
Support for Farmers' Cooperatives

Sector Report Pig Meat

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Support for Farmers' Cooperatives; ***Sector Report Pig Meat***

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Preface and acknowledgements

In order to foster the competitiveness of the food supply chain, the European Commission is committed to promote and facilitate the restructuring and consolidation of the agricultural sector by encouraging the creation of voluntary agricultural producer organisations. To support the policy making process DG Agriculture and Rural Development has launched a large study, “Support for Farmers’ Cooperatives (SFC)”, that will provide insights on successful cooperatives and producer organisations as well as on effective support measures for these organisations. These insights can be used by farmers themselves, in setting up and strengthening their collective organisation, and by the European Commission in its effort to encourage the creation of agricultural producer organisations in the EU.

Within the framework of the SFC project this sector report on cooperatives in the pig meat sector in the EU has been written.

Data collection for this report has been done in the summer of 2011.

In addition to this report, the SFC project has delivered 7 other sector reports, 27 country reports, 6 EU synthesis and comparative analysis reports, 33 case studies, a report on cluster analysis, a report on the development of agricultural cooperatives and relevant policy measures in other OECD countries, and a final report.

We like to acknowledge the valuable contribution of Hanna Karikallio (PTT) in preparing the econometric analysis in chapter 3.2.

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1. Introduction

1.1 Objective of the study

The imbalances in bargaining power between the contracting parties in the food supply chain have drawn much attention, also from policy makers. The European Commission is committed to facilitate the restructuring of the sector by encouraging the creation of voluntary agricultural producer organisations. DG Agriculture and Rural Development has launched a large study, “Support for Farmers' Cooperatives”, that will provide the background knowledge that will help farmers organise themselves in cooperatives as a tool to consolidate their market orientation and so generate a solid market income. In the framework of this study, this report provides the relevant knowledge from the pig meat sector.

In this context, the specific objectives of the project, and this sector report, are the following:

First, to provide a comprehensive description of the current level of development of cooperatives and other forms of producer organisations in the pig meat sector. The description presented in this report will pay special attention to the following drivers and constraints for the development of cooperatives:

- Economic and fiscal incentives or disincentives and other public support measures at regional and national level;
- Legal aspects, including those related to competition law and tax law;
- Historical, cultural and sociologically relevant aspects;
- The relationship between cooperatives/POs and the actors of the food chain;
- Internal governance of the cooperatives/POs.

Second, identify laws and regulations that enable or constrain cooperative development and third, to identify specific support measures and initiatives which have proved to be effective and efficient for promoting cooperatives and other forms of producer organisations in the agricultural sector in the pig meat sector.

1.2 Analytical framework

There are at least three main factors that determine the performance of cooperatives in current food chains. These factors relate to (a) position in the food supply chain, (b) internal governance, and (c) the institutional environment. The position of the cooperative in the food supply chain refers to the competitiveness of the cooperative vis-à-vis its customers, such as processors, wholesalers and retailers. The internal governance refers to its decision-making processes, the role of the different governing bodies, and the allocation of control rights to the management (and the agency problems that goes with delegation of decision rights). The institutional environment refers to the social, cultural, political and legal context in which the cooperative is operating, and which may have a supporting or constraining effect on the performance of the cooperative. Those three factors constitute the three building blocks of the analytical framework applied in this study (Figure 1).

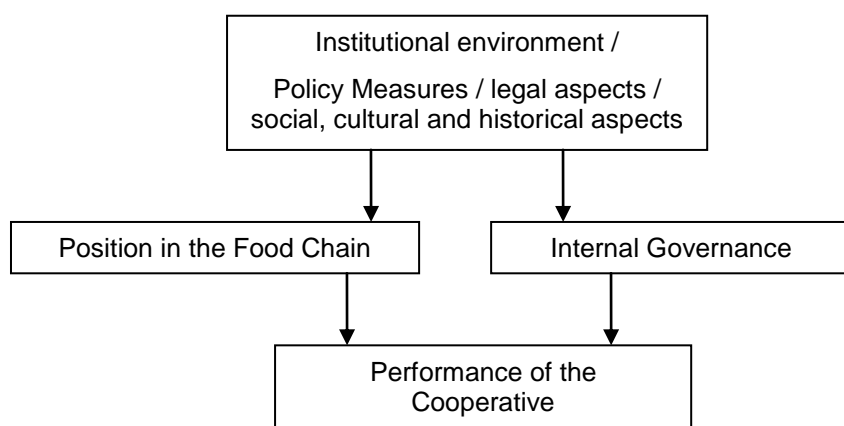


Figure 1. The core concepts of the study and their interrelatedness

1.3 Definition of the cooperative

In this study on cooperatives and policy measures we have used the following definition of cooperatives and Producer Organisations (POs). A cooperative/PO is an enterprise characterized by user-ownership, user-control and user-benefit:

- It is user-owned because the users of the services of the cooperative/PO also own the cooperative organisation; ownership means that the users are the main providers of the equity capital in the organisation;
- It is user-controlled because the users of the services of the cooperative/PO are also the ones that decide on the strategies and policies of the organisation;
- It is for user-benefit, because all the benefits of the cooperative are distributed to its users on the basis of their use; thus, individual benefit is in proportion to individual use.

This definition of cooperatives and POs (from now on shortened in the text as cooperatives) includes cooperatives of cooperatives and associations of producer organisation (often called federated or secondary cooperatives).

1.4 Method of data collection

This sector report is mainly based on the fact finding in 27 country reports, that were made earlier in this project, one per member state. In addition an inventory of policy measures at EU level was used. For these country reports multiple sources of information have been used, such as databases, interviews, corporate documents, academic and trade journal articles. The databases used are Amadeus, FADN, Eurostat and a database from DG Agri on the producer organisations in the fruit and vegetable sector. Also data provided by Copa-Cogeca has been used. In addition, information on individual cooperatives has been collected by studying annual reports, other corporate publications and websites. Interviews have been conducted with representatives of national associations of cooperatives, managers and board members of individual cooperatives, and academic or professional experts on cooperatives.

1.5 Period under study

This report covers the period from 2000 to 2010 and presents the most up-to-date information. This refers to both the factual data that has been collected and the literature that has been reviewed. For member states that joined in 2004 and 2007 the focus is on the post-accession period.

2 Statistics on the evolution and position of agriculture

2.1 Special characteristics of the sector due to character of the product and the influence of the Common Agricultural Policy

Meat production is an important agricultural activity and the pig meat sector is the largest meat production in several EU countries. The profitability of the pig meat production is directly related to changes in price relation between the input prices (feed) and the output prices of meat. The pig meat sector is thus very sensitive to price changes. There is a clear seasonal variation in most of the European countries but there is in general high price volatility in the sector as well (Figure 2).

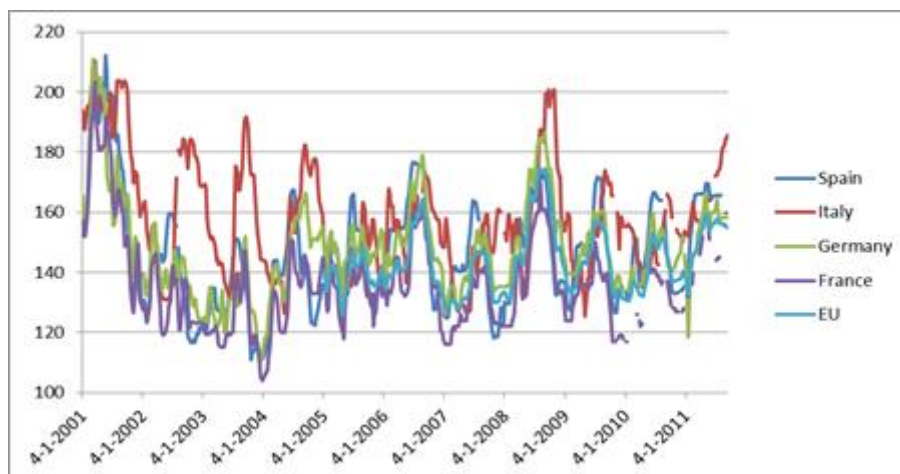


Figure 2 Producer prices in certain large EU countries and in EU (average) 2001-2010. Source: Eurostat.

The pig meat market is very integrated in Europe. Partly this is due to the fact that the European pig meat market is very closely linked to the situation in the global market. The production of pig meat in EU is larger than the consumption of pig meat. The excess compared to domestic consumption is approximately 10%. Thus, pig meat is exported from the EU. The largest export countries are Germany, Denmark, the Netherlands and Belgium. The main export market is in Asia where the European production competes with US, Canadian and Brazilian production. US, Canada and Brasil have in general lower production costs than Europe. Due to the export orientation of the sector the exchange rate of euro has also had an important role affecting the competitiveness of the European pig meat sector.

Common Agricultural Policy has traditionally tried to avoid interventions in the pig meat sector. Pig meat is treated as 'cereal-based product'. There is a possibility for buying pig meat into intervention stocks but public intervention has not been used for over twenty years. There are no quotas in the pig meat sector. Thus, the EU pork meat regime has traditionally been seen as a 'light regime', in comparison with other EU livestock regimes such as sheep, dairy and beef and some arable sector CMOs (see e.g. Agra CEAS 2005). In order to be able to stabilize markets it is possible to support private storages or subsidise export. However, these measures are used quite seldomly and only with very short term in very exceptional market situations. Recently, the EU supported private storing for few weeks time in early 2011. The use of this measure followed from many different reasons. The feed prices increased and the export competitiveness was weak due to a strong euro. Furthermore, dioxine scandals in the German feedmarket affected the demand in Europe. Thus, while there are large investment demands at the same time the sector experiences rather low profitability.

Due to a very intensive market orientation the primary production as well as the processing industry has tried to look for economies of scale. This has meant increasing the size of farms and in many countries the pig meat farms are among the largest husbandry farms. In the processing industry there seems to be an ongoing consolidation process. During the last decade we have seen several large acquisitions in the sector. In addition to IOF's the cooperatives in the sector have also actively been involved in consolidation and internationalization processes.

Due to a price volatility and price sensitivity one might think that producers were eager to organize themselves into the cooperatives. However, compared to e.g. dairy and F&V sectors the market shares of cooperatives in the pig meat sector are in general much lower. There are also different kinds of cooperatives in EU. In Northern Europe the cooperatives are mainly large that in addition to collecting the carcasses, slaughter and process them into selling products (incl. convenience food). In Southern Europe there are in addition to these large cooperatives a number of small cooperatives that only sell live animals. Probably the reason for not having so large market shares is the tradition of selling live animals to small local slaughterhouses and butcher's who then sell the meat to the consumers.

In primary production the increasing size of the units has, however, a drawback in increasing risks. There are increasing risks in economic terms. There are also increasing risks in infections and diseases. There is also an increasing risk in environmental sense due to the large amount of manure that is handled. The larger farms might have better access to latest technology but the distances that the manure needs to be transported increases by the size of the operation and the availability of land. Partly due to the environmental demands there are also increasing investments in conjugation with bioenergy plants or fertilizer plants in the pig meat sector.

2.2 Share of the sector in agriculture and in National Product

A study of farmers' cooperatives can best start at the farmers' side, in agriculture (Figure 3). The output in millions of euros includes also the price variation (the price spikes of 2001 and 2008 can easily be seen even though we use 3-year-averages) but since the market is quite integrated the graph also presents quite accurately the shares of different countries in the sector.

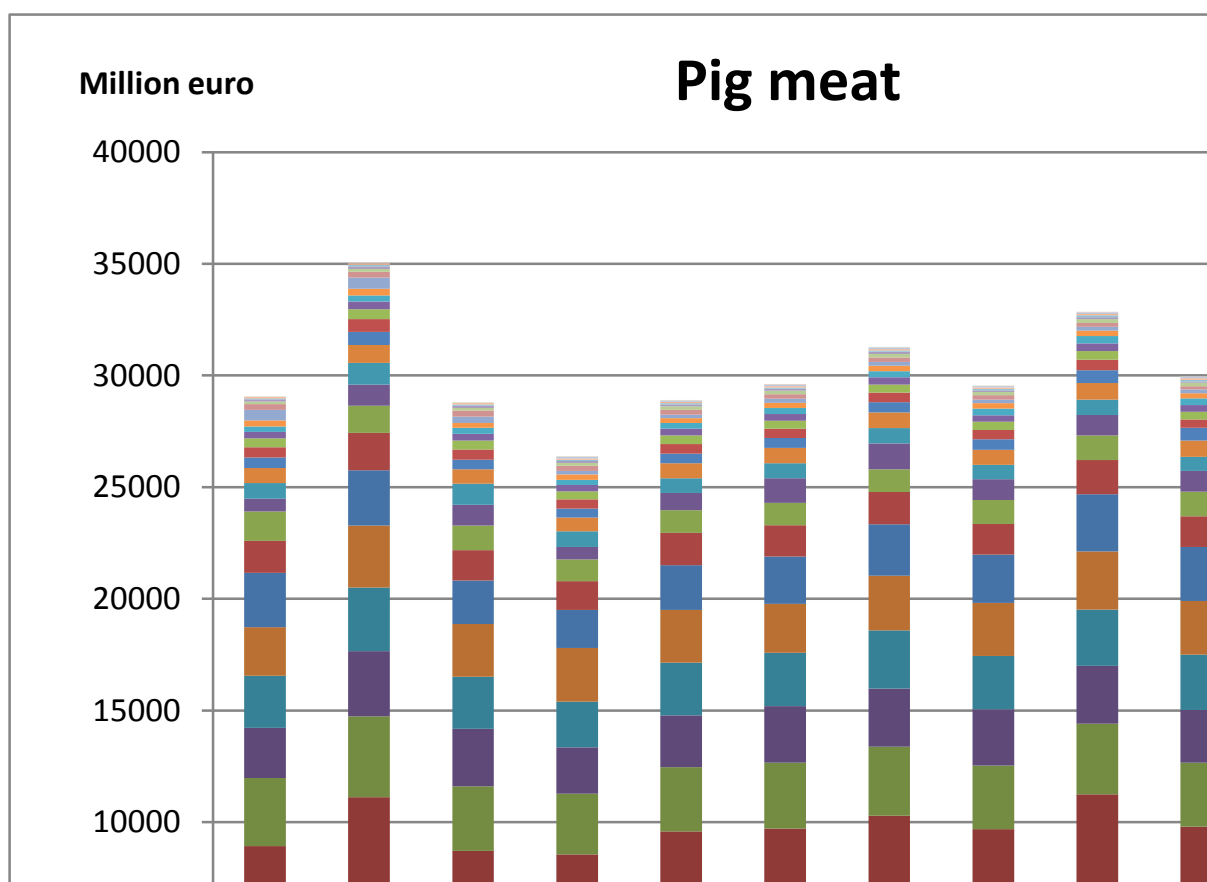


Figure 3 Trend in output per sector "2001" - "2009". Source: Economic Accounts of Agriculture, Eurostat.

