NUFFIELD IRELAND
Farming Scholarships

Dominance, competition and consumer demand – The impact on meat protein producers

A report prepared for Nuffield Ireland Farming Scholarship Trust

By

Amii McKeever

November 2012

Sponsored by

Irish Farmers' Association & Irish Farmers Journal

Disclaimer

Scholar Contact Details

Name	Amii McKeever (Cahill)
Address	The Bounds, Garryricken, Windgap, Co. Kilkenny
Phone:	+353868574420
Email:	amiicahill@hotmail.com

In submitting this report, the Scholar has agreed to Nuffield Ireland publishing this material in its edited form.

Nuffield Ireland Contact Details:

Website: www.nuffield.ie

Email: exec@nuffield.ie

Table of Contents

Table of Tables

Table of Figures

Executive Summary

This report focuses on the impact of growing corporate dominance in the food chain on Irish pig and poultry producers. It is envisaged that the report will be relevant to policy and decision makers, particularly in the Irish pig and poultry industry because of the growing pressure such dominance is causing in these sectors. However, the report is also of relevance to the wider agricultural community as all sectors are subject to the power of the multiples, and consolidation in other sectors is also a reality and currently topical.

The objective of this study was to research global pig meat supply chains and consumer demands, while ascertaining which system may enable Irish farmers to compete in an increasingly consolidated market. The main aims were to assess consumer demand in different countries; review how competition rules and other market management tools are used to curb the power of dominant companies; and to ascertain how Irish farmers can remain viable, while maintaining maximum control of their farming operations.

The Irish market is a sub-section of a bigger free market (the EU common market) where vastly more dominant retailers and processors are in force. It appears more and more each year that the pig meat market has become a global market in which prices are set beyond the region in which production occurs. Despite the dominance of certain companies in terms of meat purchasing, processors appear to have less market dominance in wholesale or retail markets. Furthermore, concentration amongst retailers means that there are fewer home market outlets through which manufacturers can reach the end consumer, leading to increased competition between suppliers to secure shelf space. This can result in some companies losing their market share and exiting the business, resulting in further consolidation.

Despite the conditions of sale being less than satisfactory to Irish producers, the lack of alternative options leaves producers in a weak position. The situation is further compounded by the weak position of the processors as sellers. The pig industry across the world has undergone massive and rapid consolidation and concentration in the last 25 years. In the USA, the top four processors now control two-thirds of the market. In Ireland, at pig processing level the concentration ration (CR4) has reached 76%.[1] The industry has rationalised and only the most specialised, efficient and most dedicated producers have survived. In recent years, governments globally have raised concerns in relation to the rising level of corporate concentration in agricultural markets and the challenges that this may present.

A number of conclusions and recommendations are made which pertain to producers, processors, retailers and government. There are a number of players in the food chain all of which are equally important, however the percentage share of the value from production appears to be weighted in favour of the downstream actors.

Recommendations

i. First and foremost an information portal must be created through which farmers are better armed to negotiate on the same terms as the other players. A better understanding of the volatility in meat sales (as is available on the feed side) will create more workable relationships between the producers and other supply chain actors.

[1] Appendix A – Commonly used measures of concentration.

ii. Governments are aware of the problem of dominance in the market and in the past there have been attempts to combat it. The EU Commission has attempted to address the problem, but the group charged with finding solutions have reached an impasse, with the processors and retailers agreeing to voluntary terms only, while the farm bodies are pressing for legislation. Competition law should be reviewed with a stronger emphasis placed on primary production. Competition law that protects the consumer only is simply not sufficient or adequate.[2]

iii. Retail dominance will continue to grow and to combat this growth, Irish primary producers must work with the processing sector to secure sufficient market power for themselves. Cooperation in the Irish pig and poultry meat supply chain is necessary, but if the dominance of the processing sector continues to grow, the Government may need to introduce legislation similar to that already in place in American i.e. the GIPSA rule.

iv. Pig and poultry meat have become commodities particularly in areas where there is no labelling or differentiation of product. Compulsory country of origin labelling will be beneficial to Ireland once introduced, but must be extended to the food service sector. Considering the importance of our export markets, Ireland must be seen as a premium supplier of food when this legislation is introduced. This can be achieved through effective marketing in the home market where there is still a desire to support Irish.

v. In the long term unless Ireland can capitalise on some form of cheaper input (other countries have cheaper labour, feed or energy than Ireland), the product will need to be differentiated to meet the demands of international consumers and to realise a premium. Efficiency for commodity markets is vital, but some farms must differentiate to meet various consumer niche demands. Considering the scope and structural change that this would require, an industry wide collaboration is needed.

vi. As a result of industry consolidation, producers must increase their own power in order to stay not only viable, but relevant in the supply chain. This can be achieved through better cooperation amongst themselves, for example through the formation of structured producer (selling) groups. These groups must employ professionals that are economically independent of factories or retailers. The groups would also facilitate increased information transfer, and explore alternative markets and selling structures. With a larger quantity of pigs, a percentage could be sold on general contract, some for immediate delivery (spot) and others on long term specialised contracts. An alternative would be to form a country wide purchasing and selling body (similar to the Western Hog Exchange) to sell pigs within the country. To maximise international sales where scale could be an impediment, an Irish Dairy Board (IDB) model may be necessary, which would enable the processors to maximise volumes of product available on the island.

Irish pig and poultry farmers must compete in the global market, but they must be allowed to compete with the same tools. Legislation must be introduced at EU level, to curb the growing dominance of certain companies at both retail and processing level, but in a manner not to interfere with the common market through the EU Commission.

[2] The aim of competition legislation in the EU is to deal with anti-competitive arrangements and practices. The competition act 2002 (Ireland) is designed to prevent anti-competitive arrangements and abuse of dominance, and to control mergers.

Introduction

"Market efficiency should not be reduced to a question of the lowest possible price. Gains related to scale, technology or management practices are true efficiencies, but lower producer prices due to the lack of competition can appear as inefficiencies as well. An uncompetitive market is not an efficient market." (Taylor, 2007).

My name is Amii McKeever and I work for the Irish Farmers Association as the Executive with responsibility for the interests of Irish pig and poultry farmers. Over the last six years, I have seen, through my work, the impact of increasing dominance at processing and retail level on agricultural producers. Furthermore, the industry is also rapidly changing, since I commenced this project, the majority of private label meat sold at retail level in Ireland is now Irish. However in the UK, our most important export market, Morrisons the UK retailer (heretofore a British meat stalwart), has started to import, whilst Vion, the Dutch meat superpower is exiting the meat industry in the UK altogether. Processors in these sectors are closing while retailers have continued to open stores in a "saturated market".[3] Many would claim that this has led to price wars and the devaluation of Irish primary product through discounting. Farmers are at the front line dealing with the increasing volatility that has become part and parcel of food production, but this cannot continue. Farmers cannot continue to absorb the losses being incurred on farms. This situation led me to question the current structures in place and I decided to carry out my Nuffield Scholarship to determine whether Irish producers could gain more power in the meat supply chain.

The meat industry is the largest subsector in the European Food industry, and the pork industry is the most important subsector of the meat industry measured by turnover, export shares, slaughtering and companies' sizes and internationalization (Hamann, 2011). North American, and increasingly EU and Latin American, pork industries are dominated by large multi-species food processing companies (Sosnicki et. al., 2010). Although Danish Crown and Vion Foods feature in the top 10 global meat processors table, they are much smaller than any of the major American or Brazilian companies.[4] JBS and Marfrig in particular are multi-species and have grown dramatically, mainly through mergers and acquisitions. The Irish pig meat industry may make up only 1% of EU production, but the industry is ranked third in agricultural output after beef and milk. Over the last 20 years, Irish pig meat companies have separated from the cooperatives models and privatization of companies is now complete. Similar to UK producers, Irish pig farmers have not formed cooperative structures, preferring to operate as individuals and compete with each other.

Retail formats vary greatly depending on the country you are in. These include vending machines in Japan and kiosks in Moscow to wet markets, hypermarkets, CSAs and farmers' markets in developed countries. In all countries, the retail market is growing and becoming increasingly powerful in the food supply chain. They offer the consumer convenience, value and service; but suppliers to these companies complain of unfair commercial practices, opportunistic dealings and a continuous fear of delisting. Governments are attempting to control the power and dominance of these companies without impacting negatively on consumer prices, which is difficult. Ultimately to maintain indigenous production, the supply chain must pay a little more for pork and chicken when required, so that consumer demand can continue to be met into the future.

[3] Stephen O'Riordan, CEO of Londis.
[4] JBS, Tyson, Cargill, Smithfield, Marfrig, BRF.

Objectives and Aims

Consumer Demand

- *This project aims to gain a greater understanding of the international consumer, their behaviour, what they consider important in their food choices and how this is impacting on primary protein producers.*

Competition & Market Interference

- *This project aims to ascertain how EU and Global action through competition law, legislation and or other forms of market interference is impacting on primary producers.*

Consolidation and Market Dominance

- *This project aims to ascertain how EU and Global consolidation in the meat chain has impacted on primary producers.*
- *This project aims to ascertain which country's production system is the most viable, taking into account Irish pig farmers' wish to maintain the maximum amount of control of their farming operations*

Methodology

This Nuffield report was compiled following a comparative study tour to America, Canada, some EU countries (Germany, Lithuania, France, UK and Belgium), Russia and Japan. A significant literature review was also compiled.

This study has been conducted by means of travel (including a global focus programme), attending conferences and trade shows; as well as interviews with Government officials and relevant stakeholders in the Irish sector and the study countries.

The information collected covered a broad range of issues including policy, legislation, industry structures, social and political.

The study was completed over a two year period from 2011 to 2012. The countries chosen to visit are either major producers of pig and/or poultry meat (America, Canada Europe) or major importers (Russia and Japan). In either case, considering the global nature of the pig and poultry industries, these markets are relevant in an Irish context.

Chapter 1: Consumer Demand

First and foremost "The consumer is king"

In most developed countries, the global economic crisis has enhanced consumer resistance to higher prices. More affluent consumers however, still selectively seek out that special product that appeals to them. Increasing incomes in developing countries are playing an increasingly important role in this also. In some countries 'image' problems have adversely affected consumer demand, or consumers are removed from the farm gate and they do not understand food production or farming, which leads to inherent difficulties. In this chapter I explain the differences between consumers in the countries I visited and the impact that this is having on producers.

Table 1: Country Profiles

	GDP per capita[1] (US$)	Population[1] (millions)	Income spent on Food[2] %	Pig Crop[2] '000	Meat Consumption[3] (kg)
Ireland	48,423	4.5	10.2	3500[4]	100.7
Europe	34,847	500	16.4	260,000	76.5
America	38,818	312	6.7	117,000	126.6
Canada	50,345	33	9.7	28,800	96.3
Russia	13,089	142	31.2	32,000	52.1
Japan	45,903	128	14.7	17,200	45.4

Source World Bank[1], USDA[2], FAO[3], GIP of ROI (including exports to Northern Ireland)

What do consumers in different markets actually want from producers?

Europe – The spoilt child

French retailer Carrefour launched their Carrefour Planet initiative in 2011, "*today customers want everything, product quality, good prices and above all, an extraordinary buying power.*"[5]

With a population of over 500 million, the EU is a major market. However, the EU food chain is fragmented in that national food markets are driven by different consumer preferences, regulatory nuances and differences in the behaviour of food processors. The percentage of income spent on food also varies considerably between member states.[6] In an effort to differentiate products and drive consumer footfall, retailers place special emphasis on certain claims which can add considerable cost to production. In many cases, the premium (if one is paid) does not return enough profit to sufficiently cover the cost of the investment required to meet these demands. This is resulting in an ever decreasing margin over cost. Consumer research has shown that although the consumer wants a product which is differentiated, they are not willing to pay a premium for this product[7]. Price wars have become ever more prevalent between retailers. There is fear that such practices will lead to

[5] http://www.youtube.com/watch?v=LJpbGLPkyws, November 15th, 2010.
[6] For example Romanians spent over 30% of income on food in 2010 while Ireland, Germany and the UK spent 9-10%. The EU-27 average in 2010 was 12.9% (Eurostat).
[7] Organic, free range, GM free, carbon neural, welfare friendly, origin identified, local.

further consolidation of the market and a decreasing choice of outlets for consumers and farmers, causing further erosion of margin.

According to Collins (2012[b]), 48% of EU consumers understand “local food” as being produced in a close proximity to where they live. The Bord Bia PERIscope 6 research has shown that the Republic of Ireland consumer is more committed to buying local than the Northern Irish or British consumer.[8] In Ireland, the ‘pursuit of value’ is now established as common consumer behaviour, however 64% of consumers in Ireland will endeavour to purchase an Irish product even at a higher price (Collins, 2012[a]). It should be noted however, that retailers claim that this loyalty is somewhat dependent on ‘all things are equal’, that is, the price differential is not too wide.

America – Science over emotion

Food commentator Michael Pollan wrote in his book ‘The Omnivores Dilemma’ (2006): *“Our [US] food system depends on consumers not knowing much about it beyond the price disclosed by the checkout scanner. Cheapness and ignorance are mutually reinforcing. And it’s a short way from not knowing what’s at the other end of your food chain to not caring – to the carelessness of both producers and consumers that characterises our economy today”*.

Research shows that 61% of US consumers look for the price of their food first and 50% agree that this is the most important attribute when deciding on a purchase (Collins, 2012[b]). The ‘disconnect’ between consumers, the food they purchase and the farmer who produces it is growing. Some analysts claim that this is due to the move to corporate farming and the rapid adoption of scientific technologies[9]. In Washington, I met with Gary Baise, a lawyer (and farmer) representing large agricultural enterprises, including some CAFOs (concentrated animal feeding operations) who claimed that although most agricultural product in the USA is produced intensively (70%), this was done to meet consumer demand for quality. He claimed that there are now an increasing number of people who are against intensive production, and the Environmental Protection Agency (EPA) and other powerful lobbies are using their influence to stop this type of production.

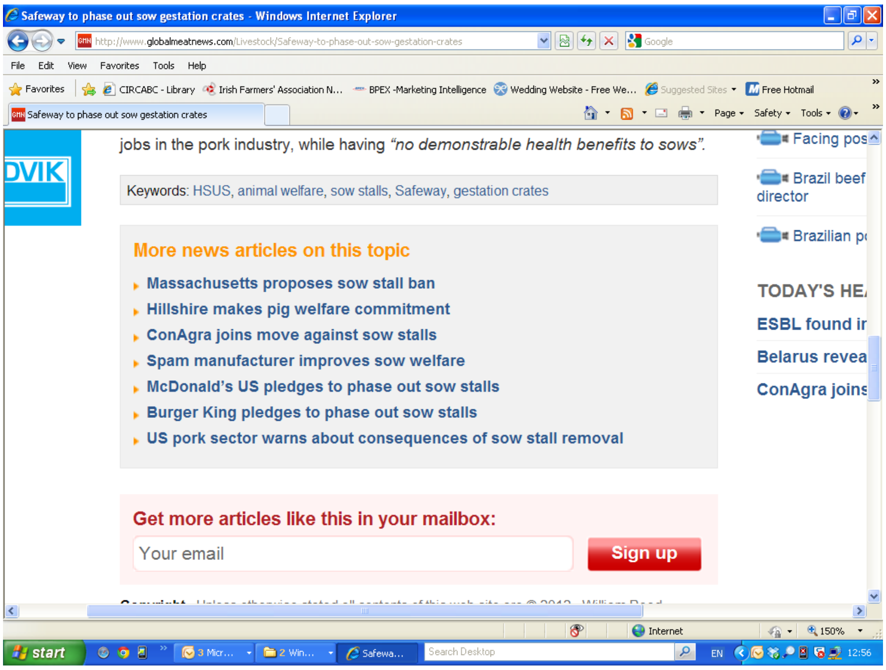
Animal welfare issues may start to impact more heavily on American farmers as the animal welfare groups successfully lobby for animal welfare legislation. Aside from this pressure, the larger multinationals, such as McDonalds and Burger King, are introducing their own welfare controls. When I visited a Murphy Brown Unit[10] in Virginia, the unit was being demolished to change from an indoor/outdoor finishing system to a fully enclosed system. The old buildings were being replaced at the behest of Smithfield’s customers, the multinationals such as Walmart and McDonalds. These customers are leading the pressure, they do not want pigs with direct access to slurry and for now they do not want pigs outside!

[8] Which according to Bord Bia is also indicative of a commitment to community.

[9] Such as the fact that America has been using GM crop since the mid 1990’s with much less debate that what has been seen in Europe. See appendix C – Consumers and Agricultural Innovation.

[10] Appendix B – Comparable value chains – Smithfield Foods.

Figure 1: News articles on loose sow housing in the US



Canada – Ethnic minorities & immigration growing in importance

"Consumers have lost sight of the fact that in modern society large corporations have always been involved with food production in one way or another due to a historic demand for cheap food which had ultimately laid the foundation for the current system." Comment from Professor John Varty, McMaster University, Hamilton.

