MARKET IMPACT OF EU REGULATIONS ON GROUP HOUSING OF SOWS



FOREWORD

There is now no doubt that animal welfare legislation (the partial ban on the use of sow stalls) due to take effect across the EU from 1 January 2013 will have a major impact on the pig sector and has the potential to cause serious disruption to the market.

UK pig producers know this only too well. This country embraced some of the highest standards of animal welfare anywhere in Europe in 1999 – since which time the size of the UK herd has shrunk by 40% as retailers and foodservice operators turned to cheaper imports.

The factors which drove so many UK pig producers out of business will now begin to affect the rest of the EU as it comes more into line with the animal welfare standards of the UK.

BPEX has for some time been warning of the likelihood of tighter supply and higher prices as pig herds across Europe decline in numbers as a direct result of the new legislation.

Recent events have shown, however, that the Commission is adopting a hard line with Member States on compliance, taking the view that the very integrity of the EU itself is at stake over this. The Commission has made it crystal clear that it intends to use every means available to ensure that Member States comply with the new Directive.

This report makes clear that the pig herd in the EU will decline, that supply of pig meat will tighten and that costs will increase. It looks at a number of possible outcomes following the introduction of the new rules on I January 2013. Which scenario actually happens will depend on the actions of all those involved including producers, processors, retailers, food service customers, assurance schemes and enforcement organisations. We can all learn from the recent experience of the egg industry and if we work together we can avoid the worst impacts of market disruption which is in the long-term interest of the industry and consumers alike.

From a producer's standpoint, those who are compliant will be in a stronger position to operate at a profit and be able with some confidence to reinvest in a business that for the first time in years has some positive prospects. If it can be said that animal welfare doesn't come on the cheap, then equally, profit potential can improve pig welfare faster than legislation.

There are about 250 days to go until 1 January 2013. It is imperative for retailers and processors to ensure contract arrangements that guarantee the supply of pig meat under terms that allow sensible business decisions to be made and for everyone in the supply chain to work towards a sustainable, profitable sector.

Getting this right will demonstrate the integrity of the EU Commission and Member States in enforcing legislation that they have agreed, it will demonstrate the integrity of the whole supply chain that it will protect pig welfare and above all it will benefit consumers through the continued supply of high welfare, high quality pork and pork products.

Stewart Houston, CBE, FRAgS, Chairman, BPEX



April 2012

EXECUTIVE SUMMARY

- The partial sow stall ban due to take effect throughout Europe from 1 January 2013 is highly likely to have a major impact on the EU pig meat market
- Pig production is likely to fall by between 5% and 10% and processors and retailers are likely to face substantial price increases
- Similar animal welfare legislation in the laying hens industry which came into force on I January 2012 has caused serious disruption to the egg industry where the price of shell eggs is 75% higher than a year ago
- The EU Commission had made it clear there will be no derogation granted and that the onus is on Member States to enforce the new legislation from 1 January 2013
- To date, only three Member States have told the Commission they are already compliant with the new legislation; nine Member States have indicated they expect to be compliant by the end of this year; 12 countries have not been able to assure the Commission they will be fully compliant by I January 2013; three countries have not replied to the Commission's request for such information
- A number of Member States have indicated they expect a "significant number" of producers to quit the industry or at least to stop breeding pigs and allow their herds to run down as they will be unable or unwilling to comply with the new legislation
- While enforcement of the new EU welfare legislation lies with Member States, the Commission has made it clear it will initiate infraction proceedings against those countries which fail to comply with or enforce the legislation
- While robust enforcement will have an effect, it will not be the only measure to have an impact on the market. Many retailers, especially those in Member States where the pig industry is fully compliant with the new legislation, will be concerned about the possible adverse effect on their corporate reputations of being found to be selling 'illegally produced' pig meat products.

Three possible outcomes after I January 2013 are examined:

Scenario I

- Total EU pig meat production in 2013 would fall by 5% compared with 2011
- This would lead to a significant increase in price for finished pigs from compliant producers by at least 10% in all likelihood
- Prices for pigs from non-compliant producers would probably fall as many processors and retailers would be unwilling to take such product
- As there is already some overcapacity in the EU processing sector, the expected fall in pig production is likely to exacerbate the situation and lead to further rationalisation in the sector.