Two thirds of pig meat production in EU is produced in the 6 countries, Germany, Spain, France; Poland, Denmark and the Netherlands. The following countries are also rather large producers; Belgium, United Kingdom, Romania, Hungary, Austria, Portugal, Czech Republic and Sweden. The change in output is described in Figure 4.

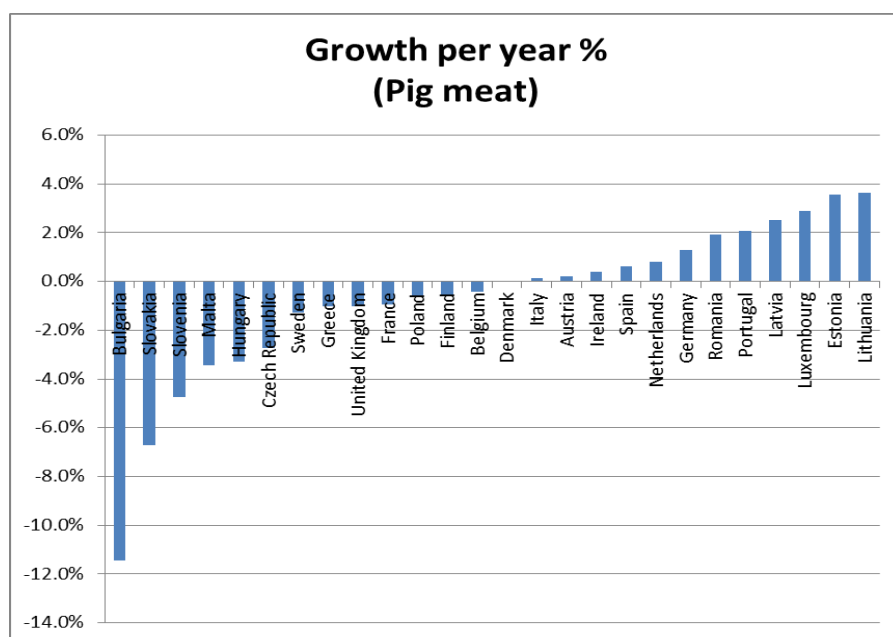


Figure 4 the change in output for the sector per country. Source: Eurostat Economic Accounts.

The change in the output does not necessarily tell the whole truth about the production change since the price level may differ between the periods included in the study. However, the value of production has decreased in Bulgaria, Slovakia, Slovenia, Malta, Hungary and Czech Republic. In the Baltic countries and in Luxemburg the production has increased. There has also been an increase in Romania, Portugal, Germany and in the Netherlands. The most important change has occurred in Germany since the growth in production has meant that Germany no longer is net importer but net exporter of pork meat. Actually, it has bypassed Denmark as the largest pig meat exporter in the world.

2.3 Development in the number of farms

The number of farms in the pig meat sector is given in Table 1 and Graph 4. The largest increase between 2000 and 2007 seems to be in Ireland, Germany and Italy while the largest decrease is in Finland, Denmark and Portugal. These figures, however, do not cover all the farms that produce pork meat. They cover only those farms whose main production consists of pork meat. Thus, the increase in numbers does not necessarily mean that the number of pig meat farms has actually increased.

Table 1. Number of farms in pig meat sector, 2000 and 2007. Source: Eurostat, Farm Structure Survey.

Country	2000	2007	Average change per year
Belgium	3700	2550	-5,2%
Bulgaria	0	6520	
Cyprus	0	180	
Czech Republic	0	470	
Denmark	3530	1760	-9,5%
Germany	4900	10360	11,3%
Greece	900	1160	3,7%
Spain	17840	15790	-1,7%
Estonia	0	60	
France	8490	6980	-2,8%
Hungary	0	4210	
Ireland	110	290	14,9%
Italy	4360	7510	8,1%
Lithuania	0	160	
Luxembourg	30	20	-5,6%
Latvia	0	150	
Malta	0	200	
Netherlands	8090	5520	-5,3%
Austria	4550	3780	-2,6%
Poland	0	48080	
Portugal	2300	1260	-8,2%
Romania	0	23530	
Finland	2360	910	-12,7%
Sweden	640	490	-3,7%
Slovakia	0	20	
Slovenia	0	70	
United Kingdom	3660	3010	-2,8%

At EU level we can however conclude that the number of farms decreases in the pig meat sector. The main reason for this is however the huge change in Romania where most of the pig meat farms are very small compared to other countries.

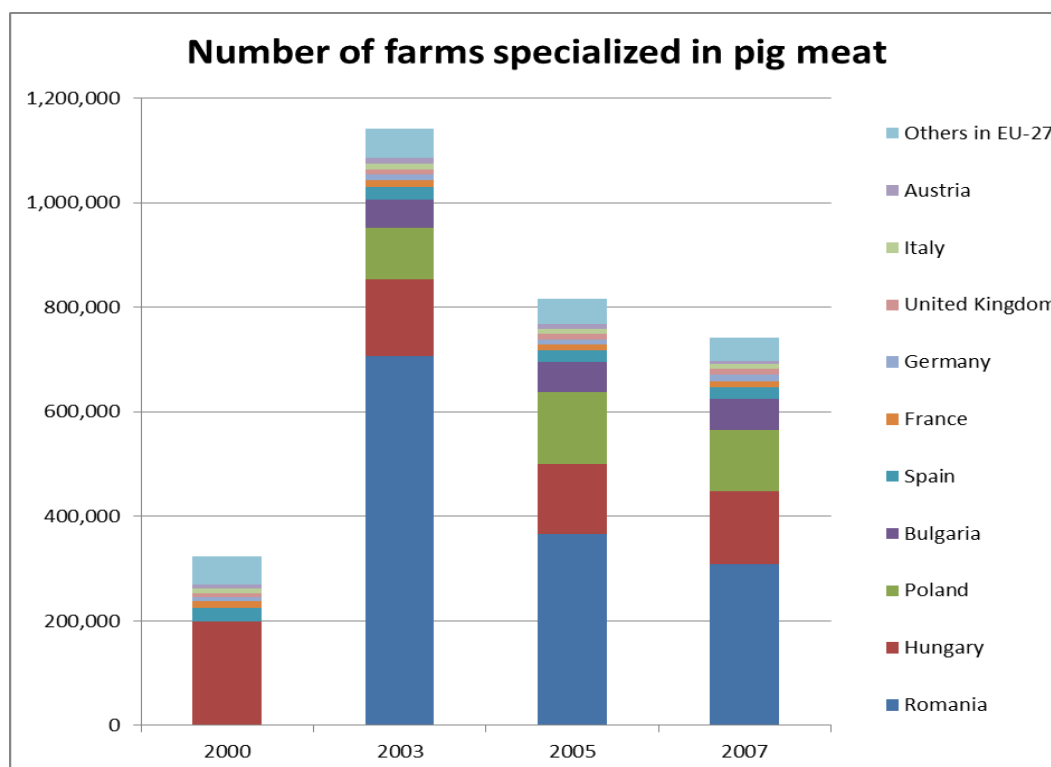


Figure 5 Number of specialised farms per country. Source: Eurostat Farm Structure Survey

The highest number of farmers specialized on pig meat farming is in Romania, Hungary, Poland and Bulgaria. All these countries are amongst the newest EU members and there is a high structural change ongoing in all of these countries. The numbers of farms are decreasing as the size of operation is increasing.

Size of farms

Farms come in different sizes from small part-time farms to large exploitations. Graph 5 shows the distribution of farms per size class, measured in European Size Units (ESU) per country and for the EU in total.

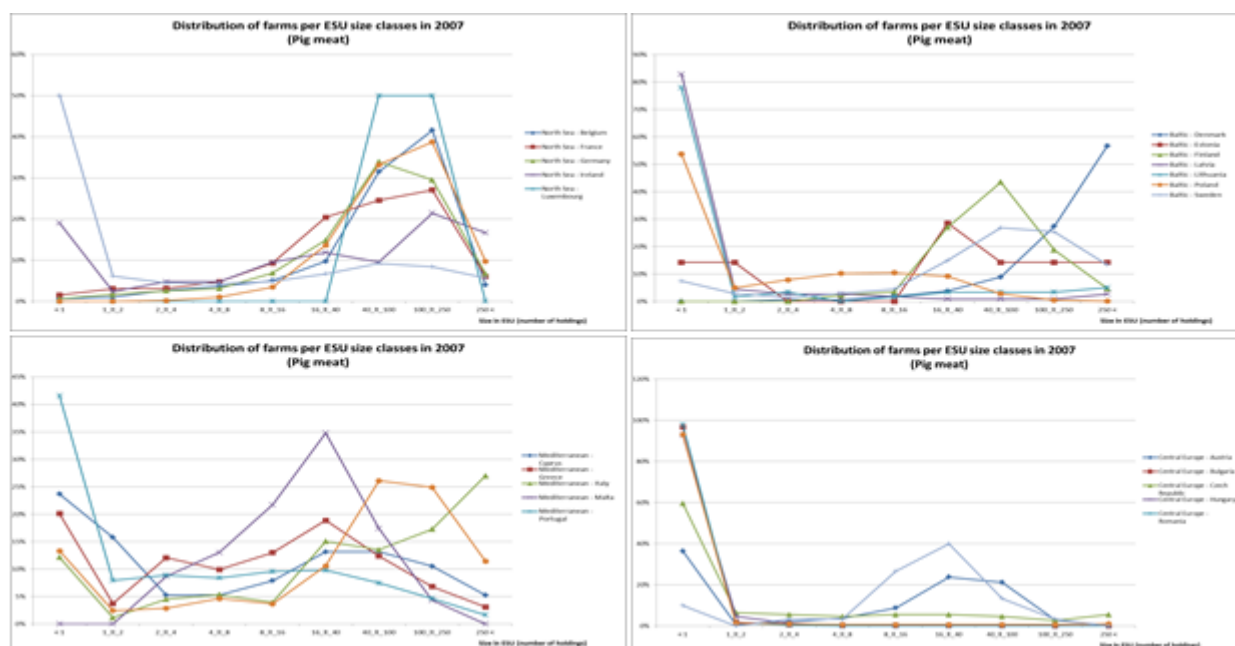


Figure 6 Number of farms per size class, measured in ESU, per specialist type of farming. Source: Eurostat, Farm Structure Survey

The largest pig meat production units are in Denmark and in Italy, however, also the Netherlands, Belgium, Sweden and Ireland have a high share of very large units. There are also many countries with a large number of small units with 1 or less ESU. Especially the new southern EU member countries have many small scale pig meat producers, the same holds for Poland, Latvia and Lithuania.

The differences in size distribution also tell the story of tradition and market orientation of pig meat farms. There are large farms in countries where the production is large. Furthermore, of these countries many are also net exporters. With few exceptions, most of the pig meat farms in EU-12 belong to the smallest size class. The farms of this size are so small that many of these farmers consume self the meat they produce. In such situation where the structural change has not yet started almost at all the role of cooperatives is obviously rather small.

Specialisation of farm production

Cooperatives may not only have member-farmers with different farm sizes or different age. Farms also have different compositions of production. This is even true for specialized farms, where e.g. some so called specialized dairy farmers also have beef or sheep or sell hay. In addition to that, a lot of mixed (non-specialized) farms exist. The heterogeneity of farming in terms of specialisation can be estimated by calculating the share that specialized farms have in the total production. This is what Graph 6 shows. It shows that farms in The Netherlands and Italy are most specialized. The difference with e.g. Denmark is however somewhat artificial. Many farms in that country are typed in the official statistics as mixed farms as they grow part of there own feed (e.g. barley). As this feed is not sold in the market but used in the farm these farms are from an economic viewpoint more specialized (but integrated) than the technical view suggests.