By 2030 the proportion of people of a visible ethnic group living in Canada could exceed 30%[11] and retail chains are now developing strategies to appeal to these consumer groups. The retail market continues to grow as the Canadian economy remained relatively robust during the economic downturn. The average Canadian household however, spends less than 10% of its budget on food. Canadians consume over 80kg of meat annually, but since 1979 there has been a massive shift in meat consumption from beef to poultry. The consumer is price sensitive and the retailers are trying to get shoppers to swap stores through price competition.

While on Prince Edward Island (PEI) on Canada Day (driving around in a vintage Mustang) I met with John Varty[12] who was hoping that driving a tractor across Canada, producing a documentary would "*cut through a debate that has reduced food production in Canada to warring stereotypes: the good guy (a plaid-shirted, organic-loving yeoman) and the bad guy (a grain-slinging, technology-wielding market conqueror).*" The reasoning behind this expedition was to raise awareness amongst Canadian consumers and help them reconnect with their food.

[11] The population of Canada is expected to increase to 38.3 million people in the next decade due to immigration (+4million).

[12] www.tractorcanada.com accessed November 2012.

Russia

"The single consumer is not important; it is the culture of the country. People are interested in reasonably priced healthy food, not if the animals are happy. In Europe people do not remember being hungry while in Russia not having food is not a distant memory." Miratorg Pig Farms Manager.

Russia is on an economic recovery track as a result of high oil prices. Per capita GDP has increased by almost 30% in four years to over €10,000 per annum. With the forecast for the economy positive and food price expenditure increasing to €2,000 per capita, the retail market is aiming to benefit. According to the UK embassy in Moscow, the Russian consumer is conscious of quality but price is more important[13]. The Russian drive for self-sufficiency is being hampered by the Government's need to keep food prices down while supporting domestic producers. A question posed to Miratorg staff was whether they should fully move to loose house systems[14] whilst expanding, to accommodate potential future demands of a large retailer or McDonalds. They claimed that currently 'price is king in Russia'. The percentage of disposable income spent on food is higher (31%) than any other country I visited. In the cities the consumer is educated and time is an important factor, space is at a premium and people will shop every day but they want EDFP not EDLP[15]. Busier lifestyles are leading to a growth in ready to eat products; and whilst demand for organic products is growing, these are limited to speciality shops and consumers are not yet willing to pay extra for them (Kolchevnikova, 2012). Similar to what is happening in Japan, Miratorg and other integrated companies are opening their own shops in outlying towns as the older generation cannot access the large box stores[16].

"Vegetarians Thrive despite Widespread Prejudice – St. Petersburg residents share why they have given up meat despite criticism from all sides including the city's Chief Dietician," headline from the Moscow Times on Tuesday June 5th 2012. In the EU we are concerned about negative publicity in relation to meat[17] which catches the media eye while in Russia State officials warn that *"vegetarianism is an indicator of mental illness."* The Russian Government is very supportive of agriculture and the road to self-sufficiency would appear to be paved with political goodwill.

Japan – Anzen and Anshin

"The Japanese population can be described in the context of Darwin's Galapagos theory of evolution in isolation, being sufficient in numbers to have preferences guided by cultural, societal and environmental drivers divergent from the rest of the world." Comment from a Japanese market analyst.

The key to marketing in Japan is based on two important factors "Anzen" which is quality and "Anshin" which is an emotional peace of mind in relation to food choices. I visited Japan over a year after the earthquake, tsunami and nuclear disaster that devastated the country in March 2011; this has had a dramatic effect on food production but also on the way

---

[13] For example the Russian authorities banned mechanically separated meat and were subsequently forced to rescind the order when government officials were 'shouted out' by angry consumers.

[14] Loose housing is already quite prevalent on Miratorg farms as they have purchased equipment from EU suppliers and as the EU is only constructing loose systems, this is the system that they have used also.

[15] EDLP Everyday low prices, EDFP every day fair prices.

[16] Any large format retailer.

[17] Documentaries compiled by welfare groups that can be one sided.

the Japanese people eat. An aging population[18] (Generation M) has become a critical influencer in the Japanese market as (1) consumption of meat protein in Japan is falling as the population ages and (2) many elderly people do not have the ability to travel to purchase groceries. The younger generation (much to the chagrin of the older generation) are very different in their tastes, preferences and behaviours. Traditionally Japanese people would 'spend money to save time' as opposed to 'spending time to save money'. Although convenience and accessibility are highly valued by consumers, after decades of 'behaving differently', the Japanese consumer is now behaving more like their American and EU counterparts. According to Bord Bia research (Bord Bia, 2012) in Ireland, an average of 81% of people surveyed[19] spend time shopping around for deals. This is a new phenomenon in Japan and one which the retailers are struggling to contend with.

Japanese meat consumption is low in comparison to the EU or Americas and issues related to food safety have a more profound effect on Japanese demand than they do elsewhere. A food scare may lead to dramatic changes in consumer behaviour and import patterns, which are both consumer and government policy led change (OECD, 2006)[20]. During the course of discussions with the Japanese companies I met, the American TV exposé 'Food Inc'[21] was mentioned on numerous occasions as having a negative impact on consumer consumption. Farmers differentiate their products through branding and quality attributes (herd health status, colour, and marbling) and there are no issues in relation to animal welfare. Environmental concerns are growing somewhat but there is government aid to help with any investments required.

Most indigenous production is used for table meat (everything at store level has country of origin labelling) and it is not cheap. Steve Moffett, a Canadian Pig Producer told me that Canadian producers over the last number of years have concentrated on marketing their meat on international markets as a quality product. He claimed that this was enormously beneficial when the Japanese introduced country of origin labelling. The product was already recognised as a quality product and therefore the Japanese people were happy to continue purchasing Canadian meat.

[18] The Japanese National Institute of Population and Social Security Research estimates that the population will fall to just under 90 million people by 2055 with 36 million of these in the 65+ category.

[19] Percentage of those surveyed saying "I am more likely to do this if my finances stay the same or get worse in the next 12 months."

[20] For example following the food scares in the 2000s on the consumer side, consumption patterns changed in that consumption of beef and poultry decreased and pork consumption increased. On the policy side, Japanese imports of beef shifted from America to Australia and chicken from Thailand to Brazil.

[21] Food Inc. (2008), Directed by Robert Kenner, distributed by Magnolia Pictures.

Chapter 2: Competition

The glorious theory of economics - supply & demand

In a well-functioning market, the price of a product is generally determined by both supply and demand. For dominance to occur, one party must have a controlling influence on one or the other of these factors. It is argued that following the consolidation of the Irish pig industry over the last 20 years (Fig 2), the sector has reached monopsony conditions[22]. Farmers are particularly vulnerable when the outlet for their products contracts to this level as they are selling perishable products that must be sold at a particular weight and time to secure the small margins, synonymous with the industry. In this chapter I discuss how government action through competition law, legislation and or other forms of market interference is impacting on primary producers.

Competition

According to Wise and Trist (2010) the United States Department of Justice (DOJ), reviews of mergers in agriculture have tended to focus on whether a merger would have a negative impact on consumers. There is significantly less attention on concerns regarding buyer power – that is the ability of a packer (processor) to drive down the price it pays to farmers because the farmers lack other markets for their animals. Vertical and horizontal[23] mergers & acquisitions (M&As) can impact on consumers and producers but in different ways, by lowering the number of outlets for sales or purchases.

According to the Irish Competition Authority mergers and acquisitions (M&As) can be good or bad for <u>consumers</u> with no mention made to upstream suppliers.

- Good mergers lead to a more efficient business that passes on some of those savings to <u>consumers.</u>
- Bad mergers lead to a situation where one or more businesses have the power to raise their prices to <u>consumers</u>. They substantially reduce competitions and <u>consumers</u> suffer. (Competition Authority, 2012 [a&b]).

A report commissioned by the European Commission (Stefanelli and Marsden, 2012) states many competition authorities are reluctant to intervene against many of the 'unfair practices'[24] at retail level, without evidence of long term harm to consumers through higher prices. Furthermore, in a recent report published by the European Competition Network (ECN) which focused on anti-trust activity in the EU Food Sector (ECN, 2012), over 1,300 M&A's were investigated with 80 referred for further investigation. Again the 'public interest' is purely in reference to the impact on consumers and does not take the potential impact of market dominance on upstream producers (i.e. farmers) into account.

Government involvement

Currently there is a huge body of work being carried out in relation to the issue of unfair trading practices in the food supply chain and market dominance. Despite the acknowledgement of a problem, Stefanelli and Marsden (2012) claim that at present, no member state in Europe has a completely effective enforcement mechanism to curb the ill

[22] Monopsony: market concentration has reduced the number of potential buyers to the point that the seller is forced to accept the buyer's terms of sale.
[23] Vertical M&As: where a company acquires the company supplying its inputs (vertical integration), Horizontal M&A's: where a company acquired a company in the same line of business (often a competitor).
[24]Appendix D – Retailers – positive competition or price war.

effects of dominant players in the retail trade[25]. Many states have a combination of soft law and hard law or one or the other. Ireland is one of the countries named in the report which is planning regulation in this area. A European Competition Network report (ECN, 2012) details a total of 182 separate cases of competition law infringement between 2004 and 2011, which have been or are being investigated. This report found that collusion amongst competitors and abuse of a dominant position were almost on a par in terms of number of cases reported.

Although most pig and poultry producers[26] are not privy to downstream pricing information, it is widely held that some store price promotions are below cost (the purchase price from suppliers). Below cost selling is generally thought of as unfair on the rationale that the weaker of the parties will suffer and ultimately competition will be damaged. Retailers and some processors would argue that the practice is legitimate from a commercial point of view[27], but several EU countries[28] have attempted to place restrictions on the practice, including Ireland through the 2006 rescinded 'Groceries Order'. The USDA Economic Research Service provides price spread data[29] for beef, pork, broilers, turkey and eggs. This is a measure that describes the allocation of the consumer dollar along the various stages of the supply chain i.e. the farm, wholesale and retail levels. Prices from these sources are standardised to reflect one pound of meat at the retail level. Meat price spreads are reported monthly for total (farm to retail), farm to wholesale, and wholesale to retail

The EU commission offices in Moscow outlined legislation that is attempting to regulate the retail trade in Russia. Internally there is a Federal Anti-Monopoly Service, which has been helpful but is limited in its abilities as it can be instructed by Government not to investigate. Apparently the best way to describe the organisation is 'underdeveloped'[30]. In Japan the 'Designation of Specific Unfair Trade Practices by Large-Scale Retailers Relating to Trade with Suppliers' 2005', aims to regulate unfair practices at retail level. The provisions of the law are outlined in Appendix F and read similar to all other countries attempting to regulate the retail trade.

America introduced country of origin labelling (COOL) in 2009. Canada and Mexico challenged the law on the basis of it being a barrier to trade. There has been little gained by either party, with Canadian pig producers in particular losing out as a result of the legislation. Some American farm group advocates claim that the expected benefits were never realised, due to the fact that the ruling was watered down considerably ever before its introduction. Similar legislation for meat (including pig and poultry) will become law in the EU at the end of 2014. This is opposed by some of the major exporting EU member states and supported by importers and those countries with a more nationalistic attitude.

As the EU explored different enforcement techniques[31] to control the rising dominance of the retail trade, the US attempted to strengthen the rules that they already have in place to control 'undue preferences' at the dominant packer side through the USDA's GIPSA rule[32]. The act

---

[25] Appendix F: Government involvement in competition.
[26] There are a number of Irish pig producers directly involved in retail trading with branded goods.
[27] To generate footfall particularly at times of quite trading (January), price matching locally, price differentiation, honour price pledges, disposal of excess, and launch of new products.
[28] France, Belgium, Luxembourg, Portugal, Spain and Italy.
[29] Appendix D: Retailers – Positive Competition or Price War.
[30] Appendix F: Government involvement in competition.
[31] Appendix F: Government involvement in competition.
[32] The USDA's Grain Inspection, Packers & Stockyards Administration (GIPSA) Appendix F.

originally prohibited packers from: engaging in unfair and deceptive practices, giving undue preferences to persons or localities, apportioning supply among packers in restraining of commerce, manipulating prices, creating a monopoly or conspiring to aid in unlawful acts.

The act was amended in 1976 to increase financial protection to livestock producers by

1. Requiring meat packers with annual livestock purchases of over €500,000 to be bonded.
2. Providing trust protection for producers in the event of non-payment for livestock by a meat packer.
3. Expanding USDA's jurisdiction over wholesale brokers, dealers and distributors marketing meat in commerce.
4. Authorising the Agency to assess civil penalties of not more than $10,000 per violation.

Nathan Fretz, a staffer at the U.S. House Agriculture Committee stated that due to increasing concern amongst certain groups on the consolidation of the pig (hog) industry with small independents disappearing, they were instructed to write a bill to "put some fairness back into the system." The resultant 'GIPSA Rule' was to include elements such as contract arbitration and transparency, as well as protection from retaliation and price discrimination. The USDA published the final rule in December 2011 in a substantially modified form to what was originally published, and this could be overturned yet. Similarly to the COOL dispute, advocators and opponents to the rule expressed varying degrees of satisfaction or disappointment with the final ruling. The fact that the primary objectives were identified in the first place means that the debate will most likely continue.

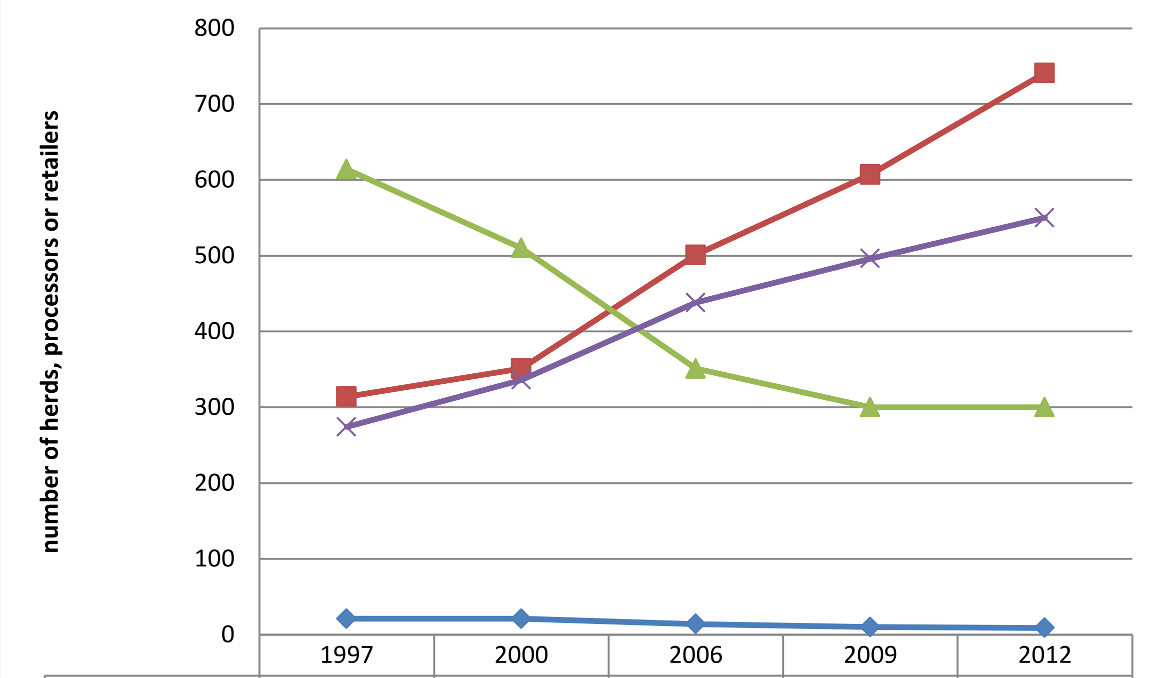
Although section 201.94(b) of the proposed rule requiring packers, swine contractors and live poultry dealers to retain records justifying differential pricing strategies was not implemented in the final rule, since August 2012 meat packers in the US are now required by federal law to report price data to the USDA's agricultural marketing service. This is a positive move towards greater transparency in the livestock market. Packers will be required to submit the price of each sale, quantity and other characteristics, such as the type of sale, item description and destination of the product. The USDA's agricultural marketing service will thereafter produce reports. Such a reporting mechanism across the EU would foster better relationships between the actors, as it would reduce misconceptions and lift the veil of mistrust.

In Europe however, it appears that retailers and processors can use their market dominance to circumvent legislative efforts to prevent unfair trading practices. If larger players cannot be controlled, legislation must improve not only the bargaining position of smaller players, but also curb the power of the dominant players. The competition authority must focus on how M&As and the continued expansion of retail outlets impact on upstream suppliers as part of investigations. Furthermore legislation that allows access to good quality pricing information is of paramount importance for consumer and producers.

Chapter 3: Market Dominance

It is widely believed by producers that the consolidation of the food production and retail industry has had a negative impact on the incomes of farmers. This issue has become a common topic of discussion at farmer meetings, conferences and forums across the EU over the last number of years. The situation is different in each country but in all, concentration of the food chain into the hands of a small number of players is increasing. This chapter discusses how this is impacting on the food chain of each country.