EXECUTIVE SUMMARY (cont'd)

Scenario 2

- Rigorous enforcement throughout the EU, leading to pig production declining by up to 10%
- Production losses on this scale would lead to real shortages of pig meat in the EU market and would mean substantial price increases and processors and retailers competing for supply
- Securing supply could be a greater priority than price
- Price increases would inevitably be passed on to consumers, possibly putting pressure on politicians to act to increase pig meat supplies (especially in those Member States where per capita consumption of pig meat is comparatively high)
- In that case, the options are to stimulate expansion of compliant production within the EU (difficult in the current economic climate) or to open up the market to imports from third countries. In this latter case, there would be difficulty in sourcing welfare compliant product on the world market
- Longer term, the implications of such political moves would lead to major structural changes in the European supply chain.

Scenario 3

- The third possible scenario would involve a fundamental realignment of production across the EU with breeding and finishing concentrated in different Member States
- Following the initial fall in the size of the breeding herd in North West Europe, it would recover to expand rapidly and fill the gap left by production falls in other parts of the EU. Many breeders in Eastern and Southern Europe would switch to finishing, taking piglets from North West Europe
- This might lead to a form of integration with productive breeders in North West Europe supplying piglets to lower-cost finishers in Eastern and Southern Europe and also lead to a reduction in overall production costs
- A major barrier would remain in the form of animal welfare concerns with resistance to large-scale transport of piglets across Europe.



I. Background

New EU pig welfare legislation – Council Directive 2001/88/EC – comes into force on 1 January 2013. The most significant and high profile element of the new legislation will require that, with limited exceptions, sows and gilts are kept in social groups during a period starting from four weeks after service to one week before the expected time of farrowing. One effect of this is to prohibit the use of individual sow stalls during this period. The regulations also cover a number of other issues which many consider to be less onerous to comply with. These include:

- Specifying the amount of unobstructed floor space available to pigs of different ages and the minimum dimensions for pens
- Specifying the width of openings and slats when pigs are kept on slatted floors
- Ensuring that sows and gilts have access to manipulable materials
- Ensuring that sows and gilts are provided with sufficient food, including sufficient bulky or high-fibre food to prevent hunger.

The new rules are likely to have an impact on the EU pig meat market, the scale of which will depend on the level of compliance by producers, the impact on the size and productivity of breeding herds and actions taken to enforce the regulations. Understanding the likely impact of the changes will help the industry to plan. Last year, BPEX published a report¹ which began to develop this understanding, drawing upon information which was publicly available at that time.

The aim of this report is to improve understanding by setting out the latest progress towards implementation and enforcement of the regulations and by developing scenarios for the market situation both before and after implementation. The report incorporates information provided by European members of the InterPIG group². In early February, a meeting was held in Brussels involving representatives from Denmark (Landbrug & Fødevarer), Germany (Johann Heinrich von Thünen-Institut), the Netherlands (LEI Wageningen UR) and the United Kingdom (Agriculture and Horticulture Development Board). At the meeting, the current situation was discussed and the scenarios presented in this report were developed.

In assessing the likely impact of the new rules, lessons may be drawn from similar changes in welfare rules for laying hens, which came into force on 1 January 2012, although the two industries have different structures which will prevent any firm conclusions being drawn. These rules prohibit the use of conventional cages (also referred to as 'battery cages') for laying hens. During January 2012, the EU Commission wrote to 13 non-compliant Member States warning them of legal action if they failed to comply. Each of these countries has produced an action plan containing measures to accelerate compliance and progress will be reported monthly.

One immediate impact of the ban on battery cages has been a sharp rise in the EU average price for eggs. At the end of 2011, the price for shell eggs was 34 per cent higher than at the end of 2010. Prices normally rise during the final quarter of the year but typically by less than ten per cent. This year, they rose by 22 per cent. Particularly sharp rises were recorded in some non-compliant countries, with Belgium, France, the Netherlands and Spain all experiencing price levels nearly double those of a year ago. In early 2012, prices continued to rise rapidly and by mid-March were around 75 per cent higher than a year earlier. Prices for liquid egg have also risen sharply.

¹ BPEX Imports Report: An Analysis of UK Pork and Pork Products Import Trade, with implications from 2013 of EU sow stall ban, October 2011.

² InterPIG is a group of economists involving organisations from 14 countries, 12 of which are from the EU. The group's main role is to analyse and compare costs of pig production across the countries represented. Results are published annually.

