# HORIZON

**Bitesize** 

## **FOREWORD**

AHDB has been at the forefront of analysis and insight relating to Brexit's impact on UK agriculture. We have explored areas including trade, policy, availability of labour and the regulatory environment in our Horizon series of publications in order to help farmers and growers understand the changes ahead and how they can best prepare their businesses in these uncertain times.

At the time of writing (January 2019), there remains considerable uncertainty regarding many aspects of Brexit, including the UK's future trade relationship with the European Union (EU). The prospect of a 'no deal' Brexit cannot be ignored and we now find ourselves in a very fluid and rapidly changing political environment. A 'no deal' scenario could have a seismic impact on UK

trade in agricultural products and, subsequently, major implications for all of the UK's agricultural sectors. It is crucial that this is understood by farmers and policy makers if disruption throughout the industry is to be avoided.

In response, AHDB will be publishing relevant information to help our farmers and growers understand the evolving situation, what it means for them and how they can prepare.

The aim of this report is to provide readers with an understanding of how Pork trade could be affected once the UK leaves the EU, under both an agreed withdrawal and under a 'no deal' scenario.





The South East and East Asian countries offer a significant opportunity for UK exports of lower-value pork cuts and offal. China is the largest consumer of pork and offal globally and could hold great potential for UK exports.

Brexit is approaching the British pig industry at a time of considerable uncertainty for the global pork market. African Swine Fever (ASF) was discovered in China in August 2018 and this has caused significant disruption. Restrictions on stock movement have resulted in areas of under- and oversupply, and this has the potential to boost Chinese import requirements over the coming year, though to what extent remains uncertain. The UK may be able to capitalise on growing demand, especially considering the ongoing trade tensions between the USA and China. The USA has been a significant supplier of pig offal to China in particular, with a third of the market share in 2017. Nonetheless, there will still be competition from Brazil and EU member countries.

With the scale of the Chinese opportunity remaining unclear, it is important to remember there are other potential destinations for low-value cuts, including the Ivory Coast, Taiwan, Singapore, South Africa and South Korea.

Japan is the second largest importer of pork and offal outside of countries within the EU. The Japan–EU Economic Partnership Agreement (JEEPA) concluded in 2017 and involves the reduction of import tariffs over a 10-year period. But once the UK leaves the EU, it won't be able to enjoy the benefits of this trade deal. If a close trading relationship between the UK and EU is maintained, any boost in demand for EU pork, and support to prices, could trickle through into the UK market.

For exports of premium pork products, the opportunities may be more limited. Hong Kong and the USA perhaps hold the greatest potential in this area. Canada, India and South Korea could also be possible outlets, and there's perhaps a chance of tapping into the high-quality foodservice sector in China and Japan.

Elsewhere, competition for export markets from low-cost producers is a major threat. Great Britain has some of the highest costs of production for pig meat globally, which can put it at a disadvantage when competing on the export market.

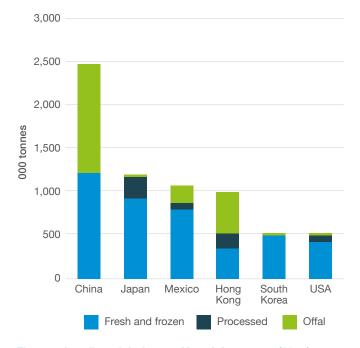


Figure 1. Leading global non-EU pork importers (2017)

Source: IHS Maritime & Trade-Global Trade Atlas®/Local customs data

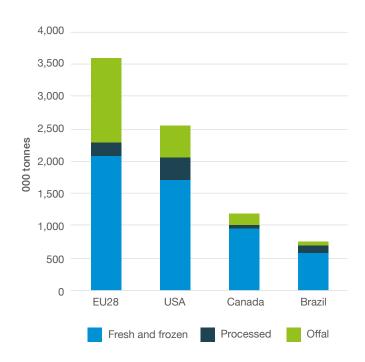


Figure 2. Leading global pork exporters 2017

Source: IHS Maritime & Trade-Global Trade Atlas®/Local customs data

While ASF in China may present export opportunities, the disease nonetheless currently represents a very real threat in the global pig meat market. In September 2018, ASF was identified in Belgium, the first time it has entered Western Europe for a decade. Further spread is clearly a concern as, aside from technical challenges, exports are disrupted, with some key importers outside of the EU typically blocking pork from affected countries altogether. The potential for further spread in Europe represents a risk for the whole EU pig market, and the UK if close trading relations are maintained, as infection in a large exporter (such as Germany) could disrupt the overall EU market balance. Of course, if this disease makes it across the Channel, it has the potential to significantly disrupt the UK pig sector.

