Situation and Outlook
July 2017

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Introduction

This mid-year update is a supplement to the annual Situation and Outlook published by Teagasc in December 2016. It begins with a summary of current economic conditions, looking at the international macroeconomic picture, recent exchange rate developments and movements in energy prices. It then provides a summary of the developments that have taken place in commodity markets in the first half of 2017. Finally, there is an assessment of the performance of the main farm systems in that period.

The report takes a short term outlook perspective to year end, assessing likely future developments and how they would influence commodity prices, production costs and farm profitability.

Across the various farm sectors, access to timely official data on production, output prices and inputs costs, remains a challenge across the EU. Official data sources tend to lag behind the actual market situation by three months and more in some cases. It is therefore necessary to rely on unofficial data sources, industry expertise and even anecdotal evidence to form an up to date assessment of the market situation.

In this publication the situation and outlook is summarised. For each commodity sector, production, consumption, output price, input market developments and income are assessed and given a positive, neutral or negative ranking.

This exercise is carried out in respect of the *Situation*, representing the first half of 2017, and the *Outlook* representing the second half of 2017. The categorisation is performed with respect to the farmer's perspective on the impact of market price, supply and demand developments on farm profitability.

The categorisation takes account of the position in the previous period. So for example a fall in milk prices in the first half of the year in comparison with the same period in the previous year would be categorised as a **negative** situation.

However, if milk prices were anticipated to rise in the outlook period relative to the same period in the previous year this would be described as a **positive** outlook.

Examples of positive developments would include:

- A rise in output prices
- A fall in inputs prices
- A decrease in international supply
- An increase in international demand
- Favourable weather conditions
- A weaker domestic exchange rate

Positive

Conversely, examples of negative developments would include:

- A fall in output prices
- A rise in inputs prices
- An increase in international supply
- A decrease in international demand
- Poor weather conditions
- A stronger domestic exchange rate

Negative

Where either the situation or the outlook suggests no change relative to the corresponding period in the previous year, this is categorised as **neutral.**

Neutral

Finally, where it is either too early to make an informed judgement or where there is a deficit of the necessary data on which a judgement should be made, it may not be possible to determine whether a positive, negative or neutral symbol should be used. Such instances are represented by a question mark.

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This approach is designed to highlight the key market developments that have recently taken place and that are likely to take place in the short term and to highlight if necessary key uncertainties regarding the short-run outlook. The associated information is then distilled down to a series of summary tables.

Commodity Sector Summary

Dairy

Situation	Outlook
Positive	Positive

PRODUCTION: Irish milk production was up by 6% in H1 2017 relative to H1 2016. The recovery in milk prices should encourage this trend to continue through H2. An annual increase in Irish milk production of more than 6% in 2017 is possible, with considerable regional and farm level variability around that figure.

PRICES: Irish milk prices rose through the first half of 2017 due mainly to a global slowdown in production growth and strong demand for butterfat. Milk prices are likely to stabilise in the short term. Any late season price adjustments are unlikely to have a substantial impact on the annual average milk price given the seasonal milk production profile.

COSTS: In H1 2017, feed, fertiliser and energy prices have remained low. Feed use has increased slightly, but overall production costs are relatively stable.

MARGINS: Net margins in 2017 will be up over 100% on the 2016 level with average dairy farm income likely to be in the €75,000 to €80,000 range

Beef

Situation	Outlook
Negative	Positive

PRODUCTION: Irish beef production has so far increased by about 4% in 2017, with greater prime cattle availability for the year to date partially offset by lower slaughter weights.

PRICES: In early 2017 finished cattle as well as young cattle prices have been lower than in 2016. Prospects for cattle prices over the rest of year are positive. Growth in EU demand and buoyant world markets will support EU and Irish prices at close to or just above 2016 price levels.

COSTS: Costs of production are likely to be broadly neutral in 2017. Lower or stable input prices are likely to be partially offset by higher fuel prices and increased feed usage driven by growth in finished cattle output.

MARGINS: Lower market prices for young and finished cattle in Q1 and Q2 2017 will reduce the value of output, but this decline will be partially offset by reduced costs of production and improvements in prices. Gross margins on Cattle Finishing will improve (+11%), while those on Single Suckling farms look like being largely unchanged on 2016 levels.

Sheep

Situation	Outlook
Negative	Positive

PRODUCTION: In 2017 EU and Irish lamb supplies are forecast to increase, while imports into the EU are forecast to contract.

PRICES: The on-going Brexit related weakness of the pound sterling against the euro, slower growth in the UK economy and the absence of growth in per capita demand for lamb on continental EU markets are forecast to leave 2017 lamb prices largely unchanged on 2016 levels.

MARGINS: With largely stable lamb prices and input costs in 2017, change in profit levels in Irish sheep production will be due to changes in output volume per hectare.

For 2017 further increases in sheep output per hectare are forecast. As a result gross margins on mid-season lowland lamb enterprises in 2017 are forecast to be 4% higher than those recorded in 2016.

Tillage

Situation	Outlook
Positive	Neutral

PRODUCTION: In Ireland, growing conditions to mid July 2017 have meant that yields this year are likely to be slightly back on the yields achieved in 2016. However, it is still early days in the harvest and it is difficult to gather hard evidence on likely yields.

PRICES: Weather concerns in the US, Canada and Australia are creating slight upward pressure on prices. Prices quoted at present represent about a 5% increase over harvest prices in 2016.

COSTS: Production costs in 2017 are likely to be slightly less than 2016 costs, at about 5%.

MARGINS: With yields declining by about 5%, prices increasing by 5%, increased straw prices, output value per hectare will be stable. With costs declining by 5%, it is estimated that FFI income on specialist tillage farms will be up slightly on 2016 levels.

Global Economy

The global economy has moved into a period of growth with increased global industrial activity and trade. However, the emerging trend towards more protectionist trade policy positions is a source for concern for future growth prospects.

Growth remains firm in key commodity importing countries. Some lower income countries are experiencing economic growth driven by improved metal prices, but sluggish oil prices mean that growth has not benefitted all commodity exporters. Price developments in green commodity markets have varied, with growth in some categories and stability elsewhere.

Economic growth in the US, the Eurozone and Japan has been stronger than anticipated, while the UK economy has lagged behind and has begun to feel the effects of Brexit uncertainty.

Growth in the US has been improving in 2017. The US economy is close to full employment and the US Federal Reserve has continued to tighten its monetary policy via interest rate increases. Higher interest rates have not impacted adversely on financial markets. The US trade policy position is a source for concern and steps towards a renegotiation of existing trade agreements and a reassessment of prospective trade agreements (e.g. TPP and TTIP) could negatively impact on future growth prospects.

The Eurozone outperformed the US in growth terms in 2016 and growth in 2017 has remained comparatively strong. Unemployment continues to fall, albeit from quite high levels in some member states. This means that there is significant scope for further reductions in unemployment. Inflation remains at very low levels, with no imminent change in European Central Bank interest rate policy likely. A key concern for the Eurozone will be the outcome of the Brexit negotiations, as well as the rise in populist political parties, some of which have an anti-European Union stance.

The UK has entered a period of considerable political uncertainty, amplified by the outcome of the June 2017 UK general election, which greatly reduced the parliamentary power of the UK Prime Minister, Theresa May. Brexit policy and Brexit negotiations with the EU have come to dominate all political discussions, with the UK at risk of leaving the EU with no trade agreement in place, given its current negotiating position.

The UK government continues to pursue a Hard Brexit position, which would see it outside the EU Customs Union, while at the same time seeking a free trade agreement with the EU. For its part the EU continues to indicate that the UK's expectations for the outcome of the Brexit negotiations are unrealistic. A worse case outcome could see the UK in a trade relationship with the EU on the basis of World Trade Organisation Most Favoured Nation tariffs, which for agri-food products could be trade prohibitive.

UK economic growth has slowed considerably and its growth rate now lags behinds much of the EU. Sterling remains comparatively weak, but stable, against other key currencies such as the US dollar and the euro.

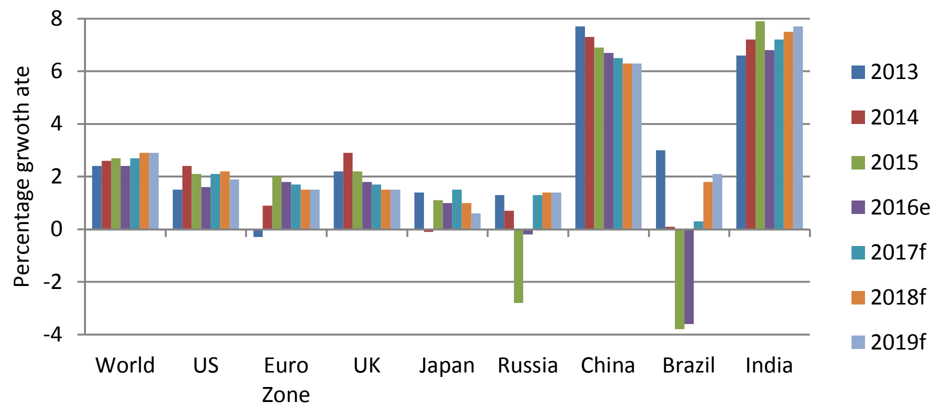
A commodity price recovery is assisting growth in Russia, while China continues to pivot from a dependency on export demand as the driver of economic growth towards a situation where domestic demand becomes more important as the driver of economic activity.

The Indian economy experienced a temporary slowdown in 2016 arising from an anti-corruption measures which involved the withdrawal of large denomination bank notes from the system. This negatively impacted on domestic consumption in the short term. Growth in India is forecast to remain more robust and to surpass China's growth rate in the short term.

Economic reforms have led to an end of the recession in Brazil which should benefit Latin American economies in general.

Actual and projected GDP growth rates for selected regions of the world are shown in Figure 1.

Figure 1: Annual Real GDP growth rates and forecasts



Source: World Bank (June 2017)

Exchange rates

Recent months have seen relative stability in the exchange rate between the euro, the US dollar and sterling. However, sterling remains at a comparatively low rate against the euro which is a source of concern for Irish exporters to the UK.