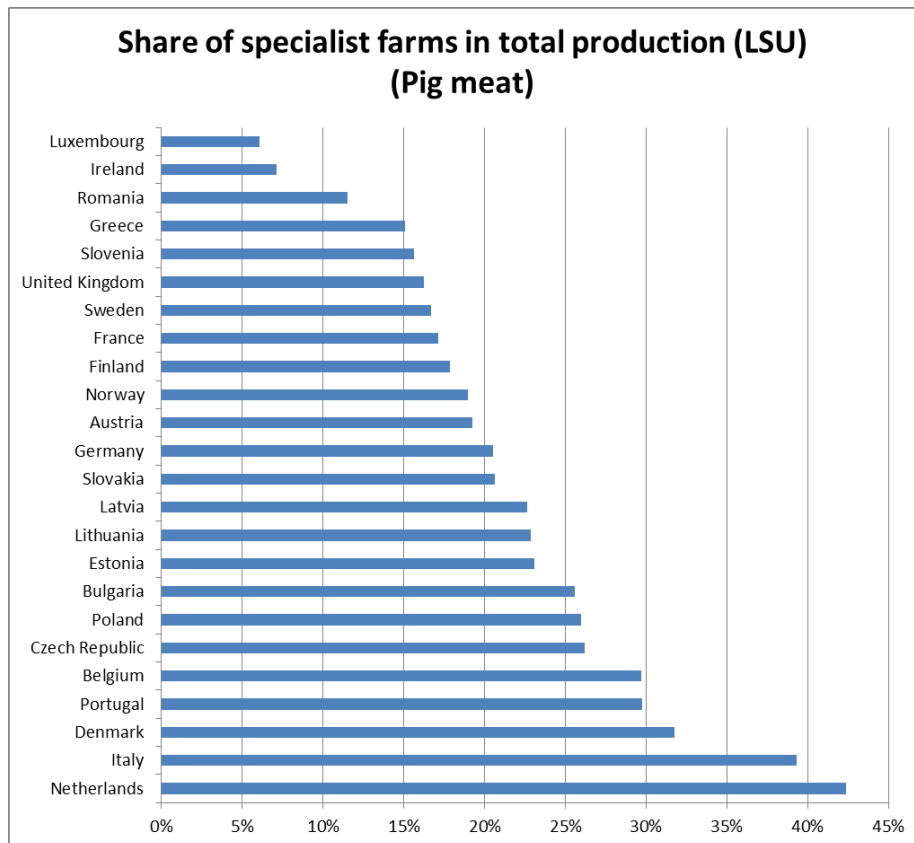


Figure 7 Heterogeneity in farm production: the share of specialist farm types in total production.
Source: Eurostat, Farm Structure Survey

2.4 Economic indicators of farms

The description of agriculture is concluded with some economic indicators (Table 2). These indicators focus on the net value added and income from farming for farmers, as well as the level of their investment. Some of this investment might be in equity of the cooperatives, but far the most will be in farm assets.

Table 2. Economic indicators for farms. Source: DG Agri, FADN.

Pig meat	Belgium	Bulgaria	Cyprus	Czech Republic	Denmark	Germany	Greece	Spain	Estonia	France	Hungary	Ireland	Italy	
Economic size - ESU	123,80	16,60	-	209,33	354,27	117,27	38,50	179,90	-	104,97	35,10	-	377,20	
Total labour input - AWU	1,55	2,82	-	11,81	3,46	1,99	1,78	1,73	-	1,85	2,58	-	3,05	
Total Utilised Agricultural Area (ha)	17,49	2,43	-	28,40	108,20	54,32	12,59	21,99	-	25,72	9,45	-	25,55	
Total output €	383 751	41 898	-	640 357	867 627	305 497	159 460	201 430	-	315 447	170 488	-	502 257	
Farm Net Value Added €	64 861	2 517	-	82 219	171 811	56 142	46 044	67 414	-	46 562	32 513	-	248 824	
Farm Net Income €	49 816	-2 368	-	-15 898	-94 634	21 957	40 785	56 129	-	24 205	15 311	-	216 107	
Total assets €	482 740	66 247	-	1 437 065	3 874 841	824 509	208 068	482 766	-	334 983	183 158	-	1 175 584	
Net worth €	294 289	49 416	-	1 120 995	1 115 436	606 622	205 154	445 917	-	124 208	103 801	-	1 151 823	
Gross Investment €	41 411	2 491	-	23 869	292 941	33 276	19 942	9 334	-	22 013	6 250	-	7 467	
Net Investment €	14 743	-617	-	-19 177	196 197	1 246	13 718	-734	-	-10 046	-1 834	-	-14 029	
Total subsidies - excl.on investm. €	7 409	404	-	12 272	36 893	18 863	6 568	4 938	-	10 099	9 387	-	11 618	
Farms represented	2 560	5 870	203	470	1 773	10 363	1 817	15 867	60	7 480	4 130	290	6 937	
Pig meat	Lithuania	Luxembourg	Latvia	Malta	Netherlands	Austria	Poland	Portugal	Romania	Finland	Sweden	Slovakia	Slovenia	United Kingdom
Economic size - ESU	71,90	134,10	269,60	42,67	149,10	44,67	18,17	75,20	29,50	93,67	143,53	-	-	176,87
Total labour input - AWU	8,04	2,52	19,72	2,03	1,67	1,59	1,72	2,18	1,52	2,00	2,06	-	-	3,81
Total Utilised Agricultural Area (ha)	83,47	67,33	70,63	0,93	8,55	24,39	14,97	17,38	2,88	52,87	66,82	-	-	25,58
Total output €	316 172	490 012	1 008 201	138 228	592 656	141 498	64 379	184 628	27 291	270 890	358 562	-	-	629 555
Farm Net Value Added €	80 306	66 506	192 856	44 520	65 060	43 058	15 406	49 703	6 786	56 258	65 775	-	-	156 111
Farm Net Income €	56 453	17 050	34 148	36 621	9 804	35 457	13 391	44 767	3 759	33 112	8 091	-	-	68 478
Total assets €	431 137	1 594 128	1 670 793	637 175	1 514 605	532 126	120 841	222 015	52 929	700 138	923 350	-	-	827 900
Net worth €	267 393	879 055	685 755	612 021	725 296	461 162	103 438	206 676	45 376	452 083	483 258	-	-	558 439
Gross Investment €	74 324	193 200	271 091	10 317	79 852	27 943	4 737	6 055	3 078	62 531	61 647	-	-	56 338
Net Investment €	53 466	104 742	190 975	3 826	31 796	6 839	-77	-2 566	1 128	10 125	17 084	-	-	25 037
Total subsidies - excl.on investm. €	13 851	33 266	46 125	35 889	3 869	11 352	3 608	852	3 746	66 053	20 346	-	-	7 326
Farms represented	197	20	150	197	5 520	4 033	48 063	1 280	24 200	930	527	27	113	3 077

The pig meat producing farms are typically rather large. Based on the land area the largest farms are in Denmark, the Baltic countries, Luxemburg and Sweden. Based on output Denmark and Latvia had clearly the largest production units, these countries are also on top in the net investment numbers.

The FADN data is, however, not fully representative for the whole EU pig meat sector. The share of farms represented is in many countries rather low and concentrated in the largest size classes. The Latvia is an example of that. In the previous Graph 5 we can see that most of the Latvian farms are very small and only a minority very large. However, these latter ones are represented in the FADN data. In some countries like in Denmark the data is in contrast very representative.

Taken into account the fact that the pig meat sector is the most important agricultural sector in Denmark and the role of Denmark as exporter, the data indicates some alarming figures. The net farm income in Denmark is very much negative. The net worth seem to be high but decreasing asset values (the price of arable land) together with weak profitability has led the Danish pig meat farms into a very difficult situation.

3 The evolution and position of cooperatives and their performance

3.1 Description of the food chain issues in the sector

As noticed in chapter 2.1 the pig meat sector is one of the least regulated agricultural sectors in Europe. At the same time it is also very dependent on the development of the world market. The consumption of pork meat is increasing in the world. However, poultry meat consumption is growing even faster. The main areas with consumption growth are in Asia, especially in China (Figure 8).

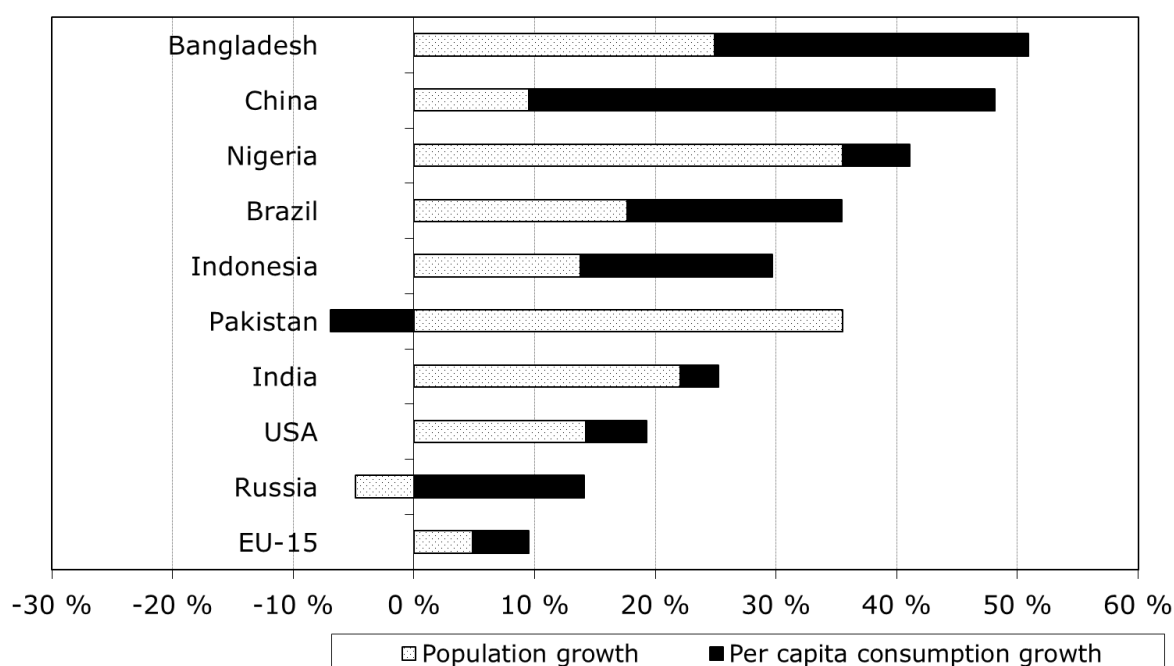


Figure 8 The consumption change of meat divided into population change and per capita consumption change in 1995-2007. Source: FAOSTAT.

In Europe the beef consumption has already stagnated whereas the poultry consumption increases. The pig meat consumption increases but very slowly. Thus, the EU must be competitive in the world market in order to be able to export into third countries if the production is to be increased. The EU main export destinations are Japan, South Korea and Russia. The trade is usually dollar based. Thus, the €/ \$ exchange rate has a considerable effect on the competitiveness of EU export. Another important link to the world market is the dependency on imported protein feed (soy). Thus, the European pig meat production is very sensitive to changes in world market prices not only of pig meat but grain and soy prices as well.

Based on production costs, European production is not that competitive, compared to e.g. Brasil and Canada. In general it is cheaper to produce in arable areas with cheap labour and transport the meat (and keep the manure on the land) than to transport feed to countries with high labour (and high environmental) costs (Graph 8).

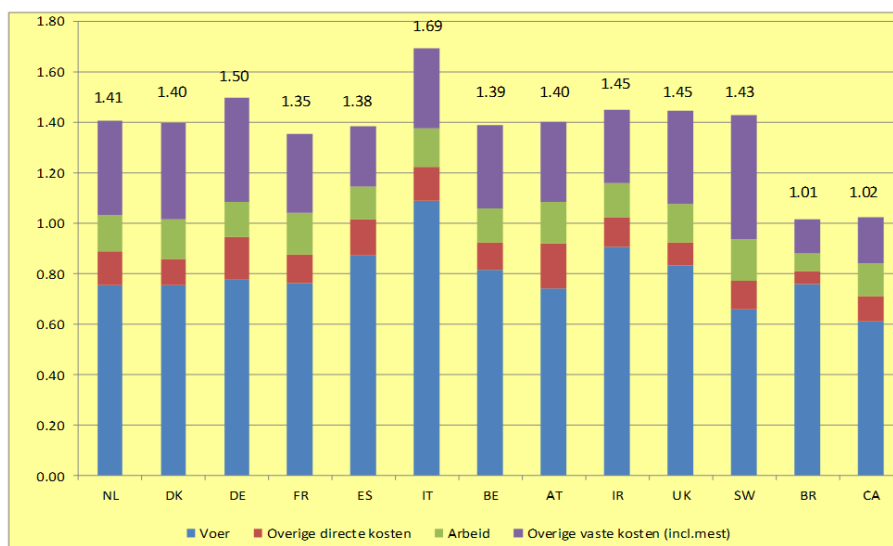


Figure 9 Production costs of pig meat in selected EU countries compared to Brasil and Canada. Source: LEI

In Russia the European meat industry seems to behave in such a way that it increases the vertical integration from feed production via primary production, slaughtering and processing up to the retail (e.g. German IOF Tönnies Fleisch, Finnish Atria). Thus, the operational model seems to differ from the European internal market where the industry does not have a role in retail and not very much in wholesale either since the retailers and wholesalers seems to increase their integration. The supply reliability and economic opportunities are some of the reasons for this difference. Farmers in Russia might still have budget constraints and unwillingness to bare economic risk while the EU cooperatives wants to secure the availability of pig meat to be able utilize capacity at slaughter houses.

Cooperatives have also some role in primary production in Eastern Europe but not in a way that it could be interpreted as vertical integration. The cooperative slaughterhouses do not usually have a role in primary production (few exceptions are such as HKScan's production unit in Estonia).

However, the role of cooperatives may be different in collecting the live animals and selling them to slaughterhouses, slaughtering and processing. The North European cooperative model usually covers all these phases whereas in Southern Europe it is typical that cooperatives may cover only e.g. the collecting and selling the live animals to slaughterhouse (often small local slaughterhouses). In addition to these, there are larger coopeatives that take care of the whole chain up to the selling the meat to wholesalers/retailers.

