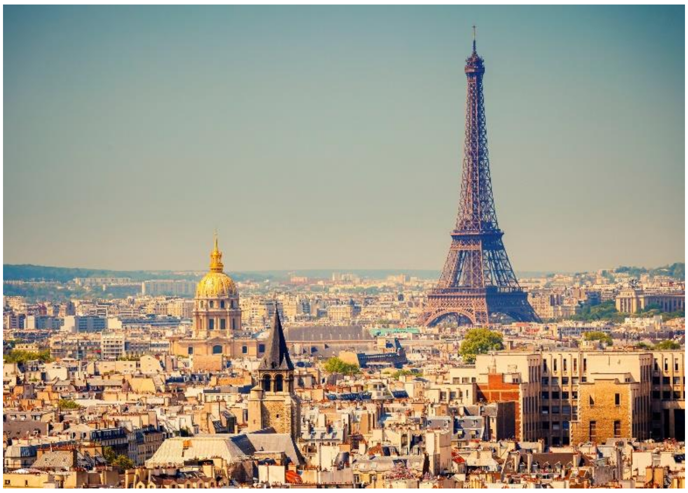

Co-operation and co-ordination in the supply chain: a comparison between the *Jersey Royal* and the *Opperdoezer Ronde* potato

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Co-operation and co-ordination in the supply chain : a comparison between the *Jersey Royal* and the *Opperdoezer Ronde* potato[1]

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Abstract

Co-operation and co-ordination along the supply chain are important factors influencing the performance of products. There is a considerable body of literature which suggests that modern business practices, concentrating on the final consumer, bring benefits to the market-orientated producers. The article attempts to discover the ability of participants to adapt to changing market signals in the supply chain and to identify their strategic objectives. To examine the influences of co-operation and co-ordination two cases will be examined. Semi-structured in-depth interviews were conducted with representatives from the actors within the supply chains and the surrounding social, economic and political system. Both the Jersey Royal (from the UK) and the Opperdoezer Ronde (from the Netherlands) are early potatoes, with limited production and a small market share. They are both PDO products, which could allow for non-commoditised relations between the members of the supply chain. However, the similarities end there. The marketing of the Jersey Royal is highly organised in terms of supply chain co-operation, whereas the Opperdoezer Ronde producers have little co-operation or co-ordination. The case studies examine the influence of the differences in co-operation and co-ordination on the product performance of both products.

INTRODUCTION

Two Protected Designation of Origin products, both early potatoes, with limited production and a small market share, both from northern European countries with industrialised agricultural systems. Should their market performance not be relatively similar ? The simple answer is no. The *Jersey Royal* from the UK is highly organised in terms of supply chain co-operation, whereas the *Opperdoezer Ronde*, from the Netherlands, is marketed with little co-operation or co-ordination. Consumer awareness and brand promotion is different for both products as is the approach to the protection of regional traditional products. There is a considerable body of literature which suggests that modern business practices, concentrating on the final consumer, bring benefits to market-orientated producers.

The article attempts to discover why the two products are so different in their approach. The case studies examine the influence of the differences in co-operation and co-ordination on the product performance of both products. Semi-structured in-depth interviews were conducted with representatives from the actors within the supply chain itself and the surrounding social, economic and political system. In addition, qualitative consumer research was undertaken for both products.

One important consideration is the similar approach to protection. The most important point is that both are Northern European countries, which have traditionally had little interest in Protected Designation of Origin or Geographical Indications. However, the national socio-economics and politics have made for different systems within the two countries, with very different models of supply chain integration. As a result, the two products have potentially very different reasons for protecting their products and differing levels of success. This paper tells a story of market status of two products and their attempts at co-ordination of the supply chain. For the *Jersey Royal* protection is about protecting a prized possession. The *Opperdoezer Ronde* has a lower status, and poorer co-ordination and the protection value is therefore about raising quality standards, exploiting the potential of regional quality food, which up until now has not been attempted The protection can be seen as a catalyst and an image enhancer.

1. THE NATURE OF THE PROTECTION

EC Regulation 2081/92[2], which became effective on 26 July 1993, provides a system for the protection of food names on a geographical or traditional recipe basis. Under these Regulations, a named food or drink, registered at a European level, is given protection against imitation throughout the European Union. Registration also helps individuals and, in particular, groups of regional producers, to raise the awareness of their product throughout Europe. This may in turn help take advantage of the wider markets that may arise from consumers' increasing awareness of the importance of regional and speciality foods. There are two designations : Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI), both of which attract a similar degree of protection.