Figure 2: Change in Irish herd size and herd, processor & retail numbers 1997-2012



	1997	2000	2006	2009	2012
Pig Factories	21	21	14	10	9
Retailers	314	351	501	607	741
Sow Herds	614	510	351	300	300
Herd Size	274	336	438	496	550

Retail Dominance

Suppliers are often dependent on large retailers for a route to market. This puts them in a weak negotiating position and unable to challenge the trading conditions. This situation has resulted in a 'climate of fear' which prevents suppliers, particularly smaller ones, from attempting to stand up for their rights (Stefanelli and Marsden, 2012).

The top priorities for the retail industry globally are related to pricing pressures, innovations and differentiation, supply chain efficiencies, sustainability and the growth of online trading. Aside from vertically integrated logistics and warehousing which is now quite common, vertical integration (VI) is not widespread amongst retailers in terms of the actual ownership of sourcing and production. The theory: it was better to focus in one core area. Retailers however, are again looking at this as a way to take more control of their supply chains and address these pressure points[33]. Intermarche for example, has its own fishing operation Scapeche and meat business SVA; LeClerc has Kermene; Co-operative Group UK grows its own vegetables and Morrisons produce their own meat (Woodhead) as well as a range of in-store prepared products. Alternatively retailers are forging exclusive links with farmers[34] or product manufacturers.

Table 2: Top 4 grocery retailers (various countries & regions)

Top 4 Russian Retailers (Grocery) 2011		
	Group	**Eur Bn**
1	X5 Retail Group	12.74
2	Magnit	9.46
3	Auchan	6.24
4	Metro Group	5.83

Top 4 American Retailers (Grocery) 2011		
	Group	**Eur Bn**
1	Walmart	239.34
2	Kroger	67.36
3	Target	52.78
4	Walgreens	52.78

Top 4 Retailers Canada (Grocery) 2011		
	Group	**Eur Bn**
1	Loblaw	24.38
2	Walmart	16.83
3	Sobeys	12.75
4	Costco	10.50

Top 4 Japanese Retailers (Grocery) 2011		
	Group	**Eur Bn**
1	Aeon	74.47
2	Seven & i	56.17
3	Uny	18.74
4	Lawson	17.20

Top 4 Retailers European (Grocery) 2011		
	Group	**Eur Bn**
1	Carrefour Group	75.13
2	Metro Group	71.15
3	Schwarz Group	69.93
4	Tesco	68.00

Top 4 Global Retailers (Grocery) 2011		
	Group	**Eur Bn**
1	Walmart	349.07
2	Carrefour	108.08
3	Tesco	83.58
4	Aeon	77.39

source: http://www1.planetretail.net accessed December 2012

Europe

The meat industry in Europe is facing considerable challenges from a much bigger, more concentrated and powerful retail sector. Although there has been consolidation at retail level in the EU, northern European markets are more concentrated than southern or eastern European markets. The growth of the discount trade in the last 10 years has been exponential. In Ireland many of the retailers have a preferred partner through which they purchase meat, and this company will generally deal with a preferred supplier themselves to ensure consistency of supply. This relationship is beneficial unless something unexpected occurs in the chain, where the most powerful of the parties will be the only one secure. It is

[33] IGD Retail Analysis.

[34] Mal-Mart have pledged to sell $1billion in food sourced from one million SME's in emerging markets. www.walmartstores.com/sites/responsibility-report/2012/globaldirect.aspx, Tesco direct contracts with beef and pork suppliers in response to rising grain prices www.tecoplc.com/talkingshop accessed December 2012.

often seen that retailers (across the EU) will favour local medium sized suppliers to avoid over reliance on larger companies who may be able to negotiate more strongly.

Retailing is very important in Ireland, with employment in the combined retail and wholesale sector in 2010 estimated by the CSO at approximately 270,000 or 14% of those employed. Between 2004 and 2011 the number of grocery units (major retailers plus symbols)[35] increased by 798. Since 1997, the number of major retailers has increased by 236%. The average size of grocery units (including hypermarkets, supermarkets and discount stores) is 1,515 square meters. Based on these figures, comparing 2000 to 2012, the floor space has almost doubled for a population increase of 18.5%. According to the CEO of Londis Stephan O Riordan[36], by 2009 the whole industry had over expanded with each symbol group opening over 40 stores per year on the back of the 'breakfast roll man', and when the downturn came it was clear that that country was oversupplied with shops.

In November 2012, the EU High level Forum[37] charged with writing a code of good practice for the food chain, failed to reach agreement. The main reason for the breakdown in talks was the European farmers' organisations COPA COCEGA calling for legislation, while the other stakeholders (i.e. retailers and processors) wanted only voluntary measures.

Table 3: Store numbers in Ireland among major retailers 1997 – 2012

	1997	**2000**	**2006**	**2009**	**2012**
Tesco	78	76	91	116	140
Dunnes Stores	54	62	90	97	119
SuperQuinn	16	17	20	23	24
SuperValu	166	172	178	191	193
Aldi	0	8	40	65	96
Lidl	0	16	82	115	169
Total	**314**	**351**	**501**	**607**	**741**

Table 4: Market share Irish retailers 1987-2012

	Group	**Share '87**	**Share '12**
1	**Tesco**	24.5%	28.3%
2	**Dunnes Stores**	25.4%	22.4%
3	**SuperQuinn**	6.2%	5.4%
4	**SuperValu**	7.0%	19.5%
5	**Discounters**	0.0%	12.6%
	Total	**63.1**	88.2

Source Kantar

America

American retailers transcend US borders and have infiltrated many international markets, particularly Wal-Mart, who are or were present in all the markets I visited. In the last 20

[35] Symbol (no. of stores): Costcutter (135), Centra (474), BWG (Spar (450), Mace (220)) Londis (250), Gala (200), Daybreak (161).
[36] Interview published in ShelfLife magazine March 2012.
[37] Which included representatives from farmers, agri-cooperatives, traders, food industry and retailers.

years, the CR4 has reached 51% and the CR20 82% however, in the US buyer (packer/processor) power is the stronger of the two. Consolidation can be beneficial, as retailers show preference to deal with larger companies who can meet their volume requirements as they expand. However, as in Europe, if retailers become the dominant force, they can drive down prices in exchange for large orders or drop suppliers on whom they may have become over reliant. For producers none of this bodes well, as ultimately packers can pass the tighter margin back to producers who bear the brunt of the squeeze in the inevitable fight (Wise and Trist, 2010).

Canada

The largest four retailers in Canada make up 60% market share combined. Steve Moffett told us that Costco and Walmart are becoming bigger players in Canada, with the Americans now supplying one third of the Canadian market. When they first opened in Canada, the Canadian Pork Council (CPC) met the retailers and requested that they purchase more Canadian meat for the Canadian market. The multiples agreed to this, but CPC was informed thereafter that the Canadian processors were getting higher prices in Japan and they could not match the Americans in the home market. Marvin Salomons indicated that the industry now has no choice but to go back to the multiples as the crisis in Canadian pig meat industry continues.

Russia

According to a survey of 150 leading international retailers in 55 countries conducted by Jones Lang LaSalle, Moscow has been ranked as the third most attractive city for international retailers. Local governments are creating a favourable environment for the expansion of hypermarkets, supermarkets and shopping malls, many of which are being built on the sites of former outdoor markets (Kolchevnikova, 2012). The grocery retail market is estimated to be worth €227 billion per annum and is forecast to grow by over 4% this year. The retail environment is split into three types of outlets,[38] modern retail stores, traditional stores and open markets.[39] The market is highly fragmented and in 2010 the top 20 retailers accounted for approximately 11% of the country's total retail sales value (PMR publications).

Although Russian owned businesses top the sales lists, French (Auchan) and German (Metro) are now in the top four having gained considerable market share in the last decade. Although the former have a strong presence, in the past three years Carrefour and Wal-Mart[40] have both withdrawn in the face of strong domestic competition but rumours of a return persist.

Japan

Supermarkets and convenience stores are the primary distribution channel for food in Japan, and distribution relies on a complex system of wholesalers with direct supply limited[41]. Some smaller retailers are merging in an effort to compete with Aeon and Ito Yokado who combined control 42.5% of all supermarket sales; the top 5 account for 65% but the larger

[38] Modern retail stores such include Magnit (Tander Group) and the X5 retail group (Pyaterochka, Perekrestok, Karusel and Kopeyka). Russians are keen on convenience, willing to shop in the expanding convenience store market instead of the larger super or hypermarkets outside of residential areas. The main player in this market is home grown Magnit.

[39] Rosstat (Federal State Statistics Service) claim that in 2011 over 88% of Russian turnover could be attributed to the modern formats, with the wet market and older style soviet stores losing popularity, particularly in the major cities of Moscow and St. Petersburg.

[40] According to reports, the business model of the French multinational is that if they do not turn a profit within 4-5 years they will get out. Walmart intended to enter the Russian market through the acquisition of Kopeyka but when this was acquired by X5 they exited the market.

[41] With limited space, fresh food deliveries can be made several times per day.

ones are also working on strategic partnerships. Department stores have undergone considerable consolidation following a difficult period, but according to Aoki et. al., (2012) they still control 12.3% of the retail food market. I visited the *depachika* or basement floor of the Takashimaya department store and the newly opened Shibuya Hikarie department stores. The price of some products was astounding but I was informed that these were food gifts and not for general consumption. Price competition is becoming more intense[42].

The Japanese agricultural lobby JA[43] indicated that the rise of large stores is now putting pressure on their production and distribution systems. One example is that JA products now go through the retailers' central distribution, which firstly removes the need for JA logistics and secondly they must pay a 'central fee'. This helped the retailers efficiency but damages JA's.

Processor Dominance

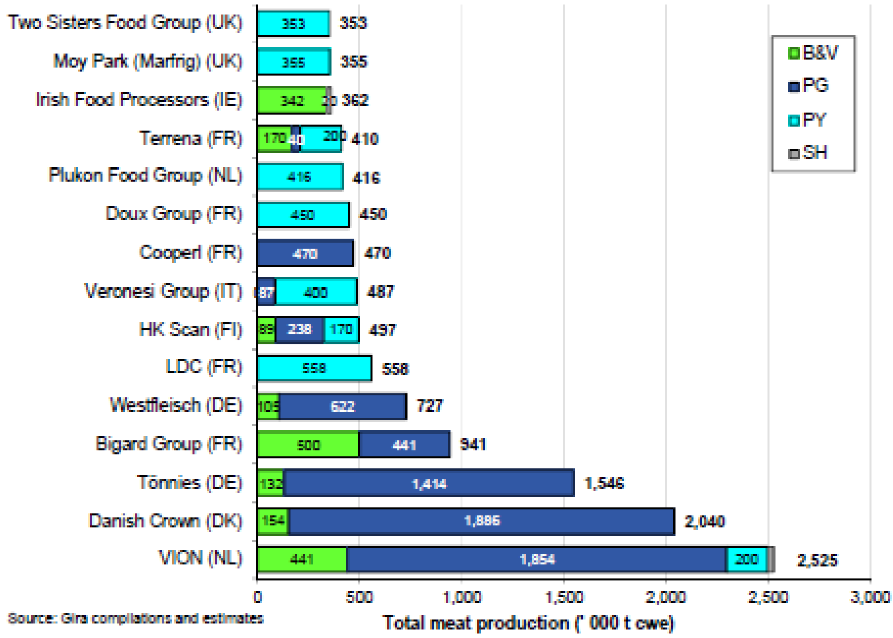
Europe

Although the top 15 meat companies in Europe control only 28% of EU meat production[44], the top 10 pig meat processors control 37% of production. The major pig meat producing countries are even more consolidated, particularly in northern Europe. In Denmark, Danish Crown controls 80% of the slaughtering; in France, the top five share 68% of the kill and in Germany the top five kill 63% of the pigs[45]. The market is characterised by increasing intra-community trade which is predominantly driven by price, but increasingly the supply and demand dynamics of different meat cuts is playing an increasing role[46]. Carcase imbalance can result in heavily discounted distress selling, as inventories of unwanted cuts (predominantly belly, shoulder and trim) build up. Processor profitability is dependent on balancing out the carcase and finding a profitable market for all cuts (Bowman et. al., 2012).

According to the GIRA panorama report (2012), many of the European red meat processors are also forward integrating (i.e. adding value), while Irish primary pig meat processors have moved in the opposite direction, leaving the added value element of the meat chain to the secondary processing sector. EU factories also are attempting to tie in suppliers, as the number of producers is rapidly diminishing. Contract farming is becoming more prevalent in the UK as farmers are not willing to own all of the risk associated with pig production. Key and McBride (2007) found that the use of production contracts was associated with higher farm productivity. Increases in productivity have benefitted society through lower food prices for consumers, but instead of benefitting producers, productivity gains have contributed to a 30% reduction in the price of pigs at the farm gate. Processor control of live animals through contracts or direct ownership depresses spot price. Farmers and processors have allowed retailers to profit from increased farm productivity but this cannot continue long term. Specific term contract arrangements should be explored, as the benefits of volatility management and efficiency are vital to farm survival, but profit gains must be distributed fairly within the chain.

[42] Lawson now carry some Yen100 products.
[43] Appendix E – Primary producers – vital to agriculture.
[44] The companies at the top of this list are pig meat companies who also work with beef but only Vion the largest processor is also involved with poultry production.
[45] Communication with Bord Bia.
[46] For example, the UK which has a similar consumption pattern for leg and loin meat to Ireland require 23 million pigs to have sufficient loin and rib, 19 million pigs to satisfy their demand for pig meat but only 6 million pigs for their requirements of shoulder meat.

Figure 3: Top 15 EU 27 meat companies by meat production volume ('000t cwe) 2010/11



America

In 1976, only 12 plants slaughtered more than one million pigs per year and pigs slaughtered by those plants accounted for only 27% of the US supply. In 1998, the number slaughtering over one million pigs had increased to 30, and by 2006 nearly 95% of U.S hogs were slaughtered in plants that handled over one million pigs per year (GIPSA, 2008). The CR4 (Appendix A) of the top American hog packers has risen to 67% with the acquisition of Premium Standard Foods by Smithfield Foods. In America processors may own the pigs from farrow to finish, with producers contracted for the labour and fixed infrastructure needed for production. Producers who wish to remain independent often enter into supply contracts (marketing agreements) that guarantee an outlet for the pigs based on a pricing formula[47].

Canada

According to David Sparling[48], in Canada approximately 75% of Canada's farmers will want to retire over the next decade and a half and $50bn worth of land could change hands during this period. *"Canadian farms are still run by Canadian farming families and that includes most of the really big ones. While hobby farms catering to local and organic foodies are one of the fastest growing segments of Canadian agriculture, farmers are increasingly choosing to incorporate and operate on a large scale."*

In the five years to 2011, there was a 42% reduction in farms with a 20% fall in the national herd leaving 7,000 active farmers in Canada. The exodus was Government supported by the 'Hog Farm Transition Programme (HFTP)[49]. Now the largest firms (Olymel and Maple Leaf Foods) account for the vast percentage of slaughter capacity (70%). In November 2012

[47] May include such variables as weight, some quality parameters or the days spot market price.
[48] David Sparling, Chair of Agri-food innovation and regulation, Richard Ivey School of Business.
[49] Appendix F: Government involvement in competition.

Maple Leaf purchased 'Puratone' and Olymel 'Big Sky Farms[50], both out of receivership leading to a further consolidation of the Canadian Market.

In Canada I visited the farm of Stephan Moffett, who was a former vice-chairman of the Canadian Pork Council (CPC). The family operates approximately 5,000 sows on top of a Potash mine in New Brunswick, Canada. He detailed the pressure farmers are under following not only the country of origin labelling in America but also due to currency fluctuations. The industry was built on favourable exchange rates, but this has now changed and the demand for Canadian pork has diminished considerably in the USA. The currency and origin labelling combined resulted in a 20% drop in production. Moffett farms did secure contract finisher accommodation in Indiana and a processor (Tyson) who was happy to take Canadian-born, US-finished pigs after he was dropped by his original processor. He claimed that although processing in Canada is already very integrated, there are still a number of small to middle sized operations that keep a certain level of competition in the market. Stephan believes that it is very important to stop the complete integration of the chain, however it is also important that farmers and processors work together to fight against the bigger problem, which is the retailers.

Russia

Over the last 20 years Russia has suffered enormous setbacks in terms of pig production. Lack of reform in the Russian agricultural sector led to high raw material costs and shortages for processors. Currently a significant proportion of the larger companies are not working to full capacity and a large volume of livestock are still concentrated on medium sized enterprises, which are not specialised. However, in the period 2006-11 over $8 billion was invested in the industry as part of the National Priority Project and the State Programme of Agricultural Development. In 2011 the largest 15 companies made up 44% of the market and the industry believes that market consolidation will take place by 2020 resulting in the 15 largest companies' controlling 65% of the market. In Russia, the opportunities for development of pig production are at agribusiness level, not family farming[51]. Of Russia's top 20 pig farming enterprises, seven did not have a single pig in 2005, including Miratorg Agribusiness Holdings[52] which I visited in June 2012.

