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Analyses of the Functioning of Milk Package provisions as regards Producer Organisations and collective negotiations

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Contents

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Abbreviations

All POs	All POs that filled in the electronic survey
All FOs	All FOs that filled in the electronic survey
APO	Association of producer organisations
CEJA	European Council of Young Farmers
CMO	Common market organisation
Copa-Cogeca	Committee of Professional Agricultural Organisations and General Confederation of Agricultural Cooperatives
DG AGRI	Directorate-General for Agriculture and Rural Development
EC	European Commission
EDA	European Dairy Association
EMB	European Milk Board
EU	European Union
EU15	EU Member States that joined before 2004
EUn13	13 (new) EU Member States that joined in or after 2004
FO	Farmer organisation
HLG	High-Level Group
IDIF	In-depth interviews farmer organisations
IDIP	In-depth interviews producer organisations
M	Month(s)
MS	Member State
MS with POs	MS with one or more POs
MS without POs	MS without POs
MS Cooperative	MS where milk deliveries to cooperatives are 2/3 and more
MS Private	MS where milk deliveries to private processors are 2/3 and more
MS Mixed	MS not classified as MS Cooperative or MS Private
N.A.	Not Available (means not filled in)
no	Number
Other FOs	FOs being not a member of Copa-Cogeca
PDO	Protected designation of origin
PGI	Protected geographical indication
PO	Producer organisation, recognised under Regulation 1308/2013
Q	Quarter of year
Y	Year(s)

EU28 Member States

Code	Country	Code	Country
AT	Austria	IE	Ireland
BE	Belgium	IT	Italy
BG	Bulgaria	LT	Lithuania
CY	Cyprus	LU	Luxembourg
CZ	Czech Republic	LV	Latvia
DE	Germany	MT	Malta
DK	Denmark	NL	Netherlands
EE	Estonia	PL	Poland
ES	Spain	PT	Portugal
FI	Finland	RO	Romania
FR	France	SE	Sweden
GR	Greece	SI	Slovenia
HR	Croatia	SK	Slovakia
HU	Hungary	UK	United Kingdom

Analyses of the functioning of Milk Package provisions as regards producer organisations and collective negotiations

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Executive summary

Aim

This study aims to assess the effectiveness and potential improvement of the Milk Package provisions, as regards the functioning of producer organisations (POs) and their role in collective negotiations with milk processors.

The specific objectives are to:

1. Evaluate the functioning of existing POs and associations of producer organisations (APOs) formally recognised under the Milk Package.
2. Evaluate the potential for POs where they have not been constituted yet.
3. In the light of the analysis, draw up recommendations to improve the usefulness of the Milk Package provisions.

Legislation on POs in the dairy sector is provided in the Common Market Organisation Regulation (Regulation (EU) 1308/2013). According to this Regulation, Member States shall recognise POs in the milk sector formed on the initiative of producers and pursuing a specific aim, which may include (Article 152(3) of Regulation 1308/2013):

(i) ensuring that production is planned and adjusted to demand, particularly in terms of quantity and quality;

(ii) concentration of supply and the placing on the market of products produced by its members;

(iii) optimising production costs and stabilising producer prices.

Approach

The results of this study are based on surveys of POs, farmer organisations (FOs) and the dairy processing industry, which are complemented with in-depth interviews.

The data and information for this study are retrieved from three sources:

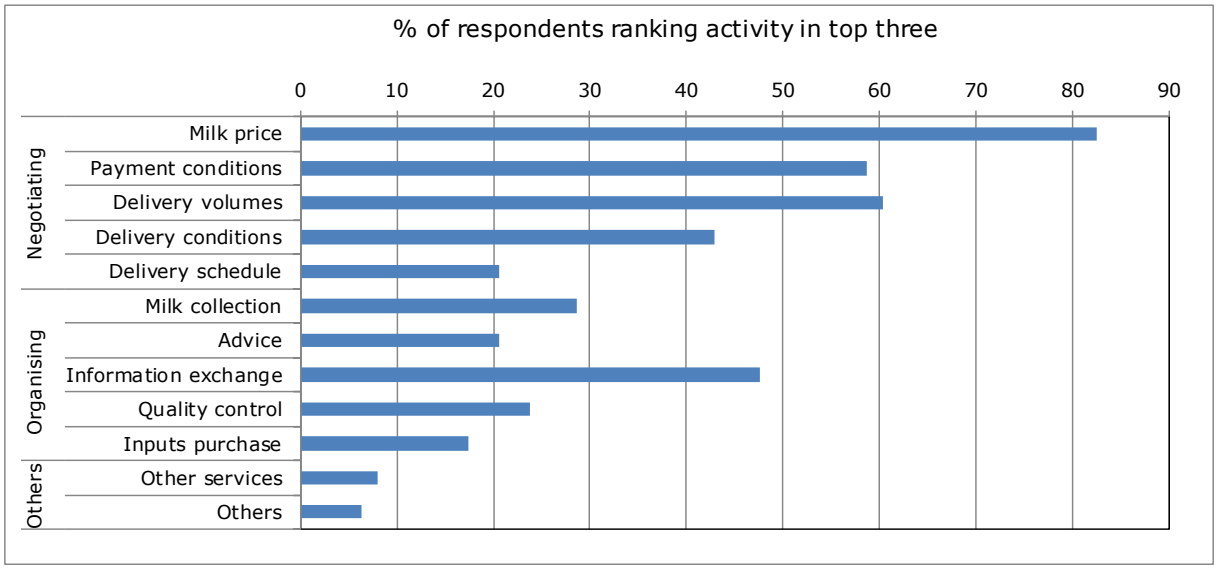
1. A desk study analysing the provisions, public information and studies on the Milk Package.

2. Three electronic surveys, in local languages, approaching:
    a. Almost all existing POs in the EU. The overall response rate was 23% (63 POs). In Germany, where most POs are established, 15% (22 POs) responded. The response rates in other countries were between 25% and 100%. Two POs deal with ewe milk; all others deal with cow milk.
    b. FOs in the EU. The response rate was 48% (out of 118 FOs), covering the 24 Member States (MSs) with the largest milk production.
    c. Members of the European Dairy Association (EDA). Nine out of the 28 EDA members responded. This questionnaire was available only in English.
3. In-depth interviews — the majority in local languages — conducted with 31 POs and 33 FOs.

Selected results

It appears from the survey among POs that the core activities of POs are negotiating prices, delivery volumes and payment conditions, and information exchange (Figure S.1). Results of negotiations are usually binding for the members (73% of the POs answering the survey) and often oblige members to deliver a fixed proportion of the milk that each member produces (65%).

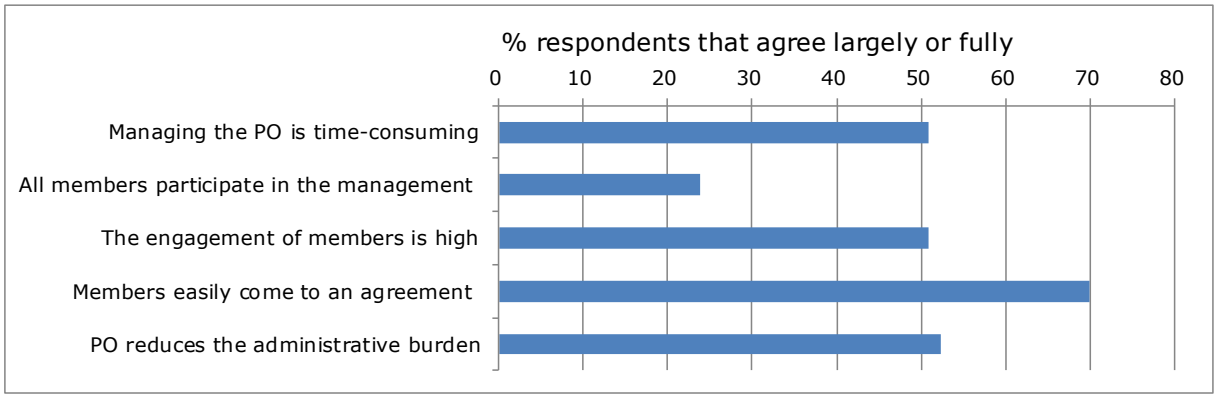
Figure S.1 Core activities of POs



Source: Electronic survey of POs

Next to the main requirement of delivering the milk through the PO, paying a fee and being located in a certain region are often requirements for farmers to become a member of a PO. Almost all of the POs have 'one-member-one-vote' rules and a board of directors consisting of only farmers (94% of the POs participating in the survey). Most POs have less than two paid staff members. POs are generally successful in coming to agreements that are supported by their members. Engagement of members is fairly high, but participation in PO decision-making is also seen as time-consuming (see Figure S.2 for details). A small majority of the POs' managers surveyed indicate that the PO reduces the administrative burden for its members.

Figure S.2 Opinions on PO management

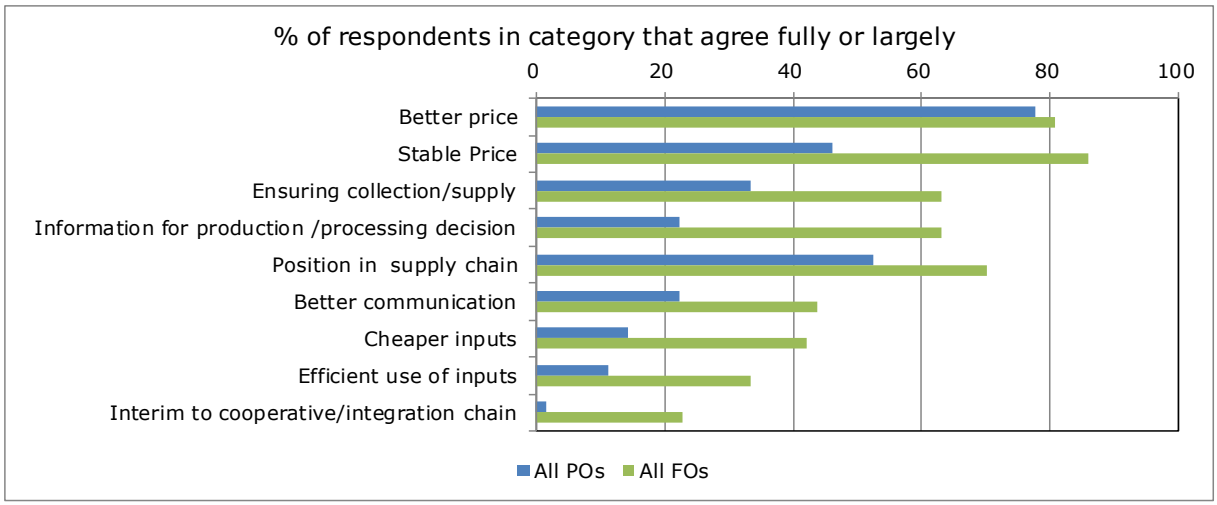


Source: Electronic survey of POs

According to the POs and the FOs, the motivation for establishing a PO is strongly based on getting a better price for the milk delivered (Figure S.3): about 80% of the responding POs consider achieving better prices to be important while about 30% largely or fully agree that this objective has been achieved (see Figure S.4). In addition, improving the position in the chain was mentioned many times as a major reason for establishing a PO and more than 40% of the POs largely or fully agree that this objective has been achieved. Assuring milk collection (i.e. 'all milk collected') is realised for 95% of the POs that indicate this as important.

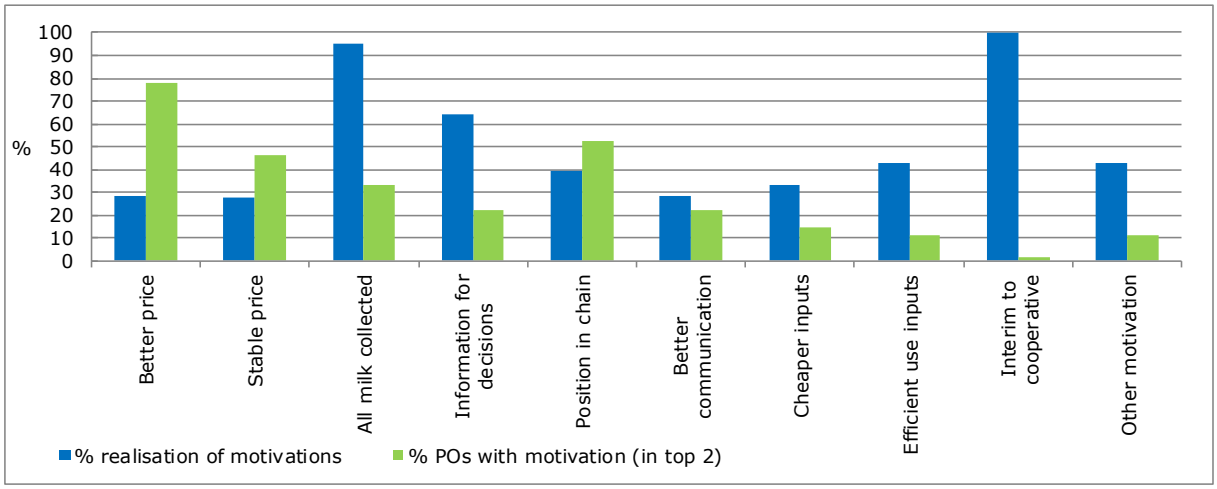
While some of the potential PO objectives are not mentioned as (important) motivations for establishing a PO, they were nevertheless reached (e.g. information for taking production decisions or efficient use of inputs), indicating that POs contribute to a variety of services for the members beyond the principal ones identified in the legislation.

Figure S.3 Motivations for establishing POs



Sources: Electronic surveys of POs and FOs

Figure S.4 Achievement of motives for initiating a PO



Source: Electronic surveys of POs
[a] Percentage of POs that fully or largely agree that their motives for initiating a PO are achieved and fully or largely agree with the statement that the objective was important in establishing the PO

The main reasons for having no PO or only a few POs are a lack of success stories, insufficient information on possible benefits, shortage of training on how to organise farmers and establish a PO, and recent changes in prices.

Summary of the main findings

Initiation of POs by producers

About 40% of the responding POs do not meet the requirement that POs recognised under the Milk Package shall be initiated by producers, our survey shows. In these cases, others have initiated the PO on behalf of the milk producers.

Maximum volume of raw milk covered by contractual negotiations

The legislation restricts the volume of raw milk to a maximum of 33% of national production and not exceeding 3.5% of European Union production covered by contractual negotiations. This requirement has been met for all the cases analysed.

Criteria with respect to minimum number of members or minimum marketable production volume

The criteria for recognising a PO differ across MSs. There are wide variations in the defined minimum number of members (between 5 and 200) and minimum marketable production (between 35 and 200,000 tonnes). Some MSs that define high minimum size requirements seem to favour large-scale POs.

Objective i: Production is planned and adjusted to demand

With respect to the objective, that production is planned and adjusted to demand, survey results do not provide strong evidence that their activities ensure matching supply and demand. Quite a number of POs in the sample find better market information of paramount importance and many do negotiate how much to deliver (which is the result of matching demand and supply). In addition, the POs deliver all the milk contracted under Article 149 of the CMO to the processor, which may indicate that supply matches demand well. Meanwhile, though, POs do not seem to supervise the volumes delivered

very strictly. The POs' role in controlling quality is also modest in most countries, as the existing quality assurance system is generally more than adequate to guarantee high-quality milk delivery. Still, POs do play an important role in either maintaining or improving the quality of the produce in niche markets (e.g. Italy) and in several of the MSs that joined the EU in or after 2004 (EUn13).

Objective ii: Concentration of supply and placing on the market

This objective of establishing POs is to bring together individual supplies in a collective selling milk to a processor to enhance farmers' position in the supply chain. Every PO realises concentration of supply compared with the individual farmer. Yet at national level POs do so only to a limited extent. The survey shows that the degree of concentration of milk supply varies greatly between MSs. In only two was the total marketable production of PO members similar to the maximum amount of milk that is allowed to be covered by collective negotiations. In all other MSs where POs were active, the 63 POs covered in the survey produce 10.2 million tonnes of milk, which is a mere 7% of the EU's total milk supply. Whereas POs are unlikely to influence the aggregate EU dairy market, the concentration of supply may have an impact nationally and regionally, since concentration can also occur at those levels (e.g. spatial competition).