The meat export to the third countries is mainly commodity trade of bulk products. Thus, the main factors affecting the competitiveness of the pig meat industry are scale economies and unit costs. This has also meant a continuous consolidation process in the pig meat industry. There are several examples of large mergers and acquisitions during the last decade where cooperatives as well as IOF's have been involved. Examples worth to mention from recent years are the construction of Dutch VION (and acquisition of British Grampian), Danish Crown acquisition of German DS Fleisch, French family owned Bigard acquisition of cooperative Socopa (arrangements afterwards where Terena bought some parts), HKScan construction (Finnish HKRuokatalo acquired Swedish Meats), DC and HK joint purchase of Polish IOF Sokolow, Tönnies investments in Russia and Germany (Tummel acquisition), French cooperative merger Cooperl-Arca and Terena acquisition of Unicopa.

The largest European exporters are Germany, Denmark and the Netherlands. The role of Germany has changed during the last decade. Earlier not enough pig meat was produced for

domestic consumption and Germany was a net importer. Now, Germany is world's largest pig meat exporter. One important reason for that is that their processing costs (especially the labour costs) in slaughterhouses are lower than for example in Denmark and France.

Due to the consumption structure the processing has traditionally stopped to slaughtering and cutting and the meat is sold through different market channels (local retailers, or more and more through wholesalers to retail chains). Thus, there has not been much room (or need) for innovations or R&D in the processing in addition to technical solutions. The share of processed food is however increasing. In addition to sausages, the large processors try to develop different kinds of convenience food products and thus increase their share of the food chain. Another typical phenomenon seems to be product differentiation. There are organic products and also some attempts to functional food (HKScan's pig meat where traditional soy based protein has been replaced by domestic oil seeds).

3.2 Performance of coops (market shares, growth, other indicators)

Compared to e.g. dairy and F&V sectors the market shares of cooperatives in the pig meat sector are rather low in most of the EU countries. There are only five countries where the cooperatives role in this sector is dominant. They are Denmark, Finland, Sweden (due to the transnational role of HKScan), Malta and France (with certain conditions). In addition to these countries, the role of farmer owned (and controlled) companies is strong in the Netherlands (VION). Of the other countries only in Belgium, Czech Republic, Germany, Hungary, Spain, Austria and Italy the cooperatives have important shares (Table 3).

Table 3. Market share of cooperatives in the the pig meat sector. Source: Country reports.

Country	"2000"		"2010"		Comments
	Number of members	Market Share (%)	Number of members	Market Share (%)	
Denmark				86	very concentrated structure, two large coops
Finland	35657*(incl.non active)	71	11780	81	very concentrated structure, two large coops
Estonia	138	17.7	12	0.8	the role of foreign cooperatives important
Latvia	0	0	0	0	
Belgium				20.8	
Austria			~90 000		
Czech Republic			85	~25	few very large farms whose cooperative has an important role
France			96 300	94	The market share of processing cooperatives (4 relatively large) ca. 35-40%, 94% refers to collecting and selling of live animals, i.e. 1 st transformation
Germany	260 000	~20	171 000	<20	major actor in Europe in the sector, large IOFs
Greece				0	
Hungary	884	19.5	1033	24.9	
Ireland,	0	0	0	0	
Italy					Figures not available but market share considerable

Malta	173	100	166	100 (2009)	
The Netherlands	3	34	0	0	
Poland			107	7	
Portugal	n.a	n.a	n.a	n.a	
Romania					
Slovakia	2	2	4	11.1	
Slovenia	33 (2003) number of cooperatives		38 (2008) number of cooperatives		
Spain	25250 (2003)	25 (2003)	25000 (2008)	25 (2008)	
Sweden				51	No Swedish cooperatives, market share refers to HKScans share, also Finnish Atria and Danish Crown important actors
UK			36382 (meat and livestock in total)	0.7 (meat and livestock in total)	The share of Danish Crown owned Tulip important, VION as well a large actor

However, the existing cooperatives have in general been able to maintain their market shares especially in those countries where the shares are large. The only exception is the Netherlands where the consolidation process (building VION) has meant that there are no cooperatives in the sector (Vion is operating as an IOF, owned by a farmers' organization). In Estonia, the role of cooperatives has also decreased dramatically during the last decade.

One of the ideas of cooperation is to reach such a market share that the cooperatives have market power to affect the benefit (i.e. producer price) their members get. We tried to test this with an econometric model where the producer price (Eurostat) is explained by market share of cooperatives. Since the exact figure is not available for most of the countries we instead use two dummies that try to catch the effect of the cooperation. First dummy is given to those countries where the cooperatives role is dominant, the second dummy to those where cooperatives' role is important though not dominant. In order to be able to take into account the market situation and the price changes we use export share (data source COMTRADE) and price of barley (Eurostat) as control variables. We use an unbalanced panel data from year 2000-2010 including totally 283 observations (all EU countries). In addition to this pooled model, we also apply a fixed effect model (FE) where country and year specific differences are controlled. The results of the estimation are presented in Table 4.

Table 4. The econometric estimation on cooperative effect on pig meat producer prices.

	Pooled		FE	
	Coefficient	P-value	Coefficient	P-value
Constant	140.307	0.000	147.576	0.000
Export share	-22.09	0.000	-33.792	0.000
Price of barley	0.498	0.000	0.367	0.001
Coop Dominant	-4.882	0.066	-5.179	0.264
Coop Important	1.204	0.674	3.494	0.299

The signs of export share and price of barley are as expected (negative for export share and positive for price of barley). Both of the control variables are also statistically significant. Secondly, the cooperative important dummy is positive in both of the models though statistically not significant. The cooperative dominant dummy is negative but only in the pooled model almost statistically significant. This all suggest that the effect of cooperatives on the market price cannot be proven. This is not to say that cooperatives are not beneficial. There may be some

other positive effects of cooperatives that the model can not capture (access to markets, delivery possibility in every circumstance, additional payments, interest on invested share, more stabilized prices etc.).

3.3 Description of largest farmer's cooperatives in the sector

In the following tables (Tables 5-6) we firstly list the five largest cooperatives in the pig meat sector in every EU country and then continue by picking up the largest cooperatives into one table. As noted previously, in some countries there are not a single cooperative active in the sector. Moreover, the listing is based on turnovers that might not always tell the truth of the cooperatives importance and size in the pig meat sector. This is due to the fact that many meat cooperatives are “multi-meat” cooperatives such that they are active also in beef, poultry and sheep meat sectors as well. Furthermore, the processing level may vary and thus, the amount of slaughtered pigs would be a more suitable measure to compare the size of the cooperative. However, this information is not available.

Table 5. The most important cooperatives in the pig meat sector, per country .

Country	Names of Cooperative	Primary (P) or Secondary (S) cooperative	Turnover 2010* (million Euro)
Denmark	1. Danish Crown Amba	P	6 062
	2. Tican Amba	P	498
Sweden	1. HKScan (In FI-database)		
	2.Sveriges djurbönder ek. för.		-
Finland	1.HKScan	S	2 125
	2. Atria	S	1 301
	3.Österbottens Kött	P	12,3
	4.Itikka	P	2,4
	5.Lihakunta	P	-
Estonia	1.Viru Lihaühistu (Viru Meat Cooperative)	P	0,7
Belgium	1. Coöperatieve Afzet van Vee en Varkens – Commercialisation Coopérative Porcs et Betail – Genossenschaftliche Vieh- und Schweine Verwertung	P	230
	2. New Cobelvian	P	6,8
	3. Dans l' Tienne	-	-
	4. Varkens K.I. Vlaanderen	-	0,2
	5. Cooperatieve Maatschappij van Antwerpse Varkensfokkers	P	0,07
Austria	1. Erzeugergemeinschaft Gut Streitdorf e Gen	P	191
	2. Wirtschaftsgenossenschaft der Fleischer Oberösterreichs reg Gen mbH	P	-
	3. Bäuerliche Vermarktung Kärntnerfleisch Gen mbH	P	-
Czech Republic	1. Agropork, družstvo		24
	2. OD Maso, družstvo		14
	3. Obchodní družstvo ŽďÁR		10
	4. INTAGRO		8,6
	5. Centrodbyt, národní odbytové družstvo		8,2
France	1. COOPERL ARCANTLANTIQUE	P	1 461
	2. AVELTIS	P	400
	3. PRESTOR	P	270

	4. CAP 50 PORCS	P	253
	5. PORC ARMOR	P	189
Germany	1. Westfleisch eG	P	1 930
	2. Viehzentrale Südwest GmbH	P	€ 417
	3. Erzeugergemeinschaft Südostbayern eG	-	255
	4. Raiffeisen Viehvermarktung GmbH & Co. KG	-	226
	5. Erzeugergemeinschaft für Schlachtvieh im Raum Osnabrück eG	-	76
Hungary	1. Alföldi Sertés Értékesítő és Beszerző Szövetkezet	P	54
	2. KA-TÉSZ Szövetkezet	P	23
	3. Söptéri Mezőgazdasági Szövetkezet	P	-
	4. Zala-Sertés Értékesítő és Beszerző Szövetkezet	P	2
Italy	1. C.L.A.I	P	196
	2. Cooperativa produttori suini PRO-SUS	P	191
	3. Italcarni	P	184
	4. MA.GE.MA.	P	158
	5. O.P.A.S.	P	51
Lithuania	1. Žemės ūkio Kooperatinė Bendrovė "Krekenavos Mėsa"	P	56
	2. Žemės ūkio kooperatyvas "Lietuviška mėsa"	-	-
	3. Žemės ūkio kooperatyvas "Lietuviško ūkio kokybė"	-	-
Luxembourg	1. Convis Herdbuch Service Elevage Et Genetique	P	-
Malta	1. Koperattiva ta' min irabbi l-Majjal Limited (Pig Breeders Co-operative Society Ltd)		14
Poland	1. Agrofirma Witkowo (Cooperative)	P	50
	2. Sorol Tucz sp. z o.o. (Limited Liability Company)	P	0,3
	3. RSP Bądkowo (Agricultural Production Cooperative)	P	3,8
	4. RSP Rzecko (Agricultural Production Cooperative)	S	12
	5. Stowarzyszenie Producentów Rolnych „Zagroda” (Agricultural Producers Association)	P	-
Romania	1. COOPERATIVA AGRICOLA MOLDAVIA	P	0,04
	2. GRASUNUL MOVILA OII COOPERATIVA AGRICOLA	P	-
	3. CRESTERIA SI INGRASAREA PORCILOR COOPERATIVA AGRICOLA	P	-
	4. DEZVOLTAREA SUINELOR CILIBIA COOPERATIVA AGRICOLA	P	-
	5. CRESCATORIA DE PORCINE CILIBIA COOPERATIVA AGRICOLA	P	-
Slovakia	1. Odbytové družstvo Bebrava	P	4,9
	2. Odbytové družstvo Dvory, družstvo		-
	3. ČILIZMĚSO, odbytové družstvo, družstvo		-
	4. Odbytové družstvo HB		-
Slovenia	1. KZ Lenart		31
	2. KZ Ptuj		25
	3. KZ Radgona		20
	4. KZ Kmetovalec Ljutomer		5,8
	5. SKZ Klas Križevci		4,4
Spain	1. Coren, S.C.G	S	942
	2. S.A.T. Fribin	P	197
	3. S.A.T. Grupo Arco Iris	P	112
	4. Grupo Avigase	P	79

	5. Covap, S.C.A	S	283
UK	1. ANM Group Limited	S	117
	2. Scottish Pig Producers Limited	P	49
	3. Yorkshire Farmers Livestock Marketing Limited	S	50
	4. Anglia Quality Meat Association Limited	P	0,5
	5. Progressive Lean Pigs Limited	P	0,03

*: 2010 or latest year available

Table 6. The largest farmers' cooperatives¹ in the food chain of the pig meat sector.

	Name of the Cooperative	Country	Turnover 2010* million €	Comment
1	Danish Crown Amba	DK	6 062	
2	HKScan	FI	2 125	The pork share ca. 50%
3	Westfleisch eG	DE	1 930	
4	COOPERL ARC ATLANTIQUE	FR	1 461	
5	Atria	FI	1 301	The pork share <50%
6	Coren, S.C.G	ES	942	
7	Tican Amba	DK	498	
8	Viehzentrale Südwest GmbH	DE	417	
9	AVELTIS	FR	400	
10	Covap, S.C.A	ES	283	
11	PRESTOR	FR	270	
12	Erzeugergemeinschaft Südostbayern eG	DE	255	
13	CAP 50 PORCS	FR	253	
14	Coöperatieve Afzet van Vee en Varkens – Commercialisation Coopérative Porcs et Betail – Genossenschaftliche Vieh- und Schweine Verwertung	BE	230	
15	Raiffeisen Viehvermarktung GmbH & Co.	DE	226	
16	S.A.T. Fribin	ES	197	
17	C.L.A.I	IT	196	
18	Erzeugergemeinschaft Gut Streitdorf e Gen	AT	191	
19	Cooperativa produttori suini PRO-SUS	IT	191	
20	PORC ARMOR	FR	189	

*: 2010 or latest year available

The Danish Crown is the second largest slaughterhouse in Europe (Vion the largest). Danish Crown is also a pig meat dominated slaughterhouse. Thus, one can estimate that more than 90% of Danish Crowns business is based on pig meat. There are also five other cooperatives whose turnover is almost 1bill.€ or more.

¹ The list has been constructed such that we picked the cooperatives from the database based on their turnover and stopped when the first 5th largest cooperative in sector from certain country was included in the list. Thus, the last cooperative on our list is the 5th largest from France, Porc Amor. We stopped listing to this point since we have no information from the 6th largest in the pig meat sector in France which might be larger than the 21st in our database.

