Northern Ireland Assembly

Research and Information Service
Briefing Paper

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Issues affecting the viability of Agricultural businesses in Northern Ireland – Autumn 2012

1 Background

In recent weeks the local news has been full of stories highlighting the apparently precarious economic state of much of the agricultural industry in Northern Ireland.

Whilst agriculture remains a major employer and contributor to the local economy, some stakeholders are raising concerns around the ability of the industry in Northern Ireland to prosper, in the current conditions.

This paper provides a brief overview of some of the factors perceived as having a negative impact on agricultural profitability within Northern Ireland over recent months, including the cost of inputs, the farm gate price for produce, the operation of the food supply chain and the weather.

2 Input prices

There follows a brief analysis of the world price for key commodities over the last decade which are essential to agricultural production. In considering this data it needs to be realised that the presented figures do not take account of either inflation or currency value fluctuation over the last decade.

2.1 World Fertiliser prices

Diammonium Phosphate (DAP) fertilisers are one of the most commonly used means of enhancing the phosphate levels within soils – which is critical for plant growth.

The world price for Diammonium Phosphate (DAP) fertiliser has fluctuated over the last 10 years but the general trend could be defined as upwards. By way of illustration, in September 2002, 1 tonne of DAP fertiliser cost £110, but this figure had risen to £355 by August 2012.

Looking at the data specifically for the months of September 2002 and August 2012, at either end of the decade of data presented in figure 1 below, the price for DAP has increased by 223%.

It is also worth noting that the price for DAP fertiliser peaked in August 2008, when 1 tonne was costing £622.

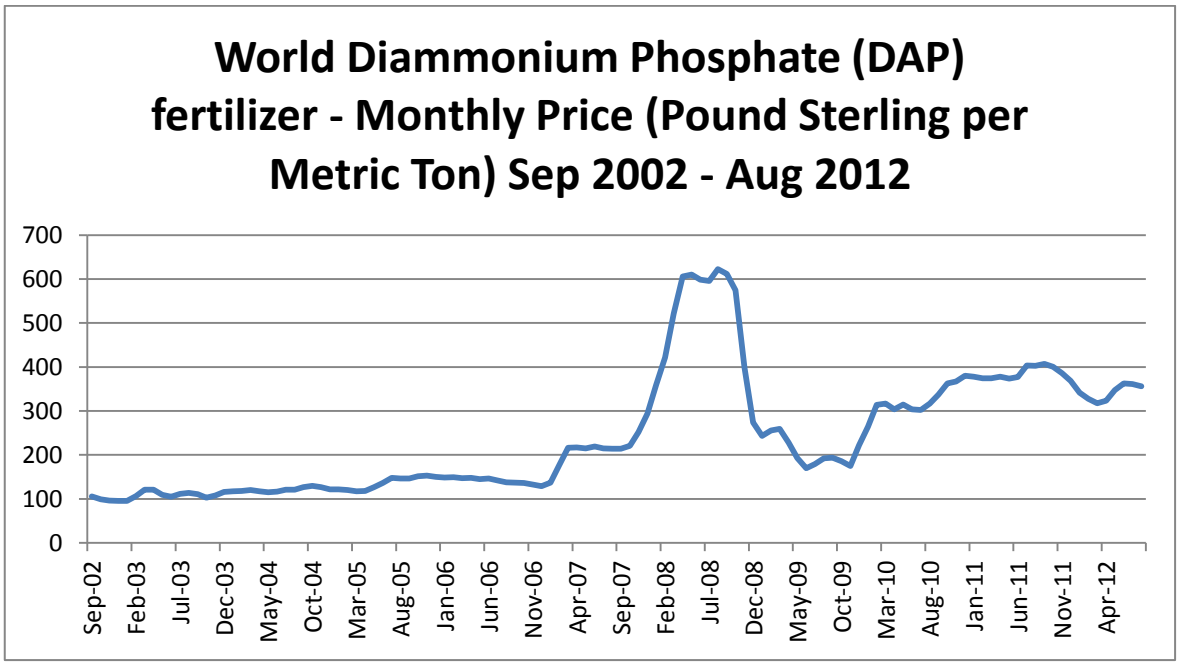

Figure 1: World Diammonium Phosphate fertiliser prices Sept 2002 - August 2012[1]

2.2 Animal Feed prices

[1] Source - World Bank data set on world commodity prices http://data.worldbank.org/indicator

There are many different animal feedstuffs across the world but one of the most commonly used is soybean which is used in cattle, pig, sheep and poultry feed.

The world price for soybean meal has fluctuated over the last 10 years but the general trend could be defined as upwards. By way of illustration, in September 2002, 1 metric ton of Soybean Meal cost £131, but this figure had risen to £372 by August 2012.

Looking at the data specifically for the months of September 2002 and August 2012, at either end of the decade of data presented in figure 2 below, the price for Soybean Meal has increased by 184%.

Between January 2012 and August 2012 the price for Soybean Meal has increased by £148.82 per metric ton, an increase of 66% in 8 months.

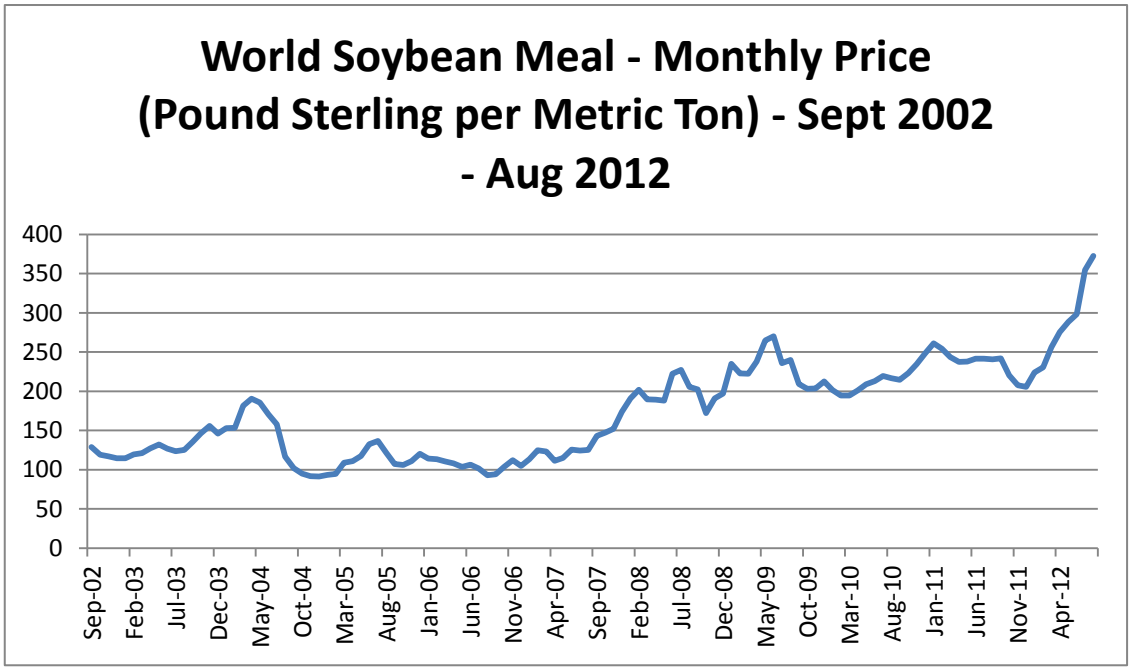

Figure 2: World Soybean Meal prices Sept 2002- August 2012[2]

2.3 Oil prices

The mechanisation of modern agriculture relies heavily on oil as do associated processing and distribution sectors. Oil is also a key component in the production of various pesticides and fertilisers.