Commercialisation of domestic pig industries in potential export markets, such as China, is a long-term threat. Some developing nations are investing heavily in domestic pork industries, moving away from 'backyard' farms with a few pigs to larger, more commercial enterprises. As these countries become more self-sufficient in pig meat production, their reliance on imports may reduce.

In the event of a 'no deal' Brexit, the EU would regard the UK as a third country and impose tariffs on imports from the UK. This would considerably lower the competitiveness of UK pork exports to the EU. On the other hand, if the UK decided to apply tariffs on UK pork imports, then it is likely that domestic prices would increase as the UK is a net importer of pig meat, which could incentivise higher production. Carcase balance would likely be a challenge, though. In addition, currently the UK exports sow meat to Germany, which is processed into products such as continental sausages. If tariffs were in place on exports, this would be uneconomical. If this became a long-term situation, there might be potential for further processing to occur in the UK.

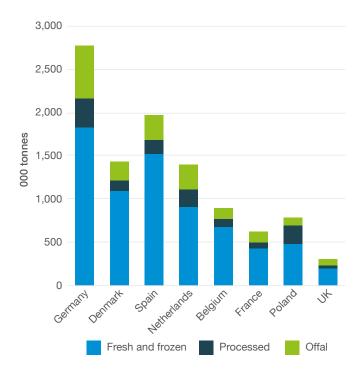


Figure 3. Leading EU pork exporters, 2017

Source: IHS Maritime & Trade-Global Trade Atlas®/Local customs data

#### What's the current trade situation?

Between 2013 and 2017, exports of pig meat increased by 29%, to stand at 335,000 tonnes in 2017 (Figure 4). During this period, the value of exports grew by 43%, increasing from £330 million in 2013 to £470 million in 2017. Exports of fresh and frozen pork have accounted for the majority (66%) of overall pig meat exports between 2013 and 2017 (Figure 5).

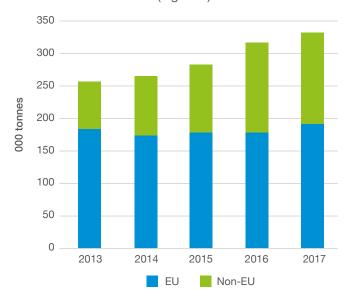


Figure 4. UK exports of pig meat including offal

Source: IHS Maritime & Trade - Global Trade Atlas®/HMRC

The proportion of exports shipped to the EU has been in decline in recent years. In 2013, 71% of pig meat exports were to EU member states. However, this declined to 58% by 2017, demonstrating the growing importance of exports to non-EU destinations.

Within the EU, Ireland, Germany and Denmark are the main destinations for UK pork. Much of the pork exported into Denmark is destined for further export, reflecting the nature of the EU ownership of some UK processor plants. There is a similar situation with exports into Netherlands, known as the 'Rotterdam effect'.

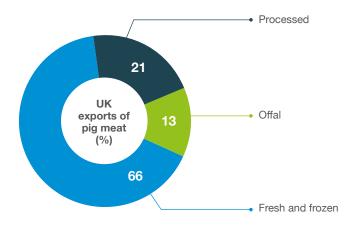


Figure 5. **UK exports of pig meat by industry** (2013–2017 average)

Source: IHS Maritime & Trade - Global Trade Atlas®/HMRC



China 19%
Germany 15%
Ireland/Denmark 14%
Netherlands 8%
Hong Kong 5%



Ireland 66%
Spain 11%
Other EU countries 19%
Non-EU countries 4%

# TOP 5 DESTINATIONS FOR UK OFFAL EXPORTS (2017) China 40% Hong Kong 21% Netherlands 9% Philippines 8% Denmark 6%

Most UK sow meat is exported due to low domestic demand. Of the exports the UK sends to Germany, the majority comprised of sow meat, which is processed into products such as continental sausages. A proportion of this product may then be exported back to the UK market.