Exchange rates are important in that they impact on the price of Ireland's exports and imports. Much of Ireland's agri related trade is denominated in non-euro currencies. The recent weakness of sterling is a negative for Irish agri-food exports making them less competitive on the UK market.

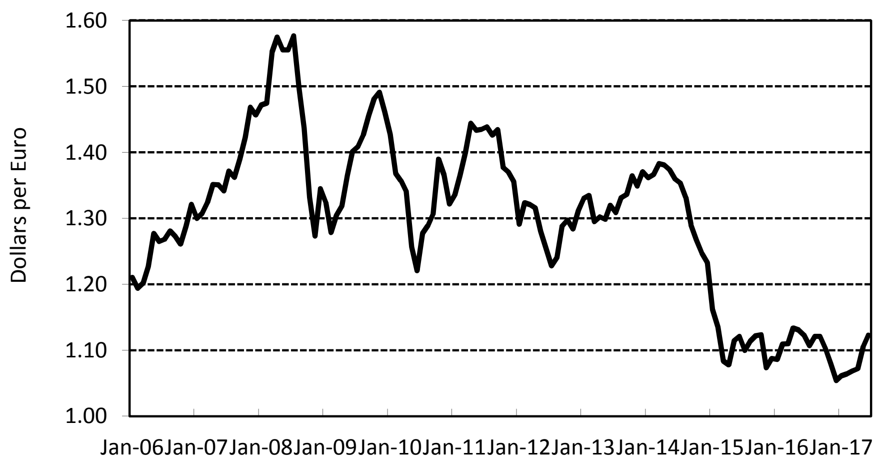
The euro has moved over a relatively narrow range against the US dollar over the last 2 and a half years. The euro dipped to its lowest monthly level since 2003, reaching $1.05 against the dollar in December 2016, but has since recovered to $1.13 in June of 2017.

The decision to hold a referendum on UK membership of the EU in June 2016 led to a weakening of sterling against the euro and the US dollar through much of 2016 and H1 of 2017. Sterling has fluctuated over a relatively narrow range against the euro over the last 12 months, as news concerning Brexit has ebbed and flowed. The recent UK general election outcome has been the latest source of weakness for sterling.

The general weakness of sterling reflects uncertainty about the future economic growth prospects of the UK, which are tied to the terms of the Brexit deal which has yet to be negotiated.

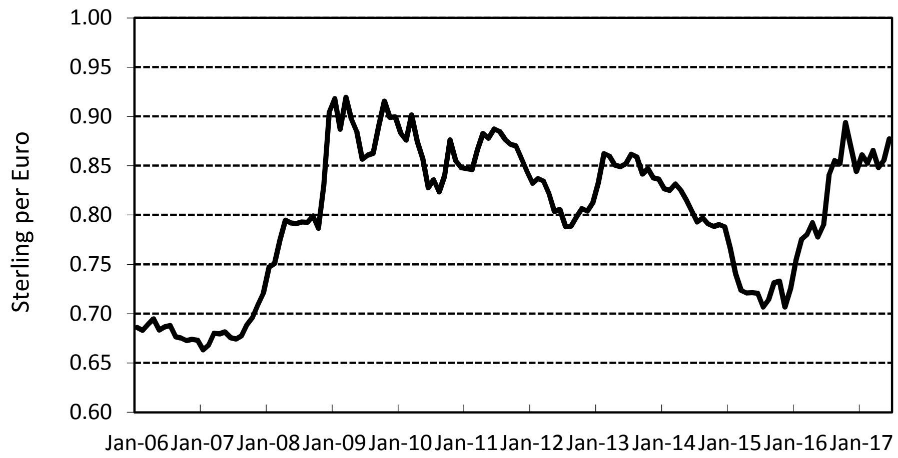
The European Central Bank remains vigilant with respect to the Eurozone's economic recovery. Inflation remains low, while economic growth has recovered. Unemployment in the EU continues to fall.

Figure 2: Euro/Dollar Exchange Rate



Source: European Central Bank

Figure 3: Euro/Sterling Exchange Rate



Source: European Central Bank

Energy Market

While fuel and electricity are less significant input items than feed and fertiliser in grassland systems, the price of energy has implications that extend throughout the economy, given the importance of energy as a cost item in the production and distribution of goods.

OPEC has attempted to drive oil prices higher via agreements on production cuts among its membership. However, to date this policy has only had very limited success. Oil supplies from non-OPEC sources continue to provide ample global supplies. Notably, US oil exports continue to grow, aided by booming shale oil production.

Brent crude oil prices moved upward through H2 of 2016. The monthly average broke through the $50 per barrel mark in December 2016, as illustrated in Figure 4. Prices rose further to reach over $55 in February 2017, but have since retreated to as low as $45 in June 2017. In July 2017 prices rose slightly but remain below the €50 mark. Set against the high prices observed through much of the period from 2008 through to H2 2014, the current oil price remains quite low.

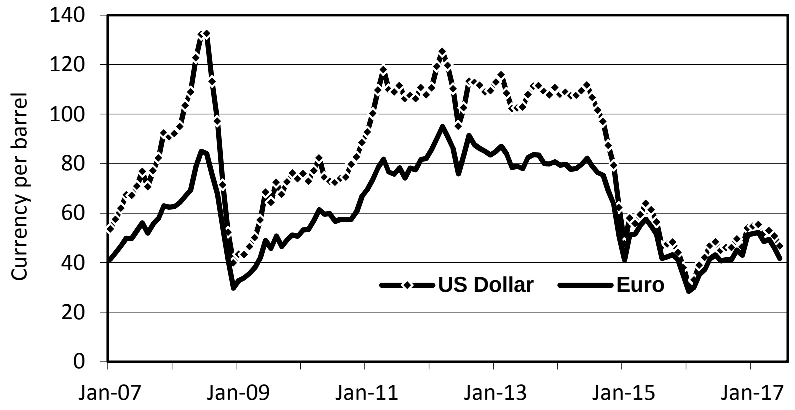
The emergence of non-conventional fossil fuel extraction technologies, such as fracking, has made it possible to recover previously uneconomic oil and gas deposits. Fracking has also increased the exploitable capacity of fossil fuel deposits which previously would have only been extracted through conventional means. OPEC had attempted to burn off fracking producers, especially those in the US, via a liberal OPEC oil supply policy which contributed to low international oil prices. Fracking generally has a higher extraction cost than for convention oil deposits. However, the cost of extraction via fracking continues to fall and US producers in particular have proven to be quite resilient in the context of lower international oil prices.

More recently OPEC has renewed its supply control policy, but this has only generated weak upward momentum in crude oil prices.

More generally, lower oil prices have benefitted oil importing regions globally such as the US, EU and Asia and have been a negative for oil dependent exporters, who have seen their oil revenues drop substantially.

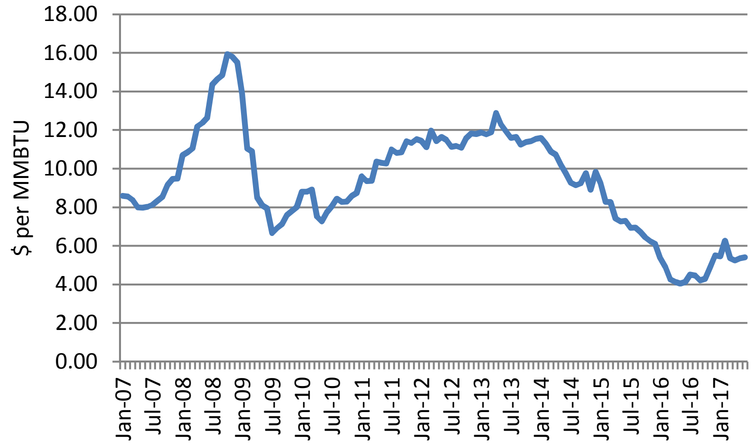
European natural gas prices have moved upward in recent months, albeit from a relatively low level. This is due to tighter supplies on the EU market, largely reflecting issues with the gas pipeline infrastructure and other factors limiting imports.

Figure 4: Brent Oil Prices in Euro and US Dollar Terms



Source: Adapted from the St Louis Fed

Figure 5: European Natural Gas Average Import Price



Source: World Bank

Inputs Market Summary

Feed

Situation	Outlook
Neutral	Neutral

- Grass growth conditions in Ireland have been better in 2017 than in 2016 and soil trafficability has also been favourable, leading to higher levels of grass utilisation. A mild winter was followed by spring weather in Ireland which was warmer and dryer than normal, with strong grass growth observed through most of the first half of 2017.
- Aggregate dairy feed use In Ireland has increased in 2017, but only in line with the growth in dairy cow numbers. Aggregate feed use on the beef side is also up in 2017, but again this largely reflects the growth in animal numbers.
- Feed prices have been stable the first half of 2017, and are slightly below their level in 2016.
- Feed prices through the second half of 2017 will depend on global grain supply and demand conditions. Early indications of the global harvest suggest only a slight upward movement in price is likely.

Fertiliser

Situation	Outlook
Positive	Positive

- Over the last 12 months international fertiliser prices have been at their lowest level for four years.
- During H2 2016 prices for fertiliser in Ireland dropped to levels last seen in 2010, but have since shown some weak upward movement in H1 2017. The low prices at the back end of 2016 will have benefitted production costs on cereal farms in particular in the current season.
- While only a limited amount of data are available to date, it would appear that fertiliser sales in Ireland for the first six months of the 2016/17 fertiliser year are up considerably on the same period in the previous year.
- Quite why Irish fertiliser sales are elevated is unclear. It may reflect farmers' decisions to stock up on fertiliser while prices are at a low level.
- There is a considerable lag in the availability of the quarterly official data, so precise sales levels for the full fertiliser year will not be confirmed until late autumn.

Energy

Situation	Outlook
Negative	Negative

- In spite of OPEC efforts to drive oil prices upward, via supply controls, oil availability globally has been strong enough to generally prevent prices from moving above the $50 dollar per barrel level.
- Continuing low oil prices, relative to the average level over the last decade, should be a feature of the next couple of years.
- Farmers have seen fuel prices rise over the last 12 months, but fuel prices remain well below the highs seen from 2012 through to 2014.