The world price for Crude Oil (petroleum) has fluctuated over the last 10 years but the general trend could be defined as upwards. By way of illustration, in September 2002, 1 barrel of Crude Oil (petroleum) cost £17, but this figure had risen to £67 by August 2012.

[2] Source - World Bank data set on world commodity prices http://data.worldbank.org/indicator

Looking at the data specifically for **the months of September 2002 and August 2012, at either end of the decade of data presented in figure 2 below, the price for Crude Oil (petroleum) has increased by 294%.**

It is also worth noting that the price for Crude Oil (petroleum) peaked in March 2012, when 1 barrel was costing £74.

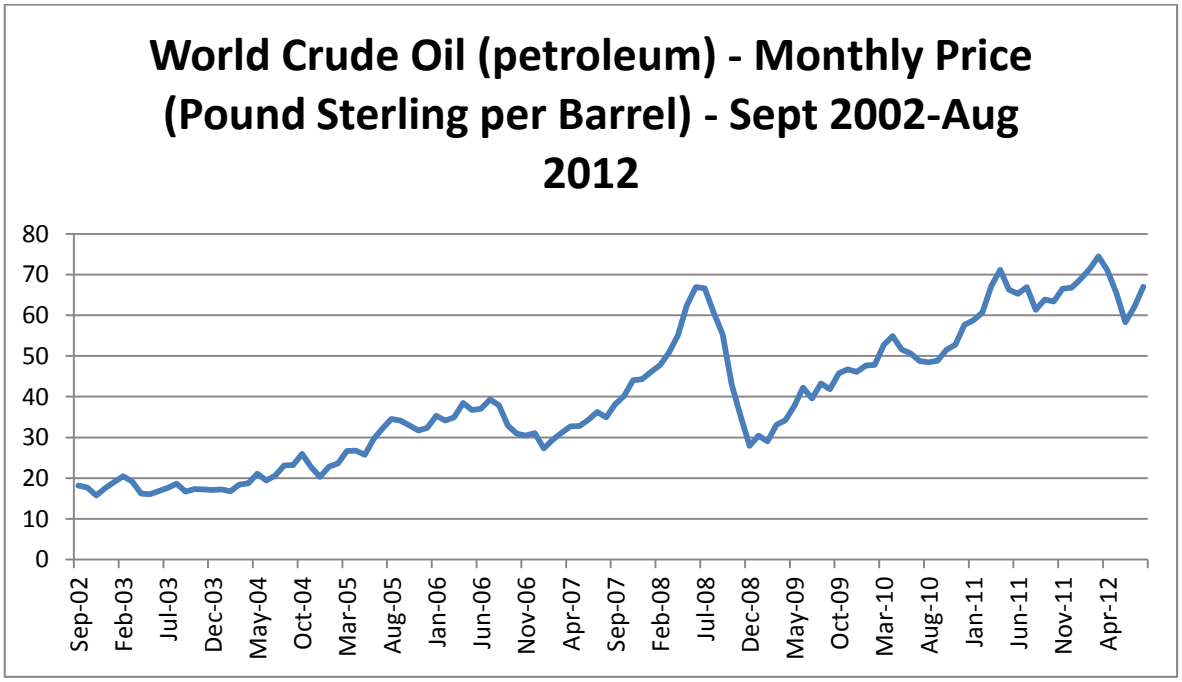

Figure 3: World Crude Oil (petroleum) prices - Sept 2002 - Aug 2012[3]

3 Prices for produce

The price that producers receive for their products can be impacted by many factors such as currency differentials and the relative supply and demand for particular items. With these caveats in mind the following data gives an overview of the pricing data for some key agricultural products within Northern Ireland.

This section also includes, where possible, comparable data for NI, GB and the Republic of Ireland, but it should be stressed that **direct comparison of this data should be approached with caution given the differing conditions within each territory which mean that you are not comparing like with like. Critical caveats here include the fact that prices in the Republic of Ireland are based in Euros and as such currency differentials in the exchange rate can have a major bearing on the price received by producers. This very issue can also impact on farmers in Northern Ireland who are in receipt of a single farm payment, as they can ask for the payment in either £ sterling or €.**

[3] Source - World Bank data set on world commodity prices http://data.worldbank.org/indicator

3.1 Milk

The United Dairy Farmers co-operative is owned by 1,900 member dairy farmers who supply it with over 1 billion litres of milk per year. Looking at the milk auction prices since January 2010 it is apparent that there has been variation in the price.