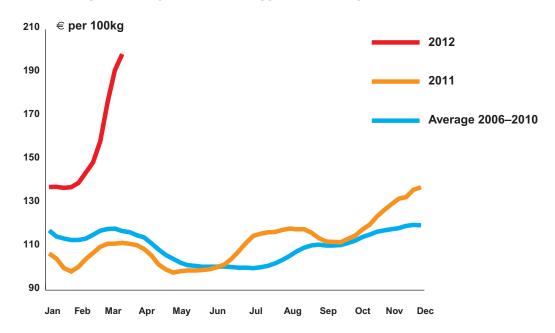


Figure I EU average market price for shell eggs for consumption

Source: European Commission

There have already been moves by some Member States to prevent eggs from non-compliant systems entering their market. However, many of these eggs are used to produce liquid or powdered egg for the processing industry, making them almost impossible to trace. This is already starting to lead to a two-tier egg sector, with eggs from non-compliant producers attracting lower prices (but also costing less to produce).

2. Progress towards implementation

In July 2011, the EU Commission requested information from all Member States about their progress towards the implementation of group housing of sows. The Commission also asked Member States to set out their national action plans to address any non-compliance.

In mid-March, the Commission revealed that three Member States had confirmed that they were already compliant. These were Luxembourg, Sweden and the United Kingdom. The last two countries have had legislation in place for many years which completely bans the use of sow stalls. Nine other Member States stated that all of their producers would be fully compliant by the end of 2012.

A further seven Member States stated that over 90 per cent of their producers would comply with the regulations. Five others said that between 70 and 89 per cent of producers would be compliant. The other three Member States were unable to provide an estimate of their level of compliance but only between 28 and 55–60 per cent of their producers already met the required standards. The identities of the Member States in each category have not yet been revealed by the Commission.

At the same meeting, the Commission confirmed that it was using all the tools available to it to push Member States to comply with the legislation. Enforcement action could not begin until January 2013, since producers would not be in breach of the regulations until then. Among the measures being taken were: training of official veterinarians, audits by the Food & Veterinary Office, preparatory work to launch infringement procedures and provision of financial support.

Member State Positions

In advance of this report, information about the latest position in their countries was collected from each of the European members of the InterPIG group. Their responses are summarised below.

Members from the **United Kingdom** and **Sweden** confirmed that group housing of sows was already a legal requirement in their countries.

In **Austria**, around 60 per cent of farms and 70 per cent of sows were in group housing at the end of 2011. However, further progress has been delayed as politicians debate banning the use of farrowing crates. Many producers have delayed making investment until that situation is resolved. As a result, it is likely that only about 80 per cent of producers will comply by the end of 2012.

A 2011 survey of producers in the Flanders region of **Belgium** (the main producing region) found that only 36 per cent had converted to group housing and 13 per cent planned to do so. It is expected that many of the remainder will simply choose to open their crates, which may not be sufficient to comply with other elements of the regulations. A significant proportion of producers is also likely to stop producing (or at least breeding).

A statistical survey in the **Czech Republic** found that 94 per cent of production was already based on group housing. It is likely that many non-compliant producers have already ceased production given the sharp fall in the Czech breeding herd (see below).

In **Denmark**, around 75 per cent of sows were in group housing at the end of 2011. Further progress is expected to result in full compliance by the end of 2012, with a few producers exiting the industry in the meantime.

There is no recent data on the situation in **France**. A survey in 2008 indicated that 70 per cent of pregnant sows were still housed in stalls. Some progress has been made since then and the latest estimate of the Ministry of Agriculture is that, on 1 January 2012, 50 per cent of French sow farms complied with regulations. The French administration is doing its best to make sure that all the farms comply and thus are able to keep on producing in the future. The main point is the difficulty farmers are having in getting funding to make the necessary investments. As a result, the government has set up a grant system and is putting pressure on the banks.

There are also no formal statistics on the situation in **Germany**. However, it is thought that about half of breeding farms were compliant at the end of 2011 but that the percentage was significantly higher in the main livestock regions. This means that up to 70 per cent of sows were group housed. Many of the remaining non-compliant farms, particularly the smaller operations, are likely to give up piglet production. Near full compliance is expected in the major producing regions but there may still be some non-compliant small farms in the south of the country.