Weather Conditions

From a grass growing perspective, weather conditions in 2014, 2015 and 2016 were regarded as quite good. It follows that expectations for 2017 would be for a reversion to more normal conditions which would not be as favourable to grass growth as the previous three grass growing seasons. However, yet again in the first half of 2017 weather conditions for grass growth have been extremely favourable.

Deviations in the spring air temperature relative to normal are shown for a range of locations in Figure 6. Spring 2016 was warmer than normal in the four Teagasc locations reported here. This shows that spring temperatures were between 0.7 to 1.2 degrees Celsius above normal across the four locations.

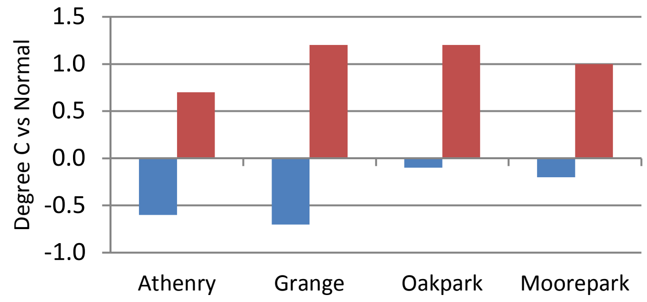
As shown in Figure 7, cumulative spring rainfall amounts in all four Teagasc locations were below the long term norm. In the West (Athenry) spring 2017 rainfall was 90% of normal, the lowest percentage across the four locations. Meanwhile in the East (Grange), Midlands (Oakpark) and the South (Moorepark) spring rainfall was between 92% and 94% of the historical norm.

Figure 8 shows grass growth data from Pasture Base Ireland for 2015, 2016 and for the year to date in 2017. Overall, in the first half of 2017, grass growth has been ahead of 2016 levels and more in line with 2015, which was itself an excellent year for grass growth. Following very strong grass growth through the spring, grass growth slowed down in May and again for a period in late June and early July 2017. However, in broad terms H1 2017 has been a very good period for grass production in Ireland.

Weather conditions in Ireland in the key growing season for cereals were particularly dry. This appears to have had a negative effect on grain fill for cereal crops in 2017. Initial indications are that winter barley yields are likely to be slightly lower than in 2016 level.

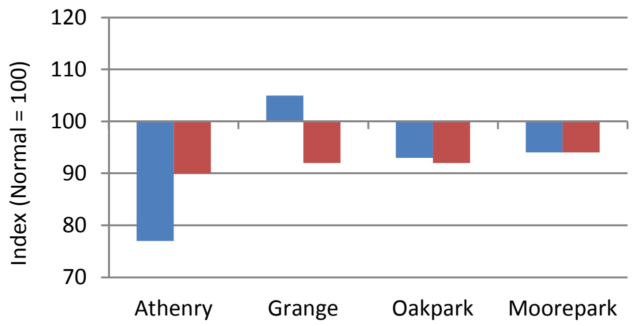
Note: Normal weather is defined as the 30 year average from 1981 to 2010.

Figure 6: Spring 2016 and 2017 Mean Temperature Relative to Normal (1981-2010)



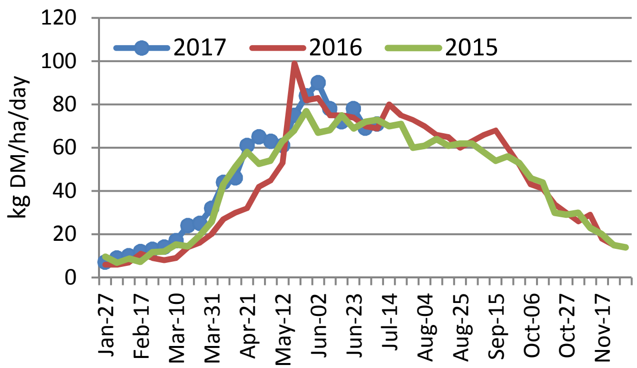
Source: Met Eireann

Figure 7: Spring 2016 and 2017 Rainfall Relative to Normal (1981-2010)



Source: Met Eireann

Figure 8: Irish Grass Growth 2015, 2016 and 2017



Source: Teagasc Pasture Base Ireland

Feed Market

The outturn for 2016 showed that bovine feed use on grassland enterprises in Ireland was up 4.6% in volume terms, reflecting the continuing increase in animal numbers nationally. Based on DAFM and CSO data, average dairy feed use per head in 2016 is estimated to have been about 887kg per cow in 2016, a decrease of 5% on the previous year. Milk yields were stagnant in 2016 and with milk prices faltering through the peak season, farmers may have been reluctant to increase yields in 2016. Beef feed usage per head in 2016 was up about 2% on the previous year.

As of July 2017, official data on feed use in the current year are limited, with DAFM sales data available for Q1 only. These data shows that the aggregate volume of dairy feed sales in Q1 2017 was up 5.3% on the same period in 2016. More up to date figures from unofficial sources were not available at the time of publication. Overall, given the growth in the dairy cow herd, early indications are that feed use per head in 2017 is likely to be at least on a par with 2016.

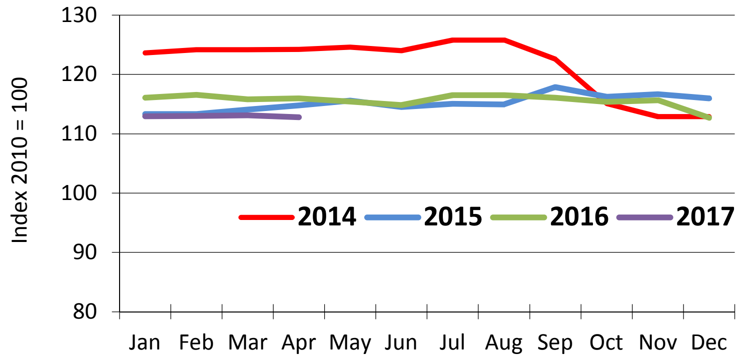
Aggregate beef feed sales increased in Q1 of 2017 by over 8% relative to 2016, with this increase partly driven by increased animal numbers.

As shown in Figure 9 and Figure 10, feed prices have been about 3% lower in H1 2017 compared with H1 2016. Anecdotally there has been a further weakening in feed prices in recent weeks.

Feed prices for the rest of 2017 will be contingent on the size and quality of the harvest. At present reports on the ongoing harvest indicate that cereal yields will be slightly back in 2017 on 2016 levels, due to reduced grain fill. However, international supply and demand conditions are of greater relevance in determining this season's Irish harvest prices and resulting feed prices. In Europe current expectations are for a reasonably good wheat and barley harvest in 2017, with soft wheat production slightly up on 2016 and barley production slightly down on 2016.

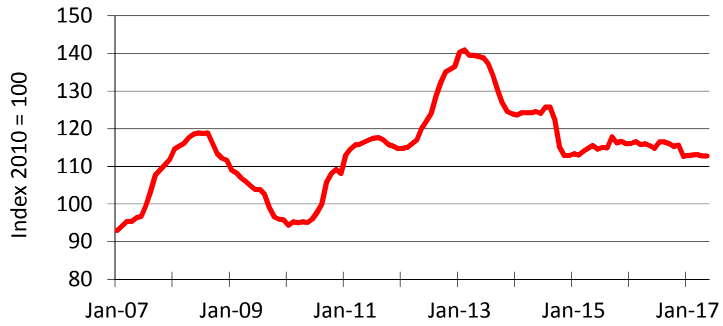
Taking a more global view, it is still too early in the year to be fully confident, but it would appear that the global wheat harvest is forecast to drop about 2%, with maize harvest down 5% and the soybeans harvest unchanged on the 2016 level. Overall this suggests that there will be relatively little movement in grain and feed prices for the year as a whole. (Strategie Grains).

Figure 9: Index of Monthly Irish Feed Prices 2014, 2015, 2016 and 2017



Source: Central Statistics Office

Figure 10: Longer Term Index of Monthly Irish Feed Prices



Source: Central Statistics Office

Fertiliser Market

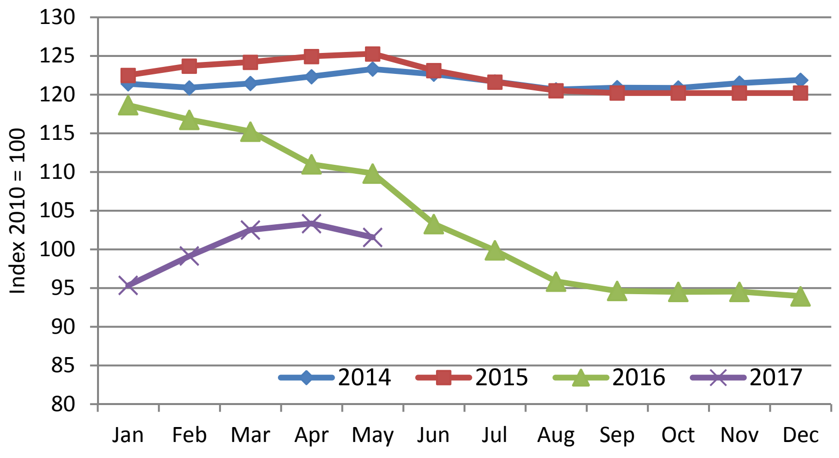
With energy prices depressed for the last two years, this has contributed to a period of comparatively low fertiliser prices. Fertiliser prices in Ireland in the 18 month period to the end of June 2017 have been the lowest observed since 2010.

Official monthly price data are presented in Figure 11 and illustrate the pronounced decline in prices through H1 2016. For 2016 as a whole, fertiliser prices were down more than 10% on the 2015 level. Prices began to track upwards again in Q1 of 2017, but have stabilised in Q2 at a lower level than in 2016. Average annual fertiliser prices in 2017 are anticipated to remain below the 2016 level.

The fall in fertiliser prices in 2016 came too late to benefit cereal growers, so the benefit of lower fertiliser prices will accrue on tillage farms in 2017.