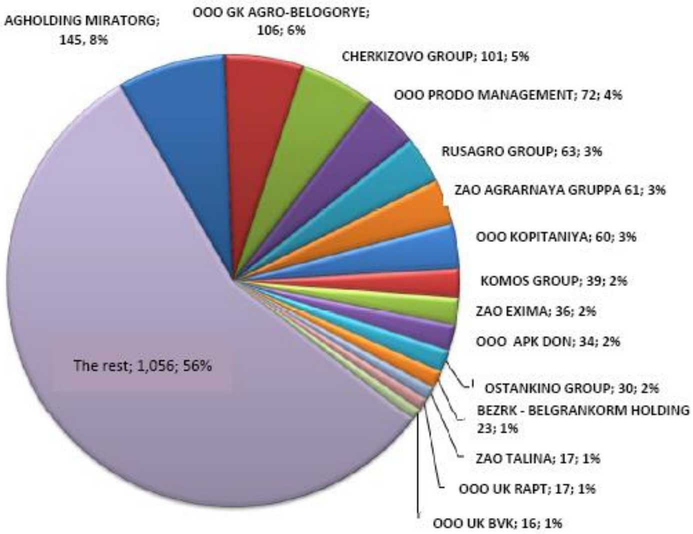
Accession to the WTO will change the face of the Russian pig production market, with the share of large enterprises expected to rise from 60% to 92% by 2020. Experts at the Russian analytical company Troika Dialog claim (in relation to WTO), "The big players will face a decline in profitability rate from the current 40-45% to 25-30%, but they will be able to benefit from market consolidation, and therefore could possibly double the volume of production."

[50] Big Sky farms and Puratone Corporation entered into court protection in September. 1.5million pig output combined.

[51] Family farm production will continue to fall (being at a low level anyway and uncompetitive) for the following reasons: aging of the rural population, degradation of complex social and economic infrastructure in rural areas of Russia, the flow of the working-age population to the cities and the spread of ASF.

[52] Appendix E – Primary producers – Vital to agriculture.

Figure 4: Russian pig producing enterprises 2011



Japan

The Japanese industry is not export orientated and meat imports are substantial. Japanese animal production is carried out on small scale farms and between 1991 and 2004 the number of pig farms fell by 75%. Since then, farm numbers have fallen by approximately 10% each year reducing the herd to 900k sows. Government is pro-agriculture as they hope to decrease Japans reliance on imported food. According to Iwantani Camborough[53], the expectation in the next ten years is for a continued growth in farm sizes with fewer producers. Indigenous production is just slightly greater than imports, but productivity is considerably lower than in the EU or America. The meat industry is highly protected by a price stabilization mechanism[54].

At the processing end, concentration is low as most slaughter houses are owned by the local authorities or cooperatives, which one industry analyst[55] claims leads to inefficiencies[56]. This inefficiency is allowed to protect the small wholesalers who claim they are operating entirely in this market. Larger processing companies (such as Nippon) have their own dedicated slaughter plants. At the processing and added value level, concentration is high with Nippon, Itoham, Starzen and Prima meat packers sharing the vast percentage of the market. Nippon ham management[57] claim that they control 21% of Japan's total meat consumption. When asked about their relationship with retailers, they indicated that currently they were balanced but they are concerned about the consolidation in the retail industry, which could lead to pressure as retailers become more powerful. They will try to further vertically integrate and grow by M&As of farms (as cannot build new farms), but they are also concentrating on differentiating their products

A number of the larger Japanese 'Sogo Sosha' trading houses (such as Mitsubishi Itochu) are involved in agriculture and retail, focusing on volume as a revenue generator. That is, the

[53] Consultants to the Japanese pig industry, outlet for PIC.
[54] Farmers and government pay into a fund and if prices drop below a certain level, farmers are topped up from the fund. According to the processors, this means the producer prices can vary a lot while retail prices are static.
[55] Interview with Mr. Yoshiki Keda, Meat Industry Analyst.
[56] For example, there is a still a central meat market behind the skyscrapers in the Shingawa area of Tokyo which is very costly as producers must pay the transportation cost.
[57] Interview with Mr. Tatsumi Nippon Ham General Manager.

premise of a small margin from each section of the business (fully integrated from farm to fork) resulting in overall larger profit margins for the group however, this supports the fragmented market structure. The largest meat processor is also the largest producer (34,000 sows), although this number has been static over the last number of years. Land access and the ability to build more farms is a major problem in terms of industry expansion. Therefore, the acquisition of farms already in operation is the route to increased production for companies. In 2011, Mitsubishi wholesale company was formed with the merger of Mitsubishi Shokuhin (food) and a number of food, beverage and wholesale companies. The press release on this stated that the reason for the merger was: *"to protect the safety of food quality and food supply by creating a new wholesale distribution model capable of adapting to changing consumer demands and diversification and to withstand long term deflation."*

Farmer Dominance

Irish pig producers, despite being very efficient, are struggling to survive in an increasingly consolidated industry. Despite the conditions of sale being less than satisfactory (payment is generally not negotiated), the lack of alternative options leaves farmers in a difficult position. Bowman et. al. (2012), make the point that "farmers commonly decide when to sell their animals based on the spot market price, with the prioritization of short term profitability (at the expense of others) generally proving irresistible." The situation is further compounded by the weak position of the processors as sellers. Despite the dominance of certain companies in terms of Irish pig meat purchasing, processors appear to have less market dominance in wholesale or retail markets.

In Ireland despite low levels of profitability and suspicion over how well the primary processing sector is performing, farmers are loyal to the factory they are supplying. It appears that generally farmers prefer to deal with local slaughterhouses that they know and therefore procurement is relatively localised (Gira, 2012). The fact that the number of outlets for pigs has fallen to such a low level that there is no real alternative may play a role in this loyalty. The situation for poultry producers is even more consolidated. This chapter explores options that could potentially improve the vulnerable position of Irish producers.

Unions and farm organisations

The Canadian MP Wayne Easter[58] told us not to underestimate the importance of the farmer as a lobbyist. He indicated that professional lobbyists are information suppliers, but those actually in the industry are much more important. During the course of my study tour, I visited a number of farm organisations. The key messages from these groups were: strength in numbers and that farmers' must cooperate with each other to achieve success in the market.

Cooperatives & producer groups

Agricultural co-operatives are a means by which farmers club together to accomplish vertical integration, either upstream (a purchasing co-op) or downstream (a marketing co-op). Over the years the Irish industry moved away from these structures[59]. The Prospectus Report (2000) made the recommendation that the 'cooperative' structure that was in existence (at that stage) be fully exploited with an aim of improving supply relationships (acknowledged then as today as problematic) and consistency of throughput. In 2004, Pilgrim's Pride, a

[58] MP and Federal Ag Critic for the Liberal Party of Canada.

[59] There are still a number of cooperatives which evolved from cooperative pig finishing units, which operated a central finishing farm purchasing pigs from shareholder suppliers, many of which had small units. These finishing units encountered extreme difficulties with disease due to the mingling of pigs (Teagasc, 2008).

vertically integrated Virginian poultry processor, announced it would close its local operations impacting 170 farms and 1,800 employees directly and indirectly throughout the local area. Following this announcement, the owners of many of these farms banded together and VPGC (Virginia Poultry Growers Cooperative) was formed. Matt Conrad[60] commented that the group have been highly successful in competing with the larger multinational companies by following their lead into an integrated system, but by forming a cooperative they have kept the profits for farmers.

Under the Rural Development proposals for the CAP Post 2013 (Pillar II), a Member State may decide to support the setting up of ***Producer Groups*.** The European Commission commented "*Producer groups help farmers to face jointly the challenges posed by increased competition and consolidation of downstream markets in relation to the marketing of their products including in local markets."* It is envisaged that producer groups can provide support by adapting production and output to market requirements; jointly placing goods on the market; establishing common rules on product information such as harvesting and availability; and development of business and marketing skills for producers.

Vertical integration[61] is applied to firstly secure constant supplies to the processing sector, but also to guarantee product quality. In Canada (and Ireland) some producers have started forward integrating in order to alter the structural circumstances (little or no bargaining power) that they find themselves in. Vertical cooperation appears to be a more conducive method of avoiding the saw-tooth profitability that is exhibited in the pig production food chain. Different methods of vertical cooperation between farmers and food manufacturers were discussed by Frank and Henderson (1992). Some initiatives could be applied in the Irish context, such as spot market pricing, market specification, production management agreements and resource providing agreements, as well as full vertical ownership. Other methods such as various forms of long term contracting, reciprocal trading, regulation and franchising are also options that could be explored by the industry.

Marketing boards dominated the Canadian live hog marketing system until the mid 1990s. These provincial pig marketing boards were developed to "protect the industry from vertical integration and to enable market access for smaller scale producers," (Hayenga et. al., 1999). Such a body would buy a percentage of the available animals and sell them to the primary processors or retailers at a negotiated price. This would remove the difficulties associated with lower pig numbers on some farms or relationship difficulties. However, with a small industry, introducing another link in the chain may not be the most cost effective move.

In the US, rationalisation took place as primary processors refused to accommodate fluctuating pig throughput and the ***supply contract*** concept evolved. This stabilised pig prices and prevented much of the over production that causes boom bust cycles in pig production. In Canada and America, contracts are being used to provide some level of price stability and to coordinate the supplies of pigs to processors. There is also some use of ***futures markets***[62] and forward pricing mechanisms. Futures markets offer benefits to

[60] Virginian Assistant Secretary for Agriculture and Fisheries.

[61] Vertical Integration (VI) involves the joint administration, in the same firm, of two or more of these stages. The decision of a firm located in one stage to become involved in the production of its raw materials or other inputs is referred to a backward (upstream) integration, while expansion into subsequent stages in the production and marketing process is termed forward (downstream) integration (Harte, 1997).

[62] A producer can trade lean hogs futures at the Chicago Mercantile Exchange (CME)[62]. Lean hog futures are standardized, exchange-traded contracts in which the contract buyer agrees to take delivery, from the seller, a specific quantity of lean hogs at a predetermined price on a future delivery date.

producers that are seeking to manage risk, as it allows them to lock in their input and output prices and secure a margin. A method of buying and selling pigs on futures markets would also be beneficial to processors who could manage risk better based on security of price and supplies. Although minimal volumes are traded on a futures market in the EU[63], there are well established futures markets in America for dairy and pigs. In December 2012, the Russian Ministry of Agriculture announced plans to create commodity exchanges for trading the country's primary agricultural products of meat, milk and sugar in an effort to "ensure that retail prices better reflect the cost of production." Commentary from the Ministry stated[64], *"In the Russian market, the average consumer price (on the grocery shelves) in some regions can exceed the purchasing (producer) price by more than five times. This happens because of a large number of intermediaries who do not produce anything, but take the lion's share of the profits of producers. The commodity exchange will allow us to change this situation"*

Canadian poultry farmers operate under a system of ***supply management,*** which is managed at the provincial level and protects them from American competition. Within this system, production levels are set to meet domestic market requirements of processors, further processors and restaurants. As a result producer prices are relatively stable. Canadian imports are regulated by tariff-rate quotas. Over quota tariffs are high enough to control imports to the agreed NAFTA[65] access levels and ultimately Canada is a net importer of chicken. In Ireland there is a degree of supply management by the nature of so few outlets for pig and poultry meat processing in the country, without any of the protectionist benefits. Considering the move towards more free trade between countries and quota removal, supply management is not an area that can be explored by Irish farmers.

Promotion and marketing

Marketing strategies influence farm returns in two ways, through the creation of value-added and by their impact on farmers' bargaining power. There are thousands of examples of how pork industries across the globe market their products. Differentiation and added value are key attributes but considering the structural and economic constraints on the industry (globally), it is important the high quality affordable product that is currently being produced can also be marketed successfully. Although there is a place for differentiated products, the 'commodity' product is already a high quality product, at least in Ireland, and should be marketed as such.

Agricultural produce in Virginia is produced, sold and marketed through the vertically integrated supply chains of Smithfield and Tyson Foods, but also through ***Community Supported Agriculture*** (CSA) schemes. The CSA is a form of alternative food network, which is now also gaining popularity in Canada. The theory is that a community of individuals group together in support of local farming operations[66], where the growers and consumers share the risks and benefits of food production. The producers in these groups command a higher market price but both the market (consumers willing to pay) and the volume that can be produced are limited.

In the Virginian Capital, Matt Conrad commented that the continued success of agriculture in Virginia, in spite of demands for improved environment and welfare of animals, was down to

[63] Appendix F: Government involvement in Competition.
[64] www.globalmeatnews.com/content/view/print/704695
[65] North American Free Trade Agreement.
[66] In the main, organic and free range production.

Virginian farmers' ability to sell their product on a 'local' concept. Only hams produced in the town of Smithfield, VA can be called Smithfield hams. He added that in general consumers were very patriotic and supportive of agriculture[67]. In the EU there are also laws protecting the labeling of products with certain characteristics[68]. As previously discussed, there is no single EU consumer as tastes differ across the continent, but some companies are taking these preferences on board to develop ***innovative products***. The EU Commission funded a cross-border project Q-Pork Chains[69] which included companies, scientists and farmers as stakeholders. The aim of the project was to develop high quality pork products in sustainable systems with low environmental impact, which can be marketed as such.

Following on from a disastrous 2007-2008 season of low pig prices and high input prices, the Alberta (Canada) Livestock and Meat Agency (ALMA) came into being. The provincial government invested $356 million into a new strategy aimed at maintaining and growing the Alberta industry as an international competitor with a high quality ***differentiated product***. This meant a shift from a commodity orientation to one with a focus on high value differentiated products. One aim was to reduce dependence on US markets through improved branding and certification programmes, as well as the redirection and refocus of government provided marketing funds.

[67] It must be taken into consideration however, that the average Virginian customer is wealthier than the average American customer.
[68] PDO: Protected Designations of Origin, PGI: Protected Geographical Indications, TSG: Traditional Specialities Guaranteed.
[69] www.q-porkchains.org accessed December 2012.

Conclusions & Recommendations

Consumer Demand

This project aims to gain a greater understanding of the international consumer, their behaviour, what they consider important in their food choices and how this is impacting on primary protein producers.

On a global scale, Ireland is a small producer of pig and poultry meat. However, on a national scale the industry is a large exporter and contributed €630m in export revenue to the economy in 2011. Consumers are reactive to price changes and therefore retailers will attempt to shield them from volatility in an effort to maintain market share. In 2011, due to tough economic circumstances, consumers were squeezed, and although price inflation eased slightly, other rising costs cut into disposable income and the 'pursuit of value' is now established consumer behaviour (Bord Bia, 2012).

Conclusion	Recommendation
The EU consumer, whose demands for food produced under specific conditions has increased costs of production, must understand the implications of such demands on costs of production.	The EU should ensure that EU food and its production systems are properly advertised and marketed. Promotion of EU production standards should be strengthened. Certain measures (under CAP) must be maintained to support EU production.
Irish and EU consumers are more conscious of how their food is produced and where it comes from than other major exporting nations such as America or Canada. Consumers in large importing countries such as Japan and Russia, who have self-sufficiency intentions, which are unlikely to be realised in the short term, have very different food demands to those of the major exporters.	Maintaining this link between producers and consumers through education is vital to securing good will amongst consumers, as well as support for indigenous production, particularly as cheaper global products of non-equivalent standards challenge the EU. Ireland: to compete in international markets must listen and respond to the demands of international consumers more closely, as survival of the pig and poultry sectors on a pure commodity basis will be very difficult in the future.
The home market consumer must not be forgotten or ignored as has happened in Canada.	The lure of high priced international markets at certain times of the year should not be prioritised over consistent home market customers.

Competition & Market Interference

This project aims to ascertain how EU and Global action through competition law, legislation and or other forms of market interference is impacting on primary producers.

All countries visited as part of this study have attempted to introduce legislation to curb the power of the most dominant player in the supply chain. There have been variable levels of success with these programmes, however, considering the growth of retail dominance, legislation is necessary to ensure the survival of all competitive players in the market.