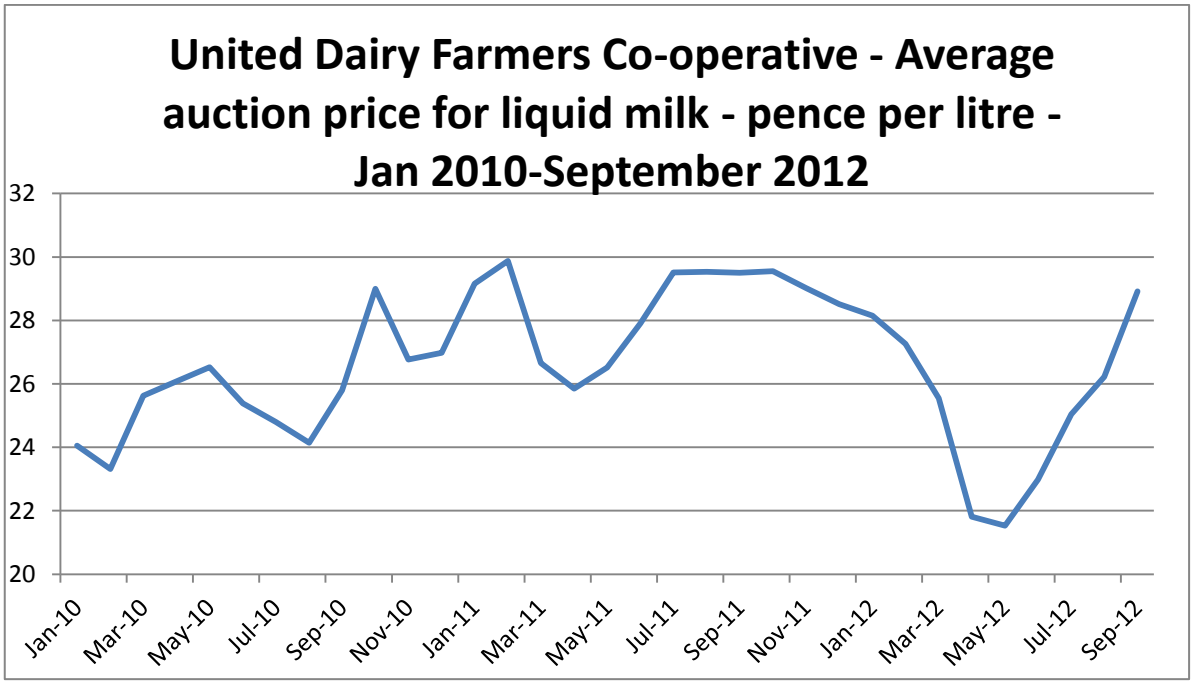

Figure 4: United Dairy Farmers Co-operative - Average auction price for liquid milk - pence per litre - Jan 2010-September 2012

The highest price per litre over the period was achieved in February 2011 (29.88 pence per litre) and the lowest auction price was recorded in May 2012 (21.53 pence per litre).

3.2 Cattle and sheep

The Livestock and Meat Commission (LMC) holds data that provides an overview of the prices of deadweight cattle and sheep within Northern Ireland, Great Britain and the Republic of Ireland.

The data for cattle is available for a range of different grades and types of cattle, but for the purposes of this report use has been made of the data relating to R3 steers and sheep. At present R3 steers make up 22% of steer kill within Northern Ireland in 2012.

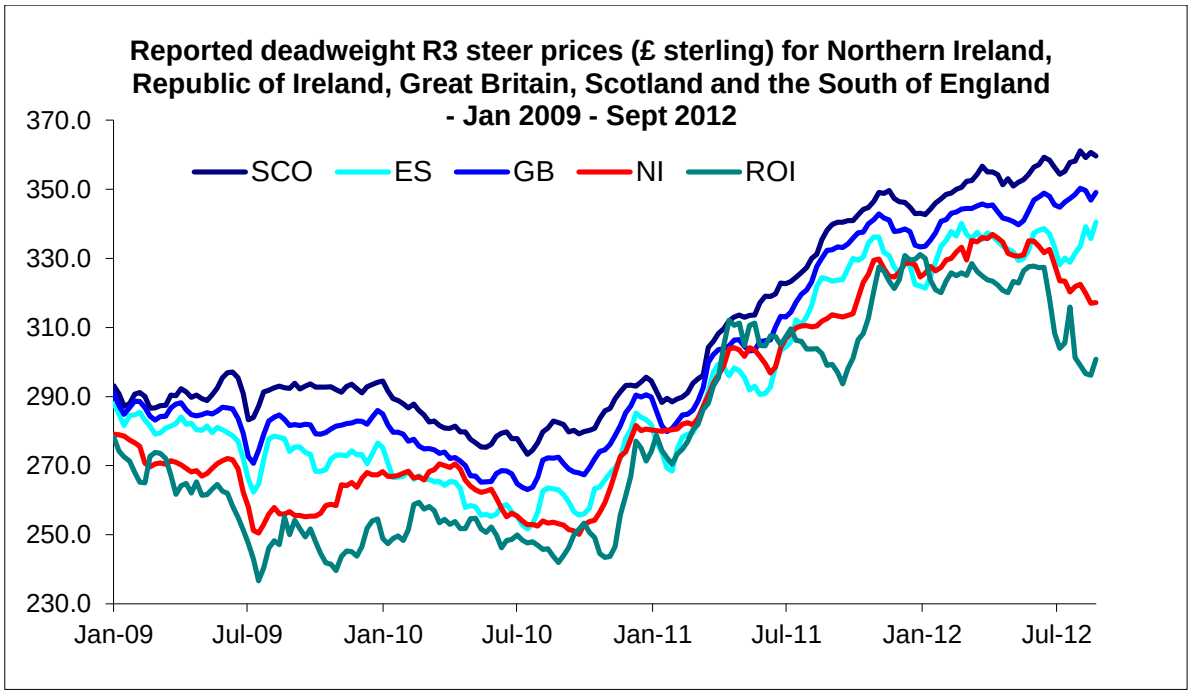

Figure 5: Reported deadweight R3 steer prices (£ sterling) for Northern Ireland, Republic of Ireland, Great Britain, Scotland and the South of England - Jan 2009 - Sept 2012

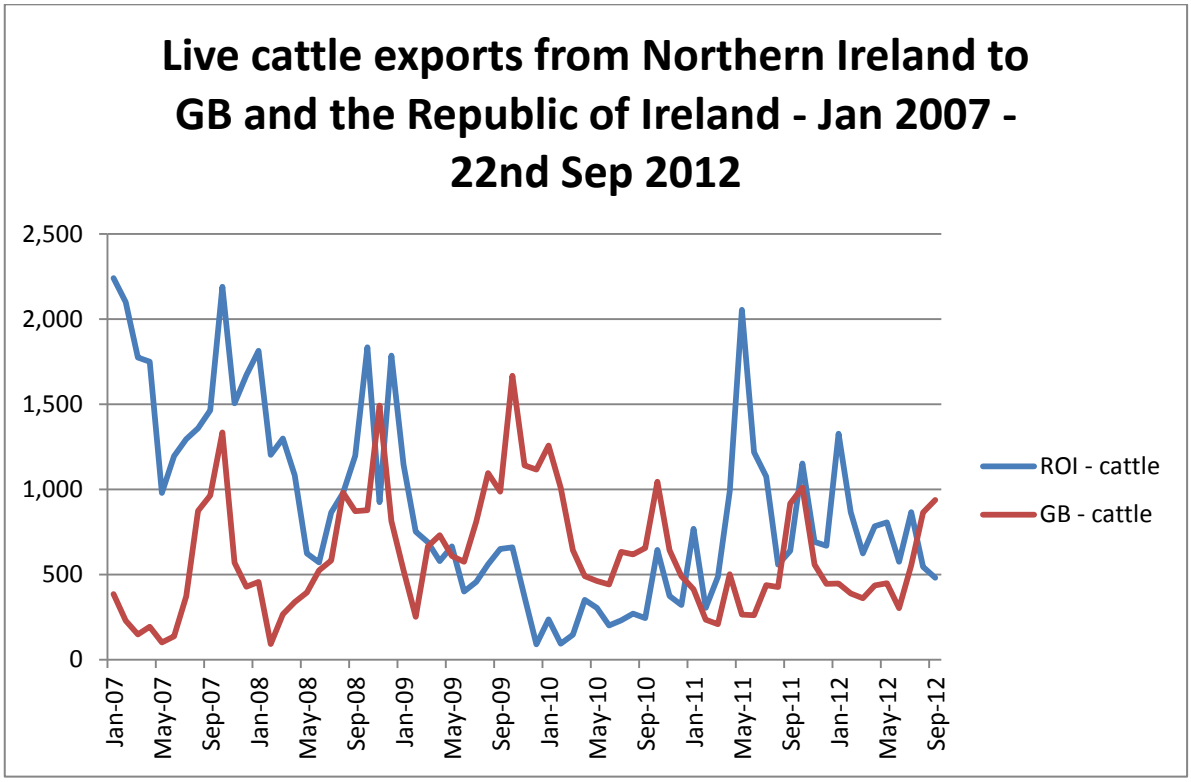

Figure 6: Live cattle exports from Northern Ireland to GB and the Republic of Ireland - Jan 2007 - 22nd Sep 2012[4]