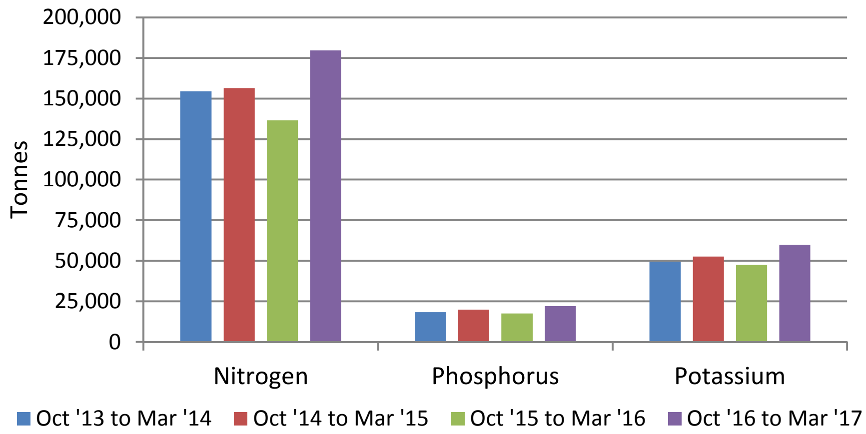
In terms of fertiliser sales in Ireland, the available official data covers the first six months of the fertiliser year (Oct 2016 – Mar 2017). For this six month period Figure 12 shows a 31% increase in nitrogen sales, and a 26% increase in phosphorous and potassium sales, relative to the same period in 2015/16. The increased sales for the period may be an indicator of forward purchasing of fertiliser by farmers attempting to maximise the benefit of lower fertiliser prices, rather than an overall trend towards increased fertiliser usage.

Figure 11: Index of Monthly Irish Fertiliser Prices 2014-2017



Source: Central Statistics Office

Figure 12: Irish Fertiliser Sales in first 6 months of fertiliser year



Source: Central Statistics Office

Dairy Market

Global Supply

Situation	Outlook
Positive	Neutral

- Lower milk prices in 2016 has caused global milk production growth to slow down over the last 12 months
- However, the strong increase in milk production in Ireland since milk quotas expired has continued.
- Elsewhere in the EU28 production has moved into a contraction, with growth only likely to re-emerge in H2 of 2017.
- EU production in 2017 is expected to be less than 1% higher than in 2016.
- While US production continues to grow, production in Oceania in the season just ended has stalled.

Global Demand

Situation	Outlook
Positive	Neutral

- International dairy product demand is stronger for some dairy products than for others.
- Butter, whey and cheese demand has been stronger than demand for SMP
- Chinese imports of dairy products for H1 2017 are broadly in line with 2016.
- The Russian embargo has remained in place and this continues to adversely affect international dairy product demand.
- High EU SMP stocks continue to hinder growth in SMP price in the short term.
- Overall, this suggests that the market is in a better balance than in 2016, but high prices could limit demand growth.

Milk Prices

Situation	Outlook
Positive	Positive

- In US dollar terms, international dairy commodity prices have come through a period of recovery from their lowest level since 2009.
- Irish farm milk prices have recovered to 33 cent per litre by mid-season in 2017.
- Short term prospects suggest that a period of price stability rather than further price increases is likely.

Irish Production

Situation	Outlook
Positive	Positive

- Irish milk deliveries to the end of May 2017 were 6% above the same period in 2016.
- Irish dairy cow numbers continue to increase, with the Irish herd likely to be about 3% larger at the mid-point of 2017 relative to the same point in 2016.
- Milk production is likely to continue to run ahead of the 2016 level in the coming months, but growth in monthly deliveries as always will depend on weather conditions.
- For 2017 as a whole, Irish milk production should exceed the 2016 level by 6 to 7 percent.

Input Cost

Situation	Outlook
Neutral	Neutral

- Feed prices to date in 2017 have been slightly lower than in 2016.
- Aggregate dairy feed sales to the end of Q1 were running about 5% ahead of same period in 2016.
- Lower energy prices over the last couple of years have contributed to low fertiliser prices in H1 of 2017 compared with H1 2016.
- Fertiliser sales over the first half of the fertiliser year are up considerably on the previous year.
- Overall, production costs in H1 of 2017 are broadly similar to 2016 and there are no signs of imminent production cost inflation.

Irish Farm Income

Situation	Outlook
Positive	Positive

- Average net margin in cent per litre in 2017 is likely to be about 13 cent per litre.
- Higher levels of milk production will further boost the growth in farm incomes in 2017.
- The current forecast is that the average sized Irish dairy farm could see net margin increase by close to 100% in 2017
- Average dairy farm income is likely to be in the €75,000 to €80,000 range.

Dairy Market

A global slowdown in milk production growth has taken place over the last 12 months. Milk production has contracted in many of the world's main dairy export regions, with the US remaining an exception. This global slowdown largely reflects the lower dairy commodity prices observed in 2016, compounded by poor production conditions and low farm milk prices in New Zealand. Negative producer sentiment in Australia was triggered by a major farm milk price cut which caused some producers to exit the sector. Globally milk production is set to increase by less than 1.5% in 2017, which is below the long term trend.

For the calendar year 2016, milk production was up just 0.4% in the EU, while it was up 1.8% in the US. Milk production in New Zealand and Australia in the dairy season just ended was down approximately 1% and 8% respectively.

At the EU member state level there has been a general downward trend in milk production over the last year, with relatively few exceptions. Among the larger milk producers in the EU, production in Ireland, the Netherlands, Poland and Italy continued to expand in 2016. Milk production in 2016 in Germany remained stable, while production in France and the UK contracted by 2.5% and 4.3% respectively.

In the EU production has slowed further in H1 of 2017, with Ireland, Poland Italy the only major producers that continue to show production growth. Figure 13 summarises recent milk supply developments. In the five months to the end of May 2017, milk production in the US is up by 1.4% relative to the same period in 2016. By contrast milk production in the EU is down 1.1% on the corresponding period in the previous year.

International dairy markets have been in recovery over the last 6 months, as the slowdown in production growth has led to a better balance in global dairy supply and demand.

Improving milk prices should boost EU milk supplies in H2. Overall EU production in 2017 is expected to be up very slightly on the 2016 level, with the increased production in H2 2017 offsetting the lower level of production in H1.

Following a period of decline which lasted 18 months, EU dairy product wholesale prices began to recover in the middle of 2016. Over the 12 month period to June 2017 the largest percentage increase in wholesale product prices has been for butter, which has doubled in price to over €5,000 per tonne. Large wholesale price increases have been observed for whey (83%) and WMP (51%) over the same period and cheddar prices have increased by one third. SMP prices have lagged well behind, with just an 11% increase recorded in the year to June 2017. The large volume of SMP held in EU intervention stocks has limited the increase in SMP wholesale market prices.

The increase in wholesale dairy product prices has been reflected in an increase in Irish farm milk prices from July 2016 onward. Monthly farm milk prices in Q2 of 2017 - the peak delivery period - have continued to improve. As shown in Figure 15, Irish milk prices were as low as 24 cent per litre in June 2016, but have recovered to over 33 cent per litre by June 2017.

Short term prospects for dairy commodity prices are for stability rather than further increases, given that the higher prices of recent months are fuelling a recovery in production growth. Figure 16 charts the most recent Global Dairy Trade (GDT) auction price developments, which shows that prices rallied in Q1 and stabilised in Q2 of 2017.

In spite of the weak growth in milk production globally, milk production in Ireland continues to grow at pace, driven largely by continuing increases in dairy cow numbers.

The increase in Irish milk production for 2017 as a whole will depend largely on grass growing conditions between now and the end of the season. The improving monthly milk price may spur a stronger increase in milk deliveries. Production for 2017 is likely to be up by 6% or more on the 2016 level.

The available data for the first half of 2017 shows a slight drop in Irish feed prices in comparison with 2016, with feed prices now at their lowest level since 2011. It is notable that the volume of aggregate Irish dairy feed sales in 2017 has been running ahead of the 2016 level, but this can be explained by the increase in cow numbers, with little change in usage per head likely to have taken place.

Following the fall in oil prices which began in 2014 and the subsequent fall in natural gas prices, farm level fertiliser prices finally trended downward through 2016 and are set to remain low through 2017.

Fuel expenditure declined in 2016, reflecting the sharp fall in oil prices. In 2017 there has been a slight upward rebound in fertiliser and fuel prices, but this is from a comparatively low base.

Direct input costs will be little changed on a per litre basis in 2017. Overall, dairy production costs for 2017 appear to be little changed on the 2016 level and the outlook for the rest of 2017 suggests that no cost inflation is likely.

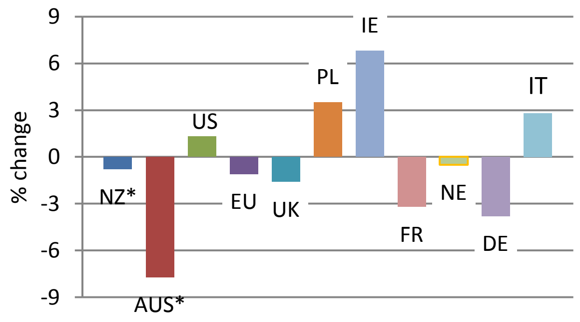
The strengthening of international dairy markets, higher farm milk prices, rising production and a benign cost environment means that dairy farm incomes in Ireland will increase substantially in 2017.

A major benefit will be felt from a rise of 20% to 25% in milk prices in 2017, taking the annual average price to over 33 cent per litre (actual fat VAT inclusive basis).

On farms where it is profitable, lower production costs, and increased milk deliveries will reinforce the impact on farm income of higher milk prices.

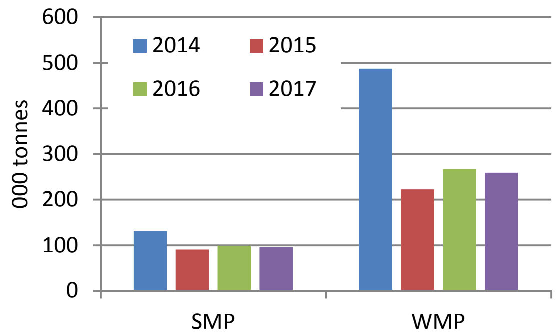
Figure 17 shows the average net margin per hectare in 2014, 2015, 2016 and the forecast margin for 2017. The substantial milk price increase in 2017 is forecast to leave the typical dairy farm net margin per hectare up by close to 100% on a per hectare basis in 2017. The average dairy farm is likely to have an FFI of €75,000 to €80,000 in 2017.