In **Ireland**, about 40 per cent of breeding farms were thought to be compliant at the end of 2011. The government has made available grants to cover part of the cost of conversion but, even so, many producers do not have access to the finances needed. It is thought that only 60 per cent of units will be compliant by the end of 2012. This conflicts with the Irish government's position that there will be full compliance.

Data collected by means of a telephone survey with the major producers' organisations and feed companies in **Italy** reveal that in March 2012, between 35 and 40 per cent of the breeding farms raising sows were in group housing. This figure covers about 200,000 sows, which is 30 per cent of the sow herd. Full compliance is lower as floor quality is not always in line with the Directive. It is expected that many farms with relatively small sow herds will close before the end of this year, whereas medium and large-scale farms and, in particular, those under contract with big feed companies, will adapt their farms to the requirements of the Directive.

Member State Positions (cont'd)

Research in the **Netherlands** shows that just over half of farms were fully converted to group housing by the end of 2011. A further quarter of farms were already partly converted. Between them, these farms housed just over 70 per cent of Dutch sows. By the end of 2012, around 90 per cent of continuing farms (with 90 per cent of sows) will be converted. Difficulty in obtaining environmental permits is delaying progress towards implementation.

A survey of the larger commercial producers in **Spain** showed that just under half were compliant in the summer of 2011 with most of the rest expecting to have converted by the end of 2012. However, the level of compliance is thought to be much lower among smaller producers. For example, for those included in the survey who had less than 400 sows, compliance was only 16 per cent with a further 21 per cent expecting to be ready for 2013.

Information about Member States which are not represented on the InterPIG group is limited. Of these, the largest herd is in **Poland**. Here, most large producers are expected to comply, in part because many might otherwise face repaying EU loans. Smaller Polish providers typically didn't use stalls anyway but many of them are closing down because of a lack of profitability. It has been estimated that in the middle of 2011, 70 to 80 per cent of Polish pig breeding farms were already using group housing.

Romania also has a significant herd with numbers growing due to foreign investment and the prospect of resuming pig meat trade with the rest of the EU, which had been suspended because of Classical Swine Fever outbreaks. It is thought that many of its producers will not be compliant by the deadline.

If the laying hen regulations are a guide, it is likely that smaller Member States, particularly those in Eastern Europe, will have low rates of compliance.

A number of Member States have indicated that they expect a significant number of producers to leave the industry entirely or at least to stop breeding. While many will not do so until towards the end of 2012, some producers have already started to leave the industry or switch to finishing. This is one of the reasons behind sharp falls in the size of the EU breeding herd recorded in recent censuses, although the difficult financial situation is also a factor. Provisional figures from the census taken in or around December 2011 are shown in Table 1.

	2010	2011	Change
Austria	278,900	270,100	-3.2%
Belgium	507,000	n/a	
Bulgaria	66,000	64,000	-3.0%
Cyprus	46,300	40,200	-13.2%
Czech Republic	175,500	4 ,900	-19.1%
Denmark	1,286,000	1,239,000	-3.7%
Estonia	35,100	35,300	+0.6%
Finland	146,400	34,200	-8.3%
France	١,127,000	1,099,000	-2.5%
Germany	2,232,700	2,193,600	-1.8%
Greece	151,000	155,000	+2.6%
Hungary	301,000	290,000	-3.7%
Ireland	149,500	146,400	-2.1%
Italy	717,400	708,800	-1.2%
Latvia	52,500	46,600	-11.2%
Lithuania	82,100	68,300	-16.8%
Luxembourg	7,600	6,000	-21.1%
Malta	6,400	4,700	-26.6%
Netherlands	١,098,000	1,106,000	+0.7%
Poland	1,328,200	1,124,900	-15.3%
Portugal	240,800	236,000	-2.0%
Romania	355,600	404,400	+13.7%
Slovakia	55,100	52,500	-4.7%
Slovenia	33,600	28,700	-14.6%
Spain	2,408,400	2,404,300	-0.2%
Sweden	154,600	151,800	-1.8%
United Kingdom	491,000	484,000	-1.4%
EU Total (excl. Belgium)	13,026,700	12,635,700	-3.0%

Table I Numbers of breeding sows and gilts in EU Member States, December

Source: Eurostat

3. Approaches to enforcement

The market impact of the new regulations will be highly dependent on the level of compliance, which is reviewed in the previous chapter. However, it will also depend on how the rules are enforced. The EU Commission has made it clear that responsibility for enforcement rests with Member States. However, they do not expect to allow any derogation and will take action against any countries which fail to comply with or to enforce the regulations. It is not yet clear how this will be done or how quickly the Commission will be able to take effective action. However, the Food and Veterinary Office (FVO) of the European Commission is programmed, during 2012, to undertake independent audits on the phasing out of battery cages for laying hens.