Conclusion	Recommendation
There is currently no programme of legislative or voluntary measures that is fully proven as successful to protect suppliers from dominant players.	As there is no proven system, an assessment through the food chain is necessary. A mix of hard and soft law based on the most successful systems in the EU should be introduced across the EU.
Farmers are particularly vulnerable when a market consolidates, and yet competition law in Europe, which is designed to protect the 'public interest', leans in favour of what is best for the consumer only with little mention of the primary supplier.	As competition law in its current form is not adequate to protect the primary supplier, producers' interests should be taken on board when M&As are being investigated or when new players enter the market.
Structural elements need to be reviewed carefully by Governments. Retailers (particularly discounters) are growing through new store openings. An oversupplied retail market has been shown to have a negative impact on towns, through the closure of existing businesses, and ultimately on consumers.	Planning regulations should ascertain market saturation and impact on competition in an area prior to granting planning.
Country of origin labelling gives consumers the opportunity to make informed decisions on the food that they purchase. The success of such a labelling regime is dependent on the consumer wanting to purchase an indigenous product. As has been the case with other products, once a consumer becomes familiar with an imported product and likes it (taste, quality, price, promotion), they will continue to buy it. This could be negative in the	Once this is introduced (Dec 2014) a strong policing arm will be required. A large proportion of imported meat that is sold at food service level is not labelled as such. The proposed legislation should be extended to cover food service. Farmers (perhaps through specific producer groups) and processors must examine how to differentiate the product for international markets. Cooperation between primary producers and export

home market situation but positive in the international market.	companies would yield the best results.
Despite the fact that detailed information is available through the USDA website, farmers in the US have repeatedly called for greater transparency in the market. The conclusions of Wise and Trist (2010) indicate that greater transparency is needed from packers, but as many (Irish) companies are privately owned, little information is disclosed.	The competent authority in Ireland (CSO) should make wholesale prices of imported and home produced (home consumed and export) meat available, and calculate the percentage share taken by the farmer, similar to what is carried out by the USDA. Data collected should be non-specific and published on-line. This would enable farmers to benchmark their product with the end product. EU legislation may be required in this area and this should be expedited immediately.
The actors in the chain rely on each other, but as the power is not divided out equally the opportunity for abusive relationships are ever present. In some parts of Europe, the market is dominated by one company (such as Danish Crown in Denmark). This system of cooperation between farmers and processors has both positive and negative points.	Better communication between producers and processors and more binding contracts will create better relationships between these partners, which will help combat retail dominance. Alternatively, if processors are not willing to enact more amicable terms with producers, the latter will have to seek these beneficial relationships with the retailers.

Consolidation and Market Dominance (1)
This project aims to ascertain how EU and Global consolidation in the meat chain has impacted on primary producers.

In an effort to understand the consolidation of the supply chain and its impact on primary producers, it is important to understand first and foremost the evolution of the current system. It evolved as the need for a growing quantity of cheaper food increased. The pig and poultry meat industries were the pioneers of consolidation and ultimately as a result of this they have become the most efficient source of meat protein available in the world today. However, profits are not fairly distributed though the chain, ultimately farmers have become more efficient but the benefits have not been returned to the farm.

Conclusion	Recommendation
Consolidation of pig production has been motivated by the need for greater efficiency achieved by larger scale operations. Two other factors outlined by the OECD (2006) are: the expectation of consumers for high quality standards which 'larger producers are better positioned to achieve'; and also that processors have a preference for dealing with fewer large producers.	Traditional organic growth of farms in Ireland is no longer possible as margins are too tight to risk the capital expenditure and legislation prevents farmers from expanding. Farmers must organise themselves into 'larger producers' through cooperative structures or producer groups.
In Europe, the retail chains are the dominant players, while in other countries the retail market has not concentrated to the same extent. The dominant position of these companies coupled with a pricing war as a result of the recession has further exacerbated the issue for farmers as these PLCs aim to maximise shareholder returns.	Legislation is required to ensure that supply chain is fair to all actors. The EU through CAP (producer groups, producer organisations as well as any other appropriate mechanism such as the introduction of mandatory price reporting) must help strengthen the hand of farmers to combat the dominant effect of both retailers and processors.
Profitability is very dependent on supply to the retail trade. In the UK and therefore most likely in other EU countries, fluctuation in profitability can be linked directly back to the loss or gain of supermarket contracts (Bowman et. al., 2012). At times, companies in Ireland will not tender for certain supermarket business as the contract can only be filled at a loss.	Competition for market share is damaging meat values as consumers expect lower prices. Processors must seek more balanced markets. The competition authority should carry out a review of contracts lost and won by meat industry players to ascertain if companies are being unfairly treated.

In the USA, some producers are satisfied to work within a VI or contract system that removes the peaks and troughs of price volatility. Working within this system lessens risk but also removes the decision making process, something that Irish pig farmers have made clear they do not want.	To maintain their independence, Irish farmers cannot continue to operate as they do currently with little control of their input prices or their sales price. A new system of selling pigs must be introduced to involve contracts, marketing boards, producer or group selling. Alternatively farmers could move up the chain into added value. However, strengthening existing relationships with processors would be more beneficial to the industry as a whole.
Farmers must also play their park by disclosing their own information and working together. According to the Canadian Pork Council, it has been shown that when consolidated buyers are purchasing from fragmented sellers, prices will generally favour the former, and when this situation prevails commodity pricing tends to predominate over value-added pricing.	Farmer relationships can be as fraught as relationships between farmers and factories. Aside from the groups mentioned above, young farmer discussion groups should be set up immediately to foster more trusting relationships between the producers of the future. Farmers must cooperate with each other through producer groups or selling bodies. An independent (non-farming) professional who is economically independent of the dominant players must be employed to run these groups.

Consolidation and Market Dominance (2)
Aim to ascertain what production system is the most viable, taking into consideration Irish pig farmers wish to maintain the maximum amount of control of their farming operations.

All actors in the supply chain are necessary, however not all actors are independently necessary, and the concentration of supply chains can make some players redundant. All sections must be profitable to be a truly efficient supply chain. Over time, farmers, retailers and processors have all consolidated supported by the same theory, "managerial co-ordination replaces market co-ordination wherever the costs of using the market system exceed the costs of organising the transactions concerned within a firm – vertical integration is a means of avoiding the costs of external market failure" (Williamson, 1971). Farmers to remain necessary must remain competitive.

Conclusion	Recommendation
Pig and poultry production and processing are capital intensive enterprises with a high degree of uncertainty and continuous processes. This makes a quick exit from production when losses are being incurred almost impossible.	Longer term contracts will enable farmers to purchase their inputs with a better degree of certainty. These contracts must be based on quality parameters. At EU level, futures pricing mechanisms and/or meat exchange options should be explored.
The high degree of uncertainty in terms of product demand and input prices create an atmosphere conducive to speculative and opportunistic behaviour which incentivises integration and market consolidation.	Uncertainty must be replaced with stronger supply chain agreements; this can only be achieved through better communication and stronger links in the chain.
The lack of transparency in pricing leads to misunderstanding of pork value spreads.	This must be addressed either by government in a similar manner to the USA or through better cooperation of producers and processors. This could also be achieved through discussion forums organised through the producer groups, more direct (beneficial) relationships with processors or retailers or through marketing boards.

Acknowledgements

I would like to thank Nuffield Ireland for providing me with the opportunity to carry out this research over the past two years. It is a great honour to be chosen and I hope that I can give back to the agricultural industry as much as I have gained through continued involvement in the association and in the industry. The people I have met though Nuffield have opened my eyes to lots of things I never had the opportunity to discuss in my own line of work. A word of thanks to my fellow 2011 scholars, Shane, David and particularly Aisling, I think that we will be friends for a long time to come.

This research project would not have been possible without the support of my husband, Richard, who proposed three weeks after I received the scholarship and must have known that as happy as I was when I got that call, his honeymoon was out the window. His Mum, Mairead, who has filled his stomach on many an evening deserves a special mention. Of course thanks must go to my own mother and family for always being supportive and understanding.

I would like to thank my employer and joint sponsor, the IFA, for allowing me the time to 'gallivant', I think was the expression used, all over the world in pursuit of knowledge. Similarly to my co-sponsor, the Irish Farmers Journal, thank you. I sincerely hope that the benefits I have gained will result in gains for the organisations' members and the Journal's readers in time to come. I would also like to thank that one man who has interviewed me twice and 'hired' me on both occasions Mr. B.

Although Nuffield opens a lot of doors in member countries, a little outside assistance is needed when you decide to spend a large proportion of your travel time in Japan and Russia. The Irish Embassy Staff in both countries, Therese Healy in Russia, Donal Kenneally and Miwo Fukuda in Japan were massively helpful and a credit to Ireland. They organised meetings with some inspirational people that helped me understand the idiosyncrasies of the country much better than if I had spent 100 years reading about it.

There are so many people that deserve special mention and although I am nervous to start a name call here goes, Matt Ryan for keeping us on target, all my fellow international Nuffield 2011 Scholars and of course the ones gone before particularly Padraig Walshe who put his name on the application day one, Rowena Dwyer, Karina Pierce and Eleanor Ryan for proof reading; Lisa Courtney for helping me map out Tokyo and book flights; Jim Geltch for facilitating me; the GFP boys; Zoe Davies kindred spirit in the fight to save pig production in Ireland and the UK; Steve Moffett; Tim Cullinan (Pigs Committee Chairman) for staying out of trouble (ish) in my absence; my Poultry and Pig Committees who suffered my absence (particularly the group that travelled to Lithuania and waved me off to Moscow); Avril Conroy, an Irish woman and an inspiration; Nick Brooks; Jack Keane; Andrey Pavlov; Gerry Douglas; David Owens in Bord Bia; Denis McKerracher; Hitoshi Mizukami, for showing me real Japanese food (and drink) and everyone else that I met on my travels who helped me, educated me and showed me a genuine welcome.

Appendices

Appendix A: Commonly used measures of concentration

(Wise & Trist, 2010)

Concentration Ratio is commonly used by economists to describe the level of concentration in a market. The concentration ratio is the market share of the top 4, 8, or 20 firms in an industry by sales. Often used to examine the market share of the top four firms, it is commonly referred to as the CR4. The concentration ratio as a measure of concentration is comparable over time and across industries, but is not recognized on its own as evidence of an adverse impact of concentration. When reviewing potential mergers, the American Federal Trade Commission (FTC) examines an industry's current concentration ratio and predicts how this might change if the merger took place. Generally, when a four-firm ratio reaches 20% a market is considered concentrated, 40% highly concentrated, and when the ratio reaches 60% it is considered likely that firms exercise market power.

Table 5: CR4: Concentration ratio of pig meat processors

Top Pig Processors in Ireland 2011		
Packer	**Daily Capacity**	**Share**
Rosderra	29,000	43%
Dawn	10,000	15%
Stauntons	6,500	10%
McCarrons	5,500	8%
CR4		**76%**
Source personal communications		

Top Pigmeat Processors in Europe 2010/11		
Packer	**Annual tonnage**	**Share**
Vion	1,886,000	8%
Danish Crown	1,854,000	8%
Tonnies	1,414,000	6%
Westfleisch	622,000	3%
CR4		**25%**
source GIRA Panaroma report 2012		

Of total kill, approximately 11,500 are exported live to Northern Ireland

Top Pig Producers in Russia 2010		
Packer	**Tonnes liveWt**	**Share**
Agholding Miratorg*	145,000	8%
GK Agro-Belogorye	106,000	6%
Cherkizovo Group*	101,000	5%
Prodo Management	72,000	4%
CR4		**23%**
Source Kovalev, 2012		

Top Hog Packers in U.S.A 2010		
Packer	**Daily Capacity**	**Share**
Smithfield Foods	122,688	31%
Tyson Foods	72,800	17%
Swift & Co	46,000	11%
Cargill	36,000	8%
CR4		**67%**
Source Wise & Trist (2010)		

*Similarly Miratorg management informed us that they are currently commissioning 27,000 more sow places. * Reports indicate that the Cherkizovo is commissioning new facilities which will bring their production capacity to 180,000.

HHI: The Herfindalh-Hirshman Index is a widely accepted measure of market concentration calculated by taking the square of each firm's market share in a market and summing the results. It is a measure of the relative size and distribution of firms in the market. When the index approaches zero, the market is made up mostly of a larger number of firms equal in size. A perfectly monopoly (or monopsony) would have an HHI of 10,000. In America both the FTC and DOJ examine the change in an industry's HHI at the time of a proposed merger. They consider markets with an HHI below 1,000 to be un-concentrated, those with an HHI between 1,000 and 1,800 to be moderately concentrated, and those above 1,800 to be highly concentrated. Last measured in 2006, the HHI for the hog market was about 1,200. Obtaining all the information necessary to calculate this measure is one of the greatest challenges to its use, because many of these firms are privately held and market information is not readily available. With Smithfield's acquisitions in recent years pushing its market share to 31%, the HHI in 2010 for the top four firms would be 1,445.

Appendix B: Comparable value chains

Smithfield Foods - the highly integrated industry model that has redefined efficiency and cost competitiveness in the U.S.A.

Smithfield Foods is a global food company that produces more than 50 brands of pork products and more than 200 gourmet foods; they employ more than 52,400 individuals globally and make up the world's largest producer and processor of pork. The livestock production subsidiary of Smithfield Foods, Inc., Murphy-Brown, LLC, is the world's largest producer of hogs. In its manifesto, Murphy-Brown states that they are committed to producing high-quality products while protecting the environment and preserving family farms. In the United States, the company owns approximately 888,000 sows and brings more than 17 million hogs to market annually. Operations include 450 company-owned farms and 2,500 family farms across 12 states.

In 2007, Smithfield took over Premium Standard Foods which at the time was the sixth largest hog packer and the second largest hog producer in the country. This ultimately left producers in North and South Carolina as well as Virginia with only one outlet for their pigs – Smithfield Foods, unless they could afford to transport the animals approximately 400 miles to the next major packer. Producers claimed that this merger approval by DOJ led to a situation where buyers (packers) were given undue leverage over sellers (Wise and Trist, 2010).

On a visit to one of Smithfield's contract finisher units (contracted through Murphy Brown) I listened to divergent opinions from the two men involved with the farm, Joseph and Troy Griffin, a father and son team producing pigs and cereals. The older generation, Joseph expressed deep resentment towards the larger company that he blamed for technically "putting him out business." He referred continually to the "big man eating up the little man." Troy however was relatively satisfied with the system of operation. He indicated that his father had built the original unit and did not like the more integrated system. His own opinion was that the system operated by Smithfield allowed them to continue in production without the risk of losses that were being experienced in other parts of the world. The 'contract finisher' is paid even if Smithfield sends no weaners and in this way the company regulates the flow of its pigs into the market. The contract states that if they do not fill the unit after 10 days, the producer starts getting paid anyway.

Danish Crown and Vion Foods - An example of a total industry sector strategy built on a cooperative model. The two differ in that the Danish model is more integrated than the Dutch model, which involves independent farmer owned cooperatives who invest in processor firms.

Danish Crown[70], Europe's largest pig meat processor, exports 85-90% of its products. Scale is a major factor in the success of the company. Over the last four years the company has restructured considerably to improve their competitiveness. They sold two plants in Denmark, completely modernised another and purchased Germanys 4th largest plant D&S Fleisch in 2010. In 2011 they transferred operating assets to a ltd. company status and it has been noted in the media that they want to attract outside equity to help fund M&As which are beyond the financing ability of the coop.

Vion are the largest EU meat company, a privately owned company with one shareholder, NCB Ontwikkeling which is closely affiliated with the farmers' organisation ZLTO[71]. The company is a for-profit organisation, as opposed to the traditional aim of cooperatives of a price maximizer for their coop members. Vion source pigs from contracted farmers, vertically integrated structures in the UK[72] and in Germany; they also import live pigs from Denmark and the Netherlands (Hamann, 2011).

According to Bowman et. al., 2012, these cooperative models work because they are not adversarial. Producers and processors interests are aligned and as producers are shareholders, they have greater access to information and a better understanding the system. Ultimately through these cooperative structures, risks are more evenly distributed throughout the chain.

Seaboard-Triumph – a contractual model in which six large scale producer groups built a large scale plant (Triumph), but contracted all produce marketing to an established food marketer (Seaboard).

In 2006, Seaboard Foods began to market and sell fresh pork products produced at a new pork processing plant, which is owned and operated by Triumph Foods. The producer-owners of the Triumph Foods plant aligned their interests with the marketing knowledge of Seaboard Foods. They follow the controlled integrated pork production model, which was already present in Seaboard's other production facility, to ensure product consistency between the two plants.

The Morrisons model – Morrisons differs from the other UK retailers in that it owns its own processing facilities, including abattoirs.

Morrisons do not focus on the premium market to secure higher prices to fund their integrated model, they vie against other retailers who import a large proportion of their meat. They are 4th in the UK in terms of CR4 market share and they are competitive [73]. According to Bowman et. al., (2012), the management has invested heavily in acquiring more processing

[70] Danish Crown is owned by farming co-operative Leverandørselskabet Danish Crown Amba.
[71] ZLTO Zuidelijke Land-en Tuinbouworganisaie.
[72] At the time of writing, Vion was exiting the UK market to "focus on its core business in Germany and the Netherlands as well as its food ingredients business."
[73] Morrissons is the smallest of the "Big Four" supermarkets, with approximately 11.8% market share, behind Tesco (30.9%), Asda (16.8%) and Sainsbury's (16%), but ahead of the fifth place Co-operative Group, which had a share of 4.4%

capacity, expanding their existing plants as well as through a series of M&As. A wholly owned subsidiary (Neerock Ltd., t/a Woodhead) buys the fresh pork and beef from a supplier network, but the farms are not in direct ownership of the retailer. As well as this, the model addresses the carcase balance issues as they can plan to use the whole animal. Relationships are described as long-term and based on trust and investment, farmers do not always profit from this system, but they are not constantly losing either.