Figure 13: Percentage Change in Milk Production Jan to May 2017 in EU & US (July '16- May '17 NZ & AUS)



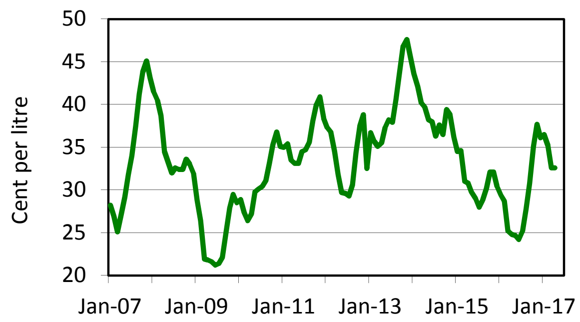
Source: Eurostat, USDA, Dairy Australia, DCANZ

Figure 14: Chinese Powder Imports Jan to May 2014, 2015, 2016 and 2017



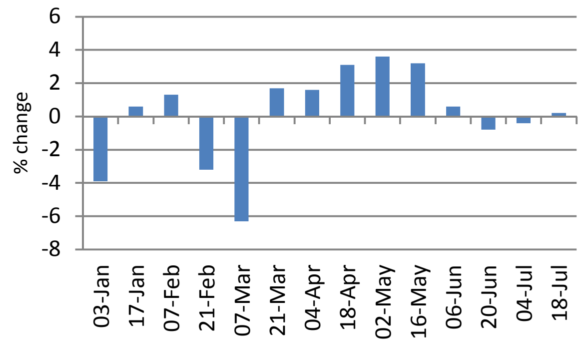
Source: US Dairy Export Council

Figure 15: Monthly Irish Farm Milk Prices (actual fat)



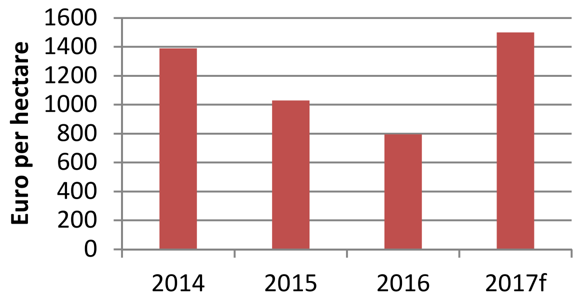
Source: CSO

Figure 16: GDT Auction Index Month on Month Price Movements in 2017 (done)



Source: GDT

Figure 17: Dairy Net Margin per hectare 2014 to 2016 and Forecast for 2017



Source: Teagasc Own Estimates

Beef Market

EU Supply

Situation	Outlook
Neutral	Negative

- EU beef production in the first third of 2017 has declined by over 1% versus 2016.
- The decrease in production in 2017 is due to reduced rates of cow disposals in most member states as well as lower prime cattle slaughter.
- For 2017 as a whole, EU production is forecast to increase by less than 1%.
- EU beef imports are forecast to remain largely stable while EU beef exports are forecast to grow strongly in 2017.

EU Demand

Situation	Outlook
Positive	Positive

- The growth in EU demand for beef observed in 2016 is expected to continue in 2017.
- Growth in per capita incomes in the EU is expected to support per capita consumption in the EU at close to levels observed in 2016.
- EU exports of beef, offals and live cattle to markets in East Asia, and the Middle East and North Africa are forecast to grow in 2017.

Beef Prices

Situation	Outlook
Negative	Neutral

- Average EU cattle prices in 2017 have increased compared to 2016.
- The stronger performance of EU cattle prices reflects the buoyant world market for beef and growth in demand for beef on EU markets.
- The on-going weakness of the pound sterling has seen growth in Irish prices lag that in the continental EU.
- Irish finished cattle prices are forecast to increase by up to 2% in 2017. In Q1 andQ2 2017 calf and weanling prices are down between 6% and 2% on 2016. Over all of 2017 weanling prices are forecast to be largely unchanged.

Production

Situation	Outlook
Negative	Negative

- Irish beef production in the first half of 2017 is almost 4% higher than in the same period in 2016.
- Production is forecast to continue to grow through the second half of 2017.
- The increase in beef production in 2017 follows the recent evolution of the Irish breeding cow herd.
- For 2017 Irish beef production is forecast to increase by up to 6% compared to 2016, driven by increased availability of animals for slaughter.

Input Costs

Situation	Outlook
Neutral	Neutral

- The direct costs of beef production are dominated by purchased feed and pasture costs.
- Higher cattle output per hectare is forecast to lead to increased feed demand despite 2017 being a good year for grass growth and availability.
- For the year to date, fertiliser prices in particular have been lower than in 2016.
- Feed prices for the year to date have been lower than in 2017. However, forecast increases in cereals and oilseed prices at harvest 2017 will likely leave feed prices unchanged for the year as a whole.

Farm Income

Situation	Outlook
Positive	Positive

- Output value on cattle finishing farms will be higher due to the increases in finished cattle prices and output volume per hectare. Output is forecast to be marginally lower on Single Suckling farms.
- Gross margins on cattle finishing farms in 2017 are forecast to increase by 11%, while single suckling farms margins are expected to remain stable**.**
- Due to dependence on direct payments, the forecast changes in FFI on cattle farms in 2017 are small, with a small increase for Cattle Other farms (4%) and stable cattle rearing farm income.

Beef Market

EU beef production in the first four months of 2017 is 1.4% lower than in the equivalent period in 2016. In most EU Member States cow slaughter in 2017 has declined on levels observed in 2016. Cow slaughter increased in 2016 due to the low level of dairy incomes and in 2017 the recovery in dairy markets is reflected in lower rates of slaughter. Total EU cow slaughter is 3.5% lower than in 2016. Slaughter of non-breeding adult cattle in the EU is also marginally lower for the first 4 months of 2017, but is forecast to increase marginally over the remainder of 2017. Total 2017 EU beef production is forecast to increase modestly (1%) compared to 2016.

EU imports of beef are not expected to add dramatically to the total supply of beef on the EU market. The recent meat industry scandal in Brazil, when combined with a revalued Brazilian real, has reduced the competitiveness of Brazilian beef exports to the EU. The generally buoyant world beef market has reduced the relative attractiveness of the EU as a market for beef exporters. EU imports of beef are expected to increase by only 1% in 2017.

The outlook for economic growth in 2017 in the EU is improving. However, in the UK real per capita incomes are now declining due to the increase in inflation that has followed the depreciation of the pound sterling.

With a forecast modest growth in the indigenous supply of beef in the EU, the outlook for cattle prices in Ireland and the EU for 2017 hinges on the prospects for further growth in domestic EU demand and for beef exports to non-EU markets.

Positive growth in EU beef demand is forecast in 2017, with growth in per capita incomes expected to support per capita domestic use, while EU exports of live cattle, beef and beef offals are expected to grow by 10% in 2017. This resilience in domestic demand for beef, along with growth in exports, is expected to lead to small increases (+2%) in average finished cattle prices in 2017 as compared to 2016.

Through the first quarter of 2017 cattle prices were generally close to or lower than prices in the same period in 2016. In the second quarter, improving demand (from EU and non-EU consumers) has been reflected in improving finished cattle prices. EU cow prices through the first half of 2017 are almost 4% higher than in 2016, while young bull, steer and heifer prices are between 1% and 0.2% higher than in 2016. Irish R3 steer prices for the first 6 months of 2017 are (on average) marginally lower than in 2016, with lower prices in the first quarter offset by higher prices in Q2 of 2017 relative to 2016. Weaker cattle prices in the UK (when expressed in euro) have meant that the growth rate in Irish cattle prices has lagged that seen in continental markets. Despite the lower rate of growth in Irish prices, Irish prices remains well above the EU average. The level of UK prices relative to prices in other markets, demonstrates the high value of the UK market to the Irish beef sector. Irish calf and weanling prices so far in 2017 have been lower than in 2016 reflecting increased supplies of cattle in the Irish market.

Irish beef production in 2017 is expected to grow compared to 2016. To date in 2017 Irish cattle slaughter is almost 5% higher than over the same period in 2016. The growth in the number of cattle slaughtered will be offset somewhat by the impact of increased dairy genetics in the national herd on average cattle slaughter weights. To date in 2017 the average cattle slaughter weight is almost 3% lower than in 2016.

The direct costs of production on Irish cattle farms are dominated by purchased feed and pasture and forage costs. To date in 2017, good grass growing conditions have meant that grass availability on Irish cattle farms has been above normal. Forage availability will not be a major driver of changes in input expenditure on cattle farms in 2017. Aggregate sales of beef feed in Ireland in Q1 2017 are up 8% on volumes sold in in Q1 2016. This is consistent with higher volumes of cattle being fed for slaughter in 2017, though the magnitude of the increase in Q1 may not be maintained over the remainder or the year.

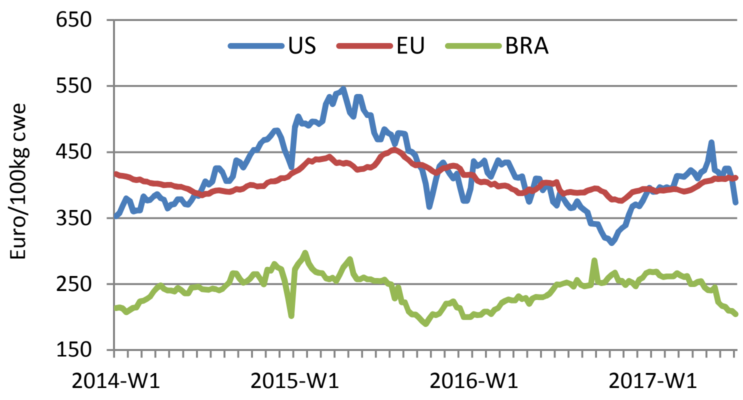
So far 2017 cattle feed and fertiliser prices have been lower than in 2016, though fuel prices have been higher. Increases in input use on cattle finishing farms (in particular feed) when combined with lower or stable prices for inputs in 2017, is expected to lead to higher costs of production per. Costs per hectare on single suckling farms should decline marginally, as purchased feed is a smaller cost component.