Transnational cooperatives

Many cooperatives are active internationally. In most cases the foreign activities of cooperatives are limited to marketing, trade and sales. Usually they do not buy agricultural products from farmers, or supply inputs to them. However, there is a growing group of cooperatives that do business with farmers in other EU Member States. These cooperatives are called international cooperatives. One particular group of international cooperatives is the so-called transnational cooperatives. These cooperatives do not just contract with farmers to buy their products or to sell them inputs, they actually have a membership relationship with those supplying or purchasing farmers.

In the pig meat sector there is only one transnational cooperative: HKScan. The role of HKScan has been analysed in a special report describing the characteristics of the transnationals. In addition, there are a few international cooperatives in the pig meat sector. From the Top20 list above there are four cooperatives that have suppliers abroad but not members. These cooperatives are Danish Crown, Atria, Tican and S.A.T. Fribin.

4 Assessment of developments among cooperatives

The objective of this chapter is to explain the performance of the cooperatives in the pig meat sector in terms of the product and farming characteristics (chapter 2) and the 3 building blocks (institutional environment including policy measures to be discussed in chapter 5 more thoroughly but also including some historical and sociological aspects; position in food chain and internal governance). This analysis is based on the data on the cooperatives active at pig meat sector collected by national experts. There were 57 cooperatives whose main business was in the pig meat sector, 11 to whom the pig meat was the second largest business and 8 to whom the third largest. Thus, all in all we included 76 cooperatives in our analysis.

4.1 The institutional environment

As noticed in chapter 3.2 the market shares of cooperatives in the pig meat sector are rather low in most of the EU countries. There are only five countries where the cooperatives role in this sector is dominant. They are Denmark, Finland, Sweden (due to the transnational role of HKScan), Malta and France (with certain conditions). In addition to these countries, the role of farmer owned (and controlled) companies is strong in the Netherlands (VION). Of the other countries only in Belgium, Czech, Germany, Hungary, Spain, Austria and Italy the cooperatives have important shares.

An important reason for the differences in market shares and the cooperatives' position can be found in the different traditions between countries and between products. In the dairy sector and in the F&V sector the product is perishable and farmers had had to find solutions to solve this everyday "market problem". In the meat sector the product is not perishable as long as the animal is alive.

Furthermore, traditionally there have been a large number of local butchers in large parts of Europe to whom the farmers have sold their animals. This is still a very important marketing channel of meat to consumers. This has been the case especially in the Southern Europe (where in many cases supermarkets came much later than in Northern Europe) which at least partly explains the cooperatives relatively small role, especially in processing the meat. Moreover, the processing has been limited largely to cutting after the slaughtering.

In the Nordic countries the tradition and the historical reasons are different. There have not been such local butchers in a similar way than in other parts of Europe. The countries have industrialised later than the rest of Europe but on the other hand the industrialization process has been very rapid. Denmark's pig meat production was already from the very beginning very export oriented and thus, the cooperation was a natural way to handle the increasing export. Sweden and Finland have been very sparsely populated and the role of cooperatives has been very strong and the cooperatives have had a larger role compared to many other European cooperatives in the meat sector. In addition to collecting animals from farms, the cooperatives used to take care of the slaughtering as well as selling the meat to wholesalers and retailers.

With exception of Czech Republic and Hungary the role of cooperatives is in new member states in general very low. In many of those countries the production has also decreased a lot after the socialist era – the food industry found it difficult to compete with West-European companies in supplying the supermarkets (often from West-European origin too). There used to be large cooperatives as well as state owned farms of which a considerable share was privatized. There have been some initiatives which have tried to strengthen the role of cooperatives in the primary production but they have not always been very successful (see in the chapter 3.4. mentioned Romanian example, some others too in Slovakia. On the other hand there have been success stories like the Polish Witco case. However, in the new member states cooperatives have some role in primary production which can not be found in the old EU-15 countries almost at all.

Today, when the market has integrated and especially the wholesalers and retailers have consolidated very strongly both vertically and horizontally their needs for purchasing goods have also increased. The large retail chains whose market shares have increased need big partners and the meat industry has tried to response to that challenge by consolidation both at national and at international level. Another reason for consolidation has been the increasing processing level. Consumers want more processed food and the large meat cooperatives at least to some extent try to increase the value added and manufacture convenience food.

For the Nordic cooperatives consolidation has been a natural way of growth process whereas e.g. in Eastern European countries there have not been such processing cooperatives that could have responded to that challenge. In some other parts of Europe (Benelux, Germany, Austria, France, Spain, to some extent Italy as well) the consolidation process has as well been fast during the last decade but there has also been very strong IOF's in the sector. Thus, the market share in the processing level has not increased.

However, compared to the largest IOFs, the largest cooperative slaughterhouses are rather large. The largest cooperative is Danish Crown that is the second largest meat company in Europe after the Dutch VION. VION has a cooperative background and still is a farmer owned company without being a cooperative. In Germany there are several very large IOF's as well as in France. In Spain (as well as in some other European countries) the US based Smithfields has a strong position due to mergers and acquisitions.

Even though the value added at slaughterhouses has increased, the product is still a very basic product with no large differences and specialities (bulk). Relatively low R&D shares of the largest cooperatives' turnovers (maximum 0,8% in Top20, most of the cooperatives did not even report the figure) verifies this fact. Furthermore, the sector has been one of the least regulated agricultural sectors in EU.

There has not been a similar "demand" from producer's side to their own processing plants as in the dairy and F&V sectors. In some countries small cooperatives have tried to concentrate on local markets or look for niche markets. In Italy there are also good examples of origin labeled products (Parma, St. Daniele ham) where smaller cooperatives can also be successful.

4.2 The role of cooperatives in the food chain

The differences in the role of the cooperatives can be seen in the following where the cooperatives' main functions are presented (Figure 10).

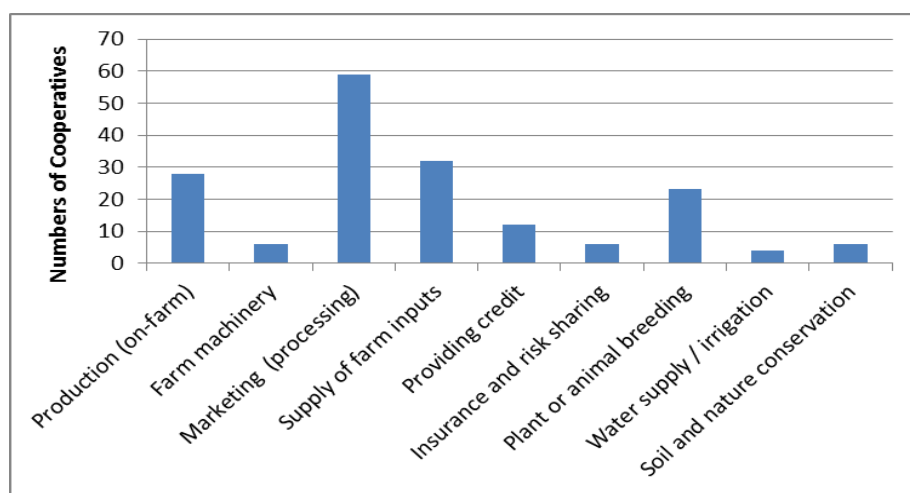


Figure 10 The role ("summed relevance") of cooperatives in the food chain (counted such that 1 when the role relevant and 2 when very relevant).

The role of marketing (selling live animals, processing, wholesaling, retailing) seem to be the most important role. In Eastern Europe there are cooperatives that have an important role in primary production. In addition to the role in the food chain some of the cooperatives have a role in general education (especially in France), infrastructure, social security and health. In the Figure 11 we divide the marketing roles of cooperatives in a more detailed manner. We also present the situation in 2000 and 2010 (or latest available year).

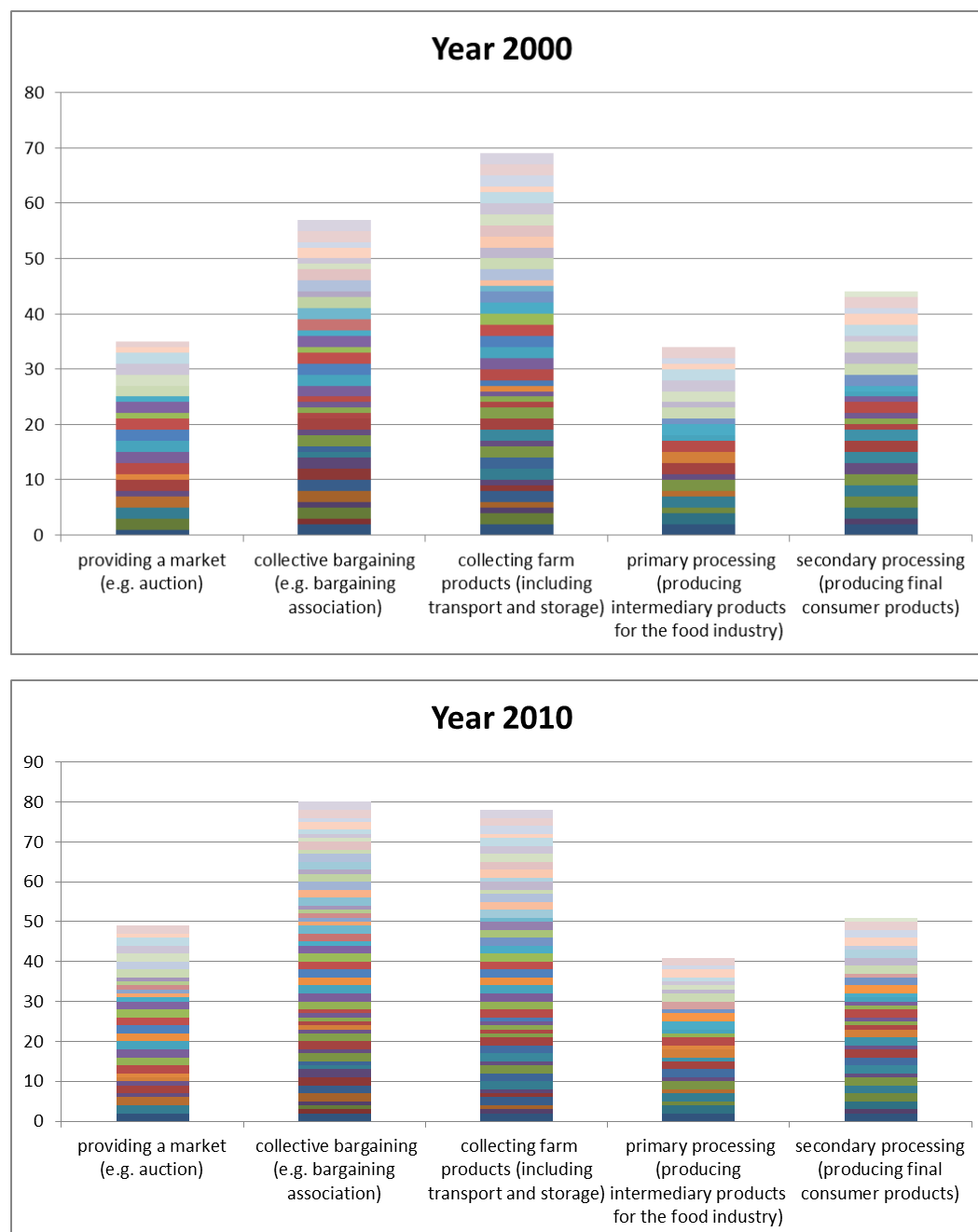


Figure 11 The role of cooperatives (“summed relevance”) in marketing live animals and processing the meat in 2000 and 2010 (counted such that 1 when the role relevant and 2 when very relevant).

Cooperatives seem to have the most important role in collecting live animals from farms. This is related to the first column of providing a market since there are only two coopeartives that provide market place for live animals without having any role in collecting the animals from

farms. The differences between columns also relates to different traditions in Europe. In the Nordic countries the marketing of live animals at an auction is totally unknown whereas in other parts that is a normal procedure and there are specific cooperatives for organizing these auctions. The increases in the shares does not necessarily reflect the increase of the role of cooperatives but rather an increase in the number of firms involved (young cooperatives that have figures only from the most recent study period or other difficulties in gathering the data from year 2000).

In the Figure 12 we look at the cooperatives role in the marketing of processed meat.