The data relating to R3 steers (figure 5) highlights the fact that there are pricing differentials and that these tend to narrow or increase at particular times of year in relation to prices across all the territories.

[4] DARD cattle export statistics

It is fair to say that as a general trend prices appear to be highest in Scotland and lowest in the Republic of Ireland, but these observations are made taking cognisance of the following caveats.

Firstly, the presented data is in £ Sterling and as such the Republic of Ireland data has been converted from Euros, meaning that exchange rate variations will have had an impact on the price and differentials.

Secondly, the reality is that market factors such as demand, supply and product grade preferences can vary across different territories and as such can impact on the price that producers are receiving from processors/retailers.

Figure 6 highlights the variation in live cattle exports from Northern Ireland to the Republic of Ireland and Great Britain between January 2007 and the 22nd of September 2012. It is evident that the numbers of cattle exported to GB and the Republic of Ireland has varied greatly. The exact reasons for these variations are unclear but it is fair to assume that the price cattle were achieving within Great Britain and the Republic of Ireland may have been a factor.

The data presented for sheep in figure 7 comes with the same caveats as that relating to cattle, and shows that deadweight sheep price differentials between the different territories have varied over time. **As a general trend GB prices have often been higher than those in Northern Ireland and the Republic of Ireland but there are instances where the Northern Ireland price has exceeded both the GB and Republic of Ireland price.**

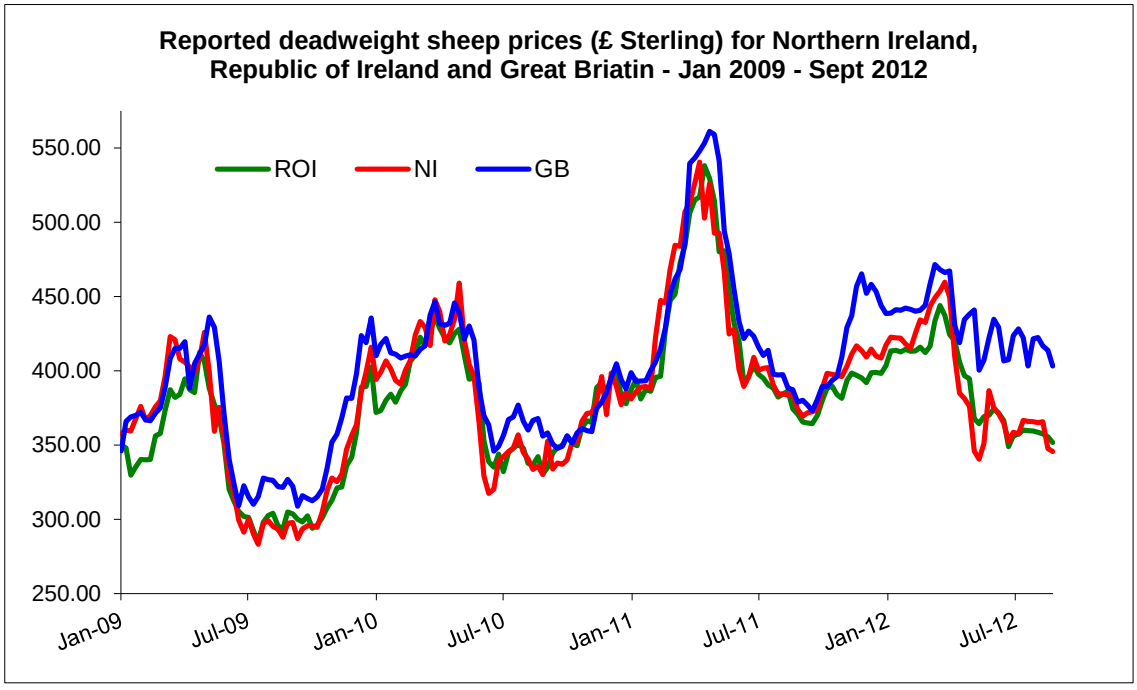

Figure 7: Reported deadweight sheep prices (£ Sterling) for Northern Ireland, Republic of Ireland and Great Britain - Jan 2009 - Sept 2012