Higher output per hectare, and a small improvement in prices, should be sufficient to leave gross margins earned on cattle finishing enterprises 11% higher than in 2016. On single suckling enterprises, lower calf prices and stable weanling prices will be reflected in marginally lower output value per hectare. Despite forecast lower costs of production, lower to stable young cattle prices are expected to result in 2017 gross margins that are marginally lower than in 2016 (-1%).

Volatility in enterprise gross margins earned largely reflects year to year volatility in cattle prices and input costs. However, given their dependence on direct payments, farm incomes on cattle farms are not as volatile as in dairy or tillage. Average FFI on Cattle Rearing farms is forecast to decline by 1%, while average FFI on Cattle Other farms is forecast to increase by 4%.

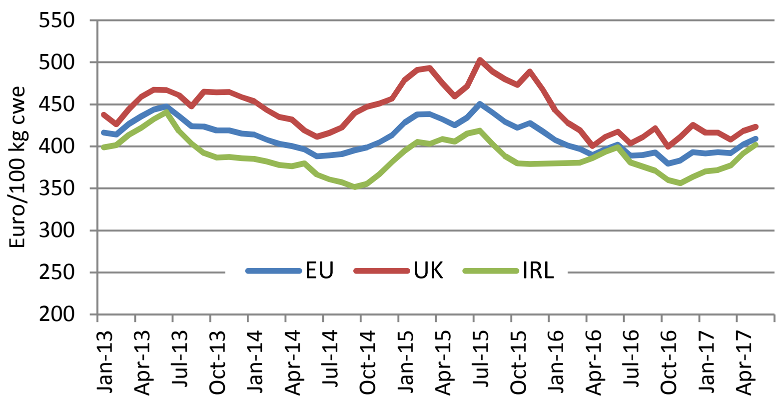
Beef Market

Figure 18: Weekly EU and World Steer Prices 2014-2017



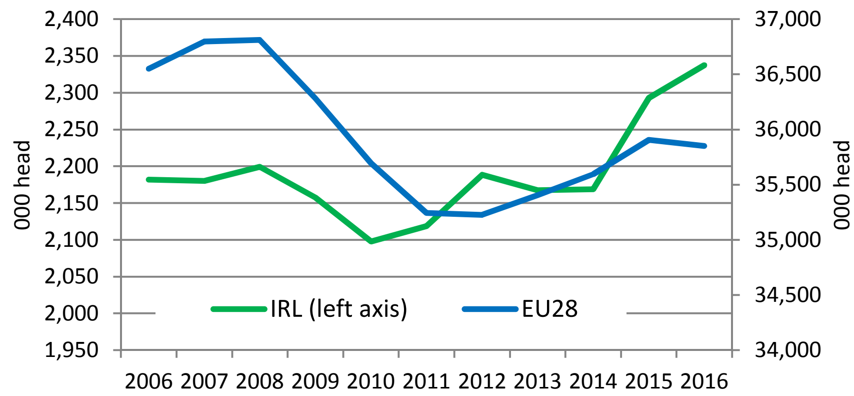
Source: Bord Bia and DG Agriculture and Rural Development

Figure 19: Monthly EU, UK and Irish Finished Cattle Prices 2013 to 2017



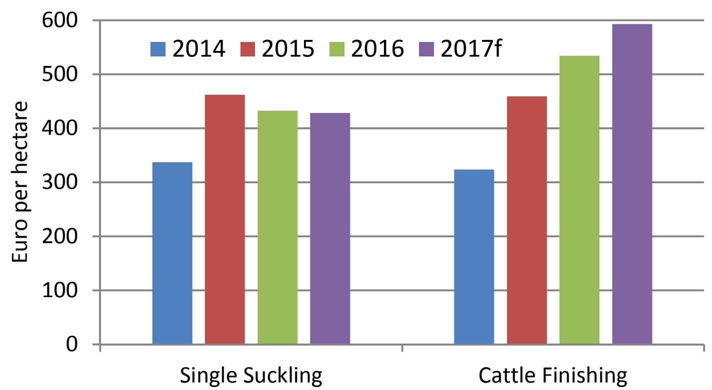
Source: DG Agriculture and Rural Development

Figure 20: Irish and EU cow inventories (December)



Source: Eurostat

Figure 21: Single Suckling and Cattle Finishing Gross Margin per hectare 2014-2016 and Forecast for 2017

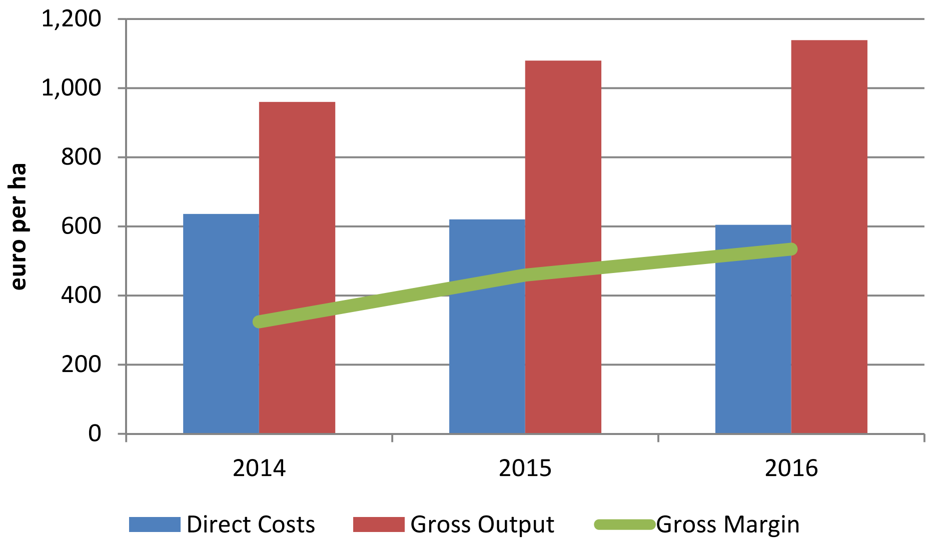


Source: Teagasc NFS and Own forecast for 2017.

Beef Market

The recent improvement in margins earned by the average cattle finishing enterprise has been driven by control of costs. Additional output value produced per hectare in recent years has not led to additional expenditure per hectare as shown in Figure 22. In 2017 this trend is forecast to continue with growth in output value forecast to stay ahead of growth in direct costs of production.

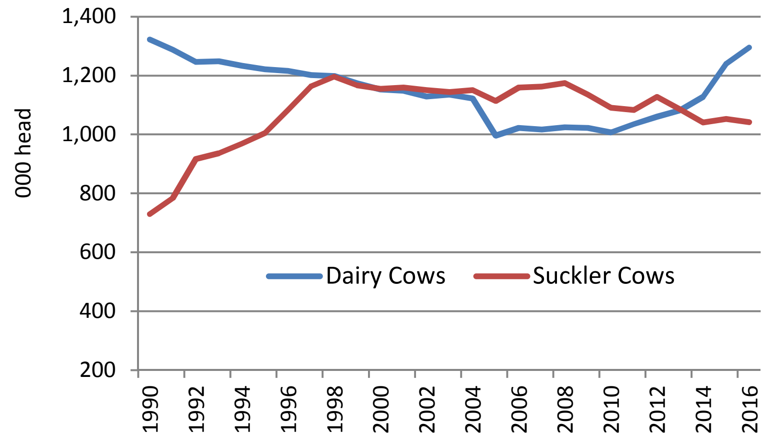
Figure 22: Cattle Finishing Gross Output, Direct Costs and Gross Margin per hectare



Source: Teagasc NFS

Developments in dairy and suckler cow inventories are important, both as indicators of likely future developments in beef and milk supply, but also because of the key role played by bovines in GHG emissions from Irish agriculture. In Figure 23 developments in dairy and suckler cow inventories since 1990 are presented. In recent years the decline in Irish suckler cow numbers has been more than offset by increased dairy cow numbers, with aggregate cow numbers growing by almost 1% a year since 2008. The latest DAFM AIMS animal inventory data indicate that the growth in Irish dairy cow inventories is continuing through 2017, though at a slower rate than observed in 2016. Irish suckler cow inventories are likely to decline only marginally in 2017.

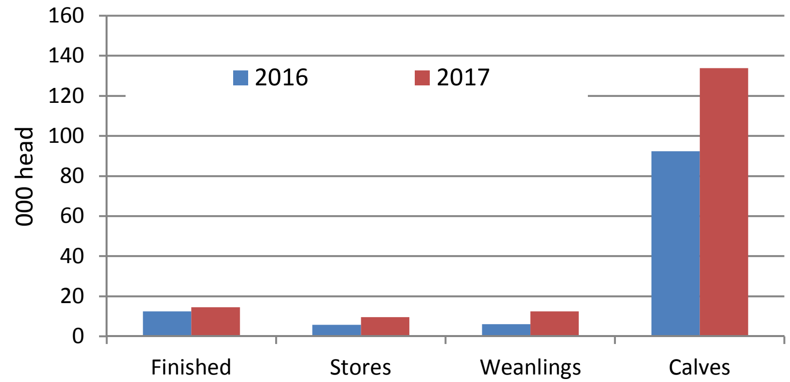
Figure 23: Long Term trends in Dairy and Suckler Cow Inventories (December)



Source: Eurostat

The volume of Irish live exports of calves, weanlings and store animals affects the volume of cattle available for slaughter in Ireland over the short to medium term. The most volatile component of Irish live cattle exports are calf exports. In the last 10 years the volume of calves exported has varied from almost 160,000 head in 2010 to less than 40,000 head in 2012. As Figure 24 shows, to date the year to year volatility in the volume of calf exports has continued in 2017 with exports of calves 45% higher than in 2016.

Figure 24 Irish Live Cattle Exports Year to Date 2016 and 2017



Source: Bord Bia

Sheep Market

EU Supply

Situation	Outlook
Negative	Positive

- The EU production of sheep meat to date in 2017 is higher than in 2016.
- Over the year as a whole, EU sheep meat production is forecast to grow 2% on the level produced in 2016
- EU imports of lamb in 2017 (primarily from New Zealand) are forecast to decline relative to levels in 2016.
- Total supplies of sheep meat on the EU markets are forecast to be lower in 2017.