The Morrisons Annual report claims *"It's a unique supply chain set-up that works for us in a number of ways. First of all, because we buy direct from farmers, we know exactly what we're buying and where it comes from. By cutting out the middle man, we can save money and pass on those savings to our customers. And by running our own processing plants, we can keep control of quality throughout every stage of the production process."*

At time of writing (November 2012) media reports[74] suggested that the company was moving away from sourcing 100% UK meat, starting initially with Irish beef and Dutch chicken.

Sturgeon Valley Pork - Alberta Livestock and Meat Agency (ALMA) supported and invested in Sturgeon Valley Pork (SVP), an integrated pig meat processor, which promoted itself as family farming with high welfare, care for the environment and local production using local grains.[75]

Unfortunately earlier this year BDO Canada were appointed receivers for the company, despite the Alberta based companies sound business basics. This was a very negative development for the industry as the company was a 'shining light' according to industry analysts of how things could and should work for the benefit of pig producers. ALMA has discussed the reasons for the failure with the former investors, most of whom were pork operations that had agreements to supply pigs, and as in many cases like this the failure was multifaceted. Major issues included under capitalization from day one, a management component, as well as the inappropriate allocation of capital expenditure, i.e. money and time spent on increasing cooler capacity in an effort to compete with the major processors instead of developing more value-added expertise. Quoted on several occasions was the fact that one of the major investor pig suppliers stopped supplying pigs and this inevitably started the fall of the dominoes. Ultimately the failure to acknowledge that processing and marketing require specialised skills no less than pig farming, along with cash flow problems and the inability to access pigs, resulted in the producers causing their own downfall.

Appendix C: Consolidation – Miscellaneous Parameters

The following are comment extracts from USDA/DOJ meetings held in 2010 (DOJ 2012)

Hog and cattle producers spoke about concentration in packing and retail. For example, at the Colorado workshop, a calf cow producer described 'empty feedlots', a tremendous loss of buyers, loss of access to the wholesale market and a lack of access to the retail market.

Similarly, one independent producer stated that when he stared selling hogs in the 1980s and early 1990s, he received good premiums and did not have to haul (hogs) far, but that has disappeared now with concentration in packing.

[74] www.grocer.co.uk accessed November 22nd, 2012.
[75] Httpp://alma.alberta.ca

Many growers reported that concentration in poultry had left them with few or only a single bidder(s) for their services, rendering them powerless in negotiations with integrators. For example, during the public comments in Alabama, a grower stated that the lack of competitions in a given geographical regions has led to integrators with all the power and left growers with little or no choice.

Conversely, some participants described how larger farming, processing and retail operations have created efficiencies that have benefitted producers and consumers alike.

Bargaining power of up-stream suppliers

An area not discussed in this report, but one which is of major significance is the bargaining power of the upstream suppliers. Feed and other inputs make up 75% of the cost of pig production[76]. Input prices have become more volatile over the last number of years, with producers facing speculative markets for cereals and proteins over which they have no control. Some producers mitigate these effects by forward purchasing, local supply agreements and/or by growing inputs themselves (the latter is uncommon in Ireland). In general however, farmers are vulnerable as they do not control the extremely volatile input prices and output prices are not guaranteed. The issue is further complicated by legislative difficulties such as the EU ban on unapproved (EFSA) GM feed ingredients. Furthermore, pharmaceutical products are also sold by large multinational conglomerates and often there is little if any choice for producers.

Consumers - Farm policy & food security

In the EU and in Ireland, there is a still a connection between the farmer and the consumer. This link will once again be tested as the CAP is reformed over the coming 12 months and the volume of payments is debated increasingly in the media. At present it appears that there is little public backlash to this spending. One would like to think that this is an acceptance that EU consumers demand a lot from EU producers. American consumers have publicly stated their opposition to direct payments to farmers despite the fact that the vast percentage of cost in the Farm Bill is in food stamps (83%)[77] as opposed to direct payment to farmers. That said, all food purchased under the food stamps school dinners programme is USA produced and therefore inadvertently supportive of agriculture.

In March 2011 while in New Zealand on the Contemporary Scholars Conference, Japan was rocked by a massive earthquake which had dire consequences for the country. Consumer confidence was shaken, and the power shortages which stemmed from damage to the Fukushima power plant also impacted heavily on food business operators. Consumers changed their buying habits moving away from luxury goods and stocking up on staples and necessities. A new emphasis has been placed on environmental issues, which could see consumers move away from low prices and back to high quality. Japan is even more focused on food security issues in the aftermath.

[76] Information provided by Teagasc Pig Production Development Unit.
[77] Tara Smith, US Senate of Agriculture, Washington DC.

Consumers and agricultural innovation

"You can't meet the challenges of today with yesterday's tools and expect to be in business tomorrow" (Anon)[78].

A new innovation is often associated with an increase in M&As, as the companies that move forward with the technology grow and those that do not are swallowed up. American agriculture has adopted the use of genetically modified (GM) crop species and with this, the EU has effectively lost America as a source of soya. The EU consumer may claim an anti-GM stance but they still require a source of soya. It remains to be seen what impact the unintended results of this GM ban, which could include rising feed prices or the loss of indigenous production, will have on consumers in the coming years. A politically charged argument in America is that producers were simply not allowed by 'big business'' to stay in production without the adoption of these technologies. Farmers at joint meetings of the United States Department of Agriculture (USDA) and Department of Justice (DOJ) stressed that although they "felt they had gained from using biotech products", they reiterated the 'importance of having a choice in what they produced, where their inputs came from, and their options for marketing." 'Food Inc.' would lead one to believe that none of these freedoms are available to US farmers today.

Paylean (ractopamine)[79] must also be mentioned as a relevant innovation, as it has provided the supply chain where it is used (America) with a competitive advantage over where it is not used (Europe). GM foodstuffs can be considered in the same vein. These are topics that must be addressed and considered by farmers and consumers. Ultimately, consumers have dictated that they do not want their meat produced with these products and farmers have obliged. However, EU farmers are exporters and competitiveness in export markets is being hampered, placing pressure on indigenous industry. If companies fail, where will the meat come from in the future? Most likely it will be the markets that are and will continue to use these 'banned substances'.

Figure 5: Paylean pays (Canadian farm)

[78] Paylean Update Presentation – Peter Provis, Elanco.

[79] Ractopamine is a growth promoting drug used as a feed additive, which promotes leanness in animals raised for meat, commonly known as Paylean for pigs and Optaflexx for cattle. It is banned in the EU.

Appendix D: Retailers – Positive competition or price war?

One of the main areas of concern in recent EU discussions regarding the food chain has been on potentially **unfair and abusive commercial and contractual practices**. Although there is existing legislation (Unfair Commercial Practices Directive)[80], once again this directive only covers business to consumer and not business to business. COPA COGECA[81] compiled a non-exhaustive list of such practices through a survey of their member organisations.

Table 6: List of unfair and abusive commercial and contractual practices

Access to retailers: Advance payment for accessing negotiations, listing fees, entry fees, shelf space pricing, imposition of promotions, payment delays and most favoured client clause.
Unfair contractual conditions or unilateral changes to contract terms: • Unilateral and retrospective changes to contractual conditions. • Unilateral breach of contract. • Exclusivity clauses/fees, imposing private brands. • Forced contribution, imposing standard model contracts. • Retaliatory practices. • Non-written contractual agreements. • Margin recovery. • Overriding discounts. • Payment delays. • Imposing payment for waste processing/removal. • Group buying/joint negotiation. • Unrealistic delivery terms. • Non-transparent and discriminatory reverse auctions. • Incorrect measurement of volumes. • Invoicing the supplier for services related to the marketing of the product. • Imposing the use of a package supplier or packaging material as a pre-condition. • Imposing the use of a logistic platform or operator. • Forced payment of supplier on-store promotions using suppliers' own displays/counters or material. • Payment to cover non-previously agreed promotions. • Over-ordering of a product intended for promotion. • Payment for not reaching certain sales levels. • Imposing an extra rebate on suppliers for sales above a certain level. • Unilateral withdrawal of products from store shelves. • Imposing unconditional return of unsold merchandise. • Imposing suppliers costs related to customer complaints.

[80] Directive 2005/29/EC of the European Parliament and of the Council concerning unfair business to consumer commercial practices in the internal market.
[81] COPA COGECA umbrella body of European farm organisations and their cooperatives.

"Private label is prostitution but it's a great way to pay the bills" Senator Mary Ann O'Brien[82].

Bord Bia research (Bord Bia 2012) shows that 81% of Irish consumers[83] buy supermarket **Private Label (PL)** products where they would have purchased branded products in the past. In many cases, when processors have been unable to sustain themselves in direct competition (i.e. failure to secure sufficient shelf space), they have started to produce private label products for the retailers. The growth of these PL products has been a feature of the European food chain in the last 10 years. The European commission (2011) has claimed this growth is affecting competition as the PLs are replacing brands and reducing consumer choice. According to IGD, PL penetration is lower in the USA than in Europe, but retailers are focussing investment in this area and consolidating ranges into fewer more powerful PL brands.

In Japan the majority of major food retailers have their own PL brands and this is increasing, particularly since the earthquake as PL responded well to the food safety concerns of consumers. Private label meat products[84] are beginning to infringe on brands, although this did not seem a huge concern to Nippon or Itoham. When the fall in percentage share that Kerry Foods had suffered in recent years was discussed, they were taken aback. Private label (or generic) in Russia is a relatively new phenomenon, and limited in scope outside of the main cities (tied to the low concentration of retail chains also outside the main cities) at approximately 3% of total retail sales in 2011. Although price is the determining factor, quality plays a significant role in consumer choice, and in Russia the lower prices associated with own brands are inadvertently interpreted as lower quality offerings (Kolchevnikova, 2012). PL is growing however, predominantly in more commoditised food segments such as processed foods. This is particularly evident in the larger retail chains that can absorb more costs and invest in the marketing of their generic products.

During my time in Canada I met with many small suppliers (not just in pigs or meat) who indicated that the retail trade was only concerned with volume sales. One such supplier I met was Bob Osbourne, who runs Corn Hill Nursery Ltd. He claimed that the retailers enticed him to supply until the retail trade was 40% of his business. They were subsequently dropped when they refused to lower prices and instantly replaced. Furthermore, the retailers continue to portray the new products as being sourced from Corn Hill Nursery as consumers want the 'maritime product feel'.

According to Kantar World panel between 2010 and 2011, over 16% of meat was sold on **promotion** in comparison to 11% of fresh produce and 5% on dairy products, with all three categories making up approximately 13% of grocery sales. 56% of consumers agreed (Collins, 2012[a]) that promotions such as the BOGOF (buy one get one free) are just a way for shops to make more money. A considerable difficulty that has now arisen is how retailers and brand owners can differentiate their products when promotions are an everyday feature. Many would argue that promotions such as BOGOFs devalue products as the consumer thereafter refuses to pay a realistic price for the product.

---

[82] Comment made by Senator Mary Ann O Brien (O'Brien's Chocolates) at Grant Thornton Event 'Food 4.0 The Dynamics of Supply & Demand Aviva Stadium 25th October 2012.

[83] Presentation given to IFA Executive March 2011 by Kantar World Panel.

[84] Aeon PL brand 'Top Value' and the Seven & I Holdings have 'Seven Premium'.

The USDA (Economic Research Service) tracks the share of the food dollar that farmers take home, **The Farmers Share**. This share has fallen to just under 12c, shrinking as the spend on marketing and further processing increases[85].

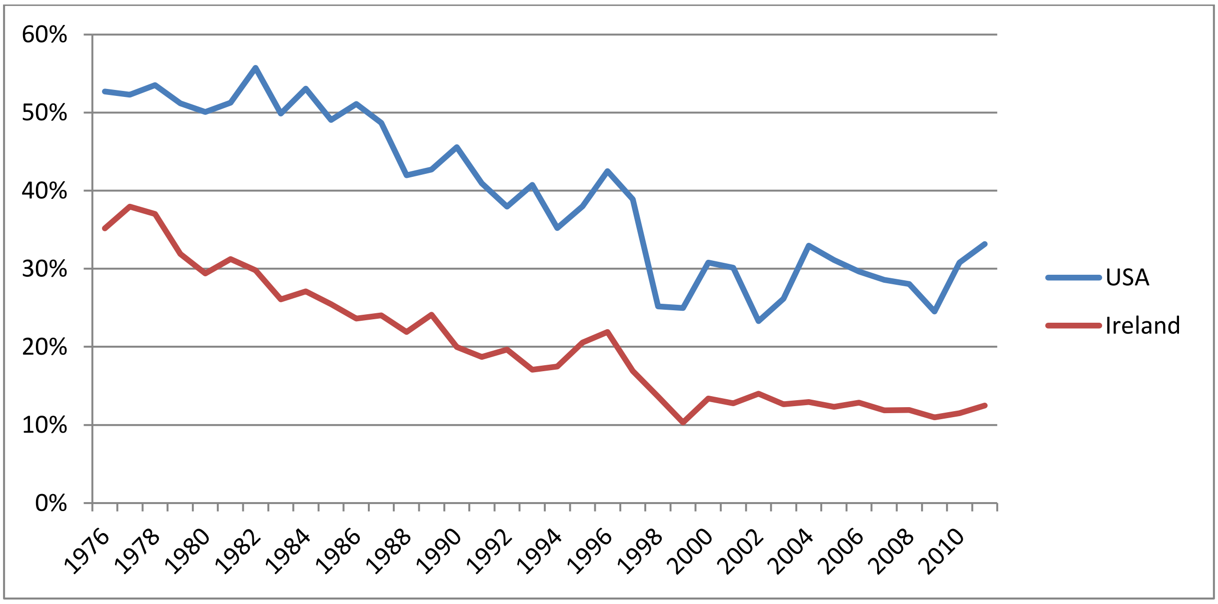
Table 7: Share of retail pork value

Year	Retail value	Whole sale value	Gross farm value	By-product allowance	Net farm value	Whl-ret. spread	Farm-whl. spread	Farmers' share	51-52% lean hogs
	US$ Cents per pound (US) of retail equivalent					Percentages %			$/cwt
2006	280.8	121.4	88.4	5.1	83.3	56.8	13.6	29.7	47.28
2007	287.1	121.5	88.1	6.1	82.0	57.7	13.8	28.6	47.10
2008	293.7	124.4	89.5	7.0	82.5	57.6	14.3	28.1	47.85
2009	292.0	111.3	77.1	5.6	71.5	61.9	13.6	24.5	41.22
2010	311.4	141.2	103.0	7.3	95.7	54.7	14.6	30.7	55.07
2011	343.4	158.8	123.7	9.7	114.0	53.8	13.0	33.2	66.13
2012 Q1-3	344.6	146.6	116.1	9.5	106.6	57.5	11.6	30.9	62.11

Source: USDA William Hahn (updated Nov 2012).

They also report that the price spread between farm gate and retail is growing. The farm share of retail pork sales throughout the 1970 and 80's was above 50% but now ranges between 20-40% (Fig 6).

Figure 6: Historical farmers' pork percentage share of retail price (Ireland[1] & USA[2])



[1]Irish pig price figures calculated from CSO (1976-1995) and Bord Bia (1995-2012), meat prices calculated from CSO Consumer Price Index (pigmeat basket 1976-2012). [2] Source: USDA William Hahn (last updated Nov 2012). View only for trend purposed as sources, currencies & calculation methods differ.

[85] According to the USDA, off farm costs such as marketing, processing, wholesaling, distribution and retailing account for almost 90 cent of every dollar spent on food in the USA.

Expansion in the Irish retail trade continues as retailers use store openings as a way to increase footfall. Despite this, the Government as part of the EU-IMF Programme for Financial Support (aka The Bailout) was asked to review the retail size cap[86] currently in place. In an interview[87] Stephan O'Riordan, CEO of Londis said "*I don't think that the cap that is there is any barrier to new entrants or competition and you only have to look at the Sunday newspapers to see the level of competition in the sector. I don't think pushing even more of the trade towards big box retailers is good for consumers in the long term because if you end up closing the local Irish independent retailers, it is effectively long term eliminating competition for the larger operators at which point the consumer is ultimately going to lose out ..... abolition would be a mistake for the consumer long term.*" The Forfas report (2011) on this matter claimed that a sweeping removal of the caps would produce mixed results that may increase competition in certain areas, while creating monopolies in others. They also pointed out that store sizes currently are below the caps. They recommended increasing the cap marginally outside of the five main cities and by a larger margin in main cities given their greater size and density.

In 1997 Tesco re-entered the Irish market[88] and brought with them a new dimension to the competitive environment well before the arrival of the German discounters in the late 90's and early 2000's. At the time concerns were expressed that imported products could potentially displace Irish goods, and Tesco gave the Irish government a series of undertakings[89] as a pledge of support for Irish products. The later arrivals were not asked for the same commitments, and over the period 1997 to 2009 the number of primary destination grocery stores has increased by 93%.