The main objectives of the EU for regional products in general, and the PDO/PGI protection labels specifically are :

- The realisation of diversification ;
- Stimulating the economy of rural areas ;
- Benefit for rural economy ;
- An improvement of the incomes/employment of farmers and those in the region ;

The Regulations attempt to bring together various existing national systems and enable each Member State to apply the most convenient means of protection. It hopes to solve a variety of problems involving product surpluses, the organisation of production and marketing, farm incomes, spatial planning, etc.

Although interest is increasing, the Netherlands and the UK have traditionally been very sceptical about the regulation, which makes for an interesting discussion of protected origin products within those countries. There has been an ever-growing use of origin identities by companies marketing their products within the two countries. But Regulation 2081/92 was seen by many in the Netherlands and the UK (Denmark and Germany can also be included, in what can be called "the northern approach") to be somewhat superfluous because of trademark, passing off and trade description legislation already in existence. The Dutch and the

British have traditionally had direct recourse in law for producers protecting their products against "copy cat" products. Neither the UK, nor the Netherlands has had any history of registration, and no official list, of protected geographical names. The only references are the lists of products appearing in bilateral agreements. There is no UK or Dutch equivalent of the INAO (i.e. a body to lay down conditions of production that would entitle producers to use a specific name). The system in both consists of a multiplicity of isolated judgements. The protection of the geographical names and of the interests of producers are of secondary importance in the UK approach - a by-product of legislation intended to protect the consumer against fraudulent claims concerning the origin of products.

2. METHODOLOGY

Qualitative research was undertaken in both countries to find out how regional potatoes, traditional regional foods in general, and the concept of PDO and PGI are perceived by UK and Dutch consumers. Three focus groups, each one consisting of eight participants, aged between 25 and 55 in BC1 socio-economic groups were undertaken. The participants were asked to the discussion knowing they were to be discussing "potatoes", but had had no mention of the words "PDO" or "PGI" when recruited. For each product, one group of respondents was recruited from the region to which the product is linked, one group was recruited from a medium-sized town outside the region and a third from a large city outside the region.

The material for the supply chain analysis was based on empirical research. This took the form of semi-structured in-depth interviews with representatives from the actors within : a) the supply chain itself ; and b) the social, economic and political system within which the supply chain operates and with which the members of the supply chain interact. Guidelines were developed by the authors to establish the objectives of the supply chain, action taken by each of the actors and the chain performance.

The authors interviewed around 100 people, in relation to potatoes, including :

- Producers,
- Intermediaries (i. e. representatives from marketing groups, pre-packers, wholesalers),
- Buyers, technologists and legal advisers from the major multiple retailers,
- Independent retailers.

The material for the institutional analysis was based along similar lines to the supply chain analysis, but the questions were framed about the interpretation of the Regulation. The authors conducted a series of in-depth interviews with senior officials from national institutions.

3. THE PRODUCTS

3.1. The Opperdoeze Ronde

The Opperdoeze Ronde is grown in the "area around Opperdoes". The light sandy clay soil and the typical "soft" sea climate are thought to be particularly suited for the production of early potatoes. Around 3 million kilos are grown on around 150 hectares, so the volumes are low. Volumes have increased due to the potatoes being introduced into a polder (i.e. clay) area, which has caused problems between growers, some arguing that the product is devalued and quality is variable. The first potatoes are lifted by hand, the majority by machine. There are around 70 growers and the potato is of great important to the local economy. On average around 60% of the area's income comes from the potato.

The product is performing quite well on the market place though it has potential to perform much better if supplies were co-ordinated. Growers individually supply their products to the auction, from where the wholesalers or retailers buy the product. Promotion is very limited at present. Despite this, prices in general are higher than the standard early potato, suggesting that some consumers are willing to pay for the product.

The value of the protection of the *Opperdoezer Ronde* could be to help to improve the promotion of the product by increased co-ordination of the supply chain. With a common standard, method of production and organisation of the supply chain, the protection could actually help increase quality. If the quality is higher they might get a better deal.