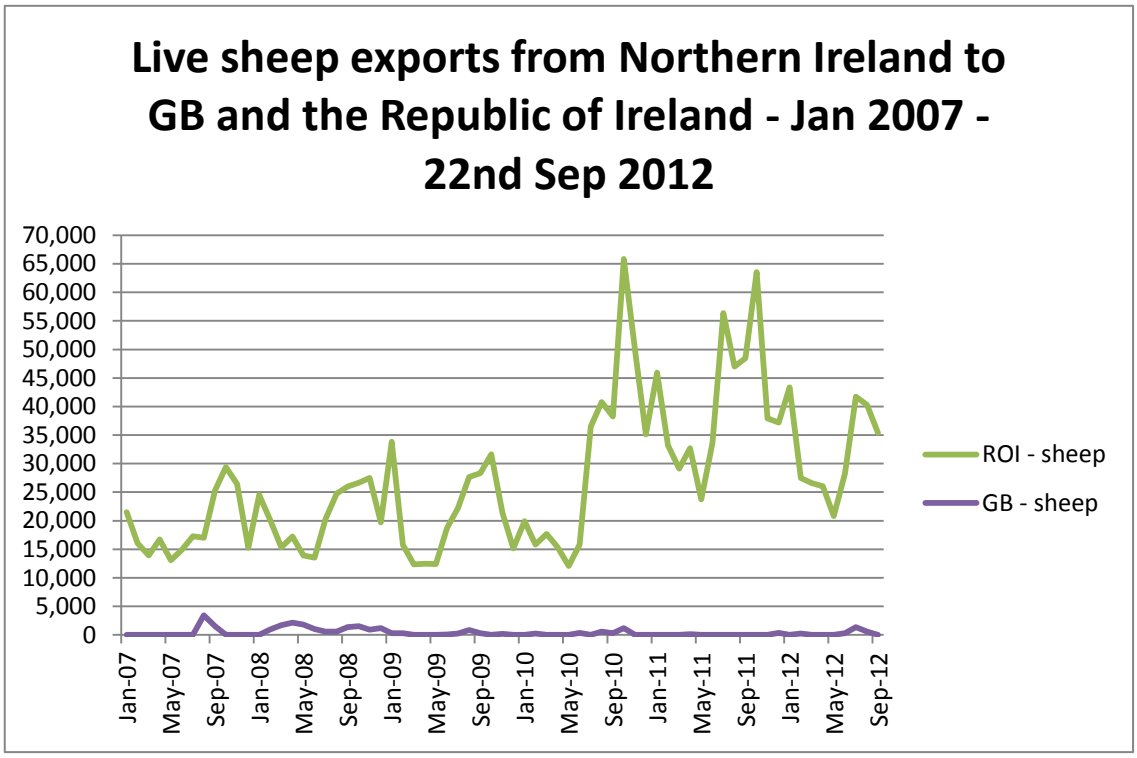

Figure 8: Live sheep exports from Northern Ireland to GB and the Republic of Ireland - Jan 2007 - 22nd Sep 2012

The data in figure 8 reveals that the vast majority of live export sheep from Northern Ireland are destined for the Republic of Ireland. It is also worth noting that 2010 and 2011 saw a large increase in these export numbers to the Republic of Ireland in particular months (December 2010 and September 2011), but that 2012 has seen a general reduction, particularly over the last few months.

3.3 Pigs

DARD data taken from the Output of pigs 1981 – 2011 dataset[5] shows the variation in the average price for finished clean pigs between 1981 and 2011.

The highest average price achieved for pigs within this time period was recorded in 2011 (134.01 pence per kg deadweight), whilst the lowest average price was recorded in 1999 (70.52 pence per kg deadweight).

[5] http://www.dardni.gov.uk/index/publications/pubs-dard-statistics/pubs-dard-statistics-pig-output.htm

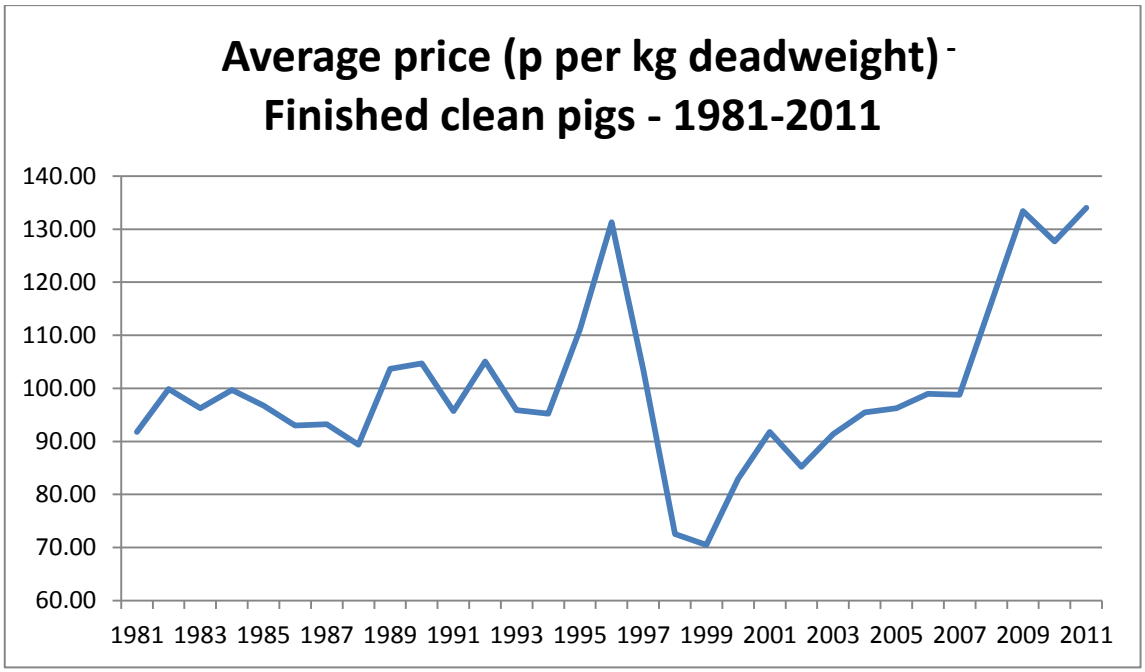

Figure 9: Average price (p per kg deadweight) - Finished clean pigs - 1981-2011

3.4 Poultry

DARD data taken from the Output of poultry 1981 – 2011 dataset shows the variation in the average price for broilers between 1981 and 2011.

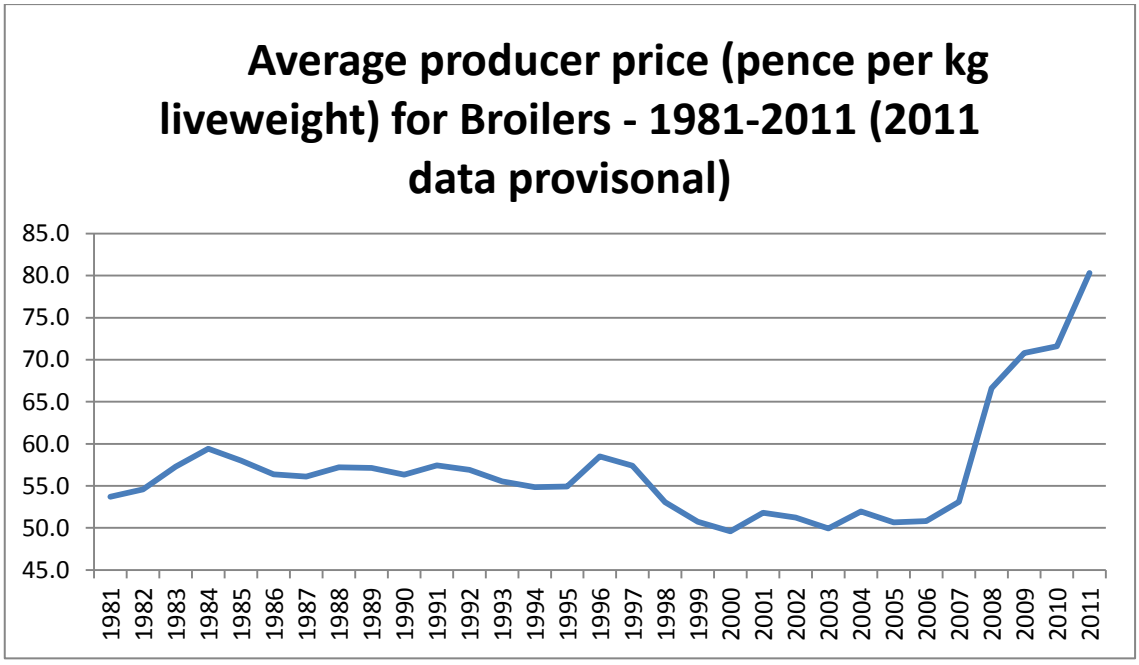

Figure 10: Average producer price (pence per kg liveweight) for Broilers - 1981-2011 (2011 data provisonal)

The highest average price achieved for broilers within this time period was recorded in 2011 (80.3 pence per kg liveweight), whilst the lowest average price was recorded in 2000 (49.6 pence per kg liveweight).