Appendix E: Primary producers – Vital to agriculture

Countries around the Pacific Rim such as the US, Canada, Singapore and Mexico have tried to negotiate a trade agreement that would reduce tariffs and other trade barriers throughout the region. Japanese exporters are very keen to see Japan join this **Transpacific Partnership** (TPP), but there is fierce opposition from the farm lobby who are adamant that agriculture would be decimated by any TPP agreement. The farm lobby has considerable political influence despite the fact that it accounts for only 1% of GDP. According to research from the JA Norinchukin Research Institute, "once the larger agricultural powers gain better access to Japan, 25% of local rice output will cease and all sugar and most beef production would stop being competitive." The Japanese Ministry agrees that, should the tariffs be removed, reliance on imports will increase from 60% to 90%. Reports from some of the Agricultural trading houses claim that JA has simply protected farmers weakening their competitiveness. They would like to see a consolidation of the rice paddies, which they claim would lower costs, whereas JA is opposed to this favouring small scale 'community farms'.

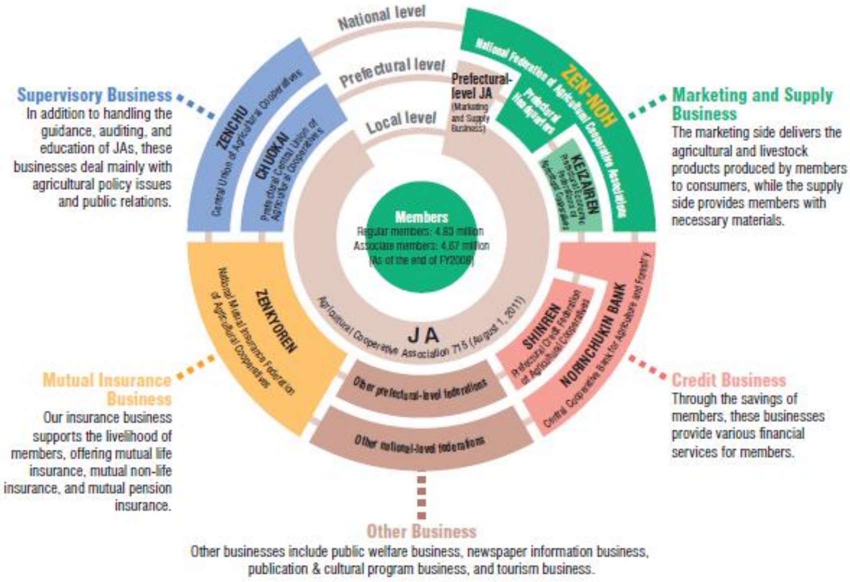
Reports suggest that JA has penetrated Japanese government in two ways: through direct political representation and by being incorporated into the agricultural administration of the state, where MAFF consult with JA directly in policy making. For example, in the current

[86] The cap on large grocery stores is set at 3,500 square meters in the Greater Dublin area and at 3,000 square meters in the remainder of the state.
[87] Fionnuala Carolan, Shelflife Magazine, March 2012.
[88] By purchasing Power Supermarkets (Quinnsworth and Crazy Prices).
[89] Such as having a buying office in Ireland, working with Irish suppliers with a view to increasing the volume of sales and benchmarking to demonstrate progress.

DPJ[90] administration, the Minister for Agriculture, Forestry and Fisheries, Akira Gunji, was previously secretary-general of the Ibaraki Prefecture Federation of JA labour unions and since his appointment he has maintained a cautious stance on TPP.

JA (Japan Agricultural Cooperatives Group)[91] is an organization that conducts business activities based on the participation and collective efforts of its members[92]. JA, with a membership of almost 9 million has a lot of power at its disposal, although in recent years the organisation has been accused of operating to preserve itself rather than in the general interest of farmers. At the time of my visit however, the focus was very much on the protection of farmers from the impact of the Transpacific Partnership (TPP).

Figure 7: Structure of the JA group



JA is effectively a trading house acting as a cooperative, in that it purchases production inputs, while also collectively marketing agricultural products to maximise economies of scale for members. Cooperatives can benefit from lower tax rates and are exempt from elements of the antimonopoly law. However they also carry out a lobbying role, have retail shops through A-COOP (with a home delivery system on on-line shop JA-Town), food branding & marketing, insurance, advisory and quality assurance schemes and banking, all through independent companies that feed into JA. JA dominates rice and corn trading, and recently they divested some companies making them independent[93]. The ZEN-NOH staff claimed that the reason for this is that the market is changing rapidly and independent company profiles can be more responsive to this market. They acknowledge that the meat business is the weak link in the JA operation as expensive inputs must be imported, and they

---

[90] DPJ Democratic Party Japan came to power after the 2009 election defeating the long dominant Liberal Democratic Party.

[91] JA includes the Central Union of Agricultural Cooperatives (JA-Zenchu), which can be regarded as JA headquarters, and the National Federation of Agricultural Cooperative Associations (JA ZEN-NOH) responsible for the marketing and supply business of the JA group. There is also The National Mutual Insurance Federation of Agricultural Cooperatives (JA-Kyosairen), which is in charge of JA members insurance services and Norinchukin bank (which holds $568billion in customer deposits) known as JA bank. The organisation also runs nursing homes, hospitals and even a funeral service.

[92] There are many other examples of strong farming organisations such as the IFA and American Farm Bureau.

[93] Meat, eggs and vegetables/fruit.

are importing some meat to avoid reliance on expensive Wagyu[94]. They indicate that the A-COOP stores are not very profitable in certain areas but that these stores provide a lifeline to people in some agricultural areas, who would leave if the stores did not operate, thus ultimately keeping producers farming.

WTO[95] – How will Russia cope with the expectations of fair play?

"After entering the WTO, this sector (pig farming) will need special attention, its requiring subtle protection measures," Russian Prime Minister Vladamir Putin addressing the Russian agricultural unions (Vorotnikov, 2012).

The eighth ministerial conference formally approved the accession package of the Russian Federation on December 16th 2011, and on August 22nd 2012 the WTO welcomed the Russian Federation as its 156th member. As part of its WTO accession agreement, Russia has committed to reducing and binding import tariffs on all agricultural goods, and to follow sanitary and phytosanitary/technical barriers to trade agreement, thereby providing more predictability and transparency for its trading partners. Many of those in the agricultural industry in Russia claim that joining jeopardizes the country's government driven self-sufficiency objective[96] of "Own it, Kill it, Cut it and Eat it in Russia."

Many of those expanding in Russian pig production stalled development until such time as the outcome was revealed, whilst the meat association President Sergey Yushin claimed that joining the WTO will prevent Russia from meeting its self-sufficiency targets and substantially change the face of Russian pig meat production[97]. It appears however, that for the political machine, being in is more important that what the country stands to gain. While in Russia, the debate was continuing and I was told that the Russian attitude was that if they cannot directly subsidise agricultural growth, they would indirectly subsidise it, "we will build roads in agricultural areas." Just recently, Russia's third biggest pig meat producer and largest meat manufacturer Cherkizova, welcomed the Government's law on "amendments to the tax code of the Russian Federation and the Annulment of certain provisions of legislative acts of the Russian Federation." The company General Director Sergei Mikhailov, commented to the media, *"the reset of income tax will have a positive impact on our business and the industry as a whole, as it will allow manufacturers to increase long-term investment programmes and increase competitiveness, which is critical since Russia joined the WTO. This decision will allow domestic agricultural companies to successfully implement new investment projects in the pork segment, where the payback period is higher."*

At the European Pig Producers Conference the following was clearly outlined by the National Union of Swine Breeders (Kovalev, 2012):

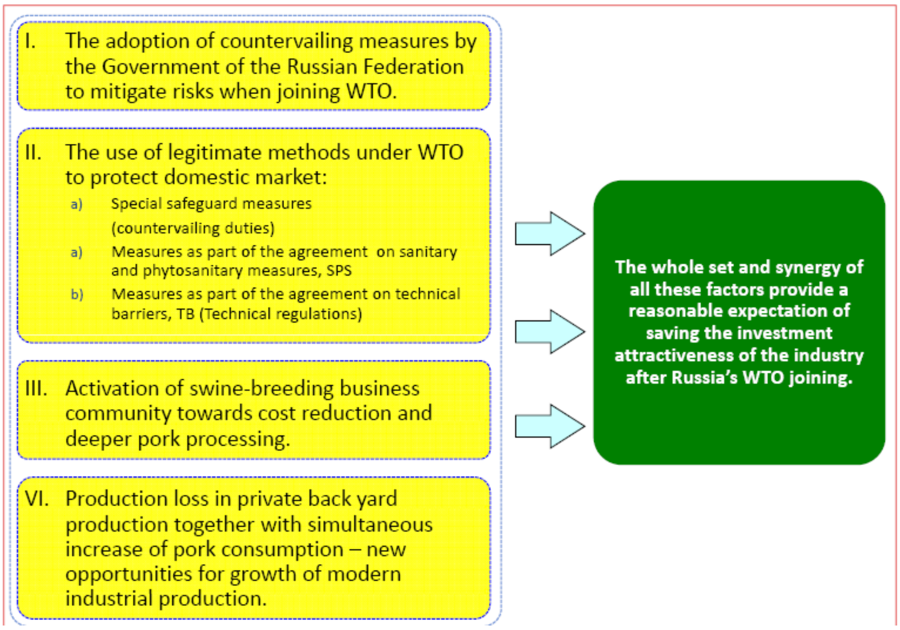
[94] Wagyu literally means Japanese cow and refers to several breeds of cattle, the most famous of which is genetically predisposed to intense marbling.

[95] The World Trade Organisation (WTO) deals with the global rules of trade between nations. Its main function is to ensure that trade flows as smoothly predictably and freely as possible.

[96] 95% of its meat by 2020.

[97] See section on consolidation for more detail.

Figure 8: Activities after Joining the WTO to safeguard Pig meat Production



It must be noted that the EU meat market is protected by highly defined TRQs[98]. There is fear amongst EU producers (and processors) that any concessions agreed under WTO negotiations would make imports far more feasible from Canada, the USA and Mercosur countries which present a threat to EU meat production. However, there are also a number of non-tariff barriers (e.g. Ractopamine) which limit import and export.

Prior to 1995, there was nothing in Belgorad in terms of farming. The farming industry had been irreparably damaged by the rise of the Soviet Empire and destroyed by its fall[99]. Pig production suffered particularly hard but as I flew over the black earth of the Belgorod region, I could see many white pig units dotted across the landscape. **Miratorg Agribusiness Holdings,** owned by brothers, Viktor and Alexander Linnik, is the biggest vertically integrated pig business in Russia with 115,000 sows on 23 farms and the intention to build 10 more (27,000 more sows); as well as beef (100, 000 head) and chicken farms in the immediate future. The company owns everything: 200 ha of land, feed mills, farms, hauliers and the processing plants.

The exponential growth of the company from 10,000 sows to 115,000 has come as a result of strong government support. Meeting with the management, it is further reinforced to us how vital it is to know your market and appreciating that Russian idiosyncrasies must be embraced and not ignored in order to be successful in Russian business[100]. In terms of challenges facing the company, the management claimed that ASF[101] and PRRS[102] were the biggest

[98] TRQ Tariff-rate quota is a trade policy toll used to protect a domestically produced commodity or produce from competitive imports. These allow a certain volume of imports with the TRQ at reasonable tariffs, whereas over quota tariffs are very limiting and generally preclude import viability.
[99] This was the Russian opinion, the Lithuanian opinion was 'farming was better under the soviets' (EPP Conference).
[100] Genetics companies such as PIC and Hermitage who have invested in Russia, building production facilities and working with nationals; has solidified their creditability; whereas other companies who failed to appreciate the importance of this have failed.
[101] African Swine Fever.
[102] Porcine Reproductive Respiratory Disease.

threats. The other main challenge is qualified labour. There is no “family farming” and therefore no family labour; nor is there a wealth of immigrant workers to avail of such as the Mexicans in America or the Eastern Europeans in the EU pig industry over the past 15 years.

The Japanese model of manufacturing where a small number of very large companies surrounded themselves with a much larger number of supporting subcontract firms, fostered a very ‘hands-on’ **supportive and obligational contracting relationship** between buyers and suppliers. According to Morris and Imrie (1993) this system is in contrast to the more adversarial approach of western companies, but but still offers the benefits of vertical integration but with the market efficiency of an arm’s length relationship. In Virginia, I visited a 1,500 acre cereal and soya farm with 50,000 breeder birds for Tyson foods, which had invested heavily in on-farm capital in 2010. Tyson Foods supplied **incentive** money for this development of €0.50c/ft^2. They indicated that they were very happy working with Tyson and that it was the American system to have an integrated supply chain, as it means that they do not have any dealings with the retailers or sales and can concentrate on production. Producers accept that this is the way that the industry operates.

As the Canadian industry faces yet another crisis with consumers moving away from pork products, the industry has produced a **promotional plan** to turn the “vulnerabilities stemming from societal pressures” into opportunities, by marketing the industry based on the quality systems that are already in place such as:

- The industry produces high quality and safe food (Food Safety).
- This food is produced using humane practices (Animal Care).
- Co-existence with its neighbours with benign impacts on the environment (Resource Accountability).

Appendix F: Government involvement in competition

The ‘Groceries Order’[103] was originally introduced in 1956 as it was recognised that suppliers specified prices through resale price maintenance (RPM) and competition was therefore limited (Collins and Burt, 2011). However, by 1972 the balance of power had shifted to the retailers and below cost selling became an increasing problem. Although suppliers were allowed to withhold supplies when below cost selling was apparent, the fear factor of losing market share was already preventing action by suppliers. A ban on below cost selling was introduced in 1987, with the aim that retailers could not use groceries as loss leaders by making it illegal to sell grocery goods below cost (where the cost benchmark was the net invoice price plus VAT).

However, there were unintended consequences in that the use of off invoice discounting[104], rebates and other discounts that retailers attained from their suppliers were not taken into consideration[105]. At the same time, low price private-brand driven retailers (Tesco, Aldi,

---

[103] Important to acknowledge scope did not include meat “goods for human consumption (excluding fresh fruit, fresh vegetables, fresh and frozen meat, fresh and frozen fish which has undergone no processing other than freezing with or without preservatives) and intoxicating liquors not for consumption on the premises ....”

[104] BWG informed the EI enquiry in 2005 that invoice discounting operates as follows: During the course of a year a retailer might purchase anything from one to a large number of product lines from a single supplier. The supplementary discounts are negotiated at a review meeting between the retailer and his supplier at the end of the trading period. The agreed discount is paid as a single lump sum. Typically it is not product specific.

[105] The EI consumer strategy group while providing no evidence claimed that, ‘In some cases the discounts can benefit the largest retailers an average of 18%, with corresponding reductions as the buying power of the retailers decreases’.

Lidl) entered the market with a business model that was unaffected by the legislation. Research suggests that the legislation artificially inflated prices for consumers and failed to protect vulnerable suppliers and primary producers from the buying power of the largest retailers (Donnelly, 2006).

The **'underdeveloped' Russian law** discussed in the report aims at creating transparent conditions for cooperation between the domestic suppliers and retailers, and therefore boosting competition in the retail sector. The law contains antimonopoly regulations, such as capping store openings once a retailer reaches 25% market share threshold within a city or municipal region, a 10% limit on bonus payments to retailers from their suppliers, as well as regulating the payment structure, for example how quickly a retailer must pay for goods with a specific shelf life. The retailers have found ways to evade some elements, such as using a franchise system to beat the 25% cap. According to the Euromonitor, in 2011 several retailers were fined or closed as a result of the regulation, which has ultimately increased prices and bitter debate on the matter continues.

Japanese antimonopoly law in this area is called the 'Designation of Specific Unfair Trade Practices by Large-Scale Retailers Relating to Trade with Suppliers' 2005'.

The provisions of the law include:
- The unjust return of goods.
- Unjust price reductions.
- Unjust sales consignment sales contract.
- Forcing suppliers to lower prices for bargain sales.
- Refusal to receive specifically ordered goods.
- Coercion to purchase.
- Unjust assignment of work to employees of suppliers.
- Unjust receipt of economic benefits.
- Unfavourable treatment in response to refusal of requests or unfavourable treatment in response to notification to the Fair Trade Commission.

As discussed in the report, many **EU Member States employ different enforcement techniques** to curb retailer power over suppliers.

Table 8: EU enforcement techniques to curb retail power

	Soft Law					Hard law	
Voluntary code (for whole sector)	**Dispute resolution mechanism**	**Voluntary code and dispute resolution enforcer**	**Mandatory code & dispute resolution/ enforcer**	**Specific legislation (non-competition law)**	**Specific legislation (based on competition law)**	**Contract law/private enforcement**	**Competition law**
Slovenia	France (CEPC)	Belgium	Hungary (1st act requires codes to be approved)	France – Ministry action	Czech Republic	Italy (drafted 2012)	Germany
	Spain (indications that retail associations using information dispute resolution mechanism)	Norway (plans)	UK	Portugal (decree law on payment deadlines in the food sector)	Latvia (actual amendment to competitions involving retail)		
		Portugal (plans)	Ireland (plans)	Romania	France (injunction)		
				Spain (plans)	Hungary (1st act mentioned)		

Source: Stefanelli and Marsden (2012)

Of note: Germany is the only country analysed in the report to employ legislation to protect suppliers from anticompetitive measures by retailers and to claim that this is a successful strategy. The German Competition Authority (Bundeskartellamt) used competition law to protect the weaker trading partner (B2B) through the 'Act against Restraints on Competition' (ARC).