EU Demand

Situation	Outlook
Neutral	Negative

- EU sheep meat consumption in 2016 increased as a result of lower prices and improved economic conditions.
- The outlook for demand in 2017 is less favourable.
- Brexit is expected to negatively affect economic growth rates and slow the growth in per capita demand for sheep meat in the UK.
- In 2017 aggregate demand for sheep meat in the EU is forecast to decline.

Lamb Prices

Situation	Outlook
Negative	Neutral

- Prices in the EU for heavy lamb declined in 2016 as growth in supply outstripped growth in demand.
- The weaker pound sterling since the Brexit referendum has augmented the competitiveness of UK lamb exports.
- To date in 2017 Irish lamb prices are 5% lower than in 2016.
- In recent weeks Irish prices have exceeded their 2016 level, but with the seasonal reduction in lamb prices now underway, lamb prices for 2017 as a whole are forecast to be unchanged compared to 2016.

Production

Situation	Outlook
Negative	Negative

- Irish sheep meat production for the year to date is significantly higher than in 2016.
- Increases in the volume of lambs slaughtered (13.6%) have been matched by increases in the number of ewes slaughtered (15%).
- The continuation of ewe and lamb slaughter at such high levels will be reflected in lower breeding numbers in 2018.
- Total Irish sheep meat production and output per hectare are forecast to be higher in 2017 than in 2016.

Input Costs

Situation	Outlook
Neutral	Positive

- Direct costs of production on Irish sheep farms are dominated by concentrate, pasture and forage costs.
- Total sheep feed sales for Q1 2017 are higher than in 2016 and these reflect increased output for the year to date.
- Fertiliser prices are expected to be lower, though energy prices are forecast to rise.
- Despite some increase in feed usage, with generally lower input prices for 2017, production costs should be slightly lower.

Farm Income

Situation	Outlook
Negative	Positive

- Margins earned from sheep production in 2017 are forecast to increase compared to 2016, due to growth in output volume per hectare.
- Gross margin per hectare on the mid-season lowland lamb enterprises is forecast to increase by 4%.
- Net margins are also forecast to increase in 2016, due to largely stable overhead costs.
- Overall Family Farm Income on sheep farms is forecast to increase by 2% in 2017, due to the continuing dependence of sheep FFI on direct payments.

Sheep Market

EU production of sheep meat in the first 4 months of 2017 is 3% higher than in the same period in 2016, with the increase in production in 2017 driven by increases in the production of sheep meat in the UK and Ireland. Over the whole of 2017 EU sheep meat production is forecast to increase by 2%, with most of the expected growth occurring in EU15 Member States.

In 2017, EU imports of lamb are forecast to decrease relative to 2016. The decline in the volume of EU imports of sheep meat is driven by the reorientation of NZ lamb exports away from the EU and towards East Asian markets. The UK is the main market for NZ lamb exports to the EU and the continuing weakness of sterling against the NZ dollar has reduced the profitability of these exports. To date in 2017, NZ sheep meat exports to the EU are over 20% lower than in 2016 (see Figure 26). Despite growth in EU domestic sheep meat production, due to lower imports into the EU, the overall supply of sheep meat in the EU in 2017 should be tighter than in 2016.

Given the tightening EU supply situation, the outlook for EU sheep meat prices in 2017 should be positive compared to 2016. However, weakness of sterling and weak UK economic growth are likely to continue to limit the prospects for strong growth in EU heavy lamb prices.

EU heavy lamb prices steadily improved between 2008 and 2015. In 2016 growth in EU supplies of sheep meat and the weakness of sterling combined to reduce EU prices. In 2017 the same forces and weakening growth in the UK economy are likely to limit the impact of improving economic conditions in the Eurozone on EU lamb prices.

Ireland and the UK are the dominant suppliers of lamb to the French and other continental EU lamb markets and a weaker sterling exchange rate increases the competitiveness of UK exports on continental EU markets. The weakness of sterling against the euro is likely to continue for the foreseeable future. This will depress the euro value of lamb exports from the UK and, together with increased indigenous supply, will limit the scope for improvement in EU and Irish lamb prices.

Irish lamb production is significantly higher for the H1 2017 compared with H1 2016. Strong increases in the supply of lambs (+10%) have been augmented by increased ewe slaughter, which for the year to date is more than 14% higher than in 2016. Overall, Irish sheep meat production and ewe disposals are forecast to be higher in 2017 than in 2016.

Direct costs of production on Irish sheep farms are dominated by concentrate and pasture and forage costs. In 2017, with good grass growing conditions, forage availability will not be a driver of increased input expenditure. Increased sheep feed sales in Q1 have been reported by DAFM and these are consistent with the large increase in lamb output in the year to date. We have forecast a small increase in feed usage that reflect our forecast increase in sheep output per hectare. For the year to date, sheep feed and fertilisers prices have all been lower than in 2016, though energy prices have been higher. Lower overall input prices will mean that despite the expected increase in feed use that total costs of production per hectare are expected to be largely stable in 2017.

The current strength of the euro versus sterling and the growth in EU lamb supply will mean that Irish lamb prices are unlikely to be higher in 2017 than in 2016. The key factor that could support EU prices is a fall in imports into the EU from NZ. However, the key driver of these reduced shipments is the reduced attractiveness of the EU as an export destination due to lower prices.

For the year to date, Irish lamb prices have been 5% lower than in 2016 (see Figure 27). With the seasonal reduction in lamb prices currently underway, and a weak sterling outlook for the foreseeable future, our forecast is that, even with prices above 2016 levels for the remainder of the year, when weighted by throughput, Irish lamb prices in 2017 will be unchanged on the average levels observed in 2016.

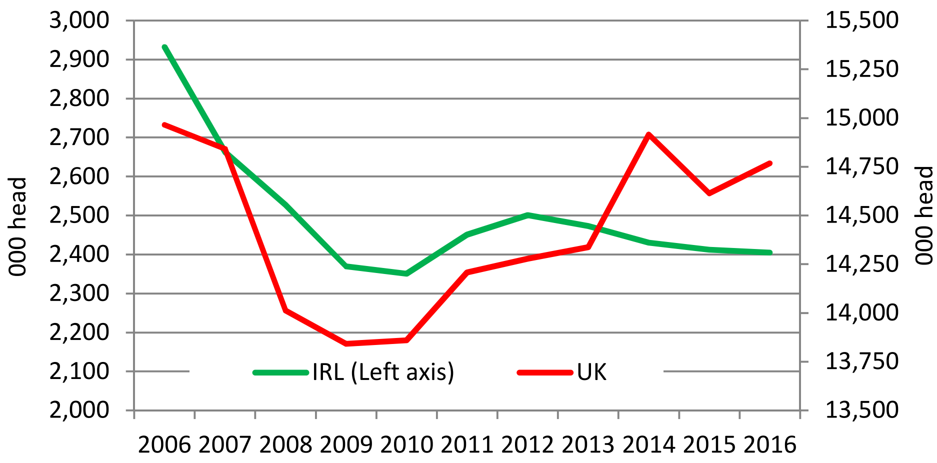
With stable costs of production and output prices expected for 2017 increased gross margins earned will be due to increased output volume per hectare. Sheep meat production is up strongly for the year to date and over the year as a whole is also forecast to increase.

The increase in output volume per hectare is forecast to forecast to lead to a small improvement in gross margins earned by the mid-season lamb enterprise. Overall, gross margins earned on mid-season lowland enterprises farms in 2017 are forecast to increase by over 4% on 2016 levels (see Figure 28).

Given the continuing dependence of sheep farm incomes on direct payments and the importance of cattle output in total sheep farm system output, an increase of 2% in FFI for the average sheep farm in 2017 is forecast

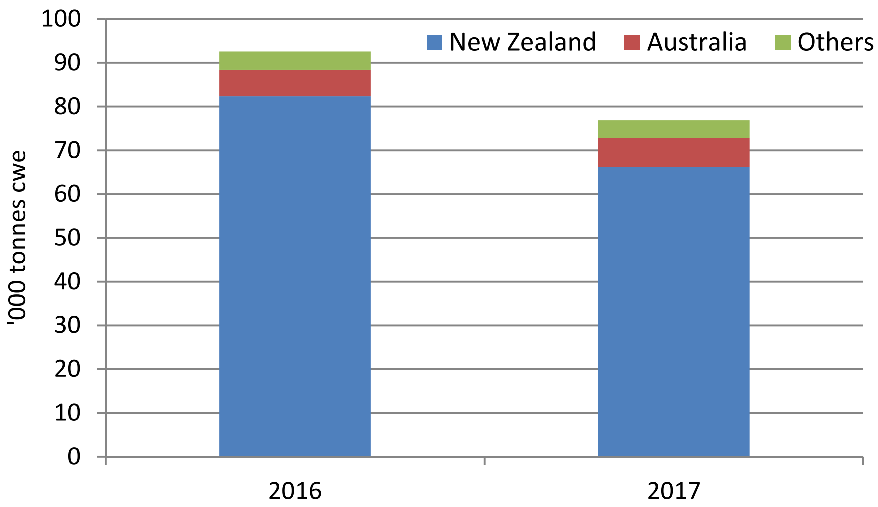
Sheep Market

Figure 25: UK and Irish Ewe Inventories (December)