The approach to enforcement in most Member States is not yet clear. There appear to be two main possibilities, examples of which are given below. They are:

- An industry-led approach, using farm assurance schemes and/or processor influence
- A government-led approach using data collection from producers and audit visits.

In Denmark, enforcement will include both approaches. In February 2012, the Danish Veterinary and Food Administration wrote to all pig herd owners and pig veterinarians reminding them of the urgency of complying with the new regulations. Given the length of the transitional period, any breach of legislation found during their welfare inspection programme from January 2013 would be 'reported to the police'. The industry will also take action through the farm assurance scheme run by the Danish Agriculture and Food Council. The Danish farm assurance scheme currently covers 97 per cent of production and membership is a requirement for suppliers to all the major Danish processors. The scheme maintains a database which is accessible to all processors so that they can confirm the status of producers. It is being discussed whether all producers who are part of the scheme will need to sign off a statement of compliance by the end of 2012.

In Germany, enforcement will also be primarily through the quality assurance scheme with compliance assessed during biannual audit visits from vets. However, this scheme mainly covers producers supplying pigs for fresh pork products. Enforcement among producers in the supply chain for processed products is less clear. However, in Germany, as elsewhere in Europe, many smaller pig producers are also arable farmers. These farmers will be under pressure to comply with the regulations to avoid any problems with direct payments due to EU cross-compliance rules.

In the Netherlands, the main approach to enforcement will be different as the quality assurance scheme is not involved. Instead, the government is working with farmers' organisations to monitor compliance. They are currently surveying all producers to assess their readiness. As well as determining whether producers are currently compliant, the survey will also ask about future plans and reasons for non-compliance. The responses to the survey will be collected by the Product Board for Livestock, Meat and Eggs (PVE). It is still not known how any non-compliant producers will be dealt with.

In Spain, central government (MARM), regional governments and the producer association Anprogapor have developed a programme of support to enable producers to reach full compliance by the end of 2012. The programme includes economic, training and monitoring measures. Since October 2011, there have been nearly 50 talks to farmers, aiming to promote compliance and help them to adapt. Slaughterhouses, especially those with a significant share of export, will also exert pressure on producers to adapt to the new welfare standards.

Approaches to enforcement (cont'd)

It seems unlikely that all Member States will have approaches to enforcement which are as rigorous as those described. This means that there will continue to be a significant number of non-compliant producers operating during 2013 and beyond, as is currently the case in the egg sector. However, robust enforcement is not the only mechanism by which this situation could change.

Many retailers, particularly in Member States with high levels of compliance, will be concerned about adverse publicity if they were found to be selling "illegal" products. This will mean that they and, in turn the processors which supply them, will wish to source pig meat only from producers who are compliant with the regulations. There may even be attempts by some governments to restrict imports of non-compliant product. This will be easier to achieve for fresh pork than for processed products, particularly where pig meat is combined with other ingredients.

This is likely to lead to a price penalty for pigs (either piglets or finished pigs) from non-compliant producers, since there will be lower demand for them. This will be most significant in countries with high dependence on exports of pig meat. Depending on the market situation, the penalty may be sufficient to make it uneconomic for producers to continue with non-compliant systems, encouraging them to comply or stop breeding.

4. Scenarios for the impact on the EU pig meat market

The previous sections make it clear that there is considerable uncertainty about both the level of compliance with the new regulations on group housing of sows and the approach to enforcement. As a result, it is not possible to provide a definitive view of the impact of the regulations on the EU pig meat market, especially around the end of 2012 and into 2013.

To provide an assessment of the range of possible impacts, three scenarios for how the situation may develop over the next two years and beyond are presented below. In reality, the true situation is unlikely to correspond exactly to any of them. However, they should give an idea of the range of outcomes which are possible.

