

# The Impact of Feed Costs on the English Pig Industry



# Contents

- 02** Foreword by Stewart Houston, Chairman, BPEX
- 03** Executive Summary
- 04** Introduction
- 05** The Feed Market in 2009/2010
- 06** Feed Prices in 2010/2011
- 07** The Impact on Pig Production Costs
- 09** EU Pig Prices Under Pressure
- 10** The Potential Impact on English Pig Production
- 11** The Solution?
- 12** Conclusion

All data contained in this report is correct at 1st November 2010

## Foreword



Stewart Houston

Producers are already losing money on every pig produced – just as they were in 2007

This report updates the work BPEX carried out in 2007 which examined the impact of feed costs on the English pig industry.

Three years ago we identified that rises in feed costs threatened the sustainability of English high welfare pig production and processing.

The principal ingredient of pig feed is wheat, the price of which soared dramatically in 2007 due to poor harvests in many parts of the world. The price of other ingredients such as soya also increased. These market pressures pushed the cost of production up beyond the price paid to farmers for their produce.

As an industry, pig producers were losing £6 every second - £3.5million a week. The industry really was teetering on the brink of collapse.

We launched a make-or-break campaign, Pigs Are Worth It!, promoting the very high welfare standards of English production. Research undertaken at the time showed that consumers were willing to pay extra for quality assured pork and pork products. The campaign urged retailers to pay a fair price to farmers and to ensure that processors passed the increase back down the supply chain.

Retailers responded to the high-profile campaign which was credited with saving many producers from going out of business: the DAPP rose from about 110p/kg to more than 140p/kg.

During 2009, the industry returned to profit, helping to claw back some of the sustained losses and enabling producers to invest in more efficient systems.

Today, as we come to the end of 2010, the fear exists that the British economy may slip into double dip recession. For pig farmers, that prospect is already a reality.

Grain market increases pushed feed costs up by 30% - literally overnight - and they are still rising. Producers are again losing money on every pig produced - just as they were in 2007. The latest hike in feed costs has hit at the same time that retailers are putting the processing sector under considerable price pressure. This has had a knock-on effect of depressing prices paid to producers and is also sucking in an increase in cheaper, lower welfare imports.

We need all parts of the supply chain to demonstrate that lessons have been learned from previous crises. We need retailers to remind their buyers of the importance of supporting English Red Tractor pigmeat production with its very high welfare and quality assurance standards. Factors which consumers value – and which will enable producers to cover their costs of production through to the next grain harvest.

Paying pig farmers a proper price for their produce will help address this issue and ensure their survival.

After all, Pigs Are Still Worth It!

**Stewart Houston** CBE, FRAGS, Chairman BPEX

## Executive Summary



The biggest and most important single cost for pig producers is feed; on average it accounts for almost 60% of total production costs. It is no exaggeration to state that global rises in the price of feed are the biggest threat to the sustainability of English high welfare pig production and processing.

Wheat is the main ingredient of pig feed and its price is keenly observed by the whole of the pig industry. The market for wheat has been very volatile in recent years with huge price rises brought about by poor harvests and a growing demand, not least for the production of bio fuels. Prices of other key ingredients, such as soya, have also increased.

The wheat market has been the subject of many newspaper headlines in recent months. The price of wheat has risen sharply to more than £170 per tonne – its highest level since April 2008. There is no sign of any respite; the futures market indicates that this high price is set to continue well into 2011.

The consequences for English pig producers: a 20% increase in feed costs – that's an extra 14% on total production costs.

This situation, however, is not unique to the English pig industry. These worldwide feed price increases are driven by global factors such as the Russian ban on grain exports and lower European production. Pig producers throughout the EU will be threatened by significant cost increases resulting from higher feed prices.

The DAPP is currently 138p/kg or about £110 for an average weight pig. The DAPP has been declining since July and there is every likelihood it will fall further.

The implications for the industry are serious. At a DAPP figure of 138p/kg, British pig producers are already losing an average of £8 per pig. If input costs, in particular feed, rise further English pig farmers face the prospect of losing even more on each pig produced. This is the equivalent of losing £1.2 million every week or £62 million a year.

The industry needs to act now. We need to show support for Quality Assured Red Tractor pork and pork products. Only total supply chain co-operation can ensure sustained profitability. Failure to ensure that adequate prices are passed down the chain from retailers and foodservice buyers will have a devastating impact. Not only is there the very real possibility of producers going out of business, but there could also be a reduction in size of the breeding herd. History shows that even modest losses, in comparison with those currently possible, have resulted in a decline in the size of the British pig herd of over one third.