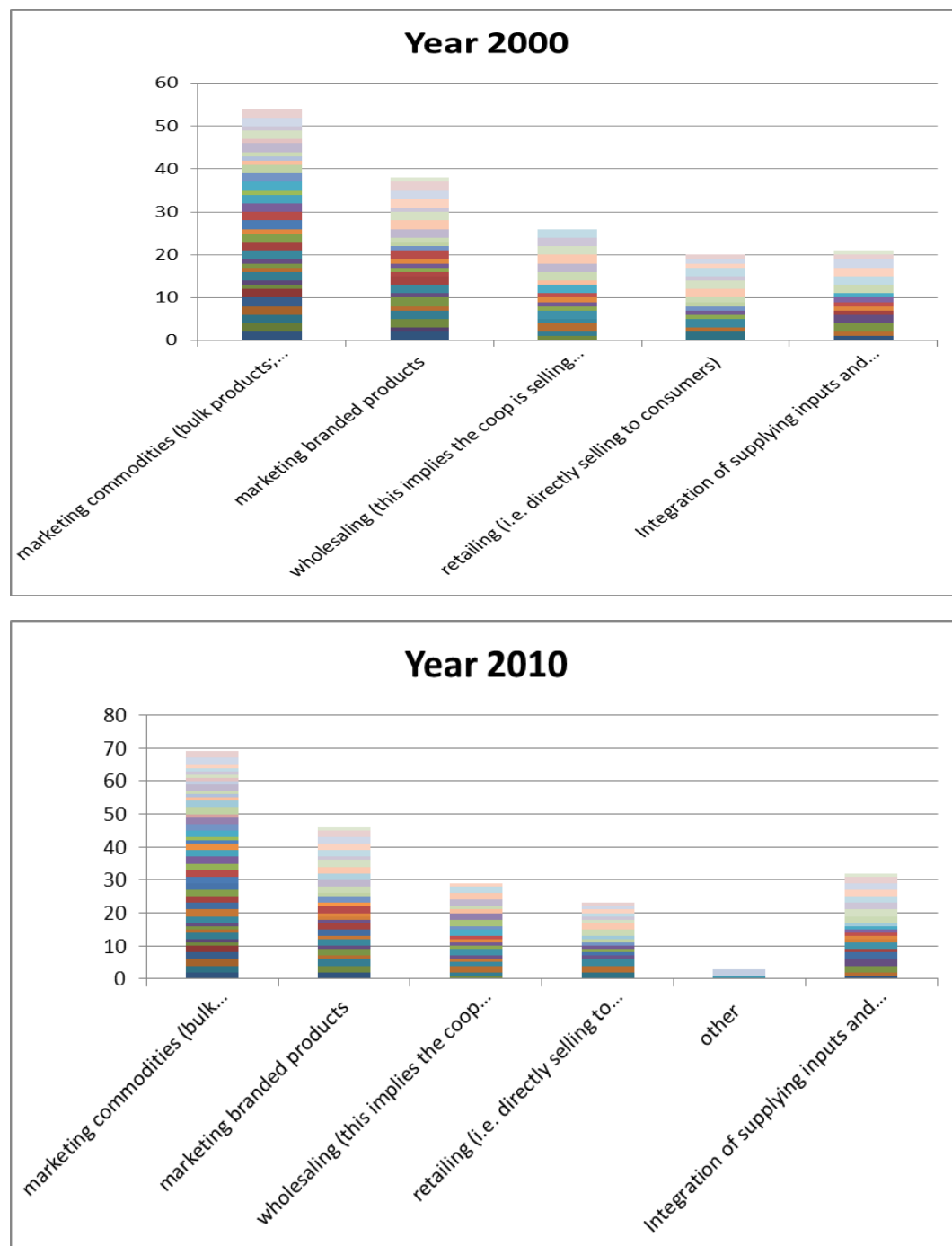


Figure 12 The cooperatives role (“summed relevance”) in the marketing of processed meat in 2000 and 2010(counted such that 1 when the role relevant and 2 when very relevant).

Again, the figures confirm the “bulk nature” of the sector. The role of branded products is smaller than pure commodity products. All the shares seem to be increasing but that rather reflect the increase in number of observations than increase in the relevance of the role. Thus, the competitiveness of the companies (cooperatives as well as IOF’s) has based mainly on the scale economies and cost minimizing (Figure 13).

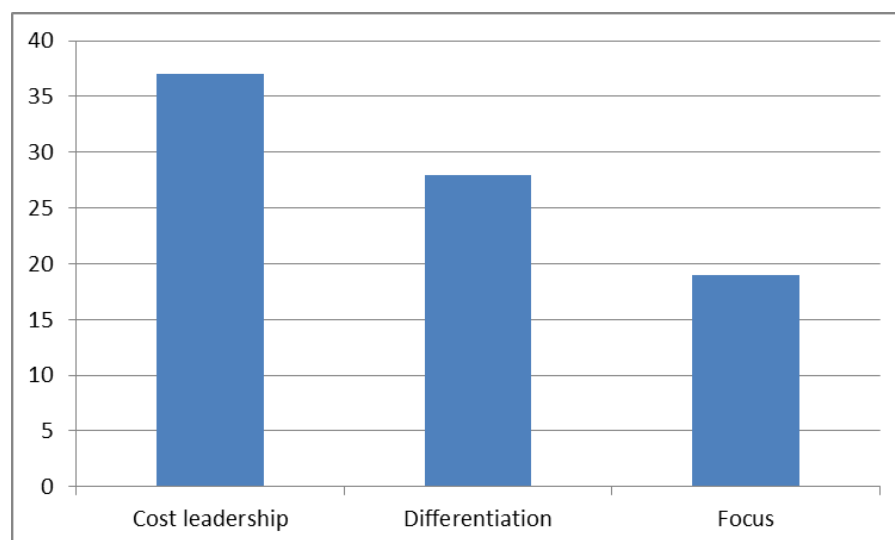


Figure 13 The growth strategies of cooperatives in the pig meat sector.

Especially the largest cooperatives strategy seems to be minimizing costs. The growth strategies of the cooperatives are presented in the following Graph 13.

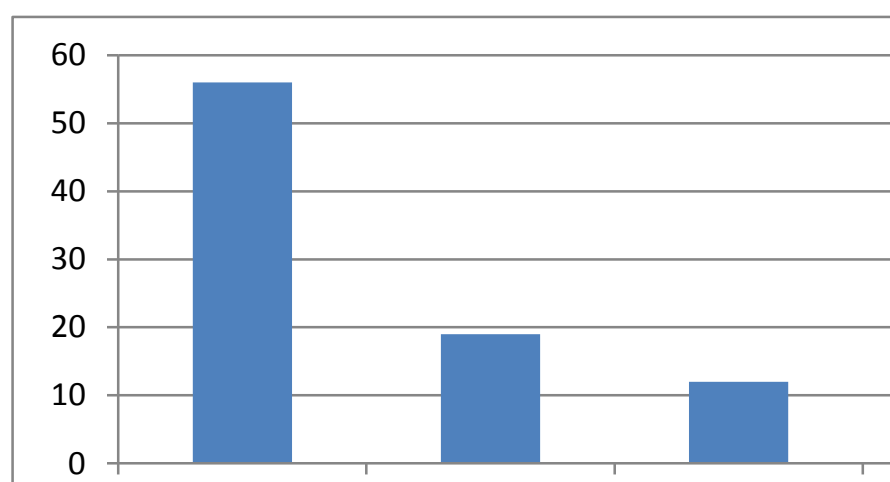


Figure 14 Growth strategies of the cooperatives.

Most of the cooperatives rely on autonomous growth that is quite obvious since majority of the cooperatives are relatively small concentrated on providing the market and collecting the animals from farms. Only a few of them have merged or plan to merge with some other cooperative or acquire/plan to acquire another cooperative/company. The horizontal mergers/acquisitions seem to be preferred. Only the largest cooperatives are looking for international mergers/acquisitions.

4.3 Internal Governance

Before presenting the internal governance models we briefly describe the membership policy of the cooperatives in the pig meat sector. One of the basic principles of cooperatives is that

membership is voluntary. This is the case in the pig meat sector cooperatives. However, there are differences in a manner how easy it is to become a member. The largest cooperatives mainly belong to the first or second group indicating an easy membership (Graph 14).

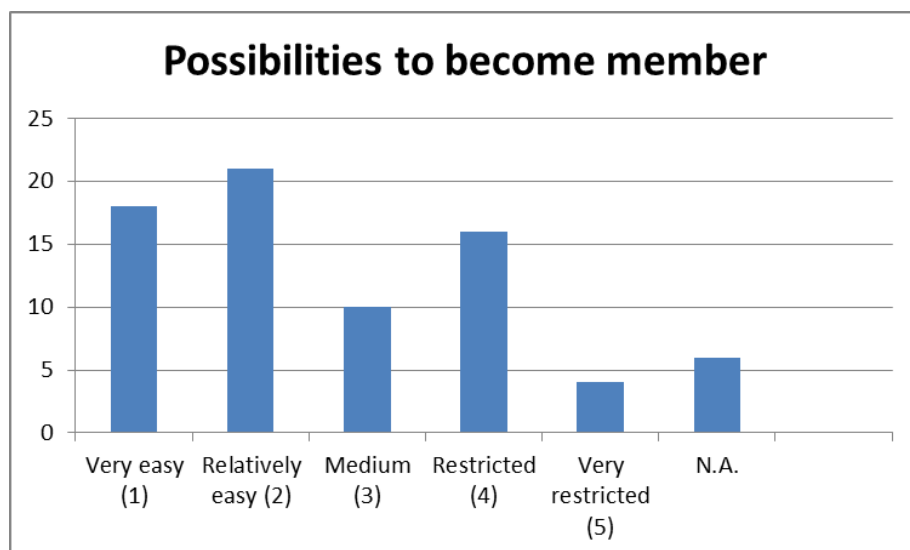


Figure 15 The easiness to become a member in the pig meat sector cooperatives.

The cooperatives that restrict the membership are the French cooperatives, the small Irish cooperatives as well as some Eastern European cooperatives that are active in primary production. The latter group's restrictions are easy to understand.

In addition to retained surplus, 30% of the cooperatives require a substantial contribution to equity from members. 70% of the cooperatives have only entrance fee. Entrance fee may, however, vary in size and in some cases may be connected to the use of cooperative services.

More than half of the cooperatives also trade with non-members. In contrast to the dairy and F&V sectors the shares may also be very large. For example, of the Spanish S.A.T Fribin's supply 90% come from non-members. There are also many other cooperatives that have a non-member share 10-50% in supply. Concerning the pricing policy, about one third of the cooperatives pay premium based on volumes and almost half of the cooperatives apply cost pricing.

Now we move on to the analysis of internal governance. The choice between one tier and two tier structure seems to be related to different national traditions, not to the size of cooperatives. With only a few exceptions we can define the "one tier" countries: Belgium, France, Spain, Italy, Ireland, Denmark and Great Britain and respectively "two tier" countries: Austria, Germany, Finland, Poland, Czech Republic, Slovakia, Hungary and Romania. Instead, when looking at the Board of Directors (BoD) membership, the size seems to matter. The larger the cooperative is the more probable is that there are also professionals in addition to the members in the BoD.

The BoD's typical size is from 5 to 7, but much larger BoDs exist, especially in France and Ireland. However, usually this large (more than 10) BoDs are not in charge of operational management. In general, it is very typical, especially in the large cooperatives that the professional managers are in charge of operational management. Usually, there are only members in the BoD. Only 20% of cooperatives have (also) outside professionals as members of BoD. Usually, the membership is based on personal expertise but in addition the regional or product groupings may have a role in electing the members into BoDs. Product grouping is used in case of multi-purpose cooperatives as well as in cooperatives that e.g. slaughter and process in addition to pigs also bovine and/or poultry.

In addition to BoD and General Assembly the cooperatives may have Supervisory committees or Member Councils. Half of the studied cooperatives in the pig meat sector had supervisory

committees of which two thirds consisted only of members. Only 25% of the cooperatives had a member Council.

Since majority of cooperatives consist of one legal entity and can also be described as traditional cooperatives the usual voting is based on one-member-one-vote principle. This is the case in more 80% of the studied cooperatives. To the group where the voting differs from this basic principle belong the federated cooperatives (Finnish HKScan and Atria, both listed in Helsinki Exchange, Spanish Coren) and Spanish S.A.T. Fribin² as well as some small eastern European cooperatives of which some are active only in primary production. In case of large federated cooperatives the voting is based on their investment shares whereas in smaller cooperatives on the use of the cooperative services.

4.4 Expert assessment of developments

The pork meat sector is a very market oriented sector. Europe produces more pig meat than it consumes. Thus, the market is very dependent on the global market where one has to be competitive with Brazilian, US and Canadian production. The market is still very “bulk” dominated. Thus, the competitiveness is based on scale economies and low costs.

The market situation is one of the key factors affecting the continuing consolidation process in the sector. There are several large cooperatives in Europe that have been active in the internationalization. This development probably continues and we probably will see mergers or acquisitions where the large cooperatives are involved also in the future. The consolidation probably continues based on the today’s structure: the largest cooperatives/companies in the sector grow; no newcomers to these largest companies’ group can be expected. The horizontal direction in mergers and acquisitions is more common than vertical direction.

Due to the strong market position of those large cooperatives they are also to remain as important actors. The cooperative background does not seem to be an obstacle for being competitive. Neither does it give any special advantage, especially in the 2nd transformation. However, the different kinds of federated structures or even mixed with IOF-based models (may be used more actively in the future (there are already examples of these, e.g. HKScan and Atria), and some steps towards this direction has obviously been taken (e.g. Danish Crown). The new organizational models of cooperatives have been analysed in Chaddad and Cook (2004).

The increasing demand for specialty products (organic, health, functional, convenience, local, origin labeled etc.) may leave room for smaller companies and cooperatives as well. However, the only way for them to survive and be profitable is to compete with quality and differentiation in the niche market where the price is not the only factor bringing competitiveness. The large companies may also be active in these sectors but it is probably harder for them. Perhaps, they may cooperate with smaller cooperatives in the future? Or they may look for market share in the niche markets with the help of subsidiaries that differentiate themselves from the mother “bulk” cooperative.

In many Eastern European countries the role of international companies and cooperatives is already now quite important. Due to the consolidation development we do not see any change in this situation. Due to the governance reasons and different structures in primary production we neither see that there would be considerable changes in membership structures (i.e. no new transnational cooperatives are to be expected). However, in primary production as well as in providing market place or collecting the animals from farms we can see possibilities to strengthen the role of cooperatives. There have been some attempts but perhaps their role could be fostered

² Special Spanish form of cooperatives, see e.g. López Lluch et al. 2005.