Over the last decade, offal exports have more than tripled due to improved market access outside of the EU, where demand for these products is much greater. In 2017, offal accounted for 24% (81,000 tonnes) of total exports, compared with 16% in 2013. Exports in 2018 were on track to surpass 2017 levels.

Exports to China accounted for nearly a quarter of all exports in 2017, of which 44% were offal products. In 2013, China accounted for 12% of UK pig meat exports, highlighting its importance as a key emerging market.

Elsewhere, exports to the Philippines and the USA have grown sharply over the past few years. In 2017, the UK exported nearly 11,000 tonnes of pork and offal to the Philippines, making it the seventh largest export outlet. Export volumes have increased fourfold over the past five years, fuelled by increasing per capita consumption in the South East Asian country.

Processed pork products, comprising mainly bacon, sausages and hams, have accounted for nearly a quarter of exports over the last five years. Shipments to Ireland account for the majority (66%) of processed pork exports.

The UK is a net importer of pork and processed products. Between 2013 and 2017, the UK on average imported 920,000 tonnes of pig meat (including offal), with over 99% sourced from the EU.

Processed pork products have accounted for just over half of total imports (Figure 6), with bacon, sausages and hams cumulatively accounting for over 90% of the category. This is a reflection of the British pork industry, as it does not have the processing capacity or the herd size to satisfy domestic demand for these products. Furthermore, the UK does not have enough pigs to meet the country's consumption levels, especially for favoured cuts. Meanwhile, on average,

fresh and frozen pork accounted for 43% of total imports between 2013 and 2017, of which the majority were fresh or chilled products.

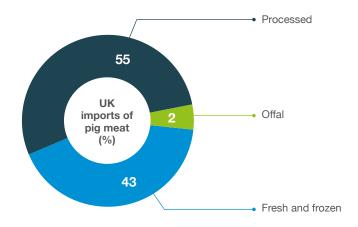
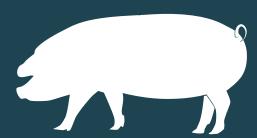


Figure 6. **UK imports of pig meat by industry** (2013–2017 average)

Source: IHS Maritime & Trade - Global Trade Atlas®/HMRC



# TOP 5 ORIGINS OF UK PORK IMPORTS (2017)



Denmark 25%
Germany 20%
Netherlands 19%
Ireland 12%
Poland 7%

Denmark is the largest supplier of pig products into the UK. The country accounts for an average of 26% of total imports every year (2013–2017). Most pork imports from Denmark are fresh and frozen, accounting for around half of the total imports from the country. Processed products contribute to the rest of the share, with bacon accounting for 40% of Danish pork exports into the UK.

Although volumes have remained relatively steady, at around 242,000 tonnes per year, the Danish share of UK pork imports has declined from 42% in 1997 to 25% in 2017. This decline is due to other nations' increasing export capabilities. Imports from Germany, Ireland and Poland have all grown significantly over the past two decades.

Overall, the Netherlands is the third largest source of UK pig meat imports and is the largest supplier of bacon into the UK market, accounting for an average of 38% of all bacon imports (2013–2017).

# What does the domestic supply and demand situation look like?

Over the past five years, UK production of pig meat has increased (Figure 7). This is due to both an increase in the number of pigs slaughtered, as well as increasing average carcase weights. In 2017, production stood at 902,000 tonnes, 8% (70,000 tonnes) higher than in 2013.

The UK is over 50% self-sufficient in pork. Issues regarding carcase balancing mean that the UK is limited somewhat in increasing pig production to meet consumption levels. Since the demand from UK consumers is only for some parts of the carcase, e.g. loin, fillet and legs, markets would have to be found for lower-value cuts which are not in demand domestically, e.g. livers, belly, head and trotters. Therefore, the UK is likely to remain a net importer of pork and processed products.