3.2. The *Jersey Royal*

The *Jersey Royal* can only be produced on the island of Jersey, which is situated off the south coast of England. This is a holiday destination, perceived by many consumers as an attractive, clean, healthy environment. The southern position allows for a mild climate with few frosts, and the potato can be harvested earlier than any other early potato in the UK. The volumes are small, as there is restricted area on an island. The potato is not high yielding and the fields are fragmented. The supply chain is extremely well structured in response to the very specific retail environment that is prevalent in the UK. Growers sell their product via one of three marketing groups who have direct relationships with the major multiple retailers in the UK. Farms are increasingly run as businesses, with specifications imposed by the multiples. There are around 400 growers but it is likely only 200 produce a reasonable surplus and these decrease in number yearly. Some potatoes are planted and lifted by hand, but the large majority are lifted by machinery.

The vast majority of the crop is exported to the UK mainland, and some is exported abroad. Local consumption is high but obviously limited in comparison to the export volume. The *Jersey Royal* takes 6.5% of the UK early potato market. The price of the potato is high in relation to other UK potatoes. It is extremely well regarded by consumers who look forward to the product coming onto the market. It is the most famous branded potato. The value of the protection of the *Jersey Royal* is this brand integrity. Thus, it is thought the protection is about retention of profit to stakeholders who have a highly valued, prized product sold in a clearly defined UK market. The growers are afraid that the product might be grown outside of Jersey as this would reduce its value.

3.3. A brief comparison of the two products

While early potatoes make a premium over ware potatoes per kilo in the Netherlands, this is not the case for the UK. Early potatoes in the Netherlands cost considerably more than early potatoes in the UK. This is shown clearly in Table 1.

Table 1 : Prices of potatoes and early potatoes in the UK and the Netherlands (Euro)

Year	United Kingdom		Netherlands	
	Average domestic price per kilo of potatoes*	Average domestic price per kilo of early potatoes*	Average domestic price per kilo of potatoes**	Average domestic price per kilo of early potatoes ***
1991	0.21	0.21	0.13	0.20
1992	0.12	0.11	0.10	0.19
1993	0.12	0.12	0.05	0.20
1994	0.24	0.15	0.25	0.31
1995	0.18	0.18	0.30	0.33
1996	0.11	0.12	0.11	?
average	**0.16**	**0.15**	**0.15**	**0.23**

* *Compiled from PMB data (1997)*
** *Amsterdam Exchanges (1998)*
*** *Commodity Board for Vegetable and Fruit (1995)*

However, the protected product in both countries attracts a premium. The difference in price over other early potatoes is considerably higher for the *Jersey Royal* than for the *Opperdoezer Ronde*. The *Jersey Royal* can be sold at more than double the price of other non-branded, non protected products, and are considerably more expensive than the *Opperdoezer Ronde*. This is shown in Table 2.

Table 2 : A comparison of prices between the *Jersey Royal*, the *Opperdoezer Ronde* potato and early potatoes in general (Euro)

Year	United Kingdom		Netherlands	
	Average domestic price per kilo of the Jersey Royal *	Differences in price between the Jersey Royal and other early potatoes ***	Average domestic price per kilo of the *Opperdoezer Ronde* **	Differences in price between the *Opperdoezer Ronde* and other early potatoes ***
1991	0.75	0.54	0.36	0.15
1992	0.44	0.32	0.53	0.34
1993	0.57	0.45	0.46	0.26
1994	0.73	0.58	0.45	0.14
1995	0.82	0.64	0.35	0.03
average	**0.66**	**0.50**	**0.43**	**0.19**

** Compiled from PMB data (1997)*
*** The Co-operative Seed Potato Union "De Opperdoezer Ronde" WA*
***Authors*

So while both the Jersey Royal and the *Opperdoezer Ronde* are protected, and are high value, niche product, early potatoes, with limited production and a small market share, the Jersey Royal attracts a higher price premium. Why is this ?

4. THE DIFFERENCES BETWEEN THE MARKETS AND SUPPLY CHAINS

There are a number of suggestions as to why performance is relatively poorer in the Opperdoeze supply chain. Firstly, *Opperdoezer Ronde* producers have little co-operation or co-ordination and therefore their promotional efforts are poor. Secondly, the balance of demand and supply on the market causes problems for both supply chains, but particularly for the *Opperdoezer Ronde.* Thirdly, consumer awareness is lacking for the Dutch potato.

4.1. Co-operation and co-ordination of the supply chain

The performance of the Jersey Royal potato is thought to be much better than the performance of the *Opperdoezer Ronde* because the *Opperdoezer Ronde* supply chain is not organised in an integrated manner. Both products have problems of supply in relation to demand, but the Jersey Royal producers seem to manage this better.