According to their self-assessment, the surveyed POs have been successful to different degrees in assuring that the milk of their members is collected and processed and in enhancing the position of producers in the value chain. Of the POs for which assured milk collection was an important reason for their establishment, almost all indicate that this objective was achieved.

Objective iii: Optimising production costs and stabilising producer prices

Improving and stabilising the producer price can be considered to be key objectives of POs under the Milk Package, even though they may also simultaneously pursue other goals. However, only between 25% and 30% of the POs claim that a higher and more stable price has been largely or fully realised. This suggests that, alongside successes that are achieved, there is ample room for improvement in the functioning of POs in this regard.

Conclusion with respect to the potential for POs where they have not been constituted yet

Based on the evidence obtained from the surveys, there are some hints of major reasons for having only a small number of POs in most of the MSs. The analysis of the answers of existing POs and FOs indicates that often the value added by establishing a PO is not clear, especially in countries where many farmers are member of a dairy cooperative. Starting a PO implies costs (time and money) and the benefits might come only over time but are not guaranteed. Success stories are lacking, which might also be because the regulation is only recent and market circumstances (low prices due to oversupply) are difficult. Moreover, potential members of POs lack information about and awareness of how PO could work for their benefit. The historical connotations of collectives make farmers in eastern MSs reluctant to get organised. This is a special hurdle that supporters of POs must surmount in putting forward possible gains from a PO. A policy recommendation for further promoting the use of POs is to reduce the information and awareness gap by targeted communications and information activities, including profiling success stories. Offering training (e.g. in bargaining techniques) to potential PO managers may also contribute to improving the competence of PO staff and hence the functioning and success of POs.

The measures established by the Milk Package will apply until mid-2020. As part of a discussion on extending and/or adjusting the Milk Package, this raises the question of

whether or not the legislation on POs and APOs should be extended. This study has a limited scope (see next section) and provides a preliminary assessment of POs, but nevertheless offers some relevant insights into answering this question. This research shows that POs partly contribute to the objectives for which they have been initiated. As it appears from the surveys, POs have not been successful in fully achieving all their objectives. Moreover, there are several MSs where POs have not caught on at the time of writing (mid-2016). This could be related to the start-up costs of a PO, but also to alternative organisational arrangements being available that are also able to address the needs of the producers. The latter possibility has not been addressed in this research. Although there are still a number of open questions, there is also evidence that POs have made a positive contribution to achieving one or more of the three objectives. For this reason, our recommendation is to extend the legal provision for POs and schedule a more in-depth evaluation, to help gain more definite insights into the functioning of POs.

Limitations of the study

The study contributes to generating new information on the POs and how different aspects are evaluated by the POs themselves, by FOs and by dairy processors. Nevertheless, the study also faces a number of limitations. A general limitation relates to the potential differences between stated preferences (what respondents say or claim) and revealed preferences (how respondents act) or observed information (e.g. objective measurement by comparing realised prices with a benchmark (counterfactual) and then concluding to what extent 'better' or 'more stable' prices are achieved). Other limitations that need to be kept in mind are that surveys on the POs and their functioning have been sent to and answered by the managers of the POs and not to their members, so it was not possible to cross-check to what extent PO managers and PO members have a shared position in answering the survey questions. Finally, given the size of the sample at MS level, the analysis of the functioning of the POs is only preliminary. Nevertheless, despite these limitations the study is believed to provide valuable information on the functioning of Milk Package provisions as regards POs and collective negotiations in the EU.

Analyses of the functioning of Milk Package provisions as regards producer organisations and collective negotiations

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1 Introduction

1.1 Background

A series of regulations were adopted by the European Parliament and the Council in 2012 and 2013 to implement the 'Milk Package' (261/2012; 511/2012; 880/2012). They were incorporated in the new common market organisation (CMO) in agricultural products (1308/2013). The Milk Package's objective is to strengthen the position of dairy producers in the dairy value chain and to prepare the sector to operate in a more market-driven environment, especially with the end of the quota system. Among other things, it allows Member States (MSs) to decide 'that every delivery of raw milk in its territory by a farmer to a processor of raw milk must be covered by a written contract' (Article 148 of Regulation EU 1308/2013), and it allows farmers to negotiate contract terms collectively through producer organisations (POs). It also sets out new specific EU rules for associations of producer organisations (APOs) and inter-branch organisations[1].

In 2014, 263 milk POs were recognised in the EU. Table 1.1 presents an overview of POs per country. The overview shows that the number of milk POs is significant in only a few countries.

[1] Inter-branch organisations are out of the scope of this study and hence not further discussed.

Table 1.1 Number of milk POs

Country	Number of POs in 2014
Germany	149
France	51
Italy	42
Spain	9
Belgium	3
Bulgaria	2
Croatia	2
Romania	2
Czech Republic	1
Portugal	1
United Kingdom	1
Total	263

1.2 Objectives

This study aims to assess the effectiveness and potential improvement of the Milk Package provisions, notably as regards the establishment and recognition of POs and APOs and their role in collective negotiations with milk processors.

The specific objectives that this study must meet are the following:

1. Evaluate the functioning of existing POs and APOs formally recognised under the Milk Package.
2. Evaluate the potential for POs where they have not been constituted yet.
3. In the light of the analysis, draw up recommendations to improve the usefulness of the Milk Package provisions.

1.3 Approach: data, information and their interpretation

The data and information for this study have been retrieved from the following sources:

1. Publicly available statistics (mainly Eurostat and the Milk Market Observatory) and reports that provide the key features of the EU milk and dairy sector in terms of production and structure.
2. EU legislation and reports to present the Milk Package provisions as regards POs and collective negotiations, and the criteria for PO recognition in each MS. This information is used either for the questionnaires or to embed the findings in existing knowledge.
3. Three electronic surveys: one sent to all POs in the EU, one to a selection of farmer organisations (FOs) in the EU and one to members of the European Dairy Association (EDA), the association of milk processors. These surveys provide original data on the functioning of POs or the causes for the absence or low numbers of POs in a specific country.
4. In-depth interviews with selected POs and FOs that responded to the electronic survey. These provide mainly qualitative information such as motivations, opinions and experiences of the functioning of POs or the low number of POs in specific countries.

The answers to the questions in the surveys and in-depth interviews are the basis for assessing the functioning of existing POs and APOs formally recognised under the Milk Package and evaluating the obstacles to establishing POs (what are the potentials for POs where they have not been established yet). To answer the research questions we use a framework that links indicators and answers from survey questions to the functioning of POs under the Milk Package.

Assessing the functioning of POs implies examining to what extent they achieve their objectives. The key objective is to enhance or improve the position of dairy producers in

the value chain. From the legislation (Regulation (EU) 1308/2013) it follows that more specific objectives that a PO may pursue may include:

(i) ensuring that production is planned and adjusted to demand, particularly in terms of quantity and quality;

(ii) achieving a concentration of supply and placing on the market of products produced by its members;

(iii) optimising production costs of its members and stabilising producer prices.

Note that, since POs have the freedom to choose one or a combination of the three specific objectives mentioned above, it is enough for a PO to be successful if it contributes to achieving (at least) one of these objectives. So, in assessing the functioning of POs, the specific objectives should be assessed separately.

POs are thus instruments to improve the position of their members in the dairy value chain and to contribute to the good functioning of markets. Just like the cooperative movement, they rely on the principle that by collective action a countervailing power can be created to (re)balance economic interest in more fairly than without this collective action. Another key principle underlying POs is that of tailoring production optimally to the needs expressed in the market (in terms of quality and quantity). A third principle is to rely on cooperation and collaboration among dairy producers to rationalise production and optimise the costs of production, as this can potentially be better achieved by cooperation rather than by each producer acting on its own (Falkowski and Caian, 2016).

From the economic theory of imperfect competition, it is known that, if competition in the dairy value chain is imperfect (e.g. oligopsony power in the downstream processing industry), it will lead to economic rents for a specific actor in the value chain at the cost of others, which might result in lower purchase prices or limit deliveries from milk producers. In such a case, POs can contribute to rebalancing market power and push for a more competitive equilibrium (potentially including a better milk price and a larger amount of milk collected). The extent to which imperfect competition plays a role is difficult to assess, but there are indicators which are at least informative, such as the structure of the dairy industry (e.g. cooperative versus private or size distribution within the dairy-processing industry), the market asymmetry between different stages of the value chain (e.g. number of dairy producers per processor or its reciprocal, the number of dairy processors or buyers of raw milk per farmer).

Transaction costs theory focuses on the transaction costs associated with contracting. Collective action through POs will involve transaction costs. Such costs, when they are expected to outweigh the benefits, can act as a barrier to POs entering the dairy value chain. Moreover, when start-up costs are high, while the benefits are limited, uncertain and spread over a long time horizon, the effect may be similar. The start-up cost barrier might be reduced by public support for producer cooperation and the setting up of POs (as is envisaged in the Common Agricultural Policy). The transaction cost aspect also includes costs associated with achieving consensus among members, the perceived administrative burden, the effort associated with managing the PO and the negotiations with parties buying the milk.

From the theory of value chains (here interpreted to be an integration of insights from the fields of industrial organisation and industrial economics), it turns out that collaboration within and across different stages of the dairy value chain can contribute to achieving efficiency gains, implementing innovations and tailoring actions taken at different levels in the value chain to each other (e.g. commitments to deliver a certain volume of milk which match the sourcing objectives of processing industries; applying quality standards along the value chain). This also includes (contractual) agreements about the application of a milk-pricing formula and the distribution of (price volatility) risk along the different stages of the value chain.

1.4 Report outline

The report has the following structure. Chapter 2 presents a concise overview of some of the key features of milk production and contractual agreements, and the structure of the milk producers and dairy industry in the EU. This chapter has two objectives: first, to give a general insight into the concentration of milk production in the EU, in geographical and economic terms, and, second, to indicate to what extent imperfect competition and an imbalance of bargaining power exist in the dairy value chain in some EU MSs. The provisions of the Milk Package legislation, its aim and its requirements are highlighted in Chapter 3, including how EU legislation is applied in the EU MSs. Chapter 4 sets out the data collection and sampling methods with regard to the survey and in-depth interviews with each of the groups of stakeholders involved in the study. Chapters 5 and 6 present the results of the surveys, with a focus on assessing the functioning of the POs (and APOs). In Chapter 5, the focus is on the functioning POs, while Chapter 6 focuses on answers to questions addressing the potential for establishing POs where they do not yet exist or low numbers have been constituted. In Chapters 5 and 6, boxes are added to briefly illustrate and highlight some of the specific comments made by the respondents. Chapter 7 brings together all the input from the surveys and in-depth interviews and compares the information from these sources with the objectives of the Milk Package provisions. Chapter 8 summarises key findings and concludes.

2 Production and structure

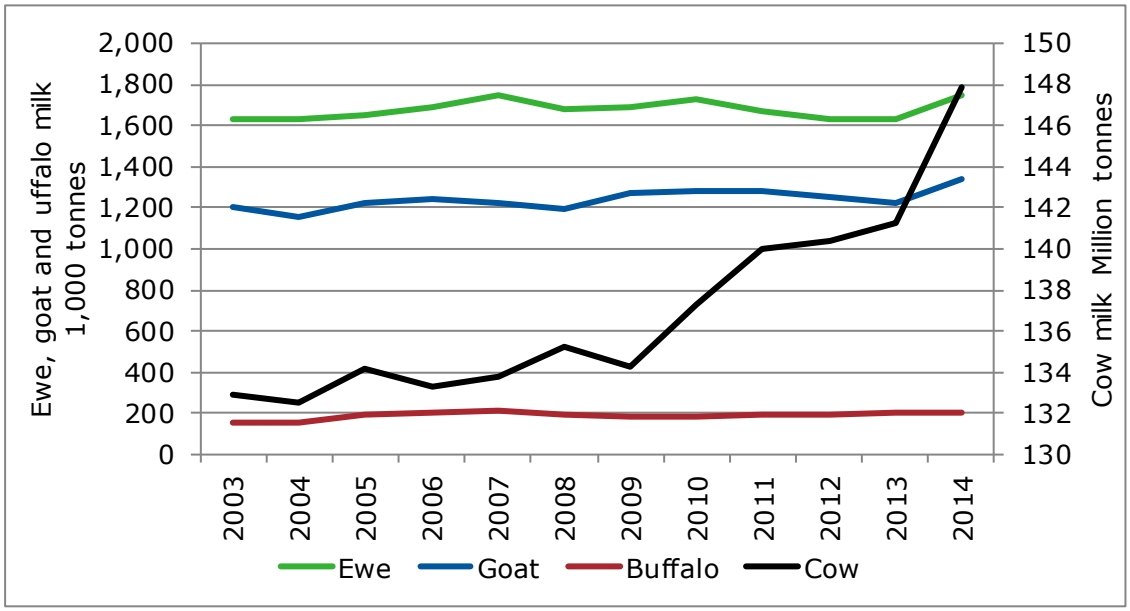
This chapter provides some background information on the EU's milk and dairy market and the structure of the European dairy sector, with the aim of giving a general insight into the concentration of milk production in the EU, in geographical and economic terms. The concentration of milk processing in a few large dairy companies might indicate imperfect competition and an imbalance of bargaining power in the dairy value chain. The latter could be an argument for establishing POs, although in some MSs concentration in the supply chain could also be due to existing cooperatives owned by farmers.

Section 2.1 presents a concise overview of the amount of milk collected in EU MSs from different animal species, the contractual arrangements under which the milk is sold. Subsequent sections in this chapter show the farm and firm sizes of milk producers and processors respectively. The structure highlights the size of producers and processors in EU MSs.

2.1 Milk collection and contracting arrangements

EU milk production is mainly cow milk: in 2014, 148 million tonnes (Figure 2.1), which is 97.8% of all milk collected in the EU (Eurostat: apro_mk_pobta). The remaining part is collected from ewes (1.2%), goats (0.9%) and buffaloes (0.1%). Over 2003-2014, the collection of goat milk (1.5%) grew faster than that of cow milk (1.1%). The collection of ewe milk showed the lowest increase (0.7%). Buffalo milk grew the fastest, however the volume remained low.

Figure 2.1 Milk collection per animal species in the EU28



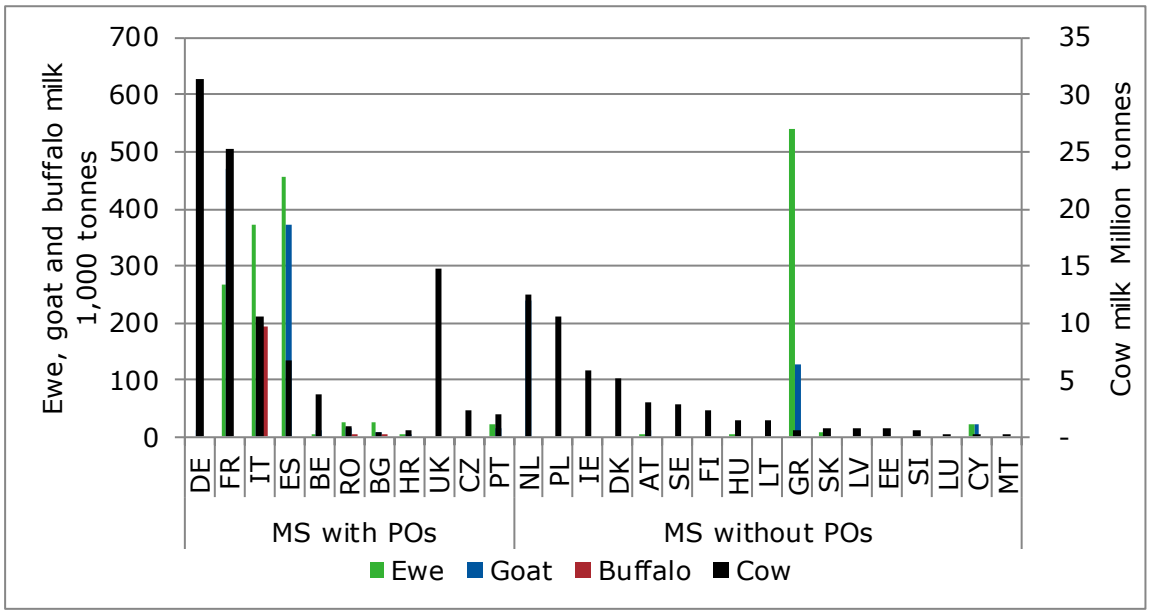
Source: Based on Eurostat (apro_mk_pobta)

EU cow milk production is geographically concentrated. The three MSs with the largest proportions of EU milk production (Germany, France and the UK) account for almost 50% of the total milk collection, and 85% of the cow milk is collected in 10 MSs (see Figure 2.2). In contrast to cow milk, which is collected in all MSs, milk from other animal species is collected in only a few countries. Over 90% of the ewe milk is collected in four MSs: Greece, Spain, Italy and France. A similar observation can be made for goat milk: 90% is

collected in France, Spain, the Netherlands and Greece. Almost all EU buffalo milk (98%) is collected in Italy.