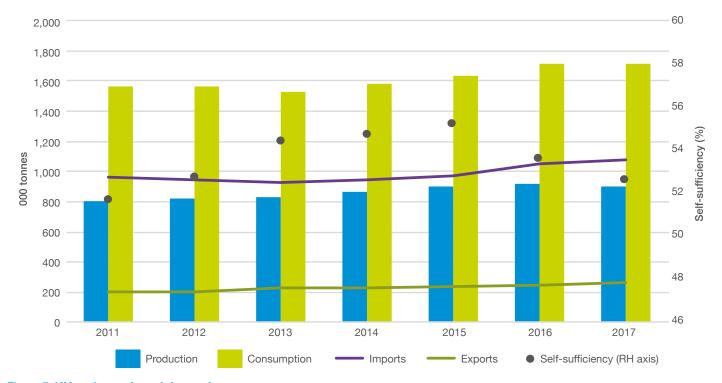


Figure 7. **UK pork supply and demand** 

NB: Data is carcase weight equivalent. Source: Defra, IHS Maritime & Trade - Global Trade Atlas®/HMRC, AHDB

Note: In 2016, official import figures show a notable year-on-year increase in UK pig meat imports. This was contrary to industry intelligence, market signals and partner country trade data at that time. Pork export figures from partner trading countries have traditionally appeared higher than the level of imports recorded by HMRC. These series followed the same trend, until mid-2016 when these series converged.

# How do the UK's costs of production compare with its competitors?

Globally, Great Britain (GB) has some of the highest pig production costs of any country, including some major players which export pig meat into the EU (Figure 8). Production costs are 40% higher on average than the USA, historically the second largest exporter of pig meat, with the lowest cost of production of the selected countries. GB's average cost of production is also above Germany's, the largest exporter of pig meat globally.

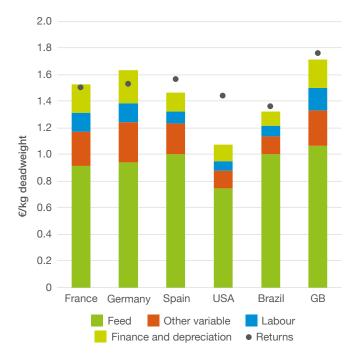


Figure 8. Pig meat average cost of production (2013–2017)

Source: agri benchmark

One of the reasons why the GB cost of production is higher than other nations is due to the structure of the British pork industry. Up to the 40% of the GB sow herd is kept outdoors – a system which can increase the overall cost of production.

On average, the outdoor system is less productive than the indoor system in terms of pigs weaned per sow per year. For example, in 2017, the average number of pigs weaned per sow in an indoor system was 26.66, compared with 23.64 in an outdoor system.

When comparing the relative productivity of GB to some of the top pig-producing countries, the number of pigs weaned per sow per year in GB is less (25.75 in 2017) than the EU average (27.79 in 2017), as well as some of the top global players, namely Brazil and the USA.

Full details can be found in AHDB's publication, **2017 pig cost of production in selected countries**.

The difference between the cost of production and returns for GB is narrow. Therefore, in the event of tariffs being placed on exports in a 'no deal' scenario, GB pig producers could see an erosion of profit margins in order to be competitively priced on the European export market.

On the other hand, as the UK is a net importer of pork and processed products, if the UK decided to impose tariffs on imports from the EU, this would likely benefit domestic producer margins.

#### How could tariffs affect trade?

The trade of pork between the UK and EU member states is largely unrestricted under the single market. However, it is a different story for pork entering from outside of the EU.

Imports of pork and processed pork products from third countries are subject to sizeable tariffs. Some major exporter nations outside of the EU have considerably lower average costs of production, but the high tariffs effectively mean that the imported pork is uncompetitive. Nevertheless, there are TRQs available which allow imports into the EU at reduced or zero tariffs. When the UK leaves the EU, existing TRQs will be split between the two (see the full report for more details). As it stands, the EU will have access to the largest proportion of all pork TRQs, except for boneless loins and hams and sausages. Although the UK will be entitled to 94.5% of the 3,002 tonnes erga omnes TRQ for sausages, this represents only a small proportion of the volume of UK sausage imports<sup>2</sup>. If the UK decides to impose tariffs on imports after Brexit, then most sausages would have to be imported under full tariff rates.