An increase in prices paid to farmers and processors would ensure survival is achievable without impacting hugely on the prices paid by consumers. A significant increase in prices at farm level would result in only a modest rise in retail prices and keep English pig farmers in business.



## Introduction



Accounting for more than half of input, feed is the single most important component in the cost of producing a pig.

Here in the UK, and indeed across Europe, the main ingredient of feed is cereal – in the form of wheat, barley and soya – which can make up to 80% of the ration. There are alternative feed sources, co-products such as bread and biscuits, however, their prices are also closely linked to the feed and protein markets.

As has been well documented since June of this year wheat prices have risen at their fastest rate since 1973 due to concerns of drought conditions throughout the major cereal-growing areas of Europe and Russia and the resultant impact on yields. Russia, the global leader in cheap wheat supply, subsequently announced a ban on wheat exports causing a very sharp increase in wheat futures. Couple that with the global increase in demand and the increased use for biofuels and it is easy to see why prices increased so dramatically. The price of other grains has also increased for many of the same reasons and is expected to last into the foreseeable future.

The cost of pig feed and the total cost of production are therefore highly sensitive to changes in the raw material prices of these commodities on the world market. The sustainability of the British pig industry is reliant on the industry's reaction to these movements in feed prices.

Other factors affecting the feed market include the growing demand for grain from China and fluctuating exchange rates.

This report builds on the work BPEX carried out in 2007 into the impact of feed costs on the English pig industry. It examines the feed market, analysing recent, current and future trends in prices both here and in Europe. The report looks at the drivers behind these trends. It examines the impact on the cost of producing pigs and considers the potential effect on pig production in this country. The report concludes by proposing a solution to minimise the effect of escalating feed costs and the potential impact on pig production.

## The Feed Market in 2009/2010



For the second consecutive year there was a grain surplus during the 2009/2010 season. Good availability and competitive pricing led to strong demand. Global trade, however, was sluggish as importing countries had good crops and stocks available to them. As a result prices were less prone to the volatility witnessed between 2006 and 2008. Maize supplies, on the other hand, remained tight and with consumption outstripping demand, prices were subject to some volatility.

European and UK feed grain markets were generally isolated from the tightness in the maize market given large availabilities of wheat and barley. This resulted in a more stable situation for feed prices across the season.

Delivered wheat prices for June 2009 averaged £110 per tonne, which was 29% lower than a year before. For the remainder of the year prices averaged below this level: in August wheat averaged £90 per tonne and in September it averaged £97 per tonne. At the end of 2009 prices rose but remained well below £110 per tonne delivered.

For the first half of 2010 grain prices remained relatively stable and more importantly relatively cheap, averaging between £95 per tonne and £110 per tonne. Between June 2009 and April 2010 UK delivered barley prices fell by £10 per tonne down from £96 per tonne to £86 per tonne.

### **Soya**

The soya market in the 2009/2010 season saw a record production, nearly 50 million tonnes up on 2008/2009. This resulted in a considerable surplus for the year with closing stock up by nearly 20 million tonnes compared to the previous season. With both the 2007/2008 and 2008/2009 seasons recording a deficit between production and consumption, prices had been prone to volatility. For the 2009/2010 season prices remained relatively stable given the surplus in production.

## Feed Prices in 2010/2011

The feed grains market, particularly wheat, started to move up in price in June 2010 as European harvests suffered and the drought in Russia became more apparent. Between the initial global grain production estimates of May 2010 and the latest September 2010 USDA estimates, wheat production was revised down nearly 30 million tonnes (over 4% of the total).

The 2010 cereal harvest in the United Kingdom is provisionally down 4% compared to 2009. Barley production was down 22% as a result of a 19% fall in the planted area and a 3% decline in yields. Wheat production was up 5% as the planted area rose by 9%; however yields were down 3%.

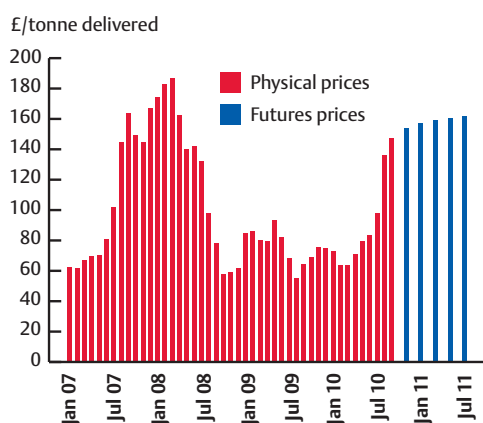
With reduced supplies and a growing demand for cereals across the globe, price volatility has returned in the 2010/2011 season.