5 Overview of policy measures and assessment of the influence of policy measures on the evolution and current position of cooperatives

5.1 Introduction

The performance of cooperatives (including producer organisations) is influenced by the regulatory framework. This framework is multi-level: EU regulations, national laws and –in some countries- even regional policies influence the way cooperatives can operate. In this chapter we look especially at the regulatory framework that influences the competitive position of the cooperative versus the investor-owned firm (IOF) and the regulations that influence the competitive position of the cooperative versus other players in the food chain.

The objective of this chapter is to identify support measures that have proved to be useful to support farmers' cooperatives. In section 5.2 the relevant policy measures and their potential impact in the pig meat sector are identified. In section 5.3 an assessment of the policy measures is given.

5.2 Overview of regulatory framework including fiscal and competition issues

We look at the policy measures firstly at the EU level. Secondly, national regulatory will be looked in three country groups based on the market share of cooperatives. The first group consists of those countries where cooperatives have a dominant role in the pig meat sector, the second group of those countries where cooperatives have an important role, and the third group of those countries where cooperatives have no role at all or very minor role in the food chain.

EU level

There are not very many cooperative specific measures at the EU level. The only measures that exist (Council Regulation (EC) No 1435/2003 on the Statute for a European Cooperative Society and Communication 23 February 2004 (COM(2004)18) about cooperatives) do not have any direct effect on pig meat sector cooperatives. Table 7 identifies the EU level measures that may have indirect effects on pig meat sector cooperatives by affecting the primary production and pig meat industry in general.

Table 7. Most relevant policy measures at EU level affecting pig meat sector.

Policy Measure Name	Policy Measure Type	Regulatory Objective	Policy target	Expert comment on effects on development of the cooperative
(Official) name of the policy measures	Mandate e.g. - Cooperative legislation/incorporation law - Market regulation and competition policies Inducement - Financial and other incentives Capacity Building Technical assistance System Changing Other	- Correction of market or regulatory failures - Attainment of equity or social goals	- Specific to this sector	Description on how the policy measure affects development of cooperatives, by reasoning through the building blocks: - Position in the food chain - Internal Governance - Institutional environment of the cooperative
Integrated CMO Regulation ((EC) 1234/2007, and (EC) 361/2008)	1.2	1	3	This measure is of course of great importance to all agricultural sectors, as it provides them with a framework within which all farms have to operate and to which most farms synchronise, adjust, their activities. It does not directly influence cooperative behaviour as such, but creates the playing ground, or the institutional environment, within which all players “compete”. Through its prescriptions and financial inducements it will of course have an indirect and marginal influence on the internal governance of cooperatives.
Commission Implementing Regulation 543/2011	2	2	2	7 June 2011, very recent. This document describes an implementation of Integrated CMO Regulation ((EC) 1234/2007
Council Regulation 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development	2	1	3	By definition this Fund aims at improving the competitive position of the agricultural sector through financial inducement with respect to the environment and local development. This is done through 4 axes, to which a multiplicity of measures can be coupled (as will be made evident when discussing the measures at the regional levels). At this general level, the EAFRD impacts on all three building blocks.

We have listed only three measures since in general the EU policy on pig meat sector is rather liberal. There are hardly any pig meat specific policies.

CMO regulation for pig meat sector exists but the instruments available have been used rather seldom. The influence of the Integrated CMO Regulation ((EC 1234/2007, EC 361/2008)) are both direct and indirect. The support for private storing is one of the measures that have been used (the most recent use early 2011). However, it cannot be argued that it would favour cooperatives. Of course, where the role of cooperatives is strong, the stabilization of markets favours cooperatives.

The second common policy measure is the Rural Development Programme that provides support measures for structural adjustment. The pig meat sector has been facing very fast structural development and is still in a development phase. The support measures may differ at national level.

The CAP and competition policy are not specific to cooperatives. Nevertheless, these policy measures are very useful and effective for all agricultural enterprises, including cooperatives and producer organisations. In general, the main aim of these policy measures is to increase effectiveness over the years. Cooperatives and producer organisations are a key tool to face competition and to expand the market. Some of the key actions include (1) innovation and education, (2) fair prices for producers' access to the market, (3) sustainable development, (4) sharing of resources, (5) good prices for consumers.

We have not listed any income support measures but of course they have effects on the pig meat sector as well even though the pork meat production as such has no specific support measures. However, one could argue that the general EU policy CAP has been rather favorable for EU pig meat sector especially from 1992 to 2003 due to regulated and stabilized grain prices. This probably improved the competitiveness of the EU pig meat sector. The pig meat sector is very sensitive to feed and grain prices.

In addition to these listed measures there are some other measures that affect the pig meat sector, though not specifically cooperatives. However, depending on the role of cooperatives the effects may be relatively important. Examples of these regulations are listed below:

- Mostly due to the serious diseases (e.g. foot and mouth disease) there are, however, rather stringent rules for prevention of epidemics and spreading of diseases.
- In EU there is a register of protected designations of origin and protected geographical indications. The register indicates special qualities of products to be marked with a protected mark. This improves the marketing possibilities of special qualities of pork meat. One example of protected marks is the "Prosciutto di Parma", pork meat.
- There is also an ongoing EU work on "improving the quality of pig meat for the consumers". This work will have an important contribution to pig meat sector, but not particularly for Cooperatives.
- There are animal welfare related labeling and highest share of animal welfare labeling is in UK and Denmark.

Countries where cooperatives have a dominant role in pig meat sector

This group consist of Nordic countries (Denmark, Sweden and Finland), France and Malta (see chapter 3). Table 8 presents the measures that directly or indirectly affect the pig meat sector cooperatives.

Table 8. Most relevant policy measures in countries where cooperatives have a dominant role in the pig meat sector.

Country	Policy Measure Name	Policy Measure Type	Regulatory Objective	Policy target	Expert comment on effects on development of the cooperative
	(Official) name of the policy measures	Mandate e.g. - Cooperative legislation/incorporation law - Market regulation and competition policies Inducement - Financial and other incentives Capacity Building Technical assistance System Changing Other	- Correction of market or regulatory failures - Attainment of equity or social goals	- Specific to this sector	Description on how the policy measure affects development of cooperatives, by reasoning through the building blocks: - Position in the food chain - Internal Governance - Institutional environment of the cooperative
TSE	The Taxation law	2.1	2	1	The taxation law permits deductibility for money that is paid to members (though not all money), which is to say that cooperatives enjoy single taxation. Investor-owned firms have double taxation.
SE	The Competition law	1.2	1	3	Competition legislation allows cooperatives to exist; otherwise they could be considered cartels. Cooperatives seem to be allowed to do things that would not be permitted in investor-owned firms, for example mergers resulting in nation-wide firms.
DK	Consolidated Act on Taxation of Companies	2.1	2	3	In general, commercial cooperatives are taxed at 25% of the taxable income/surplus as are public and private limited liability companies. When fulfilling specific conditions some types of commercial cooperatives can have different kinds of tax benefits. They can be taxed only at 14,3% of 4 or 6% of a positive balance when fulfilling the following conditions: (1) a purpose of furthering the common business interest of at least 10 members through the participation of these persons in the activity of the company as buyers, suppliers or in any other, similar way (2) a turnover with non-members that does not exceed 25% of the total turnover. (3) and whose profit, other than normal interest on the paid-up capital (normally = to discount rate of Danish National Bank), can be distributed to members as dividend in

					proportion to their turnover with the company. According to section §14.2 dividend is free of taxation.
DK	The Competition law	1.2	1	3	The Danish Competition Act and other legislation in relation to competition are to a large degree similar to Community law. The opportunities for agricultural producers to group together are also a result of the implementation of the relevant Community law.
FI	Tax regulation	2.1	2	1	The taxation of interest paid to members of cooperatives differs from taxation of dividends paid to IOF owners. The tax free interest is much smaller for cooperative owners than for IOF owners (1.500€ vs. 90.000€)
FI	Competition law	1.2	1	3	According to the Act on Competition Restrictions Section 2 Paragraph 2 the Act does not apply to agreements, decisions or other comparable acts regarding primary production of agricultural products made by agricultural producers or agricultural producer organisations, when such acts promote increase of productivity, functioning of markets, availability of food supplies and achievement of reasonable consumer prices as well as lower the level of costs. According to Paragraph 3, however, the Act does apply to acts specified in paragraph 2 if they significantly restrain healthy and functioning competition in agricultural product markets or lead to abuse of a dominant market position.
FR	Law of 5th August 1920 art. 1382-6° General Tax Code (GTC) Loi du 5 août 1920 art. Code Général des Impôts 1382-6°	2.1	2	1	Exoneration of property tax for properties with buildings permanently and exclusively dedicated to farming using by cooperative companies and their unions.

FR	Decree of 9 th December 1948 GTC art 207-1-2° and 207-1-3° Décret du 9 décembre 1948 CDI art 207-1-2° et 207-1-3°	2.1.	2	1	Exoneration of corporate tax in favour of supply and service cooperatives and their unions for operations with members provided that those companies respect their legal obligations Exoneration of corporate tax in favour of agricultural production, collect, process and sale cooperatives, except for sales made in their retail shop separate from the main establishment, for operations with non-members : processing operations concerning products or sub-products over than those designed for feeding men or animals or able to be used as raw materials in agriculture and industry.
FR	Law of 29 th July 1975 art. 1451 (GTC) completed by art 1468 Loi du 29 juillet 1975 art. 1451 complété par art CGI 1468				Exoneration of Corporate Property Tax Contribution (CFE) (« Cotisation Foncière des Entreprises ») in favour of agricultural cooperatives and their unions either when they have no more than 3 employees or when they are concerned by certain activities : electrification, rural development, use of agricultural material, artificial insemination, prevention and combat concerning animal and vegetal diseases, vinification, fruit and vegetable packaging, organisation of auctions. Deduction of 50 % of tax levy base of the Corporate Property Tax Contribution (CFE) : agricultural cooperatives and their unions which are not entitled to the exoneration accorded by article 1451 of the GTC. Contribution to VAT in accordance with EU law.
MT	Income Tax ACT Chapter 123 Article 12 (1) (q)	2.1	1 & 2	1	The Income Tax Act Chapter 123 exempts Cooperatives Societies, Both Agricultural and not from paying Income Tax, on the other hand, the Cooperatives Societies ACT 30 of 2001 obliges all Cooperatives to pay 5% of their surplus to the Central Cooperative Fund.
MT	Subsidiary Legislation 442.03 Central Cooperative Fund Regulation	1, 2 & 3	1 & 2	1	Legal Notice 288 establishes the Central Cooperatives Fund Committee to; This Legal Notice is a Fund of Solidarity that aims to; (a) to administer the Central Cooperative Fund; (b) to promote Cooperative education and training for the general

	ns Legal Notice 288 of 2001, as amended by Legal Notice 116 of 2003 and 370 of 2004				<p>development of the Cooperative movement in Malta, and to carry out all activities relating thereto;</p> <p>(c) to finance educational and training programmes relating to the promotion and development of the co- operative movement for members of and personnel engaged by Cooperatives and other persons who may actively contribute to the promotion of the co- operative movement;</p> <p>(d) to commission studies and research on particular areas of Cooperative activity or any individual Cooperative society in Malta, with a view to assessing past performance and discovering possible potential for future operation;</p> <p>(e) to produce or publish Cooperative educational material for use by members of Cooperative societies, students and the general public with a view to promoting Cooperative ideals and practice;</p> <p>(f) to sponsor participation by Cooperatives in trade fairs or specialised fairs for the promotion of Cooperative societies or the Cooperative movement in general;</p> <p>(g) to support and intensify the participation of the Maltese Cooperative movement in relevant organisations, activities and projects on an international level;</p> <p>(h) to support the existence and development of co- operative societies in all sectors of the economy and society;</p> <p>(i) to consider and, where deemed appropriate, to support the educational programmes proposed by the Board from time to time;</p> <p>(j) to collect, recover and institute proceedings for the payment of sums to the Central Cooperative Fund, in terms of article 91(6) of the Act.</p>
	<p>Subsidiary Legislation 442.03</p> <p>Central Cooperative Fund Regulations Legal Notice 288 of 2001, as amended</p>	1, 2 & 3	1 & 2	1	<p>(a) All New Cooperatives, (including Agriculture Cooperatives) can benefit from a Loan Subsidy Scheme in which 50% of Bank interest rate is paid by the CCF up to a maximum of loan of € 69,881. This loan has to be of a Capital nature. All New Cooperatives (including Agriculture Cooperatives) can benefit from a start-up grant of €1,000 All Cooperatives (Including Agriculture Cooperatives) can benefit from an 80% of design expenses (not</p>

	by Legal Notice 116 of 2003 and 370 of 2004				exceeding €1,000) to develop a website. All Cooperatives (including Agriculture Cooperatives) can benefit from a training grant of up to €1,000 in one calendar year for training.
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There do not seem to be any direct measures specific to pig meat sector in these countries. However, with exception of Finland, there are several tax exemptions that favour cooperatives.

In the Nordic countries the regulation does not, in principle, treat cooperatives differently from investor-owned firms. There are only two differences. One concerns taxation and the other concerns competition rules. In Sweden the taxation law permits deductibility for money that is paid to members (although not all money), which is to say that cooperatives enjoy single taxation. Investor-owned firms have double taxation, i.e. the firms must pay taxes for the profits, and the firms' owners must pay taxes when the firms' profits are distributed to their owners. The Danish rules are completely different – the cooperatives pay taxes in relation to the accumulated wealth of the cooperatives. In Finland there is no distinction between cooperatives' and IOF's taxation, only in taxation of interest paid to cooperative owners vs. dividends paid to IOF owners.

Competition legislation allows cooperatives to exist; otherwise they could be considered cartels. Cooperatives seem to be allowed to do things that would not be permitted in investor-owned firms, for example mergers resulting in nation-wide firms. However, there are differences between Nordic countries – at least it seems that the Danish competition legislation is more permissive than it is Sweden and Finland.