The **Country of Origin Labelling ACT (COOL)** was sought by a number of American advocacy groups (including some farm groups) on the basis of "securing more information for consumers." It was argued by these groups that many of the multi-national companies were using consumer ignorance on the origin of their products to boost their own profits. The opposition claimed that this was a purely protectionist measure or a barrier to trade. Despite the opposition of some American companies and strong resistance from Canada and Mexico, the requirement became law in 2009. Soon after the law was passed, Canada and Mexico filed a lawsuit with the WTO claiming the US was in violation of fair trade regulations. The Canadian Government claimed it was actually detrimental to both sides of the border as it increased costs, lowered processing efficiency and distorted trade.

The issue has been appealed and repealed by both sides since 2009. The WTO Dispute Settlement Board (DSB) concluded that the USA is legitimate in labelling its products for COOL but that it "creates an unfair competitive environment" for imports. The United States have signalled that they will (within a reasonable time frame), implement the recommendations and rulings in a manner that respects its WTO obligations. Canada sought and secured the appointment of an arbitrator (October 2012), but it is widely felt that the damage is now done.

The USDA's Grain Inspection, Packers & Stockyards Administration (GIPSA) proposed a regulation the **"GIPSA rule"** that set OUT marketing rules for the livestock industry.

The proposed rule intended to address:

- Contracts that do not cover required investments.
- Fairer contract arbitration.
- The lack of contract transparency, by requiring the posting of sample contracts.
- Rights of producers to file suit against packers who engage in unfair practices, without an undue burden of proof previously required by the courts.
- Protection from packer retaliation.
- Price discrimination against group deliveries of animals.
- The impact of packer-to-packer sales on market prices.
- Conflicts of interest when agents represent more than one packer.

After the proposed rule was published in 2010, USDA received more than 60,000 comments (some in support, others critical) from packers, producers and other interested parties. After receiving requests from some members of Congress and many in the industry, the Secretary of Agriculture Tom Vilsack directed USDA's Chief Economist to conduct a thorough cost-benefit analysis of the proposed rule and its impact on the livestock industry. At this point the rule became embroiled in a politico-funding crisis, where ultimately an appropriations committee eliminated the most aggressive of the proposed rules by expressly prohibiting any funding for further work on them. The USDA published the final rule implementing the 2008 farm bill provisions in December 2011 in a substantially modified form to what was originally published.

These included:

- Criteria regarding suspension of the delivery of birds.
- Additional capital investment.
- Breach of contract.
- Arbitration.

"GIPSA has managed to issue at least some new rules it believes will benefit livestock and poultry producers, but only at the cost of giving up entirely on its attempt to use this rulemaking to radically restructure livestock and poultry markets and the law governing them. Although GIPSA asserts that the final rule will bring a new level of fairness and transparency to livestock and poultry markets, the result can only be viewed as a victory for meatpackers, poultry processors and more innovative producers who are adapting to market changes with value-added, premium and branded products." (Bylund et. al., 2011).

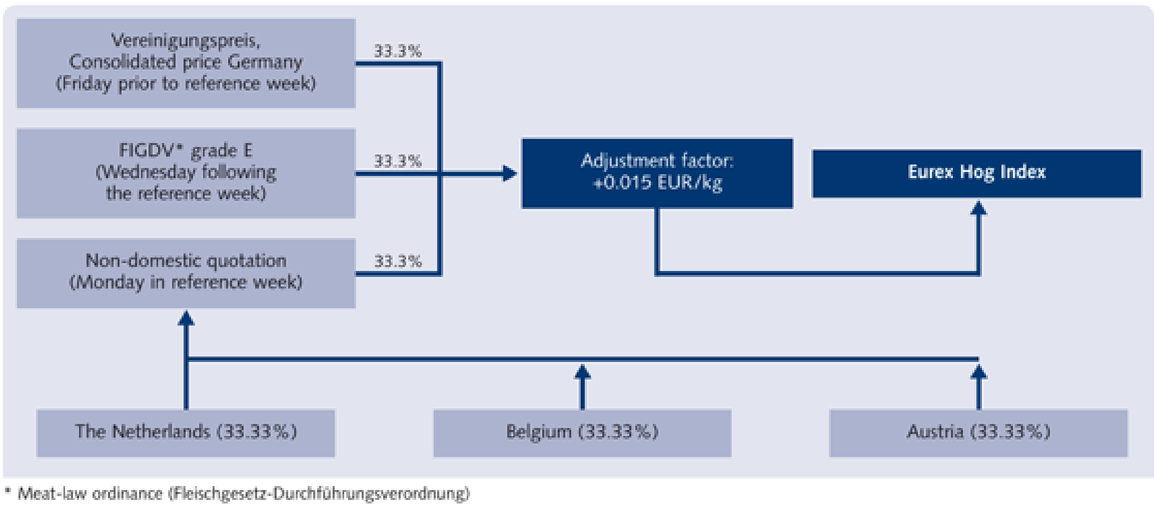
A version of the FY2013 agriculture appropriations bill passed by the appropriations committee could overturn the rule in 2013, despite the support of the two largest farm organisations the American Farm Bureau and the National Farmers Union.

Canada's **The Hog Farm Transition Programme (HFTP)** was introduced in the midst of the 2009 Industry Collapse. The main elements of the programme included:

1. A $75 million HFTP fund administered by the Canadian Pork Council (CPC). It allocated funds to assist producers to exit the pig business (producers had to agree to leave their units empty for a minimum of three years).
2. In additional, the plan laid the groundwork for the Government's decision to guarantee lenders to provide loans that would: permit repayment of outstanding Advance Payments Programme (APP)[106] emergency advances under the 2008 stay of default; address liquidity issues; and make required investments.
3. The Government also provided up to $17m to Canada Pork International to bolster critical market development initiatives.

In Europe, the price basis of Hog Futures is the **EUREX[107] Hog Index**. It reflects the cast market price situation for pigs for slaughter in central Europe. Its calculation incorporates recognized price quotations from Germany, the Netherlands, Belgium and Austria; and a public price fixing of the Federal Institute for Food and Agriculture (Bundesanstalt fur Landwirtschaft and Ernahrung [BLE]) will constitute the index according to the following quota:

Figure 9: EUREX hog futures quota calculation



[106] Under the APP, the Federal Government guarantees repayment of case advances issued to farmers by the producer organisation. These guarantees help the producer organisation borrow money from financial institutions at a lower interest rate and issues producers a cash advance on the anticipated value of their farm products that is being produced and/or that is in storage.

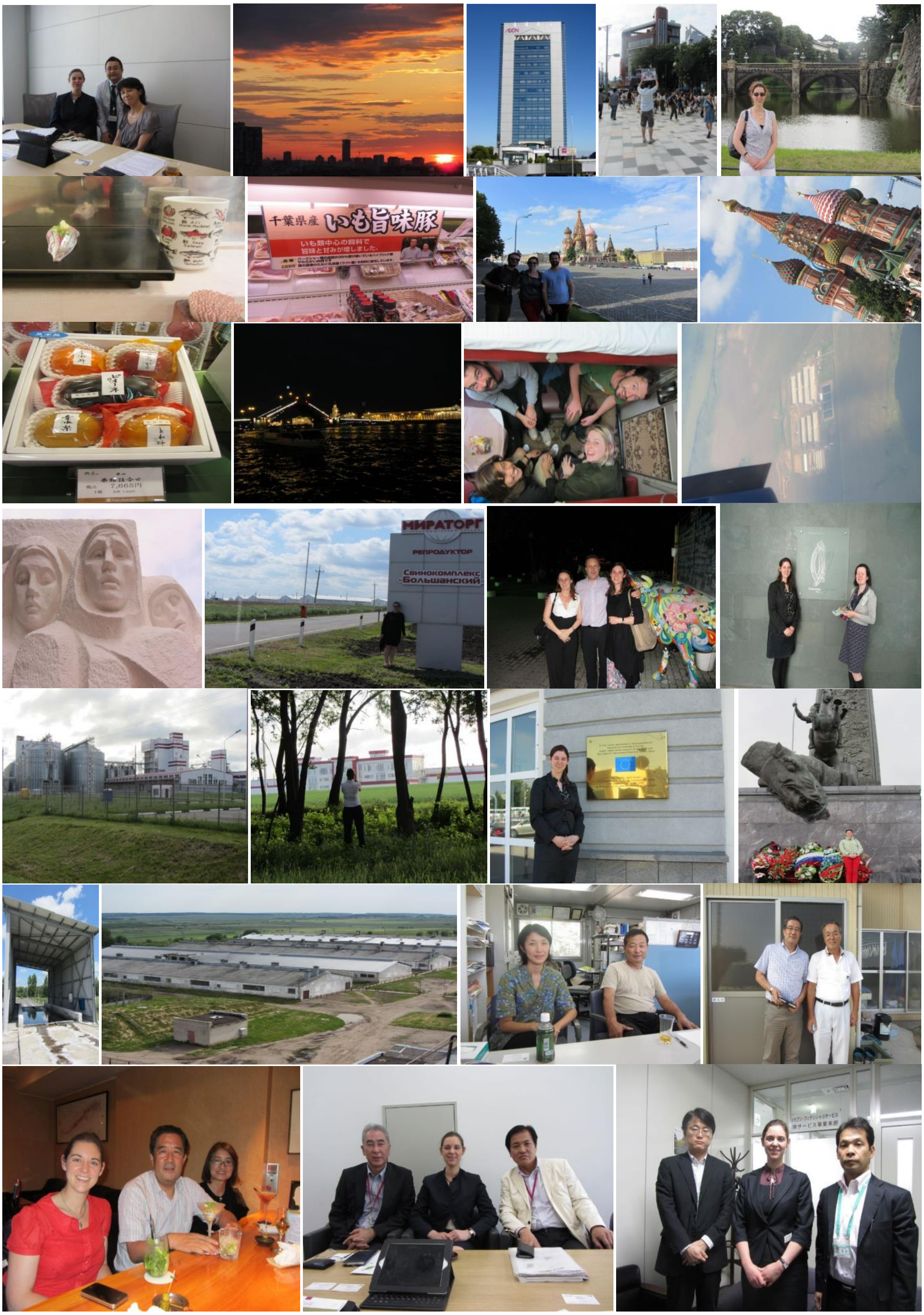
[107] EUREX is a derivatives exchange.

References

- Aoki, S.T., Radosti, A. And Myrold, A. (2012) Japan Retail Foods Retail Food Sector Report. *USDA Foreign Agricultural Service GAIN report number JA2522.*
- Bord Bia, (2012) Feeling the Pinch: The Consumer Outlook – January 2012. A strategic report on the challenges for the Irish Food and Drinks Industry. www.bordbia.ie/publications
- Bowman, A., Froud, J., Johal, S., Law, J., Leaver, A. And Williams K. (2012) Bringing home the Bacon: from trader mentalities to industrial policy. *Council for Research on Socio-Cultural Change, Public Interest Report.* www.cresc.ac.uk
- Bukeviciute L., Dierx A. And Ilzkovitz, F. (2009) The Functioning of the Food Supply Chain and its effect on Food Prices in the European Union. *Occasional Papers 47, European Economy.*
- Bylund, J.D., Shively J.D. and Walker, K.J. GIPSA Final Rule Emerges with Limited Provisisons. *Faegre Baker Daniels Legal Update 17501.* www.faegrebd.com
- Collins[a], T., (2012) Understanding Irish Consumer Behaviour. www.bordbia.ie/publications
- Collins[b], T., (2012) Understanding International Consumer Behaviour. www.bordbia.ie/publications
- Collins, A. And Burt, S. (2011) below Cost legislation: lessons from the Republic of Ireland. *The International Review of Retail, Distribution and Consumer Research 21:1, 33-49.*
- Competition Authority[a] (2012) Guide to Competition Law and Policy for Consumers. www.tca.ie
- Competition Authority[b] (2012) Guide to Competition Law and Policy for Businesses. www.tca.ie
- DOJ, (2012) Competition and Agriculture: Voices from the workshops on agriculture and antitrust enforcement in our 21st century economy and thoughts on the way forward. www.justice.gov
- Donnelly, G. (2006) The Impact of the Restrictive Practices (Groceries) Order on Competition in the Irish Grocery Trade. *Journal of the Statistical and Social Inquiry Society of Ireland Vol. XXXV.*
- ECN (2012) European Competition Network: Report Competition Law Enforcement and Market Monitoring Activities by European Competition Authorities in the Food Sector, Brussels.
- European Commission (2011) The Impact of Private Labels on the Competitiveness of the European Food Supply Chain, *Luxembourg: Publications Office of the European Union.*
- Forfas (2011) Review of the Economic Impact of the Retail CAP. *Report prepared for the Departments of Enterprise, Jobs and Innovations and Environment, Community and Local Government.*
- Frank, S.D. and Henderson, D.R. (1992) Transactional Costs as Determinants of Vertical Co-ordination in the US Food Industry. *American Journal of Agricultural Economics, Nov., Pp 941-950.*
- GIPSA (2008) Packers and Stockyards Statistical Report, 2006 reporting year., USDA
- Gira (2012) The GIRA European Meat Company Panaroma 200-2010/11 – 2015.
- Hamann K. (2011) Successful Strategies of European Slaughter and Processing Companies. *Advances in Pork Production (2011) Volume 22, pp 33.*

- Hayenga, M.L. (1999) Structural Changes in the Pork Production and Processing industry in the U.S. and other OECD countries: major trends and issues. *Presented at the OECD-Ministry of Agriculture Conference on Chinas Agro-Processing Sector: Developments and Policy Challenges, Beijing, Peoples Republic of China, October 7-8, 1999.*
- Harte, N.H. (1997) *Creeping Privatisations of Irish Co-operatives: A Transaction Cost Explanation.* In Nilssson J. & Van Gert Dijk (1997) Strategies and Structures in the Agro Food Industries. *Van Gorcum & Comp. B.V., P.O. Box 43, 9400 Assen, The Netherlands.*
- Key N. and McBride W. (2007) The Changing Economics of US Hog Production. *Economic Research Service, USDA. Report Number 52.*
- Kolchevnikova, O. (2012) Russian Federation Retail Foods – Russian Retail Market Steady On. *USDA Foreign Agricultural Service GAIN report number RSATO1210.*
- Kovalev Y. (2012) Pig Production in Russia. *Proceedings EPP Conference Pig Production in the Baltic Region – Chances and Challenges, Vilnius, Lithuania 2012.*
- McCorriston S., Morgan C.W. and Rayner, A.J. (1998) Processing Technology, Market Structure and Price Transmission. *Journal of Agricultural Economics, 49:185-201.*
- Morris J., and Imrie (1993) Japanese Style Subcontracting – its impact on European Industries' Long Range Planning, pp 53-58.
- Nilssson J. & Van Gert Dijk (1997) Strategies and Structures in the Agro Food Industries. *Van Gorcum & Comp. B.V., P.O. Box 43, 9400 Assen, The Netherlands.*
- OECD, (2006) Supermarkets and the Meat Supply Chain: The impact of food retail on farmers, processors and consumers. www.oecd.org/bookshop
- Prospectus (2000) The Pig Industry in Ireland – A Strategic Study. *Care of Teagasc Pig Production Development Unit.*
- PMR Publications. www.*pmrpublications.com*
- RTI International (2007) GIPSA Livestock and Meat Marketing Study: *Volume 4, Research Triangle Park, NC.*
- Sosnicki A., Klont R., Glaves F., Corning S.,Fields B. (2012) Pork Value-Chain Approach to Fulfil Consumer Needs. *Banff Pork Seminar Proceedings 2012.*
- Stefanelli, J. And Marsden, P. (2012) Models of Enforcement in Europe for Relations in the Food Supply Chain. British Institute of International and Comparative Law. www.biici.org
- Taylor C.R. (2007). Aggregate Economic Efficiency of Margeting Agreements: A Static Analysis. *Working Paper ES.6.2009. Auburn, AL, Auburn, University.*
- Teagasc (2008) A Development Strategy for the Irish Pig Indsutry 2008-2015. *Prepared by the Teagasc Pig Production Development Unit following consultation with stakeholders.* www.teagasc.ie
- Vorotnikov, V. WTO Accession could cost Russian Pork Sector US $68.9m per year. www.globalmeatnews.com
- Williamson, Oliver E. 1971. 'The Vertical Integration of Production: Market Failure Considerations,' *American Economic Review*, 61 (May), 112-123.
- Wise T.A., Trist S.E., (2010) Buyer Power in U.S. Hog Markets: A critical review of the literature. *Working Paper No. 10-04 Global Development and Environment Institute, Tufts University, Medford, MA, 02155, USA.*

Nuffield Scholarship Study Tour 2010-2012


千葉県産 いも旨味豚
いも類中心の飼料で
旨味と甘みが増しました。
МИРАТОРГ
РЕПРОДУКТОР
Свинокомплекс
«Большанский»