Figure 2.2 indicates the milk collection per MS per animal species. The countries are arranged in decreasing order (see note to figure), first according to the number of POs in the MS (resulting in countries with and without POs) and then according to the total quantity of milk collection. POs exist in 11 MSs (see Chapter 4 for more details). As the figure shows, there is no clear link between the size of the milk collection and the existence of POs: POs exist in countries producing large and small volumes of milk.

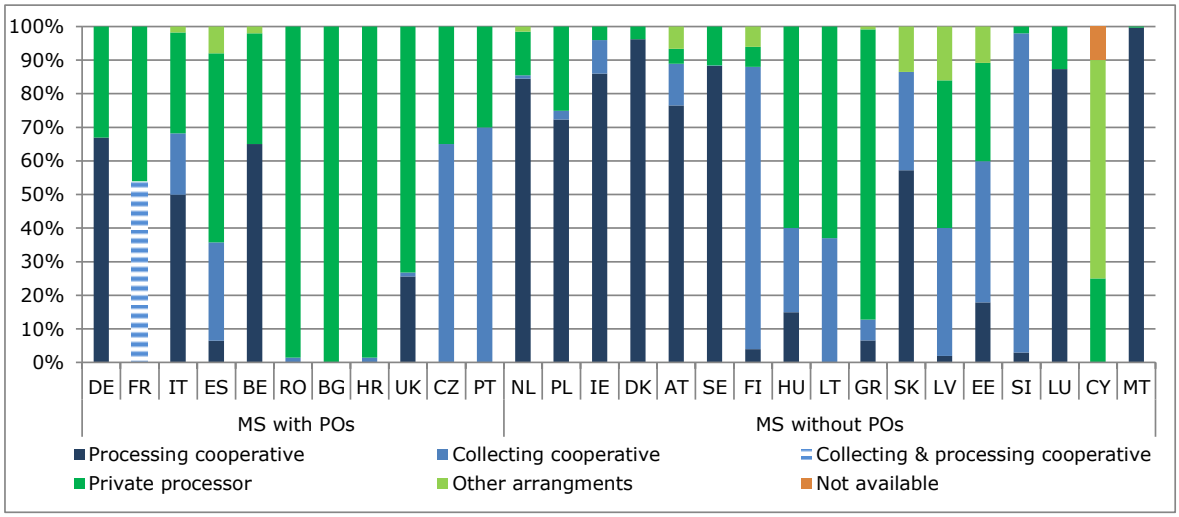
Figure 2.2 Milk collections per animal species in EU Member States



Source: Based on Eurostat (apro_mk_pobta)
Note: Countries are arranged in decreasing order, first according to the number of POs in the MS (indicated as MS with POs) and then according to the total quantity of milk collection. MSs without a PO are indicated as MS without POs.

Figure 2.3 shows by which type of contractual arrangement the milk is collected in each of the EU28 MSs. The figure shows that there is much variety between the MSs in terms of to whom farmers deliver the milk that they produced. At the EU level, though, farmers deliver most (64%) of the milk produced to collecting or processing cooperatives (EC, 2014). Cooperatives are enterprises jointly owned by the member-farmers, established for the purpose of providing goods and services to those member-farmers. Processing cooperatives are active in most of the 10 MSs where most of the cow milk is produced. In the UK and Spain (which are in the top 10 milk-producing countries), the private processors collect and process the largest proportion of milk. The presence of cooperatives might be a reason for not establishing POs, given the assumption that farmer-owned cooperatives would act in the interest of their members and as a countervailing power against (private) processors. Cooperatives are particularly strong in the Netherlands, Poland, Ireland, Denmark, Austria and Sweden, all countries without any POs. However, in Germany, France and Italy, the three countries with the largest numbers of POs, cooperative contractual arrangements also have a significant proportion (above 50%). Looking at this issue from the other perspective, in Bulgaria, Croatia and Romania all contractual arrangements are with a private processor, yet there are only two POs in each of these countries. Thus, these figures tend to suggest that POs play their role where private processors are strong, whereas in the main milk-producing countries with strong cooperatives no POs exist.

Figure 2.3 Percentage of cow milk deliveries by type of contractual arrangements



Source: Based on EC (2016)
Note: Countries are arranged in decreasing order, first according to the number of POs in the MS (MS with POs) and then according to the total quantity of milk collection. MSs without a PO are indicated as MS without POs.

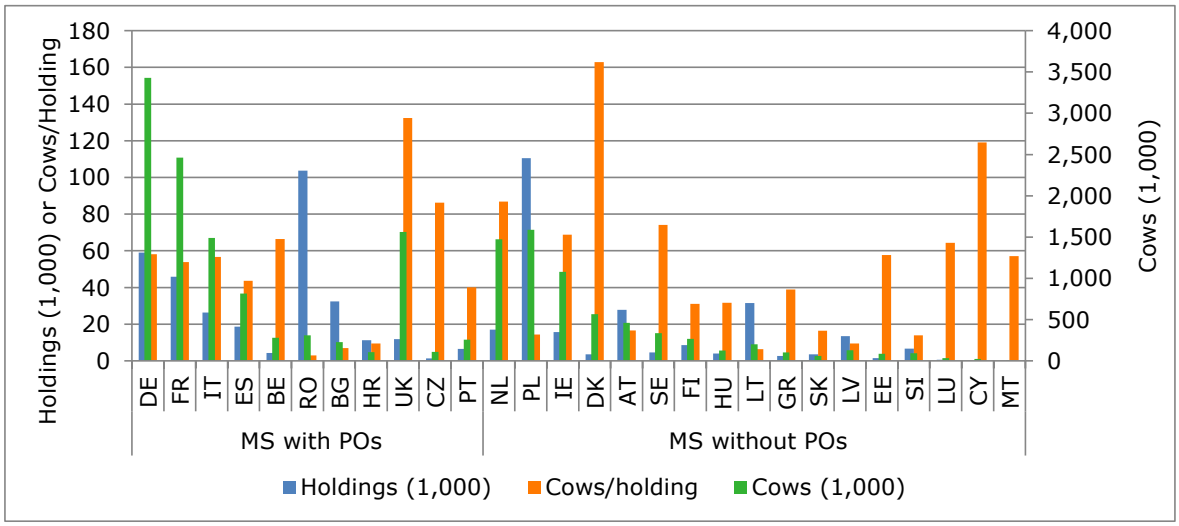
2.2 Specialist dairy farms

Most milk in the EU is produced by specialist dairy farms[2]. In 2013, the 28 EU MSs counted 570 000 specialist dairy farmers that had 18.6 million dairy cows, resulting in an average of 31 cows per holding. The average number of cows per holding was above 100 in Denmark (163), the UK (132) and Cyprus (119). The number of cows per holding was below 10 in Romania (3), Latvia (6), Bulgaria (7) and Croatia (9). The average number of cows per holding in MSs with POs was 34, slightly higher than the EU28 average. In MSs without POs, the average number of cows per holding was 26.

The annual milk production per cow in 2013 ranged between 3.4 tonnes in Romania and 9.0 tonnes in Denmark (DG-AGRI, 2016). Those countries are also the two extremes in the number of cows per holding. The EU average is 6.5 tonnes per cow. An average dairy holding in Denmark supplies 1 460 tonnes annually, whereas the average holding in Romania supplies only 10 tonnes, compared with an EU average of 206 tonnes per holding. The countries with lowest average levels of milk production per holding are Romania (10 tonnes), Bulgaria (26 tonnes) and Croatia (33 tonnes); these three MSs have two POs each.

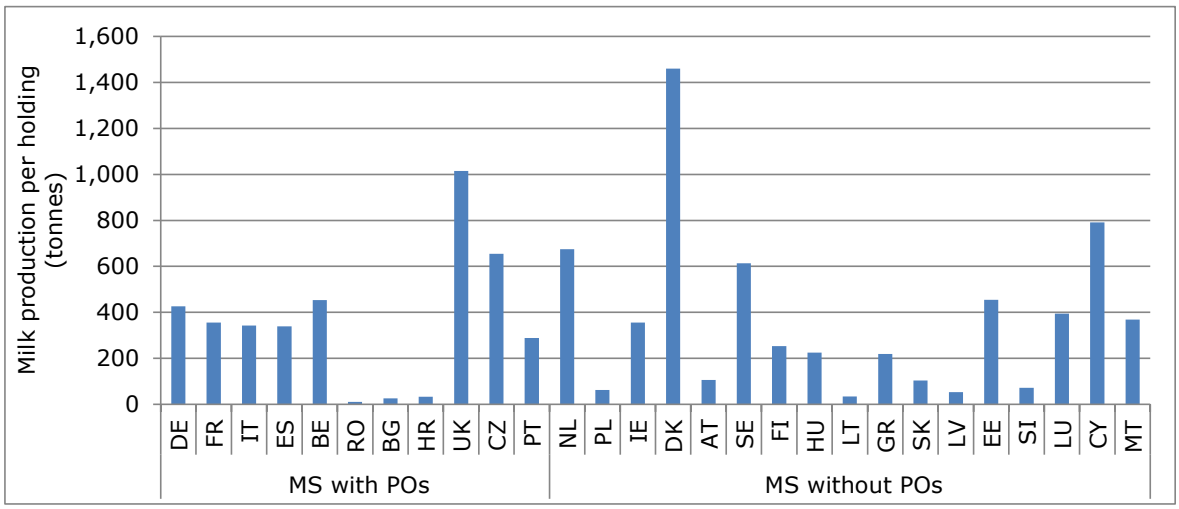
[2] Defined as farms in which at least two-thirds of the standard gross margin comes from the production of milk.

Figure 2.4 Numbers of holdings, cows and cows per holding for EU specialist dairy farms



Source: Based on Eurostat [ef_olslsuft]

Figure 2.5 Estimated average milk production per specialist dairy farm



Sources: Calculation based on Eurostat (apro_mk_pobta) and DG AGRI (2016).
Note: Milk production per holding is number of cows (Eurostat: apro_mk_pobta) times the average milk production per cow (DG AGRI, 2016).

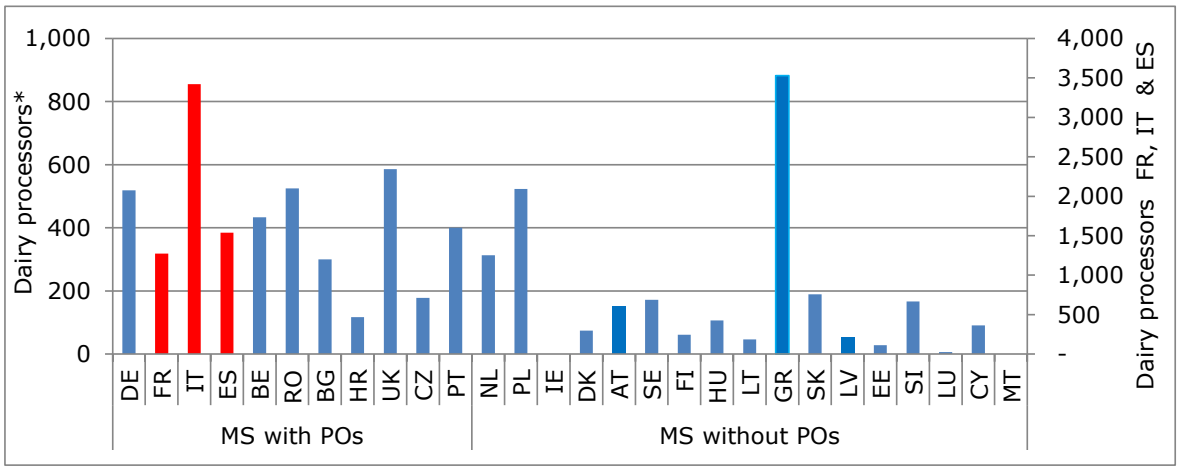
2.3 Milk processors

Another indicator that provides information on the market structure (and hence the extent to which market imperfection may play a role) is the dairy-processing firm size distribution[3]. There are quite a number of indications that the dairy industry is dominated by a small number of big companies. For instance, some of the largest European dairies are among the 10 largest dairies of the world, each having a turnover of more than EUR 5 billion (Hanisch et al., 2013). Moreover, the top 20 companies processing milk in the EU process over 70% of EU milk (Promar International, 2017). Another perspective for depicting the market structure is to point out the number of processors to which a farmer can choose to deliver milk. In the EU, over 12,000 milk processors were active in 2013, of which 3,420 were in Italy (see Figure 2.6). Most countries have between 10 and

[3] Based on NACE classification NACE10.5 (EC, 2008).

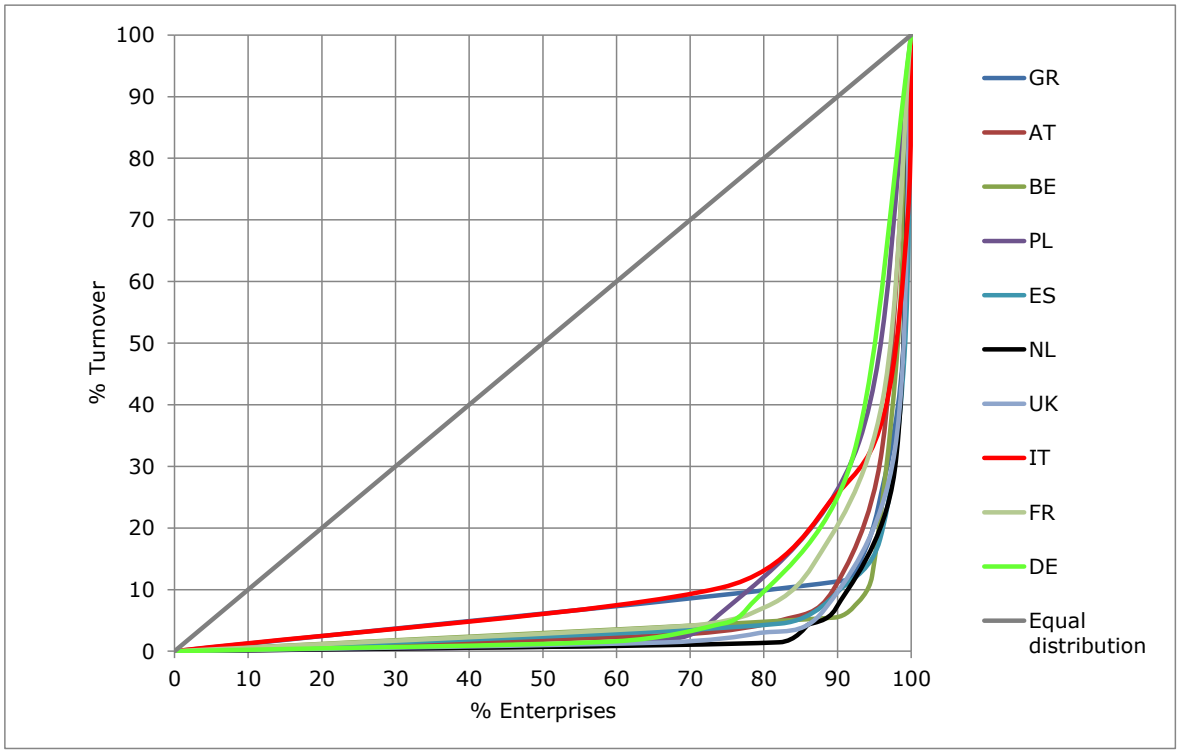
hundreds of milk processors. These numbers seem rather large. However, given the definition, farms processing their own milk are also included in these numbers. Nevertheless, based on these numbers, Figure 2.6 indicates that the number of processors is generally higher in countries with POs than in countries without POs. Hence, in countries with POs, farmers seem to have more options regarding to whom to deliver their milk than in countries without POs. From that observation, one might conclude that the establishment of POs in the countries where they are recognised was not caused by farmers having (too) few options to sell their milk to. However, to conclude that dairy processors do not exercise market power — because there are so many — may be too hasty, as to evaluate the processor's position in the value chain one also has to look at the size distribution of dairy processors in the EU.