The first scenario describes the most probable situation based on current knowledge about likely compliance levels, legislative and market responses. The other two scenarios describe more extreme situations based on rigorous enforcement of the rules from early 2013 and the possibility that the changes may lead to a more fundamental shift in the structure of the industry.

The descriptions of the impact of the scenarios are based on an assumption that there are no significant changes in external factors which influence the market. This includes the economic situation in Europe, feed prices and the global pig meat market. Changes in any of these could mean that the market situation would be substantially different.

The analysis also ignores other changes to welfare regulations which are likely to be implemented in the future, for example, restrictions on the castration of boars and the transport of live pigs. These could have a significant impact on the development of scenarios in the longer term.

Scenario I - Most likely situation

This scenario describes the most likely situation in the EU market in the run-up to and following the implementation of the new regulations, based on current knowledge. Breeding herds have already been falling in many countries because of low profitability and this will continue to be a factor, alongside the impact of the regulations. The main changes compared with the situation in late 2011 include:

- The breeding herd in North West Europe would reduce by around five per cent by early 2013
- The breeding herd in Southern Europe would reduce by between five and ten per cent in total with falls continuing during 2013
- The breeding herd in Eastern Europe would continue its rapid decline, although this will be more due to the financial situation rather than the new regulations, with some producers switching to finishing
- There would be near-complete compliance with the regulations in North West Europe but more non-compliance in Southern and Eastern Europe
- Retailers and processors in some Member States would require that all pig meat was sourced from compliant producers. In other Member States, modern retailers and processors would probably ensure they sourced only compliant product but some smaller businesses may be less particular.

Under this scenario, total EU pig meat production in 2013 would be around five per cent lower than in 2011, with some reduction also taking place during 2012. The fall in production would be smaller than the fall in the size of breeding herds as further productivity increases are expected. This would be partly a continuation of historic trends but would also reflect the fact that farms which stop breeding are likely to be less efficient than those which continue.

A production fall on this scale should lead to a significant increase in the price for finished pigs from compliant producers. This would be substantial, probably at least 10 per cent and possibly even higher as, historically, even small changes in pig supply have had a marked impact on price. Developments in the EU egg price in the last few months (see above) show how quickly the market can change in response to a change in supply. This would be good news for remaining producers who have suffered from poor profitability in recent years.

It is less clear what will happen to prices for pigs from non-compliant producers. They would almost certainly be lower, because fewer processors and retailers would be willing to take these pigs. However, the price gap between compliant and non-compliant pigs is uncertain. Its size would have a big influence on future developments in the industry, including the speed with which remaining producers move to comply with the regulations.

In North West Europe at least, production would recover to 2011 levels within 2–3 years, if past trends in productivity continue and high prices encourage expansion of remaining breeding herds. However, lack of funding, not helped by the financial crisis in the EU, may constrain recovery in other parts of Europe. This suggests that any price increases as a result of the regulations may diminish over time. Of course, many other factors will influence price movements so it isn't possible to reliably predict long-term trends.

Piglet prices would also rise significantly under this scenario. Indeed, the proportional increase would probably be greater than for finished pigs because, as well as reduced supply, there would be increased demand from finishers. This would come as a result of some breeders choosing to switch to finishing, particularly in Eastern Europe. This would probably lead to acceleration of the trend for an increasing live trade in piglets.

Scenario I – Most likely situation (cont'd)

With supplies lower almost everywhere, there would probably not be a fundamental shift in pig meat trade flows within the EU. However, if there are increased shipments of piglets to Eastern European finishers, there would probably be a rise in pig meat shipments in the opposite direction. There might also be a reduction in imports to and increased exports from, the UK and Sweden, where production is less likely to decrease as a result of the new regulations. This should ensure that prices there rise, even if production increases, although the scale of price rises could be lower.

With higher prices, EU pig meat will become less competitive on the global market. This could lead to the EU losing market share in key markets such as Russia and the Far East. Nevertheless, with demand likely to stay firm in these markets, the EU would continue to export significant volumes of pig meat and fifth quarter products, helping to support the EU market.

With many producers expected to leave the industry during the second half of 2012 and early 2013, supplies of cull sows are likely to be high. This will probably mean that cull sow prices will fall, even though demand for relatively cheap sow meat is likely to remain high. It is possible that depressed cull sow prices could persist if a ready supply of cheap meat of clean pigs from non-compliant producers is available and preferred by processors.