One policy measure that probably has contributed to the strong role of cooperatives in Finland is related to the possibility of paying national support for farmers (including pig meat farmers, the support used to be coupled to production but is today decoupled) in addition to CAP measures. In France the major benefits the cooperatives have by regulation concern the tax reliefs. There are a several tax regulations that offer cooperatives a special advantage compared to IOFs. This is probably an important reason for the cooperatives' strong position in collecting the animals from farms and providing a market place. In Malta as well there are tax exemptions, which favour cooperatives. Furthermore, there is a specific Cooperative Fund that offers different kind of support to cooperatives.

Countries where cooperatives have an important role in pig meat sector

This group consists of Germany, Austria, Belgium, Spain, Italy, Czech Republic and Hungary (see chapter 3). Table 9 presents the measures that directly or indirectly affect the pig meat sector cooperatives.

Table 9. Most relevant policy measures in countries where cooperatives have an important role in the pig meat sector.

Country	Policy Measure Name	Policy Measure Type	Regulatory Objective	Policy target	Expert comment on effects on development of the cooperative
	(Official) name of the policy measures	Mandate e.g. - Cooperative legislation/ incorporation law - Market regulation and competition policies	- Correction of market or regulatory failures - Attainment of equity or social goals	- Specific to this sector	Description on how the policy measure affects development of cooperatives, by reasoning through the building blocks: - Position in the food chain - Internal Governance - Institutional environment of the cooperative

		Inducement - Financial and other incentives Capacity Building Technical assistance System Changing Other			
AT	Law against Restraints of Competition (Kartellgesetz) Law on the merger of cooperatives of 7.5.1980 (last amended 1996)	1. Mandate 1.2 Market regulation and competition policies	1. Correction of market or regulatory failures	3. Applicable to business in general and 2. Specific to an agricultural sub-sector	Cooperatives are subject to the general legal standards which apply to competition especially to the law against restraints on competition (Kartellgesetz). Cooperatives are no cartels. The Law contains an extensive sectoral example for rural cooperatives but does not completely remove this sector from the reaches of the anti-trust legislation. The Law permits extensive agricultural cartels regardless of their market power as long as they do not completely eliminate competition. The exemption from the prohibition of cartels is grounded on the structural difficulties and the industry-specific competitive disadvantages faced by agricultural producers.
BE	Investment support for agricultural cooperatives	Inducement	Correction of market or regulatory failures	Specific to cooperatives	Clearly this measures aims at improving the position of the cooperative in the food chain
	Agreements on the improvement of porc species	System changing	Correction of market or regulatory failures	Specific to an agricultural sub-sector	Agreements such as these alter the playing field (institutional environment) by setting up new standards.
	Product quality differentiation through labeling	Other : creating niche markets	Correction of market or regulatory failures	Specific to an agricultural sub-sector	Measures such as these generally aim at creating supply markets, therefore improving the position in the food chain.
DE	Law against Restraints of Competition (Gesetz gegen Wettbewerbsbeschränkungen, GWB)	1. Mandate 1.2 Market regulation and competition policies	1. Correction of market or regulatory failures	3. Applicable to business in general and 2. Specific to an agricultural sub-sector	Cooperatives are subject to the general legal standards which apply to competition especially to the law against restraints on competition (Gesetz gegen Wettbewerbsbeschränkungen, GWB). Cooperatives are no cartels per se. GWB, §100 contains an extensive sectoral example for rural cooperatives but does not completely remove this sector from the reaches of the anti-trust legislation. GWB, §100, Subsection 1 permits extensive agricultural

					cartels regardless of their market power as long as they do not completely eliminate competition. The exemption from the prohibition of cartels is grounded on the structural difficulties and the industry-specific competitive disadvantages faced by agricultural producers.
	Law for Adjusting Agricultural Production to Market Requirements ("Marktstrukturgesetz") from 1969	1. Mandate 1.1. Cooperative legislation/ incorporation law 1.2 Market regulation and competition policies	1. Correction of market or regulatory failures	2. Specific to an agricultural sub-sector	In its original formulation, §7 of the law drew a clear line between producer associations based on the German Law and producer organisations based on European Community Law. Producer organisations (EU law) are primarily found in the fruit and vegetable sector; producer associations (German law) are important in the hop, potato, hog and piglet, and quality grain sector. The attainment of state recognition is a precondition for producer associations to apply for financial support and to receive legal competitive privileges. The development of these producer associations has not been that successful as the initiators expected them to be. There are numerous obstacles in the internal organisation, behavioural attitude of its members towards the association, the precondition for the development of promising marketing activities, and management problems prevent these producer organisations from being a favourable alternative for cooperative solutions.
ES	Co-operative Tax Law 20/1990, 19 December	2. Inducement. Financial incentives	2. Attainment of equity or social goals	1. Specific to co-operatives	National-Measure allows for the favourable tax treatment of cooperatives such that certain taxes do not apply such as for example, Tax on capital transfers and documented legal acts, Corporation Tax, etc. and to a greater degree of specially protected cooperatives, in which agricultural cooperatives are included.
	Resolution of 19 April, 2011, of the Secretary of State of Rural and Water Environments providing for the publication for	2. Inducement. Economic incentives	1. Correction of market or regulatory failures 2. Attainment of equity or	1. Specific to cooperatives	-Establishes the convocation of competitions for subsidies for 2011 in relation to the promotion of cooperative integration at the state level, provided for in Order APA/180/2008. Amongst the evaluation criteria for awarding the subsidy: the fusion of two or more

	2011 the convocation of aid destined to promote the integration of cooperatives at the state level		social goals		entities, having as a principle objective innovation in production processes, have as a principle objective innovation in commercialization processes, fostering the participation of women, being a cooperative society of worker association with agrarian activity, being a second level cooperative, etc.
	Plan of Initiation for Foreign Marketing (PIPE)	2. Inducement. Financial and other incentives 3. Capacity Building	2. Attainment of equity or social goals	3. Applicable to Business in general	-The Plan for the Initiation of Foreign Marketing (PIPE) is the first program on a national level aimed especially at Spanish SMEs that seek commercial development through exports.
	Order of 9 June 2009, for the establishment of the regulatory bases for the concession of aid for the primary integration of agrarian associative entities into Andalusian agricultural cooperatives of a higher level, and the providing for related convocations for 2009 (Andalusia)	3. Capacity Building 2. Inducement. Financial and other incentives	2. Attainment of equity or social goals	1. Specific to cooperatives	-This Order establishes the regulatory bases to concede aid for the primary integration of agricultural associative entities in already consolidated superior level Andalusian agricultural cooperative societies: Provided that commercialization of the products which are subject to such integration are amongst its activities. The legal forms of potential beneficiaries are: a) Andalusian agricultural cooperative society b) SATs doing business in Andalusia (and meet certain conditions). -The expenses of the agricultural associative entity for the participation in the social capital of the existing second or higher level cooperative may be subsidized. The maximum quantity of such aid is limited to 100,000 Euros per beneficiary entity.
	Order 12 June, 2009, establishing the regulatory bases for the concession of aid for the fusion of agricultural cooperatives and the constitution of second level (or higher) agricultural cooperatives, and providing	2. Inducement. Financial and other incentives 3. Capacity Building	2. Attainment of equity or social goals	1. Specific to cooperatives	-This Order establishes the regulatory bases to concede aid in the creation of entities which are a result of merger projects of agrarian cooperatives and the constitution of second level or higher agrarian cooperatives. The legal form of the possible beneficiaries must be: a) Andalusian agrarian cooperative society, b) second level Andalusian agrarian cooperative society, c) SATs with its legal place of business in Andalusia (which meet certain conditions), d) cooperative societies and SATs with industrial establishments inscribed

	for related convocations for 2009 (Andalusia)				(registered) in Andalusia. -The following may be subsidized: pre-merger expenses assumed by the entities that merged; pre-constitution expenses of a second level cooperative assumed by the entities that participated in its constitution; etc. -The maximum quantity of such aid is 20,000 Euros divided between the number of businesses that participated in each merger process or constitution.
	Order 20 April 2010, establishing the regulatory bases for the concession of aid to support the increase of size and dimension of agro industrial cooperatives, to promote business cooperation, integration, mergers and strategic alliances and fostering the constitution of second and higher level associative entities (Andalusia)	3. Capacity Building 2. Inducement. Economic incentives	2. Attainment of equity or social goals	1. Specific to cooperatives (and other social economic enterprises)	-The object of this aid is the promotion of integration activities of cooperatives of the agro industrial sector, especially directed at promoting concentration projects through the constitution and consolidation of second or higher level cooperatives.
	Order of 30/12/2009, of the local Ministry of Agriculture and Rural Development, which modifies the Order of 11/12/2008 of the local Ministry of Agriculture and Rural Development, approving the regulatory bases of aid for the	2. Inducement. Financial and other incentives	2. Attainment of equity or social goals	1. Specific to cooperatives	-This Order is financed 100% by the local Ministry of Castilla la Mancha, without European or national financing, is for the promotion of cooperativism. Beneficiaries are agrarian cooperatives and second level or higher level cooperatives integrated by agrarian cooperatives. The lines of aid, all especially to promote the concentration and integration of cooperatives, are the following: contracting of technical personnel; technical assistance in the improvement of commercialization; financial expenses derived from integration processes in second level cooperatives or en businesses

	improvement of the de associative agrarian structures en Castilla-La Mancha (FOCOOP)				participated in by cooperatives; investment destined to improve the provision of common services in primary production.
IT	Legislative Decree No 228 of 18 May 2001. <i>Guidance law and modernization of the agricultural sector</i>	Definition of legislative and regulatory framework of the agricultural sector	Updating of the regulatory framework according to the evolution of the agricultural system and defining strategic development lines for the agri-food industry	Specific to the agricultural sector with focus on farmers' cooperatives	<p>In 2001, Italy has passed a law concerned with orientation and modernization of the agricultural sector that has introduced important innovations, including the full recognition of the agricultural cooperative as a farmer on condition that the relationship with the members prevailed over the relationships with third parties.</p> <p>This regulatory action extends the definition of agricultural activities also to the related activities (such as processing, preservation and marketing of the agricultural product). After 10 years of application, we can say that this rule has had very positive effects on the Italian agriculture and food industry. This is particularly true if we focus on the cooperative model that obtains a central position in the sector's legislation framework. Indeed, thanks to. D. LGS 228/2001, agricultural cooperatives become key players in the outlining processes of future policies for Italian agriculture, in terms of recognition of its role in the valorization of agricultural products, and as a fiscal/legal entity with benefits. The latter refer to the cooperatives' specific legal form and their belonging to agricultural sector.</p>

Similarly to the first group, there are not any pig meat specific measures either in this group. There are similar kinds of exceptions given to cooperatives in Competition laws as in the first group (i.e. cooperatives are not cartels). In Spain there are measures that even promote cooperatives to merger as well as enlarge their operations abroad. We have listed some of these measures (of which some are regional). When the pig meat sector is very market oriented and the benefits of scale economies obvious these measures can be argued to favour pig meat sector.

Basically, the tax regulation in the countries belonging to this group seems to be similar to other taxpayers. The only exception is Spain.

Countries where cooperatives have a minor role or no role at all in pig meat sector

The rest of the EU countries belong to this group. The Netherlands is perhaps an exception in this group since the role of VION that is cooperative based and farmer owned company has a very dominant role in the Dutch pig meat sector. Most of the countries in this group are Eastern European countries where there are very few processing cooperatives in the pig meat sector. In many of these countries the largest cooperatives in the sector are involved in primary production.

A common feature, again similar to the previous groups, is that there are no specific regulations concerning the pig meat sector. In the Netherlands the regulation has also otherwise a very minor role. In eastern European countries there are different kinds of attempts (many of them related to RDPs) that could favour and foster the cooperatives in primary production.

5.3 Expert assessment of impact of policy measures

In principle, the pork meat has been considered as “cereal-based-product” in EU agricultural policy. Thus, the production of pork meat has been “left” for the market and not regulated very much. The same “not much regulation principle” seems to continue in later phases of the food chain and concerning cooperatives as well. There are not many pig meat specific measures.

There are large differences between countries in the cooperatives’ performance in the sector. However, the legislation and regulation concerning cooperatives do not differ that much. Thus, one can conclude that there are no specific policy measures that could be interpreted to foster the role of cooperatives in one country compared to another country.

Thus, when we think about our building blocks and the various aspects in the institutional environment affecting the performance of cooperatives the most important is the historic background. This holds especially for the pig meat sector where the market itself as such is very little regulated.

Probably, there is a need to promote cooperation in the sector especially in Eastern European countries. However, we believe that the main focus should be in promoting the primary production through production cooperatives or farmers’ cooperation and small scale processing/retailing in the local or other niche markets. Due to the nature of the sector we do not believe that any effort put into promoting large scale processing cooperatives would be successful.

6 Discussion

One possibly interesting topic for further research would be the analysis of taxation of cooperatives vs. IOF's and comparison between countries. Taxation is not harmonized in EU and when the cooperatives grow and enlarge their operations abroad the differences in taxation may lead to otherwise unnecessarily complicated subsidiary structures. The question would perhaps be of some interest also related to the transnational cooperatives.

Another issue that should be more thoroughly analysed is the role of members in cooperatives classified by their role in the food chain (collecting, 1st and 2nd transformation etc.) and by the size of the cooperative.

Furthermore, when interpreting the result we have to keep in mind that the dataset consist of rather heterogenous group of cooperatives. It is not only the size that vary but the role in the food chain as well. The value added and the goals of the cooperatives may also be somewhat different due to these differences.

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