Figure 2.6 Number of milk processors in 2013



Source: Eurostat SBS.
* Except milk processors in FR, IT and ES; these are shown on the secondary vertical axis.

Figure 2.7 Lorentz curves of % dairy processors and % turnover in 2013 per MS



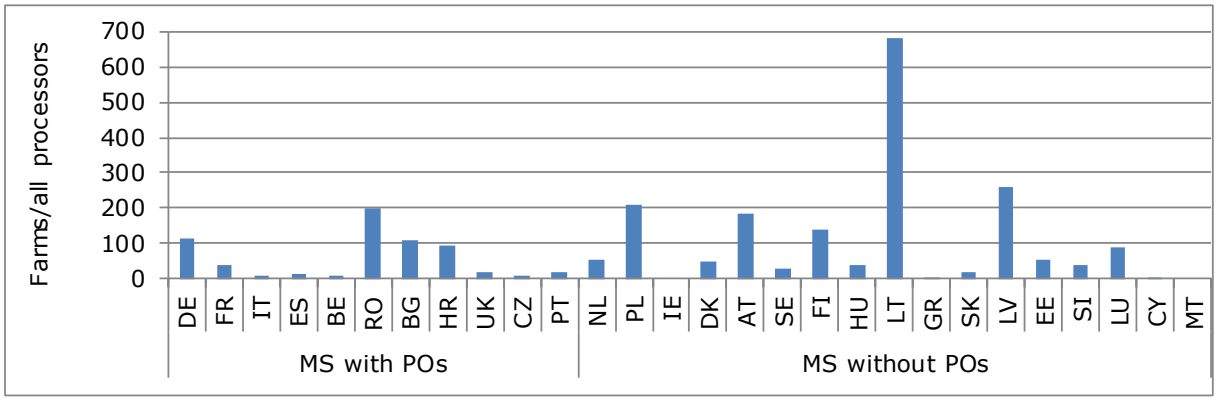
Source: Based on Eurostat SBS.

This size distribution of dairy and food processors is rather skewed: a large number of processors have a small proportion of any MS's total turnover, and a small number of processors have a large proportion of turnover (Wijnands and Verhoog, 2016). Figure 2.7 shows the situation in MSs with at least 1% of EU total turnover and sufficient data. Some differences between MSs can be observed. In Italy, 90% of processors account for 25% of the country's total turnover, while in the Netherlands 90% of the processors account for 7%. In other words, 10% of processors count for 75% of national turnover in Italy and 93% in the Netherlands. Hence, these figures indicate that in quite a number of countries dairy processing is dominated by a few big companies. This holds for countries with and without POs. This suggests that there is no clear link between dominance of large dairy processors — an indication of market imperfection — and the establishment of a PO.

2.4 Dairy farms and milk processors

In the previous sections, we discussed the average size of the specialist dairy holdings and the structure of the milk-processing sector. The bargaining power of producers depends on the number and size of raw milk suppliers and the number of the processors. To give some insight into this, we expressed the number of specialist dairy holdings over the number of milk processors. The result is that on average 47 farms exist per milk processor in the EU. Figure 2.8 shows that in nine countries this ratio is more than 100 farms per processor. The processing scale in Lithuania is large, which means that the ratio is almost 700 farms per processor. At the other end of the spectrum — in Italy, the Czech Republic, Greece and Cyprus — the ratio is below 10 farms per milk processor.

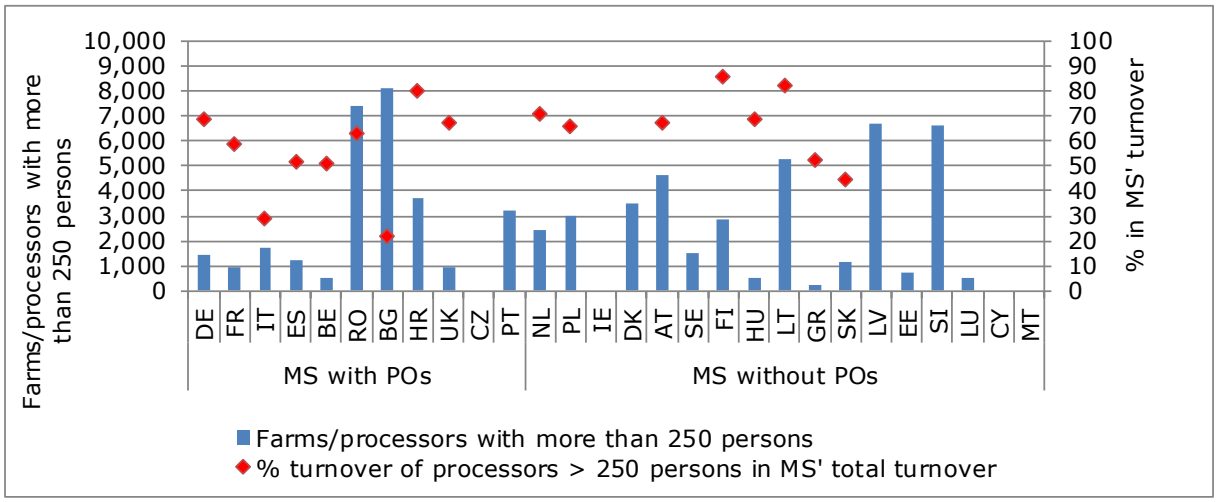
Figure 2.8 Number of specialist dairy farms per milk processor in 2013



Sources: Calculations based on Eurostat databases.

We have already discussed the skewed size distribution in the milk-processing industry. The Eurostat statistics allow comparison of the numbers of specialist dairy holdings and of milk processors with a certain number of employees. For this purpose, we took the largest processors, namely those employing more than 250 persons. These large processors generally have more than 50% of the total dairy industry turnover in an MS (see Figure 2.9; note that there are data for only 17 MSs). For these large processors, bundling of milk supply will lower their transaction costs. The costs of collecting and negotiating will be lower per unit of quantity, if larger quantities can be supplied. However, opportunities for farmers to negotiate depend on the number of processors in their region.

Figure 2.9 Number of specialist dairy holdings per milk processor and percentage of MS's total turnover in 2013, for processors with more than 250 employees



Sources: Calculations based on Eurostat databases.

The analysis of the milk and dairy-processing sector shows that in each of the EU MSs the sector consists of a large number of farmers producing milk and many dairy-processing firms purchasing this milk, although in some MSs processing is rather concentrated in one or a few firms. However, looking at the number of possible purchasers of milk in each MS, there is no evidence of farmers having so few options to

sell their milk that dairy companies could possibly exercise a monopolistic type of behaviour such as controlling farm prices.

3 Producer organisations in the dairy sector

3.1 Introduction

As noted before, the aim of this study is to assess the functioning of POs and APOs as they are formally recognised under the Milk Package.

POs already have a long history: in the fruit and vegetable sector, they were already established in the 1960s (Regulation 159/66/EEC). Recognition by the MSs became required in 1996 (Regulation EU 2200/96).

To address issues in the dairy sector (milk crisis) a High-Level Group (HLG) was created in 2010 to discuss the need for medium- and long-term arrangements in the milk and milk products sector in the context of abolishing the milk quota, which was planned for 1 April 2015. The objective was to reflect on new arrangements that would contribute to stabilising producer income and enhancing transparency in the market (EC, 2012). One of their recommendations regarded the need to increase the bargaining power of primary producers within the dairy value chain. In addition, the European Council mentioned that the low concentration in milk supply could be a reason for the low bargaining power of primary producers of milk (EC, 2012).

It is against this background that the Milk Package was adopted in 2012. The Milk Package contains several measures, including a provision for compulsory written contracts between milk producers and processors, the possibility of negotiating contract terms collectively through POs, new specific EU rules for inter-branch organisations, allowing actors in the dairy value chain to engage in dialogue and carry out certain activities, and a series of measures enhancing transparency in the market. The measures established by the Milk Package will apply until mid-2020.

In this chapter, the POs and APOs, as they are applied in the dairy sector, will be further discussed, with a focus on their main characteristics (Section 3.2). MSs have to define certain requirements with respect to POs. The implementation options they have made are discussed in Section 3.3.

3.2 Regulation on POs and APOs

For the dairy sector, legislation on POs is provided in the Common Market Organisation Regulation (EU) 1308/2013. According to this regulation, MSs shall recognise POs in the milk sector on the initiative of producers and pursuing a specific aim, which may include (Article 152(3) of Regulation 1308/2013):

(i) 'ensuring that production is planned and adjusted to demand, particularly in terms of quantity and quality;

(ii) concentration of supply and the placing on the market of products produced by its members, including through direct marketing;

(iii) optimising production costs and returns on investments in response to environmental and animal welfare standards, and stabilising producer prices'.

MSs can lay down criteria about the minimum number of members of POs and/or the covering of a minimum volume (Article 154 of Regulation EU 1308/2013). See Section 3.3 for further details.

Through POs, dairy producers can collectively negotiate contract terms with milk processors or raw milk buyers. With respect to the volume of milk that a PO can negotiate, clearly defined restrictions apply (Article 149 of Regulation EU 1308/2013):

1. 'the volume of raw milk covered by such negotiations does not exceed 3.5% of total Union production,

2. the volume of raw milk covered by such negotiations which is produced in any particular Member State does not exceed 33% of the total national production of that Member State, and
3. the volume of raw milk covered by such negotiations which is delivered in any particular Member State does not exceed 33% of the total national production of that Member State.'

An MS may, on request, recognise an APO in the milk and milk products sector if the MS concerned considers that the association is capable of carrying out effectively any of the activities of a recognised PO (Article 156 of Regulation EU 1308/2013), and that it fulfils the conditions laid down in Article 161(1). Little information is available on APOs. Criteria have been set by six MSs: Germany, Latvia, Lithuania, Hungary, Austria and Romania. Only Germany states that it has three APOs (EC, 2016).

3.3 Minimum criteria for POs

MSs can set minimum criteria for recognition as a PO in the milk sector (Table 3.1). Ireland and Malta have no legislation on minimum criteria. National legislation on POs already existed in Germany, France and Portugal before 2012.

Table 3.1 Minimum criteria set by MSs with recognised POs

	MS	National legislation (planned or adopted)	Minimum number of farmers	Minimum marketable production (1,000 tonnes)[a]	Minimum contract duration[b]	Additional or other criteria
MS with POs	DE	Nov 2013	5	–[c]	No	
	FR	Existing before 2012	200	Or 60	5 Y	PDO/PGI cow milk 25 farmers or 7,000 tonnes if 55% is delivered to the same buyer
	IT	Dec 2012	5	3	1 Y	
	ES	Nov 2011	–	200	1 Y	Ewe and goat milk 30,000 tonnes; Balearic and Canary Islands and certain quality marks, cow milk 10,000 tonnes and ewe/goat milk 1,000 tonnes
	BE	Dec 2012/Aug 2013	40/20	–	No	Flanders, 40 farmers or 10 organic farmers; Wallonia, 20 farmers
	RO	Q1 2014	5	0.035	6 M	
	BG	Jan 2015	5	–	6 M	
	HR	Jun 2013/ update 2015	7	3	6 M	
	UK	Apr 2013	10	6	No	
	CZ	Oct 2012	10	–	No	
	PT	Existing before 2012	12	See last column	6 M	EUR 8 million for cow milk and EUR 1 million for ewe and goat milk
MS without POs	NL	Oct 2014	15	–	No	
	PL	Nov 2013	12	2	?	
	IE					No information available
	DK	Early 2013	5	3	No	
	AT	Oct 2012	20	Or 3	No	
	SE	May 2013	10	6	No	
	FI	May 2012	15	3	No	
	HU	Dec 2012, changed Jan 2016	–	See last column	6 M	15,000 tonnes for cow milk, 600 tonnes for sheep milk and 500 tonnes for goat milk
	LT	Oct 2012	20	1	No duration	20 farmers and at least 200 cows
	GR	Sept 2013	5/20	0.5/5	-	
	SK	Dec 2012	5	–	No duration	
	LV	Jan 2013	10	0.125		
	EE	Sept 2012	–	See last column		5% of domestic production
	SI	Feb 2014	20	2	1 Y	
	LU	March 2014	10	–		
	CY	June 2013	35	20	1 Y	
	MT					No information available

Source: EC (2016).
M, months; PDO, protected designation of origin; PGI, protected geographical indication; Y, years.
[a] Cumulative with the requirement for numbers of farmers, unless indicated otherwise.
[b] 'No' means no written contracts/offers compulsory.
[c] '-' not a criterion

One criterion is a minimum number of farmers, for most MSs ranging between 5 and 20 farmers. A few MSs have no lower limit for the number of members. However, several MSs set higher threshold levels: 35 in Cyprus, 40 in the Flanders part of Belgium and 200 in France[4]. The second criterion, cumulative with the first (except for a few countries), is the minimum marketable production. Some countries have no minimum amount; most other MSs have levels between 35 and 6,000 tonnes. Higher levels are found in Hungary (minimum 15,000 tonnes), Cyprus (20,000) and France (60,000), and the highest minimum level, 200,000 tonnes is implemented in Spain. The criteria can be different for organic farmers, ewe or goat milk producers and producers in a specific geographical area (EC, 2016).

[4] For exceptions in Belgium and France, see Table 3.1, column 'Additional or other criteria'.

In 13 MSs, written contracts are compulsory, notably in MSs with a limited number of 'cooperative structures'. The duration of the contract ranges mainly between 6 months and 1 year. France is an exception, with a minimum contract duration of 5 years (EC, 2016). National legislation in the UK and Belgium mentions 'codes of best practices on contractual relationships' as additional guidelines for PO contracts with buyers. Note that in Germany, for deliveries negotiated through POs, model contracts are commonly used, which, in addition to quality, price parameters and duration, will also comprise more details on the milk volume in future (EC, 2014). In addition, a derogation from the obligation of written contracts is possible. That is relevant in MSs where cooperatives are important. Dairy cooperatives whose statutes, or the rules and decisions based thereon, have provisions with effects similar to those of the basic conditions for contracts laid down in this Regulation should, in the interest of simplicity, be exempted from a requirement that there be a written contract (Article 148 of Regulation EU 1308/2013).

4 Data collection: surveys and in-depth interviews

This chapter sets out the data collection and the sampling methods on data with regard to the three groups of stakeholders involved in this study:

1. recognised POs, whose answers are used to evaluate the functioning of POs (objective 1 of this study);
2. FOs, whose answers are used to evaluate the potential of POs (objective 2 of this study);
3. milk processors that will also provide important information required to evaluate the potential of POs (objective 2 of this study).

The information gathered from these three groups will be analysed in Chapters 5 and 6. Based on these analyses, recommendations are drawn on the improvement of the Milk Package provisions (Chapter 7).

The information gathering for the POs and FOs took place in two rounds. First, an electronic survey was launched and, second, based on the responses to the survey, a number of POs and FOs were selected for in-depth interviews. Milk processors were contacted using an electronic survey only.

The surveys and in-depth interviews were carried out in national languages. The original questionnaires, email invitations and European Commission (EC) recommendation letters were drafted in English. These were translated by the EC into the national languages of the MSs and used in the electronic surveys for POs and FOs. Several open questions invited respondents to add comments. Most of the in-depth interviews were held in the national languages, and the answers were then translated into English.

4.1 Producer organisations

Information on the functioning of POs was gathered in two steps: an electronic survey and in-depth interviews.