It has been recognised that there is already some overcapacity in the EU processing sector. The expected fall in production would make this situation worse. The expected increase in piglet trade would have a particular impact on slaughterhouses in exporting countries, such as Denmark. Processors will probably also face tighter margins as retailers will be reluctant to increase prices while consumer demand remains subdued. This would probably lead to some rationalisation in the processing sector.

Scenario 2 – Rigorous enforcement

This scenario envisages that the regulations on the group housing for sows would be rigorously enforced across the EU. It is probably unrealistic that this would happen immediately after 1 January 2013 but it would lead to the following changes compared with the situation in late 2011:

- The breeding herd in North West Europe would reduce by between five and ten per cent with most of the fall happening by early 2013
- The breeding herd in Southern Europe would reduce by at least ten per cent by early 2013 and by a similar or perhaps even larger, amount over the following year
- The decline in the breeding herd in Eastern Europe would accelerate further in the short term but might stabilise later as price increases improve profitability
- Most retailers and processors across the EU would require that all pig meat was sourced from compliant producers.

Under this scenario, the reduction in pig meat production would be much higher than in Scenario 1. Production in 2013 would be up to ten per cent below 2011 levels, following a smaller fall in 2012. Further falls in production could be expected for the next year or two before productivity increases and herd rebuilding by compliant producers started to raise production again.

Scenario 2 – Rigorous enforcement (cont'd)

Production losses on this scale would lead to real shortages of pig meat on the EU market. This might mean substantial price increases as processors and retailers competed for the remaining supplies. Indeed, securing sufficient supplies would become a more important priority than price.

Price increases on this scale would inevitably have to be passed on to consumers by retailers. This would increase pressure on politicians to take action to increase pig meat supplies. This pressure would be particularly strong in Member States where pig meat makes up a higher share of protein consumption, since it will be harder for consumers to switch to alternatives. Pig meat currently accounts for half of all meat consumed in the EU, although per capita consumption varies considerably between Member States. Higher prices would be likely to lead to a shift of consumption from pig meat to other proteins, although this would depend on price movements for alternatives.

There are two main ways of increasing pig meat supplies. One would be to take action to stimulate expansion of compliant production within the EU. However, this might be difficult at a time when spending by governments is constrained by the economic situation. There might also be objections to the expansion of production on animal welfare or environmental grounds, particularly in the countries of North West Europe which would otherwise be best placed to lead expansion. However, expansion through vertical integration could take place, especially in Eastern Member States.

The other option would be to open up the EU market to imports from third countries. However, EU imports from the global market largely come under the WTO and EU quotas for pig meat products which can be imported at reduced import tariffs currently total less than 100,000 tonnes per annum. At present, not all these quotas are being filled but they might be if EU pig prices increased significantly. Imports outside of quota are unlikely at current price levels due to the high level of tariffs³. However, if prices in the EU rise sufficiently then high tariffs may provide less of a barrier to imports. Raising import quotas would take some time and it would also take time for EU authorities to approve more processing plants in the exporting countries, especially as there are also issues relating to animal health, such as FMD.

If imports from outside the EU were to increase, they might help to mitigate price rises and supply shortages, although competition from other import markets such as Russia and China would mean prices would still be high. Likely sources of pig meat imports would include countries which are already large exporters to other markets, such as the US, Canada and, if they can improve their health status, notably around FMD, Brazil. Such imports might face objections on welfare and environmental grounds since, in some respects, standards are lower in these countries. For example, the use of sow stalls is still allowed, although there is already pressure from North American retailers to reduce their use.

Once third countries have access to the EU market, it might be difficult to reimpose restrictions on imports from these countries once EU production starts to recover. This could be to the detriment of remaining EU producers and processors, given the lower costs of production in the Americas. This could lead to major structural changes in the European supply chain, with the market price reducing to be more in line with global market prices.

³ For example, the import tariffs on fresh/frozen pork cuts range from €46.70 to €86.90 per 100kg.

Scenario 2 – Rigorous enforcement (cont'd)

Under this scenario, North West Europe would strengthen its position relative to the rest of Europe. As under Scenario I, there would probably be an increasing trade in piglets from this region to Eastern and Southern Europe. Despite this, supply shortages would be felt most in the south and east, so trade in pig meat from north to south would increase.