Producers of the Jersey Royal potato are members of a highly developed, market-orientated co-operating supply chain. They work with one of three different marketing groups who sell produce to the major multiples (with a small percentage going through wholesale markets and to the canning industry). The top five multiples have a 69% share of the grocery market in the UK and supply chain-based competition predominates rather than competition between firms. The supply chain for fresh produce in the UK is experiencing increasingly competitive pressure with a rationalising of the supply base (Binet and Wilson 1997). The major retailers are squeezing costs wherever possible, in a constant drive for higher quality at competitive prices. However, although the UK retailers are dominant for the majority of products, and the influence of the retailers is considered as the most important influencer of the entire chain, there is a certain price negotiation for this niche product. There are clear production specifications, excellent traceability systems, supplies are organised and it is thought real synergistic effects are realised.

In relation to the protection, the Jersey Royals can "fit" very well. The potato adds to the diversification of produce on the island, and a great majority of the farmers grow the potato. Although farms are increasing in size and their numbers decreasing, the Jersey Royal plays an important role in keeping the rural economy stimulated. Employment has decreased because of mechanisation, but manual workers are needed for the labour intensive jobs. There is no doubt that the margins brought to the growers, groups and officials are of benefit, especially the more modern, efficient and larger farmers who have very comfortable lifestyles (especially in a tax free environment !). The majority of farmers interviewed were not small scale, traditional craftsmen farmers but modern professional producers, limited only by scale, unconcerned about the "ideology" of the protection/traditional product except in a marketing context.

Producers of the *Opperdoezer Ronde*, on the contrary, have little co-operation or co-ordination in the supply chain, either with each other or the retail industry. There is no co-ordination, and there is a serious problem of some growers producing sub-standard potatoes, on later "polder" ground. This reduces the "specificity" of the product and may damage the product reputation with consumers in the long term.

Growers are personally responsible for supplying potatoes to the auction market with no knowledge of the succeeding actors in the supply chain. The wholesalers and the retailers in turn "just" buy the *Opperdoezer Ronde* by the auction clock, so no direct influence on the production of the product is possible, traceability is difficult and no information is passed back from the customers or major retailers about quality aspects. Until very recently, no specific actor was able to influence the others ; however, in the Opperdoezer supply chain, the influence of Albert Heijn is expected to increase as the major multiple attempts to source direct from farmers, in co-operation with the auction. It is beginning to approximate the UK "retail control" model, evolving and adapting purchasing and logistic systems.

The *Opperdoezer Ronde* is also thought to be a good example of a PDO product. The authors consider the objectives of the growers, the *Opperdoezer Ronde* Union and the auction in relation to the PDO protection label to be in coherence with Dutch institutional and EU objectives. The auction acknowledges the product niche characteristics, and is actively attempting to invest in the marketing of the product. However, the lack of involvement of the wholesalers and retailers might hinder the performance of the PDO protection, depending on the strategy applied by the auction. If close co-ordination with these actors is achieved, their involvement might increase, but presently, their objectives are contradictory. These negatively influence the performance of all actors individually and as a whole.

The PDO/PGI protection labels might influence the future positions in the market. One might for example think of the influence such a label might have on the product evaluation by consumers. More confidence, a higher perceived product quality and a lower (perceived) quality risk might be considered important consequences of marketing these products with such a protection label. These consequences in turn are expected to lead to a higher willingness to pay and/or buy which in turn strengthens the market position of those products. For the *Opperdoezer Ronde*, the protection might help to improve the co-ordination of the supply chain. A common standard and a precise method of production could help increase quality. If quality is higher, they might be able to increase the prices paid for the product. The product is, theoretically as a traditional regional food, a product that consumers want, and is seen to be "different" to the standard product because of its link with the geographical region from where it originated. The retailers, sourcing directly, may see this niche product as an ideal marketing opportunity and work in conjunction with the growers to promote the product and the protection. The potential of regional quality food has not been exploited in the Netherlands as yet so the protection could be a catalyst for change, and in exploring the potential of one product help to promote others.

4.2. A problem of simple economics

For both products there are an interesting demand and supply problem within the market. How the producers sort this is fundamental to performance within the supply chain.