1. Electronic survey

   Recognised POs were invited in their own language to fill in a questionnaire (Appendix 1) addressing five topics:

   a. general information such as year of establishment, initiators, milk production, type of purchasers, motivations for establishing a PO and the extent to which these motivations have been realised (Section A);

   b. activities performed by the PO and its priority (Section B);

   c. aspects of contractual negotiations (Section C);

   d. organisation and governance such as requirements for becoming a member, voting rules, managing the PO and support (Section D);

   e. challenges and solutions (e.g. benefits, drawbacks and potential for more POs in the MS; Section E).

   The sample of POs covered by the survey is based on information provided by the Directorate-General for Agriculture and Rural Development (DG AGRI). This included information on email addresses of POs for sending the electronic survey, except in Germany and in Italy. In Italy, contact information was available for 25 out of the 42 POs. In Germany, Bayern MeG contacted its members and provided the email addresses of 35 members. In addition, the Deutscher Bauernverband contacted all other POs in Germany by mail, making 149 POs covered in Germany. Overall, the response rate to the electronic survey was 23%. Germany had a relatively low response rate, although the number of the POs responding was the largest in any country. The German PO responses were mainly from the Bavarian region (16 out of 22), which suggests a rather strong geographical bias. In Italy, 11 out of the 25

invited POs (44%) responded. The response rate was moderate in France (26%) and around 50% in Spain and Romania. All POs approached also responded in Belgium, Bulgaria, Croatia and the United Kingdom, where the numbers of POs are quite small (see Table 4.1). The only PO in Portugal did not respond, though. In the Czech Republic, the invitation to take part in the survey was sent to the eight POs that had existed in 2013, but seven of them were no longer recognised as POs in 2014.

In the analyses below, the POs from which data have been collected will be referred to as 'Electronic survey POs'. No weighing will be applied; each observation will have the same weight irrespective of the number of responses and the amount of milk delivered by the PO or in the particular MS. Country-specific deviations will be highlighted in the analyses of the data.

2. In-depth interviews

Based on the response to the electronic survey, a limited number of POs were selected for in-depth interviews. The in-depth interviews were also held in the local languages, except for Croatia, Portugal and Romania, where they were in English or German. The number of in-depth interviews was fixed by DG AGRI: all POs should be orally interviewed if fewer than five exist in that MS, and in Germany, Spain, France and Italy five POs were selected (see Table 4.1). The Czech Republic was an exception: besides the PO that existed in 2014, four POs that were active in 2013 but stopped in 2014 were also interviewed, with a focus on the lessons to be learned from discontinuing POs.

For countries with more than five responses on the electronic survey, the selection of POs to be interviewed was based on the valid responses available on 15 February 2016. For the Czech Republic, we selected the existing PO and used the selection procedure on the seven POs that stopped in 2014 to select the additional four POs for the in-depth interviews.

The interviewers followed a prescribed protocol in the in-depth interviews. At least the following three topics had to be addressed:

1. organisational and legal circumstances and challenges: experiences of farmers in setting up a PO;
2. the internal decision-making structures and processes of the PO;
3. the benefits and challenges farmers obtain from being members of a PO.

Furthermore, at least one other topic had to be discussed during the interview. This topic depended on the answers provided in the electronic survey. The reporting had to be structured around specific elements and in English.

The information from these in-depth interviews will be referenced as 'in-depth interviews POs' (IDIP).

Table 4.1 Number of invited POs, responses, and sample and response of in-depth interviews

Country	POs in 2014	Responses to electronic survey (%)	In-depth interviews	
			Planned	Response
Germany	149	22 (15)	5	5
France	51	13 (25)	5	5
Italy	42	11 (26)	5	4
Spain	9	5 (56)	5	5
Belgium	3	3 (100)	3	3
Bulgaria	2	2 (100)	2	2
Croatia	2	2 (100)	2	1
Romania	2	1 (50)	2	0
Czech Republic[a]	1	3 (38)	5	5
Portugal	1	0 (0)	1	0
UK	1	1 (100)	1	1
Total	263	63 (23)	36	31

Sources: EU (2015) for number of POs in 2014; electronic survey POs and IDIP.
[a] We invited all eight POs that had been recognised in 2013 in the Czech Republic; one still existed in 2014. The response rate is based on POs in 2014 except for the Czech Republic.

4.2 Farmer organisations

In countries with few or no recognised POs, information on the opinion of FOs was collected following a similar approach used for the POs, that is through an electronic survey and in-depth interviews.

1. Electronic survey

   All FOs in the sample were sent a letter from the EC by e-mail, inviting them to fill in an attached questionnaire (Appendix 2) in their local language. The questionnaire addresses two topics:

   a. Reasons for the low number of POs. This topic corresponds to a question in Section E of the PO questionnaire.

   b. Reasons for farmers to join a PO. The question corresponds to a question in Section A of the PO questionnaire.

   The sample of FOs is based on several sources:

   1. All full members of the Committee of Professional Agricultural Organisations and General Confederation of Agricultural Cooperatives (Copa-Cogeca) indicated on their website[5] were selected, resulting in contact information for 59 organisations. In Lithuania, the national organisation distributed the questionnaires to others, notably regional organisations in the country. This resulted in two additional responses. These two were added to the number of invited organisations, resulting in 61 organisations from this source.
   2. The umbrella organisation of the European Council of Young Farmers (CEJA) in Brussels provided contact information for 22 organisations.
   3. A similar approach was used for the European Milk Board (EMB), resulting in contact details for 18 organisations.
   4. In addition, the EU office of La Via Campesina, the International Peasants' Organisation, provided contact details for another eight organisations[6].

[5] http://www.copa-cogeca.be/Main.aspx?page=CopaMembers
[6] La Via Campesina provided contact information for nine organisations. The organisation indicated in Spain was already on the list of Copa-Cogeca. That organisation is only included on the Copa-Cogeca list and not on the list of La Via Campesina.

5. The aforementioned organisations did not include organisations in Bulgaria and Romania. DG AGRI provided contact information for 10 organisations in these countries.

The total number of organisations contacted was 119, covering all EU MSs.

Almost half (57) of the contacted FOs responded to the questionnaire. 38 of them were FOs contacted through Copa-Cogeca. Detailed information is provided in Appendix 4 and an overview can be found in Table 4.2. The responses covered 24 of the 28 EU MSs, as no FOs from four small countries replied. In the presentation of the results, we shall make a distinction between FOs that are members of Copa-Cogeca and all others (indicated as 'other FOs').

In the analysis, the data collected through the survey will be referenced as 'Electronic survey FOs'. No weighting will be applied; each observation has the same weight irrespective of the number of responses and the amount of milk delivered. Deviations in specific MSs are presented in the analysis.

2. In-depth interviews

In countries with more than 0.9% of the EU total milk production, two in-depth interviews were planned. Countries with less than 0.9% of the total EU milk production are not covered in the sample because of their limited relevance at total EU level. The countries excluded are Estonia, Greece, Croatia, Cyprus, Latvia, Luxembourg, Malta, Slovenia and Slovakia. Furthermore, Germany is not included, as it has many POs and the objective of interviewing FOs is to understand the reasons of the low number or absence of POs. Data gathering in the remaining nine MSs was limited to electronic surveys.

The local language was used in countries that have POs (except Croatia, Portugal and Romania) and in regions where they speak Dutch, German or Polish. All other interviews were in English.

A protocol similar to the one used in the in-depth interviews of POs had to be followed by the interviewers. At least the following two topics had to be addressed:

1. reasons for the low number of dairy POs in your country;
2. relevance of the Milk Package provisions.

Depending on the answers in the questionnaire, other topics could be discussed (not obligatory).

In 12 out of 19 selected countries, at least two in-depth interviews were achieved. In the other seven countries, one interview was held. Not being able to get into contact with the spokesperson of the FO was the main reason. In addition, language barriers hampered getting into contact.

The information from these in-depth interviews will be referenced as 'in-depth interviews FOs' (IDIF).

4.3 Members of the European Dairy Association

Information on the opinions of processors was collected through an electronic survey among members of the EDA. The EU office in Brussel invited the members to fill in a questionnaire (Appendix 3). The questionnaire was in English. The content of the questionnaire was largely in line with the questionnaire sent to the FOs, but phrasing was from the processors' point of view. Besides some general information, the questionnaire addressed two topics:

1. Reasons for the low number of POs. This topic corresponds to a question in Section E of the PO questionnaire and in the FO questionnaire.

2. Reasons for doing business with POs. The question corresponds to a question in Section A of the PO questionnaire (while taking a processor's perspective).

The EDA has 28 members in 21 MSs[7]. Of those members, nine responded (response rate 32%) covering nine MS (also covering 32% of the EU28). Those nine countries are Germany, France, Italy, Latvia, the Netherlands, Austria, Poland, Sweden and the United Kingdom. These nine countries account for 75% of total EU milk production. Of the EDA respondents, four are located in MSs with POs and the remaining five in MSs without POs. In this respect, the sample is considered fairly representative.

In the analysis below, the data collected through this survey will be referenced as 'Electronic survey EDA'.

4.4 Categories of countries and organisations

In Chapter 6, we divide the respondents into several categories with the purpose of analysing the questionnaire data in more depth.

In a first step, we distinguish the target groups of the questionnaires:

1. POs. We present first 'all POs' (63 respondents), next to the results of four specific MSs (Germany, Spain, France and Italy) and the rest of the MSs that have POs.
2. FOs. If all surveyed FOs are presented, this will be indicated as 'all FOs'.
3. EDA members. These are the results of all respondents from the EDA.

In a second step, we distinguished the following categories for further in-depth analyses regarding those MSs in which a large number of FOs responded to the electronic survey:

1. The presence of POs in the MS:
2. MSs with one or more POs are indicated as 'MS with POs'. They account for 67% of EU milk deliveries.
3. Countries without POs, indicated as 'MS without POs'. They account for 33% of EU milk production.
4. Aggregates for the European Union.
5. The 15 MSs that joined the EU before 2004 are indicated as 'EU15'. They account for 86% of EU milk production.
6. The remaining 13 MSs, which joined the EU in 2004 or after, are indicated as 'EUn13'. They account for 14% of EU milk deliveries.
7. Type of contractual arrangements

   We classify MSs according to the type of contractual arrangements, based on the importance of deliveries by farmers to cooperatives and private processors. MSs where milk deliveries to (collecting and processing) cooperatives are two-thirds and more (66.6%) of the total deliveries are classified as 'cooperative'; while MSs with 66.6% and more of milk deliveries to private processors are classified as 'private'. The rest of the MS are classified as 'mixed', i.e. those where the proportion of milk delivered to private processors or to cooperatives is less than two-thirds of the total production. We acknowledge that the threshold of two-thirds is arbitrary. The result is as follows:

8. 'cooperative': 14 MSs with 59% of EU milk production;
9. 'private': 6 MSs with 12% of EU milk production;
10. 'mixed': 8 MSs with 29% of EU milk production.
11. The umbrella organisation of FOs that answered the questionnaire. This indication is not linked to countries. The categories are:
12. members of Copa-Cogeca;
13. others, indicated as 'other FOs'.

[7] For names and addresses, see: http://eda.euromilk.org/about-eda/members.html

The different categories that are linked to MSs are included in Table 4.2. This table also provides information on the respondents of the surveys among FOs.

Table 4.2 Sample FOs, responses, and sample and response to in-depth interviews

	Member State	Predominant contractual arrangement	EU15/ EUn13	Electronic survey			In-depth interviews
				Invited	Response	Response rate (%)	
MS with POs	Germany	Cooperative	EU15	5	2	40	*
	France	Mixed	EU15	7	5	71	1
	Italy	Cooperative	EU15	6	2	33	2
	Spain	Mixed	EU15	6	3	50	2
	Belgium	Mixed	EU15	7	4	57	3
	Romania	Private	EUn13	4	2	50	1
	Bulgaria	Private	EUn13	6	2	33	1
	Croatia	Private	EUn13	3	3	100	*
	United Kingdom	Private	EU15	4	3	75	2
	Czech Republic	Mixed	EUn13	4	1	25	2
	Portugal	Cooperative	EU15	3	2	67	1
MS without POs	Netherlands	Cooperative	EU15	4	2	50	2
	Poland	Cooperative	EUn13	7	1	14	2
	Ireland	Cooperative	EU15	3	1	33	2
	Denmark	Cooperative	EU15	3	2	67	2
	Austria	Cooperative	EU15	4	3	75	3
	Sweden	Cooperative	EU15	3	1	33	2
	Finland	Cooperative	EU15	3	1	33	1
	Hungary	Mixed	EUn13	4	1	25	1
	Lithuania	Mixed	EUn13	8	7	88	1
	Greece	Private	EU15	1	1	100	*
	Slovakia	Cooperative	EUn13	2	0	0	*
	Latvia	Mixed	EUn13	8	6	75	*
	Estonia	Mixed	EUn13	3	1	33	*
	Slovenia	Cooperative	EUn13	2	1	50	*
	Luxembourg	Cooperative	EU15	3	0	0	*
	Cyprus	Private	EUn13	5	0	0	*
	Malta	Cooperative	EUn13	1	0	0	*
	Total	Cooperative	EU15	119	57	48	31

Sources: Electronic survey FOs and IDIF
* Not in sample.

5 Results on experiences and opinions of POs

This chapter presents the results of the electronic survey of and in-depth interviews with POs. The electronic survey provides quantitative information and the in-depth interviews provide qualitative information. While this chapter focuses on describing the information retrieved, Chapter 7 interprets it in relation to the objectives of this study as well as to the functioning of the Milk Package. The topics discussed follow largely the structure of the questionnaire (Appendix 1).

Results are presented for all POs in total, and separately for the POs in Germany, France, Italy and Spain, countries from which at least five POs responded to the invitation to fill in the electronic survey.

5.1 Milk deliveries and production areas

This section presents several features of the surveyed POs in terms of their milk production in total and in relation to the limitations of the production areas. This information, gathered from answers to survey questions in Section A of the questionnaire (general information), will also serve to discuss the representativeness of the sample of POs.

A first step, though, is to show how much of their production the POs deliver under the collectively negotiated contracts. Table 5.1 shows that, even in the countries with many POs, total deliveries of POs in an MS negotiated under Article 149 of EU regulation 1308/2013 never exceed 50% of the country's total milk deliveries. The level of deliveries from POs in the Czech Republic in 2014 is based on eight POs. Since 2014, that level has been significantly lower, as only one PO continued to exist in 2015 (see Chapter 4).

Table 5.1 Volume of milk deliveries: total and negotiated under Article 149 CMO in 2014

Country	Animal species	Total deliveries (1 000 tonnes)[a]	Deliveries negotiated under Article 149 CMO (1 000 tonnes)[b]	Percentage
Germany	Cow	31,375	11,527	37
France	Cow	25,261	4,469	18
Czech Republic	Cow	2,370	1,053	44
Spain	Cow	6,647	840	13
	Ewe	457	71	16

Sources: [a] Eurostat and [b] EC (2015)
Note: EC (2015) did not provide information on deliveries negotiated for other MS

The information in Table 5.1 is used to evaluate the representativeness of the survey responses presented in Table 5.2 below. In Germany, 15 POs in the survey deliver milk under negotiated contracts. These 15 are 10% of all POs in Germany, and they deliver 10% of all the deliveries that are made under negotiated contracts in that MS. The sample seems to be representative for Germany. However, in France the percentage of POs in the survey in the total is higher than their percentage of the deliveries under negotiated contracts, suggesting that in France the relatively small POs responded. The POs of Italy and Spain (Table 5.2) have relatively large percentages of the deliveries under negotiated contracts. This indicates that mainly POs that deliver large quantities responded to the invitation.

The 63 POs covered in the survey produced 10.2 million tonnes of milk, of which 35% (3.6 million tonnes) was delivered under collectively negotiated contracts (Table 5.2). All recognised POs in Germany, France, Italy and Spain together delivered 17.9 million tonnes (see Table 5.1, column 4). The POs in our survey from these countries delivered

1.9 million tonnes (the sum of the four countries as presented in column 6 of Table 5.2) under collectively negotiated contracts. That is 10% of the deliveries of all recognised POs. For the other MSs, the information on total milk deliveries by POs under contract has been incompletely reported. However, for the four MSs with complete information it becomes obvious that cow milk delivered under collective contracts never exceeds the marketable production of all respondents in the survey.