4 Farm incomes

Building upon the data from sections 2 and 3, a critical question for the agricultural industry is the level of income that individual farms/farmers are generating.

This data is available from the DARD Farm Business Data Survey which distinguishes between different types of income and has time series data from 2004/5 to 2010/11. The 3 different types of farm income and what they cover are as follows:

- **Farm Business Income** - FBI is the return to all unpaid labour (farmer, spouses and others with an entrepreneurial interest in the farm business) and to their capital invested in the farm business which includes land and buildings;
- **Cash Income** - cash receipts less expenditure; and
- **Net Farm Income** - the return to the farmer and spouse for their manual and managerial labour and tenant-type capital invested in the farm business.

Looking at the average figures for all 3 measures since 2005/6 it is apparent all 3 measures initially rose in value up until 2007/8, with before falling back in 2008/9 and 2009/10. 2010/11 saw a rise in all 3 measures.

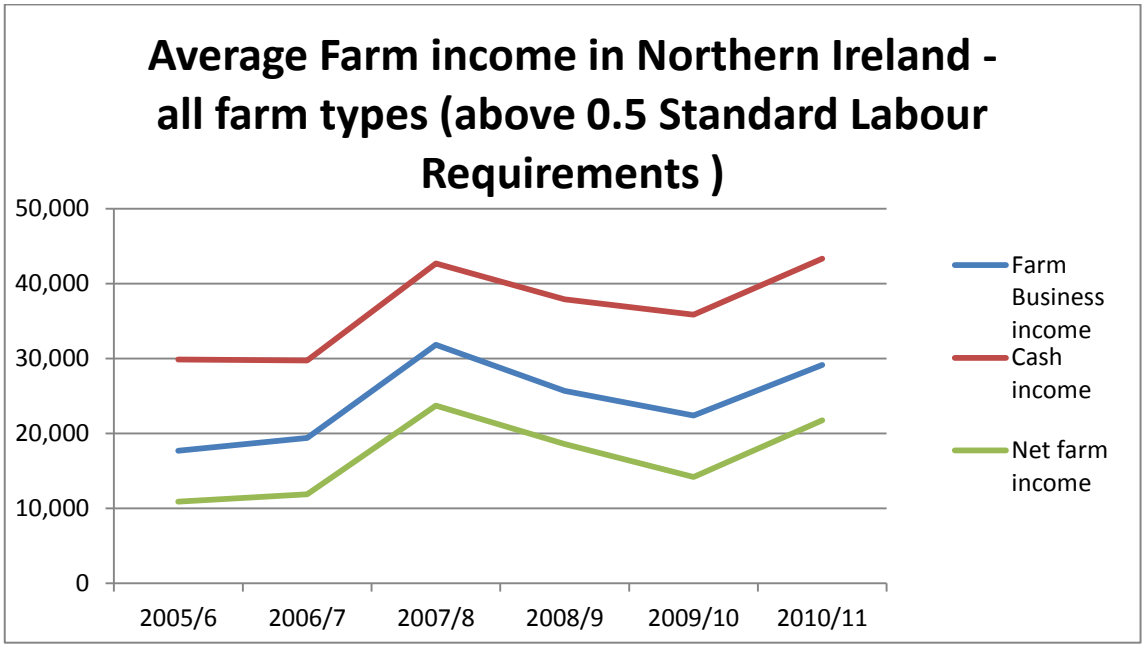

Figure 11: Average Farm income in Northern Ireland - all farm types (above 0.5 Standard Labour Requirements)

Taking the 2005/6 figures and comparing them to the 2010/11 average farm income figures shows the following changes:

- Farm Business Income - +65%;
- Cash Income - +46%;
- Net Farm Income - +99%;

Whilst these headline figures show the increase in average farm income across the 3 measures used by DARD it is also useful to look at how the values change in comparison to the previous year's data as set out in figure 10 below.

This data further illustrates the growth and contraction of the measures of farm income between 2005/6 and 2010/11. By way of example net farm income increased 100% between 2006/7 and 2007/8 before contracting by 20% from 2007/8 to 2008/9.

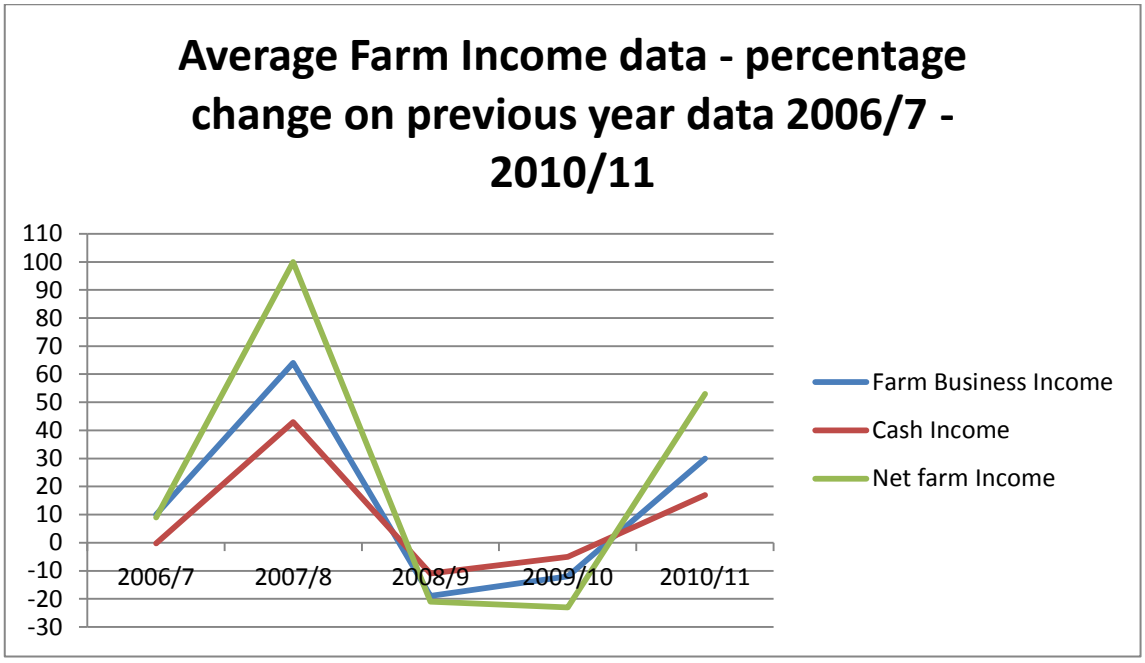

Figure 12: Average Farm Income data - percentage change on previous year data 2006/7 - 2010/11

Looking forwards, a key question remains how farm incomes will change for 2011/12, which is particularly pertinent given the recent spikes in the prices of inputs such as animal feed.