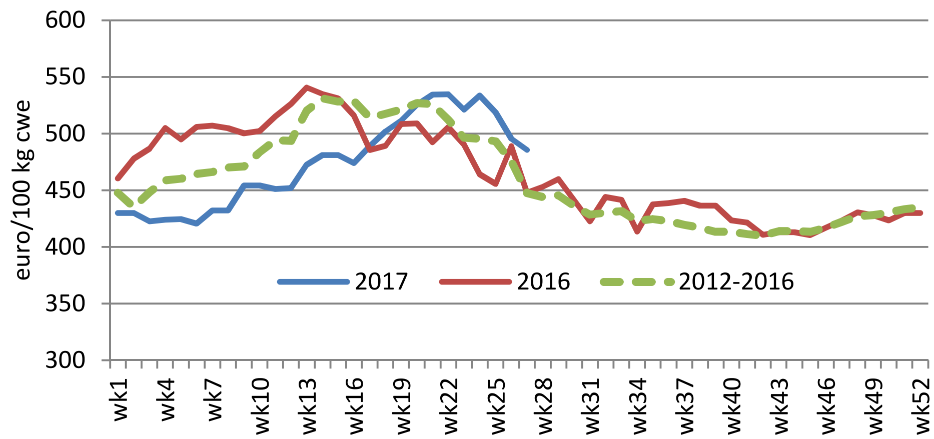
Source: Eurostat

Figure 26: EU28 Sheep meat imports January – April 2016 and 2017



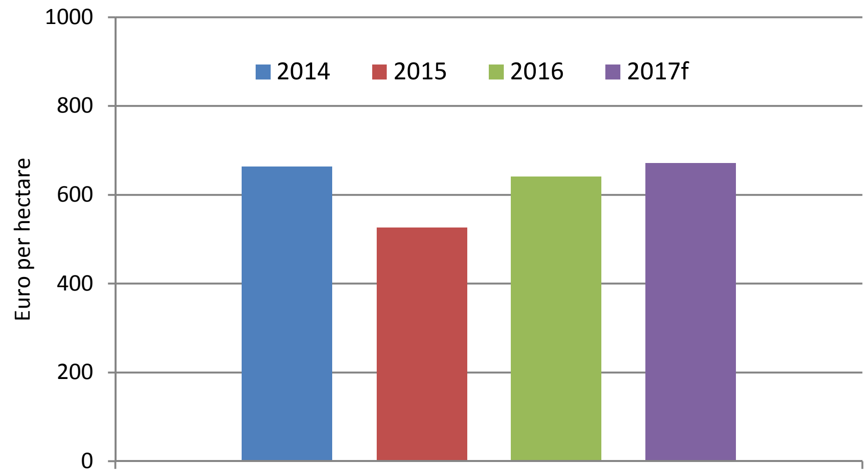
Source: DG Agriculture and Rural Development

Figure 27: Weekly Irish Lamb Prices 2017, 2016 and average 2012-2016



Source: DG Agriculture and Rural Development

Figure 28: Mid-Season Lowland Lamb Gross Margin per hectare 2014-2016 and Forecast for 2017



Source: Teagasc NFS and Own Forecast for 2017.

Tillage Market

	Wheat Market	Barley Market	Prices	Production	Input Costs	Farm Income
Situation	Positive	Positive	Positive	Negative	Positive	Positive
Outlook	Neutral	Neutral	?	?	Neutral	?

Wheat Market

- EU wheat production in 2017/2018 is expected to be about 140.7 Mt, 4.6 Mt year on year harvest growth.
- Wheat use in animal feeds in 2017/18 is estimated at 51.7 Mt, down 2.6 Mt year-on year.
- World wheat production in 2017/18 is expected to be 713 Mt, down 13 Mt on 2016/17.
- Demand is set to decrease, by 0.4 Mt on the 2016/17 level.
- World ending stocks are expected to be slightly down by13 Mt in 2017/18 compared to 2016/17.

Barley Market

- Aggregate EU barley production is set to decrease by about 4% compared to the previous year.
- World barley supply is forecast at 136.6 Mt which is 11.6 Mt less than 2016/17.
- World demand is expected to be lower this year, standing at 141.2 Mt, due to lower animal feed demand.
- Based on current prices, demand is expected to transfer away from barley, with incorporation rates for barley much lower in 2017/18 compared to last year.
- World ending stocks are forecast to be approx. 21.6 Mt in 2017/178, down from 2016/17.

Prices

- Associated with the slight decrease in forecasted ending stocks for wheat and barley, all signals at present indicate a slight increase in harvest price in 2017 relative to 2016.
- July futures are indicating at least a 5% increase in harvest prices in 2017 over 2016 levels.
- Demand for straw appears strong this harvest with quoted prices considerably higher than 2016.
- Particular unknowns for the latter part of the year include: exchange rate influences, demand interactions between commodities (e.g. maize and wheat) and production potential in France, the US and Australia in particular.

Production

- Data show that all cereal crops except winter oats decreased in area in 2017.
- The total area of cereal crops declined by approximately 5% in 2017.
- It is too early to accurately forecast 2017 yields, but early indications are that yields will not be as high as 2015 or 2016.
- Early harvesting of winter barely has reported yield per hectare decreases of about 2% compared to 2016.

Input Costs

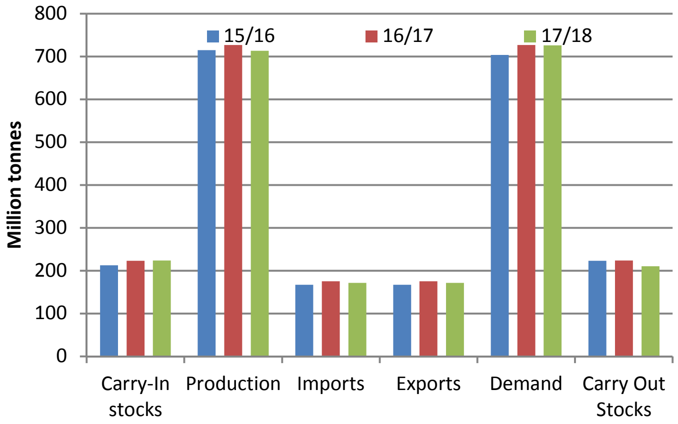
- In 2017 there has been very little change in the majority of direct cost items. However, fertiliser costs are estimated to have decreased by the largest amount, by about 15% on cereal enterprises.
- Slightly higher energy prices should have increased a number of overhead costs.
- Anecdotal evidence suggests that land rental prices have increased but counterbalanced by a decline in total cereal area.
- Overall, it is estimated that total costs on the average tillage farm in 2017 will be about 5% lower than in 2016.

Farm Income

- With slightly higher output prices, coupled with lower yields for the main cereal crops, cereal output value is estimated to be marginally up in 2017.
- Overall costs in 2017 are estimated to be down reduced by about 5%, associated with reduced fertiliser costs and decreased cereal area.
- Average income on tillage farms in 2017 is expected to be close to €34,000, which is higher than 2016 and similar to 2015 income levels.
- However, much uncertainty still surrounds full yield potential of all crops and prices at this stage in the harvest.

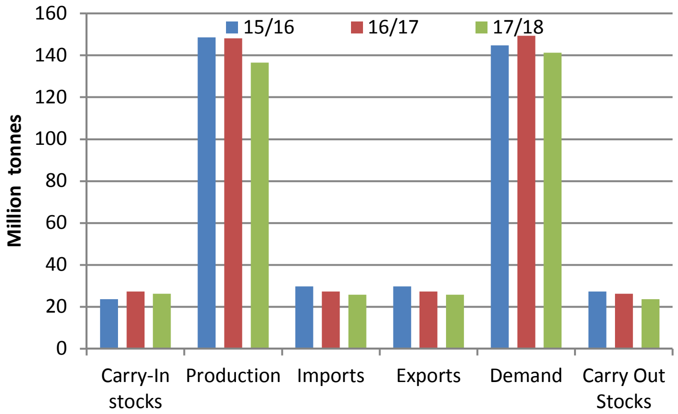
Tillage Market

Figure 29: World Wheat Balance from Main Exporting Countries (Mt)



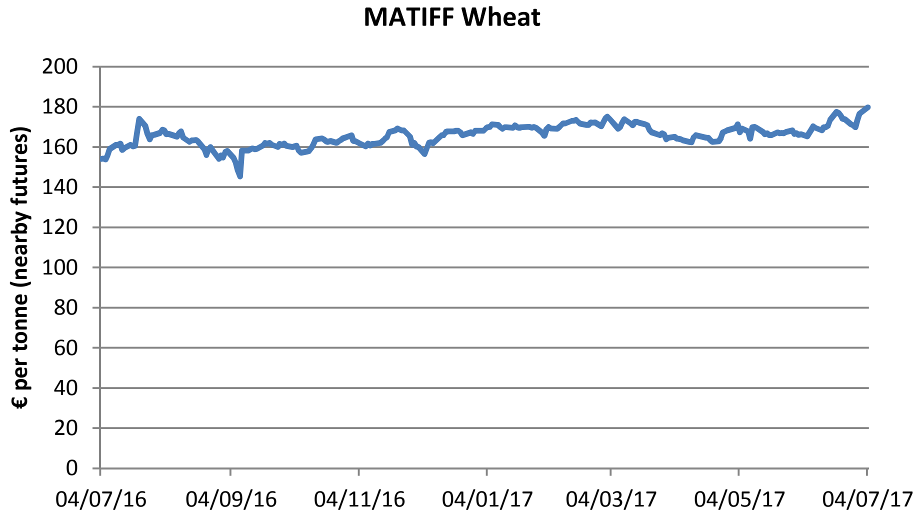
Source: Strategie Grains

Figure 30: World Barley Balance Sheet (Mt)



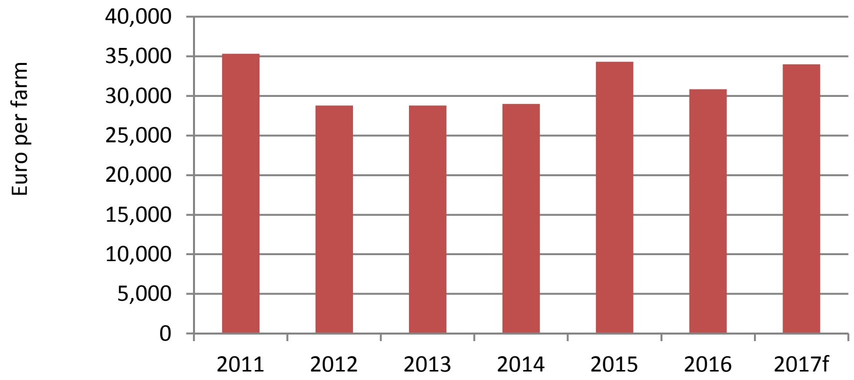
Source: Strategie Grains

Figure 31: Nearby Futures Prices – July 2016 – July 2017 (€ per tonne)



Source: HGCA

Figure 32: Average Irish Tillage Farm Income



Source: Teagasc, National Farm Survey and author's estimates