Table 5.2 Total cow milk production and deliveries under PO contracts in 2015 by POs in the survey

MS	Marketable milk production		Deliveries under PO contracts			
	Number of responses with values	1,000 tonnes	Number of POs	Percentage of all MS POs	Total deliveries by POs in 1,000 tonnes	Percentage of milk delivered under PO contracts[a]
DE	21	2,005	15	10	1,098	10
FR	13	1,332	2	4	30	1
IT	10	988	6	14	540	51
ES	4	1,273	1	11	240	29
BE	3	1,415	0	0	0	
RO	1	79	1	50	79	
BG	2	5	1	50	4	
HR	2	20	0	0	0	
UK	1	1,613	1	100	796	
CZ	3	1,451	3	38	778	
PT	0	0	0	0	0	
N.A.	3					
Total	63	10,181	30	11	3,565	

Source: Based on Electronic survey POs, questions 7 and 21.
N.A., not available (information not filled in).
[a] Based on source EC, 2015, The percentage is the percentage of total deliveriers by surveyed POs under contract negotiation and MS states total as indicated in Table 5.1.

All except two POs that responded are involved in cow milk production. The exceptions are:

- A ewe milk PO in Spain with five members and 35,000 tonnes of milk production. This production is just above the required minimum of 30,000 tonnes (see Table 3.1), but at the same time almost 50% of the total quantity delivered under PO contracts. The production is located in areas with structural limitations[8] (Electronic survey POs). The five members are cooperatives with around 700 farmers, producing 76,000 tonnes of milk.
- A ewe milk PO in Italy with 564 members and 19,113 tonnes of milk production. This PO produces mainly in areas with other structural limitations, and a small part in mountain regions.

All the ewe milk produced by these two POs is delivered under negotiated contracts.

Less than 50% (28 out of 60) of the POs delivering cow milk are producing in areas with structural limitations (Table 5.3). In addition, 12 of these POs produce in more than one area with limitations. In France, as well in other MS covered in the survey which are aggregated in the group "Rest", most POs are producing in areas without structural limitations. In Germany, Italy and Spain, the majority of surveyed POs produce in areas with limitations.

[8] This term is used in the questionnaire as it was designed by the client, and is not further specified.

Table 5.3 Cow milk POs with members in areas with structural limitations

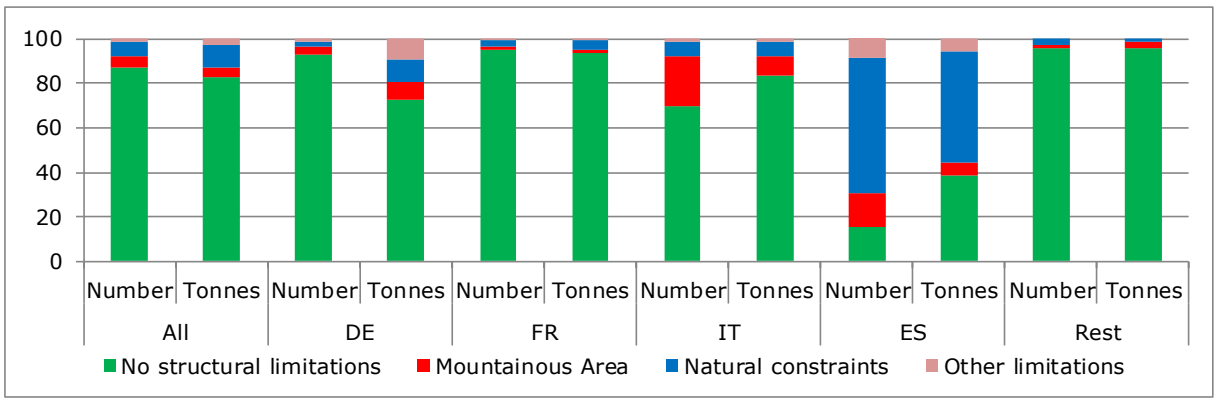
Type of area	All	DE	FR	IT	ES	Rest
Mountainous	20	8	1	7	2	2
Natural constraints	14	8	1	1	2	2
Other limitations	7	4	1	1	1	0
2 or 3 areas with limitations[a]	12	8	1	1	1	1
Total POs in areas with limitations[a]	28	12	2	8	3	3
POs in areas without structural limitations	32	9	11	2	1	9
N.A.	3	1	0	1	1	0
Total	63	22	13	11	5	12

Source: Based on Electronic survey POs, question 8.
N.A., not available.
[a)] 12 POs have production in two or three areas with structural limitations. The total POs in areas with limitations are all POs that produce in at least one area with structural limitations. This number is not the sum of previously mentioned categories, as some POs produce in several areas.

The survey results show that the milk produced by the surveyed POs is mainly (83%) produced in areas without any limitations and this percentage is slightly lower than the percentage of members (87%, see Figure 5.1). Only 6% of members are active in areas with natural limitations and they produce 10% of the total milk production. The surveyed POs in Spain produce mainly in areas with natural constraints. As members can produce in more than one area with structural limitations, the number of members exceeds 100% only in Spain.

Figure 5.1 shows that most individual members of the POs produce in only one area with structural limitations, in contrast to the finding that several POs produce in regions with more than one structural limitation. Only in Spain do several members of the PO produce in more than one area with structural limitations. The data did not make it possible to identify exactly how many produce in more than one area.

Figure 5.1 Members of POs and cow milk production in areas without and with structural limitations within the selection of MSs (% of total of POs with cow milk)



Source: Based on Electronic survey POs, question 8. Detailed information in Appendix 5, Tables A5.1 and A5.2
Note: In Spain, several PO members produce in more than one area with structural limitation, resulting in a total of more than 100%

The surveyed POs are not representative for the total EU dairy sector as the proportion of milk produced in mountainous regions in the EU is higher than the proportion in all surveyed POs (Table 5.4), except for Germany.

Table 5.4 Cow milk production in mountainous areas (% of total milk production)

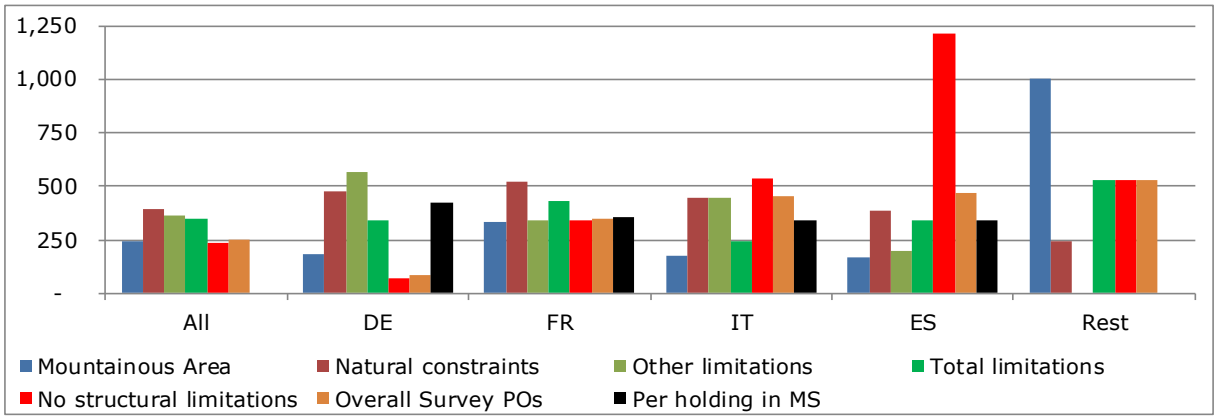
Source	All	DE	FR	IT	ES
Electronic survey POs	5	8	2	9	6
Santini et al. (2013), p. 39	10	8	14	21	27

Sources: Based on Electronic survey POs and Santini et al. (2013)

For all surveyed POs, the milk production per member is higher in areas with structural limitations than in areas without limitations. This applies especially in Germany. In Spain, POs in areas without structural limitations have the highest production per member. These differences between MSs are remarkable.

The average cow milk production per PO member in Germany is low compared with DG AGRI 2016 data (Section 2.2) on average production of specialist dairy holdings: 87 tonnes per PO member compared with 427 tonnes per average specialist dairy holding. This indicates that the surveyed POs in Germany consist of rather small producers. In France, the difference between PO members and specialist dairy holdings is small. In contrast to Germany, the average milk production per PO member is larger than the Germany's average of specialist dairy holdings.

Figure 5.2 Average cow milk production per PO member (tonnes/member)



Sources: Based on Electronic survey POs, question 8. Information based on Tables A5.1 and A5.2 in Appendix 5. Per holding in MS based on Eurostat and DG AGRI (2016); see Figure 2.5.

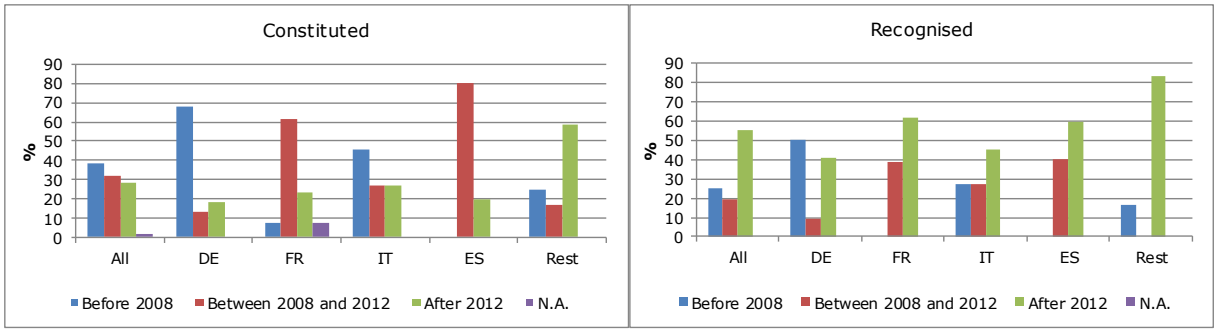
5.2 Establishing POs

Survey results show that 71% of the surveyed POs were already constituted before 2012, the year that the Milk Package came into force (see Figure 5.3, left panel). Policies in specific MSs can explain the relatively large proportion of POs constituted before 2012. For example, in Germany, legislation on POs (*Erzeugergemeinschaften*, EZG) had already been in force since 1969 (Wendt, 2013).

Quite a number of POs that were constituted before 2012 have also been recognised under the 2012 Milk Package regulation: Figure 5.3, right panel, indicates that 56% of the POs were recognised after the 2012 Milk Package legislation. The significant number of POs that answered that the PO was recognised under the Milk Package provisions before 2013 indicates that they may be not familiar with Milk Package provisions. In Germany and Italy, a relatively low proportion of POs have been recognised after 2012, which might be explained by the longer tradition of POs in these countries, where they do not find it necessary to adopt specific Milk Package requirements immediately, although in Germany the transformation of POs meeting the Milk Package requirements went smoothly and required little effort (Wendt, 2013). This might explain the large proportion

of POs constituted between 2008 and 2012. In France, where national legislation also existed before 2012 and most POs were established before 2012, a relatively high proportion (over 60%) were recognised under the Milk Package legislation.

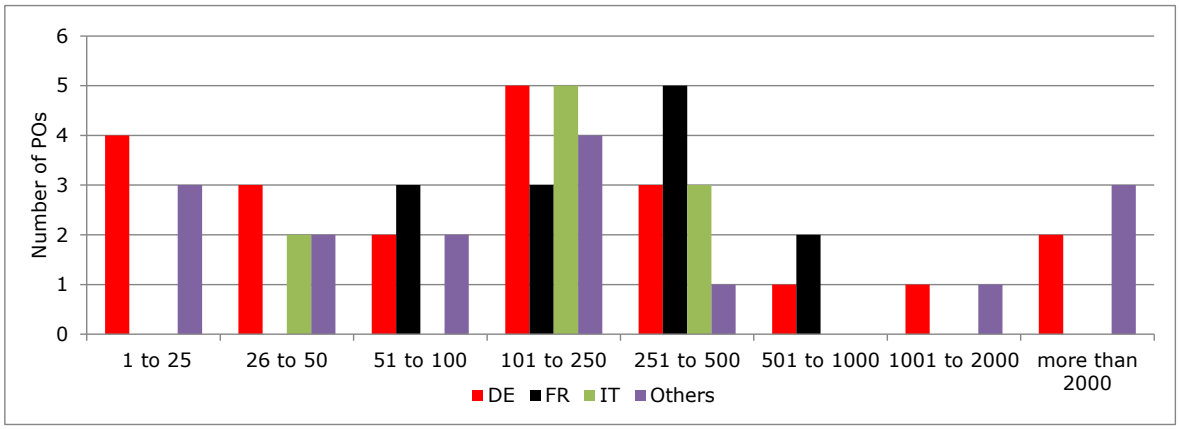
Figure 5.3 Constitution and recognition of POs per period



Source: Electronic survey POs, questions 1 and 2. Tables A5.3 and A5.4 in Appendix 5 provide the numbers.

Other survey outcomes report on the size of the POs. Almost 50% of the 60 cow milk POs have 101 to 500 members, 28% have between 101 and 250 members and 20% of the POs have between 251 and 500 members. The proportion of POs with fewer than 101 members is almost 12%, and POs with more than 500 members account for 17%. The 60 POs that provided information on the number of members have in total 40,411 members. That makes on average 674 members per PO. These statements refer to the aggregated numbers of all surveyed POs: Figure 5.4 provides further MS-specific details for Germany, France and Italy.

Figure 5.4 POs by number of members



Source: Electronic survey PO, question 7. ES is not included because the number of observations is too small. The observations are included in Others.

The average number of members per PO is far higher than the number of specialist dairy holdings per processor as presented in Section 2.4. In Germany, the number is even above the number of specialist dairy holdings per large processor (i.e. processor with more than 250 employees; see Table 5.5). In France, the ratio between members of POs and specialist dairy holdings per large processor is about 1 to 3 and in Italy it is about 1 to 8. This indicates that POs contribute to a concentration of milk supply.

Table 5.5 Number of members per PO, and number of specialist dairy holdings per processor

Category	DE	FR	IT
Average number of members per PO	1,924	296	219
Specialist dairy holdings per processor (Figure 2.8)	114	36	8
Holdings per processors with more than 250 employees	1,438	954	1,754

Sources: Electronic survey PO, question 7, Eurostat and DG AGRI (2016); see Section 2.4.

Around 40% (24) of the surveyed POs are members of an APO, mainly in Germany (17; 77%) and France (6; 46%). Eleven POs have no interest in establishing an APO; 14 are interested in doing so, mainly in France. The remaining POs did not fill in an answer (Electronic survey POs).

In Article 152 of EU Regulation 1308/2013, the requirement is stated that POs 'are formed on the initiative of the producers'. The survey revealed that 62% of POs covered in the survey were established on the initiative of farmers and 17% were initiated by traders (Table 5.6). The latter is mainly the case in Germany[9]. Trade unions are seen as representatives of producers; therefore, they are considered the same as FOs.

Table 5.6 Drivers for establishing the PO (number of respondents)

Initiative by	All	DE	FR	IT	ES	Rest
Farmer(s)	39	11	8	5	4	11
Cooperative	2	0	0	0	1	1
Processor	4	1	1	2	0	0
Trader	11	7	3	1	0	0
Milk-collecting organisation	6	3	1	2	0	0
N.A.	1	0	0	1	0	0
Total	63	22	13	11	5	12

Source: Electronic survey POs, question 3.
N.A., not available.

Fifty out of the 63 POs (79%) indicated that they had no problems in getting recognition. The main obstacles to recognition had to do with difficulties in understanding or complying with formal provisions. In addition, the transformation of a cooperative to a PO and splitting a PO were mentioned (Electronic survey POs).

The five German respondents indicated that recognition was not difficult: four out of five had been established for some time but also a newly established PO had no problems in becoming recognised (IDIP).

Some POs interviewed mentioned administrative burdens and/or negotiations with the government as difficult. One mentioned this as a difficulty despite support from a trade union (IDIP).