The drivers behind this volatility are:

- Export bans in both Russia and the Ukraine, resulting in the loss of the world's largest source of cheap wheat
- Price speculation on the financial markets
- High import demand, particularly from China
- Increased demand for non food uses primarily for bio-fuels
- Decreased cereal production particularly in the Northern hemisphere (mainly Europe and Russia)
- Record demand for grain-fed meat coupled with stocks being at a 30-year low

Futures prices on the UK's LIFFE market have strengthened since June and are well ahead of last year. Prices in October reached the highest point since April 2008 at £170.75 per tonne. The latest prices for UK wheat futures (1 November) are at £170.50 per tonne up 67% compared to the same point last year.

UK feed wheat futures prices\*



\*As quoted 15 October 2010

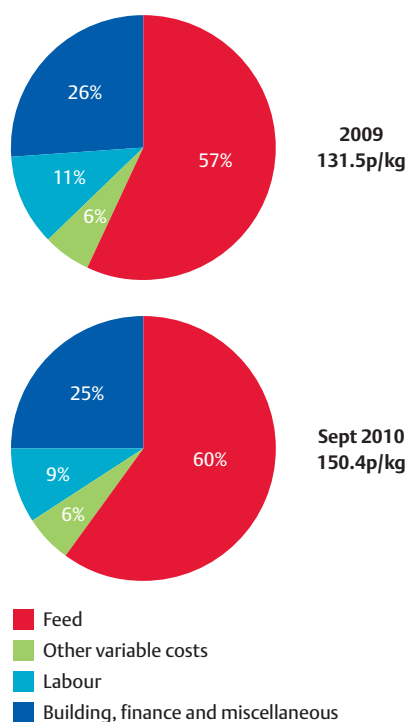
### Soybean prices

Following last year's record soybean crop, production for this year is anticipated to fall while demand grows further, particularly from China. The area planted in South America is expected to be lower this year leading to a fall in production. Weather is expected to be a key factor in South America with the La Nina weather pattern threatening to affect the planting and growing conditions.

The changing price relationship of soya and maize as well as a stronger incentive to plant wheat compared to previous years could also affect US soybean plantings. Futures prices in Chicago (as at 1 November 2010) were £281 per tonne.

## The Impact on Pig Production Costs

### The cost of producing a pig



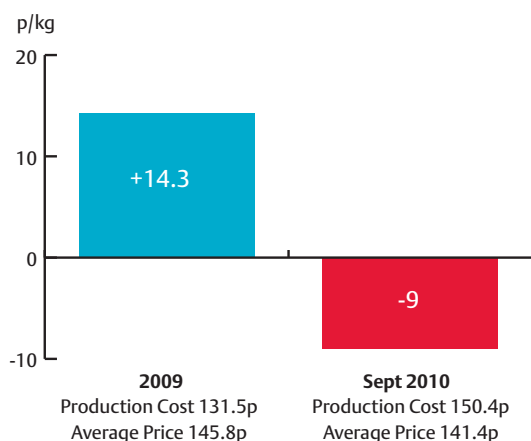
Accounting for more than half of total input, feed dominates the cost of producing a pig. The second biggest input cost in 2009 was building (including depreciation), finance and miscellaneous which equated to 26% of total costs. In 2009 the average pig production cost in Great Britain was 131p/kg dw (source: BPEX/AHDB Interpig report). As feed prices rise it will become an even greater proportion of total production costs.

The increase in feed ingredient prices seen so far this year – and which is expected to continue well into next year – has resulted in finished pig feed costs rising by 20%. This means that the total production costs for a finished pig have increased by 15% already from 131p/kg to an average of 150p/kg.

The impact of these increases in cost of production is that producers will move into negative returns for every pig slaughtered subject to movement of the DAPP. In 2009 English pig farmers received on average 146p/kg which equated to a profit of £14 per pig slaughtered. In September 2010 the average pig price was 141p/kg. With the large rises in input costs seen since 2009, particularly the large rises in feed prices since June this equates to a loss of £8 per finished pig during September.

A number of factors will determine the precise impact on individual farmers. Some producers use alternative feed sources such as food co-products, including bread, biscuits, cakes and distillers grains. The price of such feed materials tends to move in line with wheat and soya. As a result the impact is likely to be similar across the sector.