DARD did publish a forecast of 2011/12 farm incomes for a range of sectors in January 2012. The forecast percentage change in Farm Business Incomes for the different agricultural sectors are set out in table 1 below.

Farm Type	2010/11	2011/12 (forecast)	% change
Cereals	35,942	20,427	-43
Dairy	51,555	61,490	+19
Cattle & Sheep (LFA)	19,257	19,054	-1
Cattle & Sheep (lowland)	9,354	8,516	-9
Pigs	56,279	33,748	-40
Mixed	43,925	36,534	-17
All types	29,159	30,673	+5

Source: Farm Business Survey

Table 1: Farm Business Income data (£ Sterling) for 2010/11, forecast data for 2011/12 and percentage change.

The projections contained in table 1 indicate reductions in Farm Business Income for all but one of the agricultural sectors, with the cereal and pig sectors facing the biggest percentage falls. '*All these farm types experienced higher product prices 2011/12 but this was not enough to offset increases in input costs and, therefore, a reduction in incomes. The most notable increases in input costs for each farm type were fertilisers for Cereals farms, feeds for Pigs farms, and feeds and fertilisers for Cattle & Sheep (LFA), Cattle & Sheep (Lowland) and Mixed farms.'*

The one exception within this forecast data is the Dairy sector, within which Farm Business Income is forecast to increase by 19%. This positive forecast was based on the premise of ' …*higher milk prices (achieved and anticipated) in the 2011/12 accounting year. It is important to note, however, that the increase in milk prices was counteracted to some extent by higher input costs, in particular for feeds and fertilisers*.'

It should however be recognised that this forecast data was published in January 2012 and as such may well be subject to change when the full picture becomes clear in January 2013.

In the absence of a current (2012) overall measure for farm income, **DARD's Pig Financial Results data, which is updated on an ongoing basis, does indicate that the pig sector in particular is experiencing a challenging year**. As illustrated in figure 13 below, **the margin over feed per finished clean pig has fallen from a high point of £14.47 in December 2011, to the low point of £5.82 for the month of August 2012 – 60% lower than it was 9 months ago**.

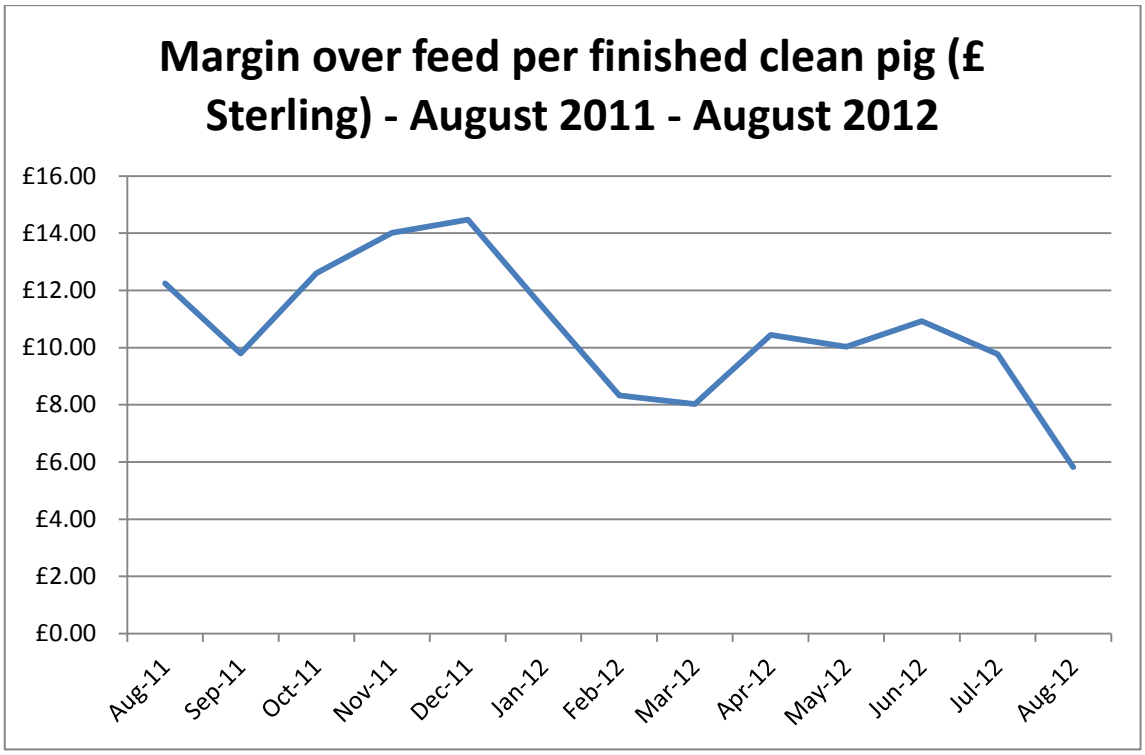

Figure 13: Margin over feed per finished clean pig (£ Sterling) - August 2011 - August 2012[6]

5 Food supply chain issues

The food supply chain is the name given to the interconnection between food producers, manufacturers/processors, wholesalers, retailers and consumers.

As set out in figure 14 below, the many stakeholders in the food supply can be connected to each other in many different ways.

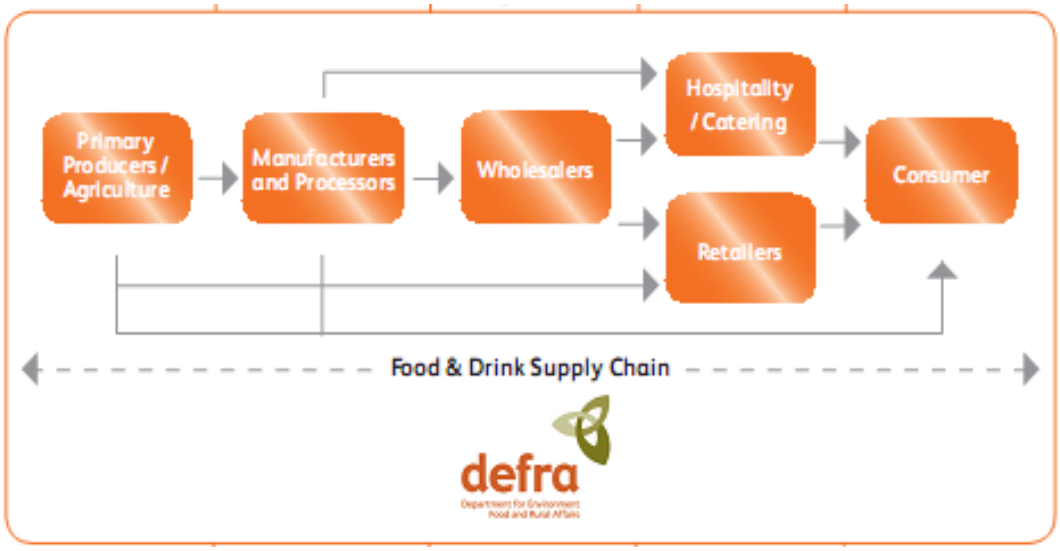

Figure 14: The Food and Drink Supply Chain[7]