[9] In German, 'trader' has been translated as *Unternehmer*, which is broadly speaking an 'enterprise'. This might be a misunderstanding and it is possible that a processor or cooperative is meant.

Box 5.1 Czech case: from eight recognised POs in 2013 to one PO in 2014

The Czech Republic is a special case, as seven out of eight recognised POs in 2013 were no longer registered as recognised in 2014. Four of these POs have been interviewed. The objectives of these POs are strengthening the position of the producers in the value chain, better prices and ensuring payments. All the four POs are still active and some are applying for recognition again.

The reasons mentioned for withdrawing recognition include no benefits, large administrative burdens, higher prices if the producers negotiated individually, some members ceasing to produce milk, not being legally compliant as a cooperative and waiting for response from the authority about being recognised again.

Other arguments for stopping are also mentioned: unfair competition practice by domestic retailers favouring foreign brands, not being allowed to sell the milk to intermediate traders, ex-post price determination by buyers and unfair policies of other MSs.

Recommendations that these POs made are to provide POs with financial support, advantages for members in applying for subsidies, free access to market information, stronger regulation of the milk market (e.g. reintroduction of the quota system) and the EU exporting excess milk as food aid.

Overall, this Czech case raises several aspects that will be elaborated below and are not very different from the experiences in other MSs. However, the issues were apparently more severe and prompted or forced these POs to take the decision to terminate recognition.

Source: Statements of Czech POs (IDIP).

Finding members was no problem for 51 out of the 63 POs surveyed (81%). Some indicated reasons for not easily finding members, such as administrative work to fulfil all regulation requirements, mistrust among farmers and not being familiar with POs (Electronic survey POs).

Box 5.2 Experience of getting members

PO A

Before the introduction of the Milk Package, there was a system of inter-professional associations dealing with the delivery conditions and prices. Small regions had prices and conditions that were the same for all farmers in that region. Half of the farmers delivered to a private company. Farmers delivering to a large processor had already started to work together unofficially and the crisis of 2009 strengthened the process. It was the initiative of farmers supported by a trade union to organise the PO, motivated by more economic thinking. The group started in 2010 and was recognised in 2012. The group functioned already as a kind of a PO and it was not difficult to find members. Farmers were already involved.

PO B

This PO declares: Our mission was to establish a single supply contract. We wanted to abandon the old contract between a single producer and the processor, and involve more suppliers. We had the attention of 30 to 40 potential members, thanks to a link with an old farmer association. We contacted them by phone and face to face, explaining the benefits of being a member of a PO. Then we had some meetings in which we explained the benefits of a single supply contract. As a result, we obtained a single supply contract and we succeeded in aggregating several producers. Members nowadays recognise the advantages of getting together with other producers.

Source: Statements of specific POs (IDIP).

5.3 Purchasers of milk

From the 63 surveyed POs, 37 had no difficulties in finding purchasers. Four POs did not provide any information on this subject, while 22 POs pointed out one or more difficulties

that they had met. Causes of difficulties included the unwillingness of processors to negotiate with POs or APOs, mainly because processors prefer contracts with individual producers instead of POs. Also, POs claim that some purchasers seem to ignore the existence of POs, there are divergent opinions on milk contracting among members of POs, or oversupply meant that potential purchasers had little interest in buying milk (Electronic survey POs).

The processors to which POs deliver their milk have mostly a regional or international dimension (Table 5.7). However, there are differences among the four major countries with POs. In Germany, for instance, regional processors are the main buyers of PO milk. In Italy the geographical dimension of the processors is rather balanced among all four levels, whereas in Spain most processors have a national dimension and in France most processors have an international dimension.

Table 5.7 Geographical dimension of processors as purchasers of POs (numbers)

Location of processors	All	DE	FR	IT	ES	Rest
Local	2	1	0	1	0	0
Regional	17	9	2	2	0	4
National	12	1	0	2	4	5
International	18	5	11	1	1	0
N.A.	1	0	0	0	0	1
Total processors	50	16	13	6	5	10
Not a processor	13	6	0	5	0	2
Total POs	63	22	13	11	5	12

Source: Electronic survey POs, question 10.
N.A., not available.

When asked for the main type of purchaser, the respondents did not fill in the questionnaire consistently, as 29 POs indicated that this would be a processor (Table 5.8; based on question 9), while in previous table (Table 5.7, based on question 10) 50 POs filled in that they deliver to a processor. That is the reason why the numbers of POs that deliver to a processor are different in the two tables. Table 5.8 shows that, in France and Spain, POs deliver (almost) exclusively to milk processors whereas, in other countries, POs sell their milk to traders and cooperatives as well (Electronic survey POs).

Table 5.8 Main type of purchaser of the PO

Type of purchaser	All	DE	FR	IT	ES	Rest
Processor	29	1	13	3	4	8
Trader	18	15	0	1	1	1
Cooperative	8	0	1	3	3	1
Others	1	1	0	0	0	0
2 or 3 types	5	0	1	1	2	1
N.A.	13	5	0	5	0	3
Total POs	63	22	13	11	5	12

Source: Electronic survey POs, question 9.
N.A., not available.
[a] Five POs deliver to two or three types of purchasers. In total 61 type of purchasers are mentioned, which is larger than the number of the 50 POs

Overall, on average each PO has 4.4 purchasers (Table 5.9). The number of purchasers is the lowest in Germany (ranging from one to five purchasers per PO) and is slightly higher in France and Italy. In Spain, the average number of purchasers is more than 20. The Spanish POs that deliver to processors have on average 21 purchasers, with POs indicating numbers ranging from 3 to 35 processors. Other types are, for example, a

specific enterprise, self-processing (both mentioned three times) and a combination of collecting and processing (once) (Electronic survey POs).

Table 5.9 Average number of purchasers per PO for types of purchaser

Type of purchaser	All	DE	FR	IT	ES	Rest
Processor	5.6	1.0	2.3	3.7	21.0	4.5
Trader	2.2	2.0	N.A.	1.0	7.0	2.0
Cooperative	2.1	N.A.	1.0	1.3	3.7	1.0
Others	1.0	1.0	N.A.	N.A.	N.A.	N.A.
Total average	4.4	1.9	2.4	2.7	20.4	4.3

Source: Electronic survey POs, question 9.
N.A., not available.

5.4 Motivation

This section focuses on the motivations[10] or reasons for establishing a PO. Motivations are interpreted as the main objectives that members of the PO were pursuing when the organisation was constituted. A follow-up question was to what extent these objectives have been realised.

Ninety-two per cent of respondents indicated that getting a better price was their most important reason for establishing a PO (Figure 5.5). The next most important motives are a stable price (67%) and enhancing the position of producers in the value chain (63%), followed by assuring that all milk is collected (49%) (Electronic survey POs). A French PO confirms in the interview that price negotiations are often difficult, as sometimes one large processor is dominant in the region (IDIP)

The extent to which the important objectives have been realised is evaluated as rather low: around a quarter of the respondents indicated that a better price, a stable price or a better position in the supply chain has been achieved 'largely' or 'fully' (Figure 5.6). POs in Germany and Italy appear to be more positive and French POs more negative than the average result of these opinions (Electronic survey POs).

French POs are, however, very positive about assuring that 'milk will be collected'; 92% of the POs indicated that this object is 'largely' or 'fully' achieved. German POs also report positively on the realisation of this objective: two-thirds of POs surveyed indicated that this objective is 'largely' or 'fully' achieved. The score for communication is also rather positive. However, information on this topic was collected only in Germany and Spain (Electronic survey POs).

[10] In the questionnaire, question 12 uses the word 'motivation'. Motivation can be interpreted as objective if the realisation is assessed. However, in some case we have to stick to the word 'motivation'.

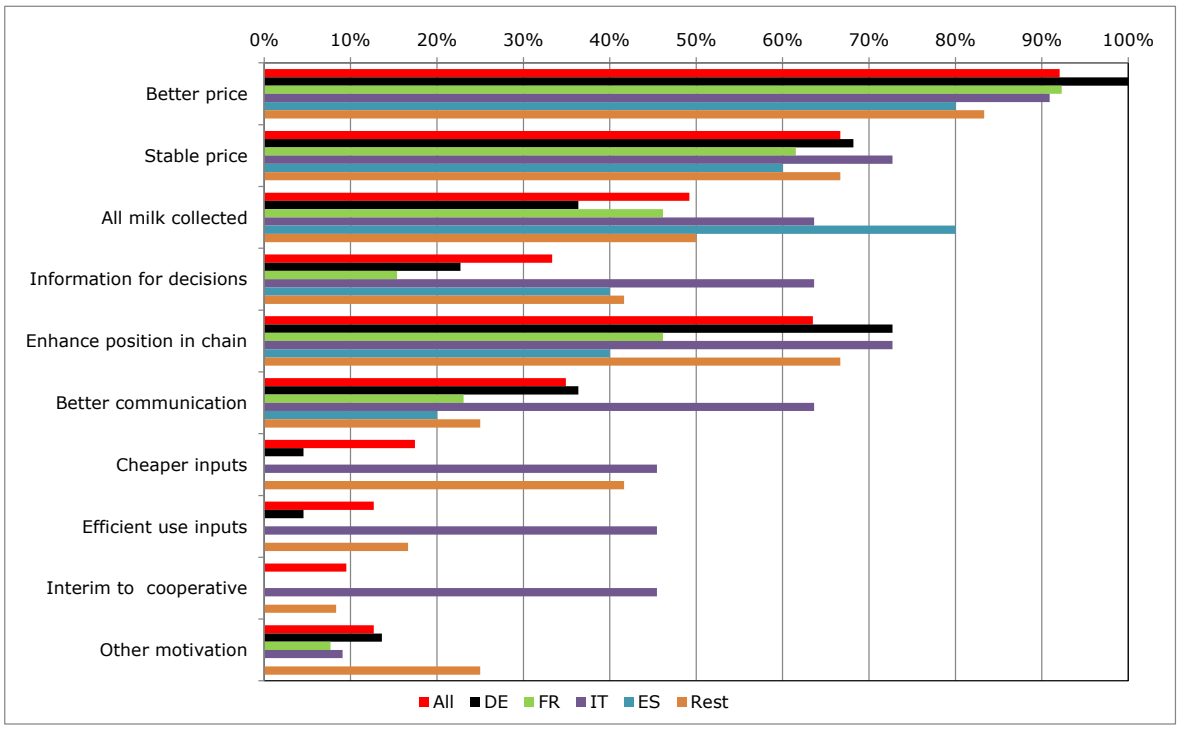
Box 5.3 Small farmers as preferred suppliers for a specific customer

We wanted to organise the PO as an enabling tool for integrating and strengthening our local farmers in the milk distribution. First, we tried to get small-scale farmers (real players in our territory); second, we aimed at an average production of 900 tonnes a year; and finally, we wanted to obtain a suitable legal status according to the Community guidelines. We contacted suppliers and farmers already active in the territory. They talked with their customers, providing information on the PO. Meetings and face-to-face contacts helped a lot. One of the success factors in the PO establishment was explaining to potential members that the organisation would find new distribution channels. As a result, we increased the number of suppliers, got new members and brought down the fixed costs. Members now fully rely on the Producer Organisation for their milk collection.

Source: Statement of a specific PO (IDIP).

Fewer than half of all respondents filled in the questionnaire on the purchase of cheaper inputs, more efficient use of means of production, interim step for a cooperative or others. Over two-thirds of the POs mentioned that these topics were not motives for establishing a PO (Electronic survey POs). Some POs interviewed in the EUn13 had success in procuring cheaper inputs (IDIP).

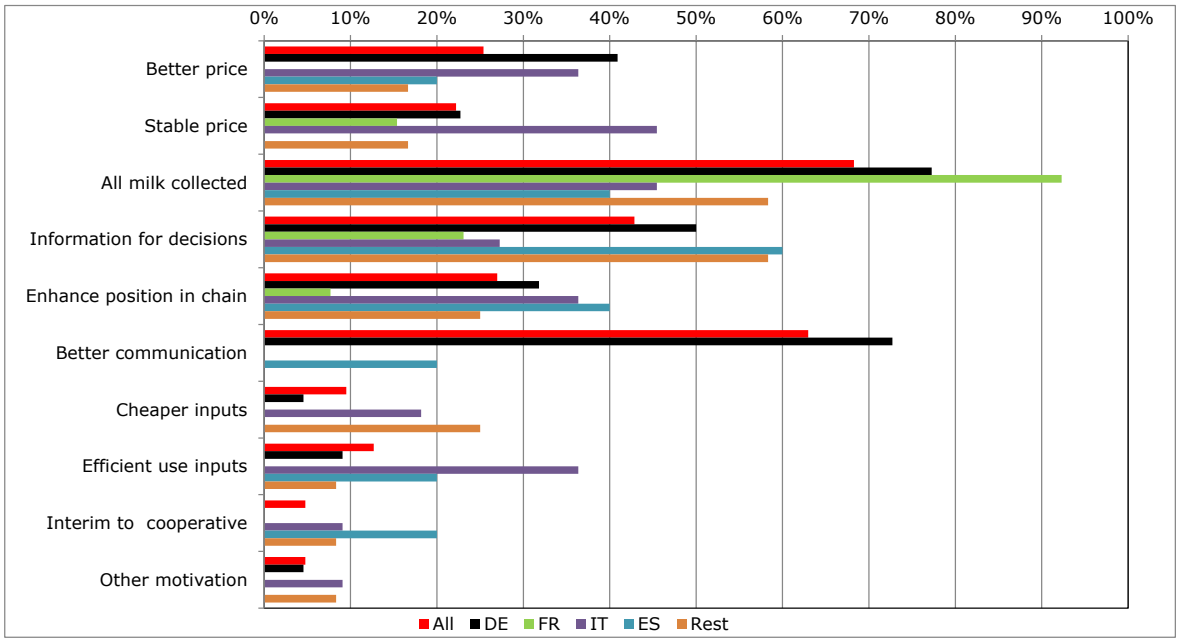
Figure 5.5 Motivation for establishing the PO (% rank 1 to 3 of all POs)



Source: Electronic survey POs, question 12. Detailed information in Appendix 5, Table A5.5

The category 'other motivation' is rather diverse. Some mentioned having better negotiating options by establishing a PO, better possibilities of valorisation of the milk, having been treated badly by a purchaser, better exchange of information between purchaser and producers, meeting the regulatory requirements, changes in organisation of the previous purchaser or demonstrating that existing cooperatives intrinsically involve all functionalities of a PO (Electronic survey POs).

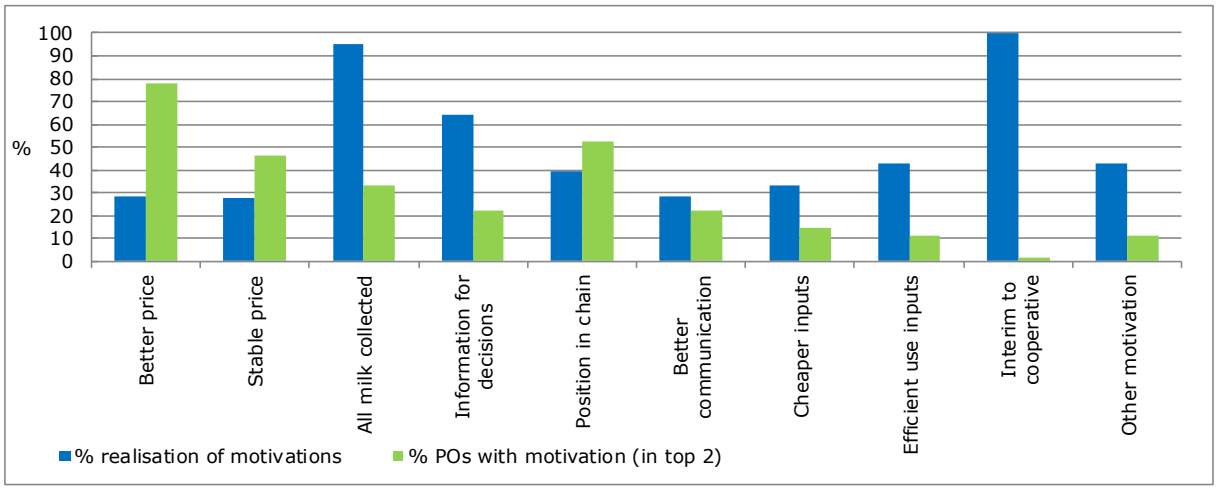
Figure 5.6 Extent of realisation of the motivationa of the PO (% realised 'Fully' and 'Largely' of all POs)



Source: Electronic survey POs, question 13. Detailed information in Appendix 5, Table A5.6.
[a] The question on better communication was translated and included only in the German and Spanish questionnaires.