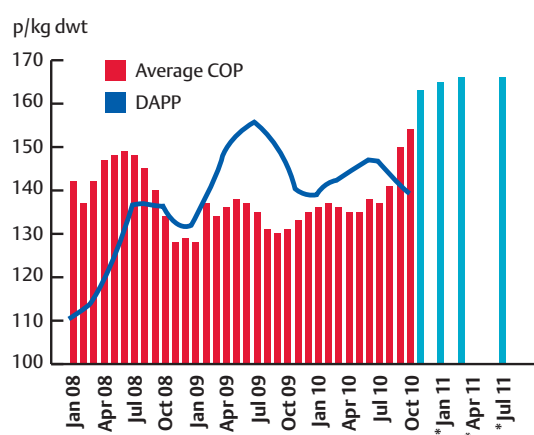
### Profit and loss on British pig production





## The Impact on Pig Production Costs

Estimated average cost of pig meat production



\*Based on grain futures prices quoted on 15 October 2010

Some producers may have tried to manage risk by buying forward feed contracts. Those who did buy forward now face the prospect of those contracts expiring and will be exposed to the accumulated rises over the past few months, with prices now up to £70 a tonne higher than a year ago.

Many producers, however, have been exposed to these high prices for months now. The relatively low prices and stable market during the 2009/2010 season, plus the expectation of another quiet season this year meant fewer producers bought forward on contract.

The impact of the recent rise in feed costs on pig farmers could be devastating. Based on an average of 150,000 pigs being slaughtered a week, the industry could face losses of £1.2 million every week, or £62 million if these losses persist for a year. If feed prices rise, or the DAPP falls, further losses will only increase.

In analysing the impact of feed cost rises on pig production costs it is important to take into account the losses experienced by the pig abattoir sector in recent years. Many abattoirs have sought to build sustainable supply chains with their producers. This has included, among other initiatives, factoring in cost of production rises when calculating payments to pig producers. In the vast majority of cases, these rises have not been reflected in the wholesale prices being paid by supermarkets.

## EU Pig Prices Under Pressure



Pig prices across Europe have declined sharply since the end of August and have been tracking below last year's levels. The EU reference price fell by 9% over the eight week period to 24 October increasing the pressure on many producers.

Throughout most of 2010 the EU market has been less firm than in 2009 while slaughterings have been higher. For piglets, prices have also declined sharply as finishers look to pay less for them in order to offset increased feed costs.

Prices in all the major pig producing nations decreased in the eight weeks to 24 October while, as previously stated in this report, feed costs have increased. Pig prices in Spain moved the most in the period, down 18%. Prices in the Netherlands and Germany decreased by 8% and 7% respectively. Prices in Denmark fell by 6% during this period.

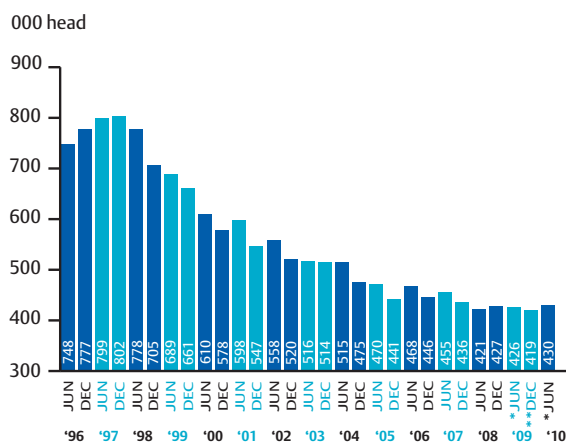
The depreciation of sterling contributed to the UK pig reference price declining by as much as 11% in euro terms, whereas the reduction in sterling was only 4%.

The increased value of the euro against the US dollar and a recent easing back in demand is now having an adverse effect on EU pig meat trade with developing countries, in particular Russia and Japan, and so also affecting EU pig prices. The euro is currently valued at US\$1.38, an appreciation of 8% since the middle of August. Since the low point in June the euro has moved up steadily. Exports to Russia during the first seven months of 2010 totalled more than 170,000 tonnes, 67 per cent higher than a year earlier and, more importantly, exceeded 76% of the annual Russian quota. As a result, the EU will have limited opportunity to export to Russia during the last part of 2010.

Currency fluctuations can have a detrimental effect on European pig profitability. A weaker euro results in European producers paying comparatively more for any feed they have to import, while a stronger euro results in falling pig prices due to exports being less competitive on the world market and imports into euro zone countries being relatively cheaper.

## The Potential Impact on English Pig Production

**Breeding herd trends**



\* Based on revised Census methodology in June 2010

\*\* Re-aligned figure in-line with Census revisions

Looking at long term prospects, it is difficult to assess the precise impact that this rise in feed costs will have on pig production in this country. The outcome is hugely dependent on whether the DAPP increases to cover all or part of these costs.