[6] Northern Ireland Pig Financial Results, August 2012, DARD website
[7] http://foodanddrink.nsacademy.co.uk/files/nsafdm/resources/FINALUKFSC.pdf

Individual farmers may choose to sell all or some of their produce in one or more of the following ways:

- Directly to a manufacturer/processor;
- Directly to a retailer; and
- Directly to a consumer.

The choices that a farmer makes in relation to the food supply chain can have a direct impact on the profitability of their business.

Selling directly to the consumer is often considered to be the most profitable approach as it cuts out the processors and retailers who have their own margins to make. There are however downsides to selling directly including the potential need for costly processing, storage or retail facilities on farm, and the lack of a guaranteed demand for products.

Selling to a processor or retailer generally means that the farmer will have a contract of supply and will not have to process or market their produce which can be costly. The downsides to this model however are that supply contracts can often come with significant conditions that can be challenging to meet in relation to the specification of the produce. In addition the price that the farmer receives for their product will often be fixed at a level which will enable the processor/retailer to make a profit and as such this can mean that the price which the farmer receives is relatively low.

Within the UK, apparent problems with the functioning of the food supply chain led the Competition Commission to undertake a review of the groceries market between 2006 and 2008. The review established that there were problems with the existing system which were having an adverse effect on competition due to a number of market features including supply chain practices that were detrimental to suppliers.

These findings led to the introduction of the UK the Groceries Supply Code of Practice (GSCOP) in February 2010.

The GSCOP is underpinned by an overarching fair dealing provision, and includes (among others) a prohibition from making retrospective adjustments to terms and conditions of supply; a prohibition from holding suppliers liable for losses due to shrinkage; a requirement to enter into binding arbitration to resolve any dispute with a supplier; and a requirement not to unreasonably de-list a supplier. It applies to any retailer with groceries turnover in excess of £1 billion per year (currently there are ten), and governs their relationships with their direct suppliers.[8]

Following the election in May 2010, the coalition government confirmed its intention to create a groceries ombudsman and published a draft Bill setting out the powers of the Adjudicator in May 2011. The Bill was considered by both the EFRA and BIS Select Committees in summer 2011, and both recommended changes to the draft legislation.

[8] National Farmers Union Briefing on The Groceries Code Adjudicator Bill, 12th May 2012

In the Queen's Speech on 9th May 2012, the government announced its intention to introduce a formal Bill, which was subsequently published on 11th May 2012. The Bill will be introduced in the House of Lords and is expected to have its Second Reading on 22nd May 2012.

The Groceries Adjudicator Bill was introduced to the House of Commons on the 3rd September 2012 and includes provisions for 3rd party complaints. Questions however remain over whether the creation of an Adjudicator will actually improve the lot of producers/suppliers in relation to their dealings with processors and retailers through the effective implementation of the GSCOP.

6 Weather conditions

The weather has a direct impact on the profitability or otherwise of agricultural businesses in a number of ways.

Weather conditions in terms of temperature, sunlight and precipitation levels will have a direct impact on crop yields and grass growth

Weather conditions will also impact on ground conditions which will have a direct impact on livestock and whether they can be grazed on pasture and for how long. The nature of ground conditions will also impact on the ability of a farmer to harvest a crop.

Taken together these factors associated with weather conditions will have a major impact on both the income a farmer can generate and on the inputs he needs to bring in if for example his harvest is down or he is unable to put animals out to pasture.

Considering this information the last few years have seen negative cost impacts on local farmers from both local and further afield weather conditions.

According to met office data the summer of 2012 (June-August) was the wettest summer for the UK in 100 years[9]. Summer 2012 was also one of the dullest summers on record with just 413 hours of sunshine making it the dullest UK summer since 1987. The UK's mean temperature of 13.9°C over June, July and August, was also 0.4°C below the long term average. The impacts of this wet weather, cloudier and colder summer have been multiple but have included:

- Livestock being kept indoors as ground conditions cannot support them – this has also had a knock on effect on demand for fodder as animals need to be fed;
- Ground conditions have made the harvesting of crops and silage particularly challenging;
- The reduction in sunshine and temperature has had a detrimental impact on the growth rates and yields of some crops – which has increased costs of fodder and feed;

[9] Summer 2012 was the wettest in 100 years, Met Office press release, 4th September 2012

Summer weather conditions within the USA, a key producer of world soy meal, have also had an adverse impact on agriculture. Large parts of the USA have been subject to drought conditions with the United States Department of Agriculture characterising the conditions as the *'…most severe and extensive drought in at least 25 years.'*

The impact of this drought on soy bean production has been drastic with USDA estimating that *'….average yield is estimated at 35.3 bushels per acre in September, down sharply from initial forecasts of 43.9 bushels per acre, but only slightly below the 36.1 bushels per acre forecast in August**. Soybean yields at this level would be the lowest since 2003***[10]*.'*

This reduction in US yields has had a direct impact on world feed prices and is also projected to lead to a significant increase in food prices within the USA and wider.

7 Conclusions

- There are many factors which impact on the profitability or otherwise of the agricultural industry in Northern Ireland – this is a complex situation and one which merits further detailed and expert analysis;
- The pace of change from being in profit to being in deficit appears to be rapid and market volatility and price variation are a growing challenge for farmers here;
- Agricultural prices have shown variation but the general trend has been upwards over much of the last decade – the challenge revolves around the fact that input costs appear to have risen quicker than farm prices;
- Commodity prices – particularly for animal feed and fertiliser have risen markedly over the last decade. 2012 alone has also borne witness to significant increases particularly in relation to feed;
- Price differentials for sheep and cattle do exist between NI, GB and the Republic of Ireland but the size of the differential varies over time and is the result of a range of factors that require further analysis;
- Farm incomes up until 2010/11 appeared to be holding up well but were coming under increasing pressure from the rising cost of inputs such as fertiliser and feed;
- Food supply chain issues continue to be a focus for concern for producers and it is too early to say whether the appointment of a Groceries Adjudicator will address these concerns;
- The weather has directly increased the costs that local farmers have had to absorb whilst simultaneously impacting on output levels.

[10] U.S. Drought 2012: Farm and Food Impacts, USDA website, 25th September 2012