If the UK was to leave the EU without a trade deal, the UK could be subject to these same tariffs, making UK exports uncompetitive on the European market at least until a deal is struck. As a result, domestic prices would have to fall in an attempt to be competitive. As over half of UK pig meat exports are shipped to the EU, this would have a significant impact on the UK pork industry.

Please note that at the time of writing, details of the tariff rates the UK may set for pig meat under a 'no deal' Brexit have not been published.

Please note that these percentage splits could change in the future as negotiations are ongoing.

Table 1 demonstrates the effect that tariffs could have if the UK adopted similar tariff levels to those currently set by the EU. For example, one of the UK's most significant exported pork products, fresh/chilled boneless pork, could be subject to a tariff of €869 per tonne tariff.

The extent to which these tariffs can impact prices is influenced by a number of factors, including unit price and exchange rates. For example, in 2015, the tariff on fresh boneless pork was 43% ad valorem, whereas in 2017 the tariff was 36% ad valorem, due to a higher price per unit as well as a weaker sterling—euro exchange rate relative to 2015.

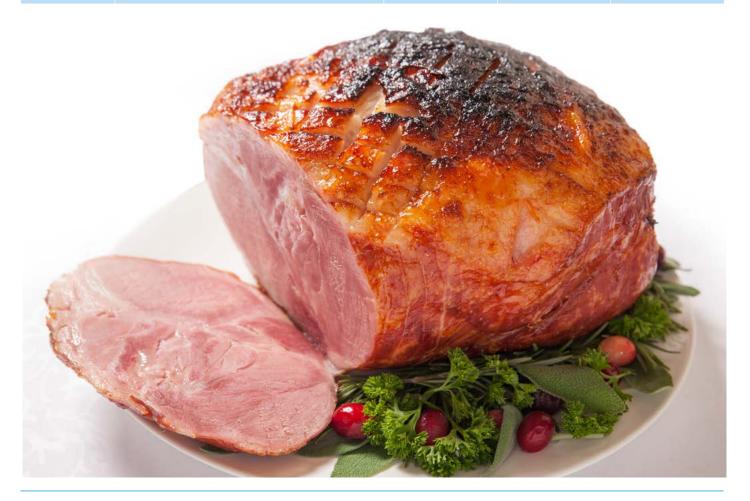
Without a deal that ensures free trade, exports of sow carcases would be a particular area of concern. With little domestic value, most sow carcases are exported to Germany. However, under a 'no deal' scenario, carcases could be subject to a tariff of €536 per tonne, which again could erode producer margins. In this instance, exports of the sow carcases would be uneconomical, and with no demand or value domestically, it may be challenging to find an outlet.

The UK could decide against imposing tariffs on pig meat imports from the EU, but this would mean removing tariffs on imports from non-EU countries as well. As a result, the increased competition for domestic producers could exert downward pressure on UK prices.

If the UK applies reciprocal tariffs on pig meat imports from the EU, then domestic prices are likely to rise, given that the UK is a net importer of pig meat. However, higher prices may be unacceptable to consumers.

Table 1. Selection of significant pork commodities exported by the UK (2017) with effective ad valorem rates (2015 and 2017)

Code	Product	Tariff rate	Effective ad valorem (2015 export unit price)	Effective ad valorem (2017 export unit price)
02032959	Frozen meat of domestic swine, with bone in (excl. carcases and half-carcases, hams, shoulders and cuts thereof, and fore-ends, loins, bellies and cuts thereof)	€86.9/100 kg	72%	73%
02031955	Fresh/chilled boneless pork	€86.9/100 kg	43%	36%
02032915	Frozen bone-in bellies and cuts	€46.7/100 kg	32%	21%
02031110	Fresh/chilled carcases and half-carcases	€53.6/100 kg	50%	42%



#### EU import tariff rates for selected pig meat products

The table below covers a selection of the main pig meat products either imported or exported by the UK.