In other respects, the impacts of Scenario 2 would be similar to, but more extreme than, those under Scenario I. For example, sow prices would probably crash as sows from non-compliant herds were culled. This might give some temporary support to processors but the overcapacity in the sector and tighter margins would be even more apparent.

Scenario 3 – Fundamental realignment of production

The first two scenarios are essentially differentiated by the extent to which production levels are affected by implementation and enforcement of the new regulations. In both cases, the analysis suggests that some producers, particularly in Eastern Europe, will move from breeding to finishing pigs. The third scenario extends that trend and considers the possibility that the regulations will be a catalyst for a realignment of production. Under this scenario:

- After an initial reduction in the size of the breeding herd in North West Europe, it will expand rapidly to fill the gap left by reductions elsewhere
- Many breeders in Eastern Europe (and some in Southern Europe) would switch to finishing, taking piglets from producers in North West Europe.

Under this scenario, production across much of the EU would become integrated, with breeders in North West Europe supplying piglets to finishers in Eastern and Southern Europe. To some extent, this realignment would be driven by the market but to complete it would also require strategic direction from producer organisations or governments.

A number of benefits would accrue to those involved from a realignment of this kind. The most obvious would be a reduction in costs of production. A recent Dutch study⁴ shows it might be possible to reduce costs by 10 per cent or more compared with current levels. Breeders in North West Europe have consistently performed well against most measures of breeding herd efficiency. In particular, the number of pigs weaned per sow per year is higher here than elsewhere and this is a key contributor to the cost of production of piglets. In contrast, costs of finishing are lower in Eastern Europe, where labour costs and often feed prices are lower. Although there would be increased transport costs, these are small relative to other costs.

Another benefit would be an easing of the environmental constraints on producers in North West Europe, particularly Denmark and the Netherlands. Breeding operations have a lower environmental impact than finishers because of the smaller amount of manure or slurry produced. Constraints of this kind are less of an issue in the more sparsely populated countries of Eastern Europe.

⁴ Aramyan, L.H., R. Hoste, W. van den Broek, J. Groot, H. Soethoudt, T.L.T Nguyan, J.E. Hermanson, J.G.A.J van der Vorst, 2011. Towards sustainable food production: a scenario study of the European Pork Sector. Journal on Chain and Network Science 2011; 11(2): 177-189

Scenario 3 – Fundamental realignment of production (cont'd)

The main political objections to this scenario would be on animal welfare grounds. In particular, there would be increasing resistance to the large-scale transport of piglets across Europe.

Under this scenario, EU production levels would recover quickly, as under Scenario I, so any price increase would be temporary. Indeed, with costs of production lower, in the longer-term prices could actually fall. This might leave some Member States in a difficult position, if they are unable or unwilling to take advantage of the realignment. For example, the UK hardly exports any live pigs and that situation is unlikely to change due to political pressures. However, this could mean the gap between costs of production in the UK and elsewhere in the EU would grow. This would probably mean that UK pig meat was increasingly uncompetitive and that producers would struggle to remain profitable. This would leave the UK industry in a challenging position even allowing for consumer preferences for British products. The same would be true of Sweden and those countries which focus on producing regional speciality products, such as Italy.

The realignment of production would also lead to a realignment of the processing industry. It would probably mean that much slaughtering would move away from North West Europe, introducing another cost saving given the high labour costs there. This might also be true of some further processing operations, although it is likely that, in many cases, carcases or primal cuts would be sent back to the country of origin of the pigs for processing. This situation might prompt more vertical integration of production and processing than is currently seen in the EU.

With costs of production lower, EU pig meat products (or at least those from the Member States involved in the realignment) would be more competitive on the global market. This might lead to additional export opportunities, supporting prices and further reinforcing the realignment.

5. Ongoing monitoring

During the course of 2012, some of the uncertainties which surround the implementation and enforcement of the new regulations on group housing of sows will become clearer. As this happens, the impact of the regulations will also become clearer. This report marks an important step in understanding the likely impact on the pig meat market but its findings need to be kept under review as further information becomes available.

We expect there will be a need to update the analysis contained within this report during the remainder of 2012 and into 2013. Any updating will be done in consultation with experts from across Europe, to ensure that it takes full account of the latest situation across all Member States.



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