Demand is high for the *Opperdoezer Ronde* and the Jersey Royal at the beginning of the season, as consumers in both the Netherlands and the UK look forward to these specialised early potatoes. As supplies are relatively low, the price is high and the margin received by all actors in the supply chain is good. As the potatoes "bulk up" and producers try to increase supply to catch the high prices the price begins to decrease. This begins to slide rapidly, and by the latter part of the season supplies are higher than demand and the producers have problems ridding themselves of stock. This problem has been overcome, to an extent, in Jersey as growers (in conjunction with the marketing groups and retailers) co-ordinate supplies, only lifting the quantity required by the market. As a result, it would takes a longer time to reach the point of decreasing returns. Prices tend to stay high for a much longer period, which retains the good performance of the product ! This has not yet occurred in the Opperdoeze supply chain, and it is thought to be the most important aspect in their lack of co-ordination. Basic economics suggests that as long as supplies are lower than demand, prices will remain high. As soon as supplies are larger than demand, prices decrease.

4.3. Consumer Awareness of the products and the protection

While "knowledgeable" consumers of both products look forward to the product entering the market in season, the Jersey Royal holds a considerably better position ; it is well known by many consumers in Britain and has a good proportion of the market. The consumer demand for Jersey Royal is higher than that of the *Opperdoezer Ronde*. Consumers are familiar with the region of origin of the Jersey Royal, especially when this is compared to awareness of Dutch consumers about the region of origin of the *Opperdoezer Ronde*. In addition consumers are able to generate significantly more associations with Jersey, compared to the area around Opperdoes. As the effect of the region of origin is expected to be lower for the *Opperdoezer Ronde*, compared to the Jersey, the willingness to pay and/or buy is likely to be lower for the *Opperdoezer Ronde*.

The lack of knowledge (and to an extent interest) in both countries, in relation to "origin labels", was evident from the qualitative research. The concept was certainly not well known or popular, and few participants showed much interest in the protection. In the Netherlands most people had not heard of the protection before though some respondents had heard of it, or read about it in the newspaper. Only one man could actually give a short description of what PDO actually means. Interestingly three of the four Dutch PDO products come from North Holland and recognition was higher in this area as relatively more attention might have been given to the PDO label in the local newspapers. In addition a number of Dutch regional specialities were mentioned based on their name and reputation. The only experience Dutch consumers had with protection and geographical indication were Dutch cheeses (although it is not a communicated label) and French wines and cheeses (AOC).

Similarly in the UK, when the respondents were asked whether they had heard of Protected Designation of Origin (PDO), it was clear that very few had, though several asked whether it was like the "*Appellation Contrôlée*" mark. Many immediately guessed it was something to do with Yorkshire pudding, or wine, or Tequila. In Jersey, however, it seemed that the respondents did know of the protection and were aware that Jersey Royals had been protected. A proportion of consumers knows that "Champagne has to come from Champagne" and (prompted) most have seen the "*Appellation Contrôlée*" marks on bottles of French wine, French cheeses, etc. Some mentioned patents and the Trade Descriptions Act. When the philosophy behind the regulation was explained the interest of the participants increased considerably and the majority thought it a good idea, either as a mean of protecting traditional livelihoods or as a marketing initiative.

CONCLUSION

This article has examined the key factors behind the difference in market performance between the Jersey Royal from the UK and the Opperdoeze Ronde from the Netherlands. The former is highly organised in terms of supply chain management with a market orientation, whereas the latter is marketed with little co-operation or co-ordination, orientated instead towards the product. While the prices of the Opperdoeze Ronde potatoes are higher than other early potatoes, they do not attract the same large premiums that the Jersey Royal engages. In addition, there is the important problem of supply and demand pricing which is much better co-ordinated by the Jersey Royal supply chain. It is argued that the lack of co-ordination both horizontally and vertically, between growers and the other members of the chain, has significantly held back the development of the product. This is likely to change once the major multiples move towards the UK model of direct sourcing from producers. Once supplies are better organised, the price, and the margin between players in the supply chain, is likely to increase.

This paper has also highlighted the differential impact of the PDO legislation in countries where the Regulation is not widely supported at present. The impact of the legislation on the speciality food industry could be far-reaching. For certain "traditional" products with low status, the protection could help raise quality and profile, enhancing the value of a product, and acting as a catalyst for the development of co-ordination and co-operation in the supply chain. It raises the question, however, of producers protecting something "awful" with the aim of making them better through marketing and image improvement, just because it is a product traditionally made in an area with unique "qualities" relating to that area ? This is a problem which must be tackled on an individual basis. Other producers can use the Regulation to protect certain products from encroachment of other products in relation to the "brand"

NOTES

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