Code	Product	Tariff rate	Effective ad valorem rate (2015 prices)	Effective ad valorem rate (2017 prices)		
0203		Fresh/frozen pork				
02031110	Fresh/chilled carcases and half-carcases	€53.6/100 kg	50%	42%		
02031211	Fresh/chilled bone-in hams and cuts	€77.8/100 kg	37%	33%		
02031219	Fresh/chilled bone-in shoulders and cuts	€60.1/100 kg	43%	40%		
02031911	Fresh/chilled bone-in fore-ends and cuts	€60.1/100 kg	40%	36%		
02031913	Fresh/chilled bone-in loins and cuts	€86.9/100 kg	22%	27%		
02031915	Fresh/chilled bone-in bellies and cuts	€46.7/100 kg	19%	18%		
02031955	Fresh/chilled boneless pork	€86.9/100 kg	43%	36%		
02031959	Other fresh/chilled bone-in pork cuts	€86.9/100 kg	131%	142%		
02032110	Frozen carcases and half-carcases	€53.6/100 kg	20%	9%		
02032211	Frozen bone-in hams and cuts	€77.8/100 kg	44%	48%		
02032219	Frozen bone-in shoulders and cuts	€60.1/100 kg	42%	49%		
02032911	Frozen bone-in fore-ends and cuts	€60.1/100 kg	37%	36%		
02032913	Frozen bone-in loins and cuts	€86.9/100 kg	28%	52%		
02032915	Frozen bone-in bellies and cuts	€46.7/100 kg	32%	21%		
02032955	Frozen boneless pork	€86.9/100 kg	64%	48%		
02032959	Other frozen bone-in pork cuts	€86.9/100 kg	78%	72%		
0206		Edible offal				
02063000	Fresh/chilled edible offal of swine	Free				
02064900	Frozen offal of swine (excluding livers)	Free				
0210	Salted, dried or smoked meat					
02101111	Salted hams and cuts	€77.8/100 kg	21%	28%		
02101119	Salted shoulders and cuts	€60.1/100 kg	12%	28%		
02101131	Dried/smoked hams and cuts	€151.2/100 kg	32%	31%		
02101211	Salted bellies and cuts	€46.7/100 kg	5%	7%		
02101219	Dried/smoked bellies and cuts	€77.8/100 kg	6%	17%		
02101910	Salted bacon sides or spencers	€68.7/100 kg	15%	10%		
02101920	Salted three-quarter sides or middles	€75.1/100 kg	27%	26%		
02101940	Salted loins and cuts	€86.9/100 kg	26%	27%		
02101950	Other salted pork cuts	€86.9/100 kg	35%	35%		
02101960	Dried/smoked fore-ends and cuts	€119.0/100 kg	30%	23%		
02101970	Dried/smoked loins and cuts	€149.6/100 kg	44%	38%		
02101981	Dried/smoked boneless pork cuts	€151.2/100 kg	57%	81%		

Note: Effective ad valorem rates calculated using export unit prices

Code	Product	Tariff rate	Effective ad valorem rate (2015 prices)	Effective ad valorem rate (2017 prices)		
1601	Sausages and similar products					
16010010	Liver sausages	15.4%				
16010091	Uncooked sausages, dry or for spreading	€149.4/100 kg	89%	45%		
16010099	Other sausages	€100.5/100 kg	35%	31%		
1602	Prepared or preserved meat					
16024110	Prepared or preserved hams and cuts	€156.8/100 kg	26%	45%		
16024210	Prepared or preserved shoulders and cuts	€129.3/100 kg	40%	68%		
16024911	Prepared or preserved loins and mixed loins/ hams	€156.8/100 kg	24%	36%		
16024915	Other prepared or preserved mixtures of pork cuts	€129.3/100 kg	25%	57%		
16024919	Other prepared or preserved pork cuts	€85.7/100 kg	30%	29%		
16024930	Prepared or preserved products, 40%-80% meat content	€75.0/100 kg	15%	13%		
16024950	Prepared or preserved products, <40% meat content	€54.3/100 kg	26%	22%		
16029010	Blood sausages and similar products	16.6%				
16029051	Other preparations containing pig meat	€85.7/100 kg	27%	36%		

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