Parallels can be drawn with the 2007 crisis when sharp increases in world commodity prices pushed up feed costs and resulted in the majority of producers operating with negative returns. Over this time losses accumulated and some producers went out of business with a subsequent reduction in herd sizes. The situation was only resolved through a combination of the delayed reaction of processors and retailers increasing the prices they paid for pigs and input costs eventually declining.

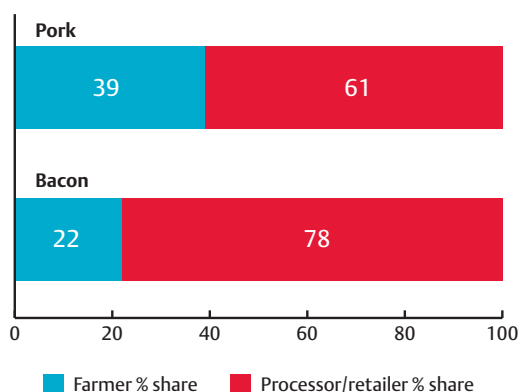
What was the impact on production? The breeding herd declined by 7% between 2007 and 2008. This was on the back of a general decline in the breeding herd since 1997. Between December 1997 and June 2007 the herd declined from 802,000 head to 454,000 head, a decline of 43% in nearly 10 years.

The breeding herd continued to contract through 2009, but the first part of 2010 saw an increase to 430,000 head which is the highest it has been since December 2007.

While the industry has certainly enjoyed a better environment for the past two years with better prices, lower input costs and positive profit margins, the situation going into this latest period may not be as positive as some may think. The profits of the last two years have generally gone into paying off the debts accrued during 2007 and 2008 and investing in more efficient systems leaving little, if any, surplus profit to act as a buffer. Consequently, if feed prices continue to rise and negative margins return the outlook for the British pig industry is bleak.

## The Solution?

### Farmers' share of retail prices



It is critical that the pig industry learns the lessons from 2007/2008. There are, of course, strategies that farmers can adopt to further improve efficiency, but little can be done to reduce overall input costs against a backdrop of such high global rises in feed costs.

We have compiled a three-point action plan to help the English pig industry overcome the issues laid out in this report and avert another crisis:

#### 1. Increase the DAPP

The industry must respond by increasing the DAPP. The only sustainable solution is for farmers to obtain a higher price for their pigs and as the vast majority of British pork, bacon, ham and pork products are sold through retailers this means securing higher prices from supermarkets.

#### 2. Support English high welfare pig meat production

Retailers need to be reminded of the importance of supporting English/Red Tractor pigmeat production with its high welfare and quality assurance standards – both factors which British consumers value. This also means supporting assurance schemes, such as the Red Tractor logo – an easily recognisable badge of quality and country of origin.

#### 3. Supply chain co-operation

The whole supply chain needs to pull together to ensure a profitable production sector and that the industry continues to meet demand for quality, farm assured product. Retailers and processors alike need to ensure this rise in retail prices is passed down the supply chain, to the producers themselves.

There is concern about the impact that a price increase may have on consumers and the demand for pork and pork products such as bacon and ham. As the feed price pressures will also affect those EU farmers that supply the British market, such as Denmark, Netherlands, Germany and France, it is reasonable to assume that all pork and pork product prices would be affected.

A close examination of the share of retail expenditure producers receive shows there is considerable variation, depending on the degrees of processing of the product. Overall the farmer receives on average 39% of the retail price for pork. So if a rise in the pig price was passed directly to the retail price without any extra margin being taken then retail prices would only rise by a small percentage to allow for a significant rise in the producer price.

## Conclusion



The sustainability of the English pig industry and those in other EU countries is under severe threat as a result of the escalation in feed grain prices, which has been driven by the Russian and Ukrainian export bans, increased demand and extreme weather conditions across the globe.

With no sign of a let up in feed cost rises, the industry needs to pull together and act now. The solution is for producers and abattoirs to seek a substantial increase in the price paid for pigs. A failure to do so will result in considerable losses and, if past trends are anything to go by, a significant reduction in production capacity here and elsewhere in Europe.

There has been increased capital investment in all sectors of the industry in recent years, and particularly more latterly, following the profitability of the past two years. This investment manifested itself in the continued effort of the English pig industry to improve supply chains and deliver very high welfare, quality assured pork and pork products to meet growing consumer demand.

This recent increased expenditure, however, has resulted in many producers taking on extra debt and liabilities. If there is a return to negative margins the sustainability of the industry is threatened.

A failure to act in the face of this challenge from high costs could result in recent investment being completely undermined. The only solution is a modest rise in retail prices across the range of pork and pork products that is passed down the supply chain to secure the future of pork processors and especially pig farmers.