In Figure 5.6, we express the realisation as a proportion of all respondents, irrespective of whether they indicated the topic as a high or low priority. Below, we select the POs that, first, ranked the motivation (also interpreted as objective) as number 1 or 2 and, second, indicated that this objective was fully or largely realised. The objectives (treated as motivations) with regard to prices are seen as important, but only 29% of those representatives of POs who considered this the most important reason for establishing the PO indicated that these topics were realised fully or largely. In addition, many POs mentioned the position in the chain is an important motivation, yet only 39% of the POs considered this motivation fully or largely realised. The motivation 'all milk collected' is realised for 95% of the POs who indicated this as important. Of the POs that indicated 'better information for decision-making' (9 out of 14) as an important motivation for setting up the PO, 64% are fully or largely satisfied with its realisation.

Figure 5.7 % of POs whose motivations are realised 'Fully' or 'Largely' and who indicated that motivation among top two priorities for establishing a PO

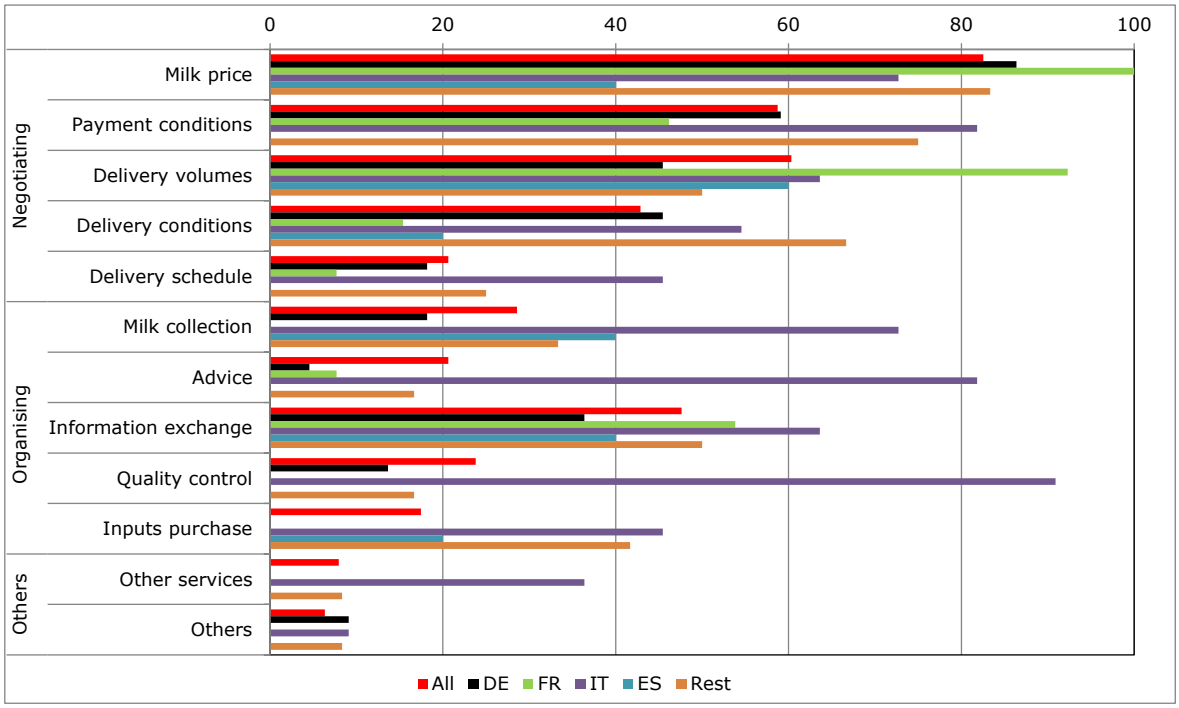


Source: Electronic survey POs, question 12 and 13. Detailed information in Appendix 5, Table A5.7.

5.5 Activities

In line with the importance of 'better prices' for establishing a PO, price negotiations are the most important activities, ranked in first place by two-thirds of the POs (Figure 5.8). In France, all POs ranked this activity as 1 or 2. Activities related to 'payment conditions' and 'delivery volumes' are the next most important. In the fourth place in importance is 'exchange of information and experiences' and almost as important are 'delivery conditions'. Few POs indicate other activities as important. Other activities are largely in the field of activities already mentioned. Interesting activities are related to milk market intelligence, training of administrators and position of the conventional or organic sector (Electronic survey POs).

Figure 5.8 Core activities of POs (% rank 1 to 3 of all POs)



Source: Electronic survey POs, question 14. Detailed information in Appendix 5, Table A5.8.

The ranking shows differences between the MSs. Negotiating milk price and delivery volumes rank high in France: in this MS, cooperative and private companies are both important in milk processing. In Italy, organising quality control, advice and milk collection are also rather important. The rest of the countries have overall high scores on several activities (Electronic survey POs).

Box 5.4 Improving quality of raw milk

One of the POs interviewed achieved higher raw milk quality and analysis of raw milk. It defined parameters to make quality consistent between producers, consulted other stakeholders in the dairy chain and had meetings with the university and regional institutions. Eighty small-scale producers became members thanks to quality certification of milk resulting in high remuneration. Young farmers and smallholders recognised the advantages of being part of the PO.

Source: Statement of a specific PO (IDIP).

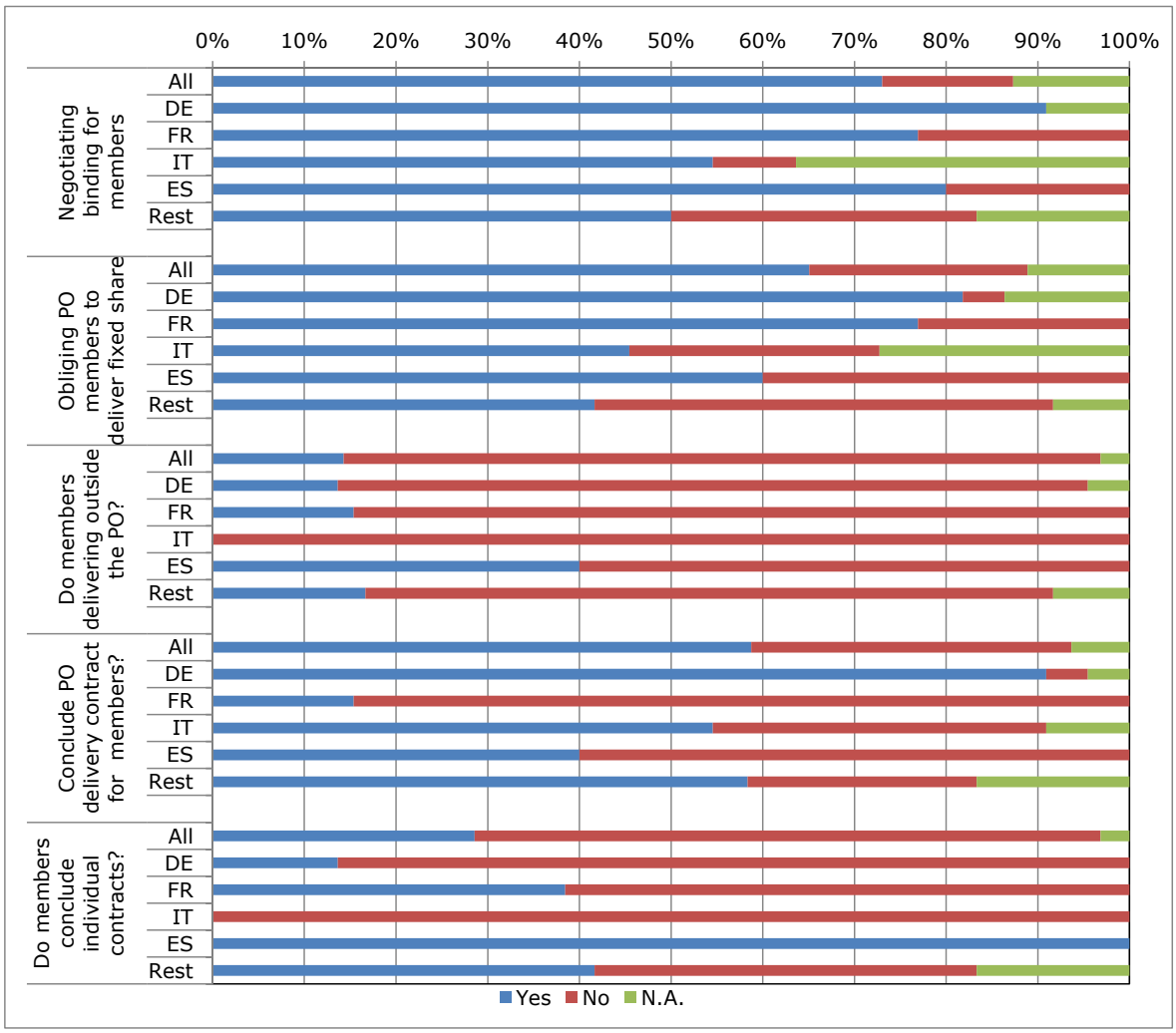
Interviewed POs also indicated better quality of milk as important: for one PO, it is a specific asset to improve the position in the value chain (IDIP).

5.6 Contractual negotiations

Between 60% and 75% of all POs carry out negotiations that are binding on members, oblige their members to deliver fixed amounts, and conclude contracts on behalf of their members. Germany has the highest percentages for these three activities, 80-90%, while these are relatively low in Italy. France has the lowest percentage of POs that conclude contracts for members. A significant number of POs (30%) observed that their members negotiate and conclude individual contracts without interference by the PO, especially in Spain (Electronic survey POs). One of the POs stated that the Milk Package provisions are

not relevant to improving the position of milk producers in negotiations with processors (IDIP).

Figure 5.9 Contractual negotiations (% of total respondents)



Source: Electronic survey POs, questions 15 to 20. Detailed information in Appendix 5, Table A5.9.

Box 5.5 Beneficial relationship with processors by building trust

The challenge was finding dairy processors willing to negotiate and do business with the PO based on contracts. A stable relationship with dairy processors is built on long-term contracts, regulating mainly total volumes, prices (mixed, indexed, reference levels, etc.) and quality, but also penalties for breach of contract. Furthermore, the PO initiated a cost optimisation project. The PO succeeded in concluding regular contracts with 20 milk processors (small cheese makers but also some of the biggest dairy producers). The 2015-2016 campaign included yearly contracts, and even one for 3 years' duration has been achieved. All the milk produced by the PO members is sold, above the average market price. No farmers have left the PO, and three contract-breaching members have been taken to court, where the cases were won by the PO.

The PO representative stated that public support of POs should be based on results rather than simply helping the constitution of a PO after meeting the national requirements. The PO representative supports the Spanish requirement of 200,000 tonnes per year, because the objective is to increase volume rather than create parallel regional and fragmented associations.

As a concluding impression: a PO with a positive and entrepreneurial view.

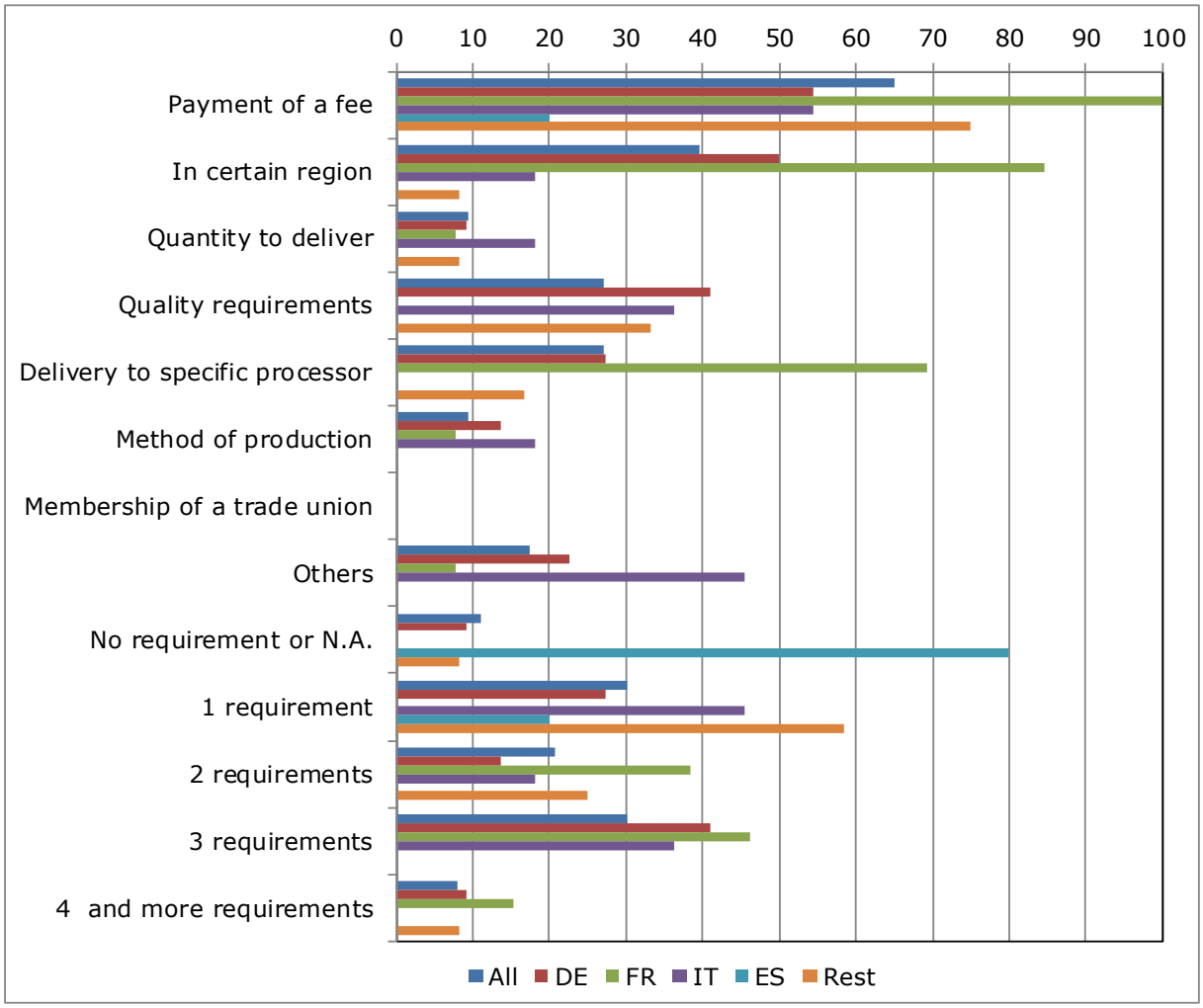
Source: Statement of a specific PO (IDIP).

5.7 Organisation and governance

The discussion of responses on the organisation and governance of the POs presented in this section covers the requirements for becoming a member of a PO. Questions on governance deal with management activities and the possible impact of PO members on these activities.

Paying a fee is the main membership requirement for 65% of the POs; only in France does this hold for all POs (Figure 5.10). The second is 'being established in a certain region': this was again mostly in France, at 85% compared with 40% for POs in all countries. Third and fourth (both 27% of all POs), quality requirement (highest in Germany, 41%) and delivery to a specific processor (highest in France, 69%) are mentioned. Almost 60% of the respondents mentioned at least two requirements to become a member of the PO and 40% at least three. In France and Germany, at least half of the POs have three or more requirements. In the 'Rest' of the countries, 58% of the POs have just one requirement (Electronic survey POs). It is relevant that in Germany membership of an FO is mentioned whereas on the question 'trade union' no requirement is filled in. Furthermore, in Germany the processor has to agree (mentioned twice).

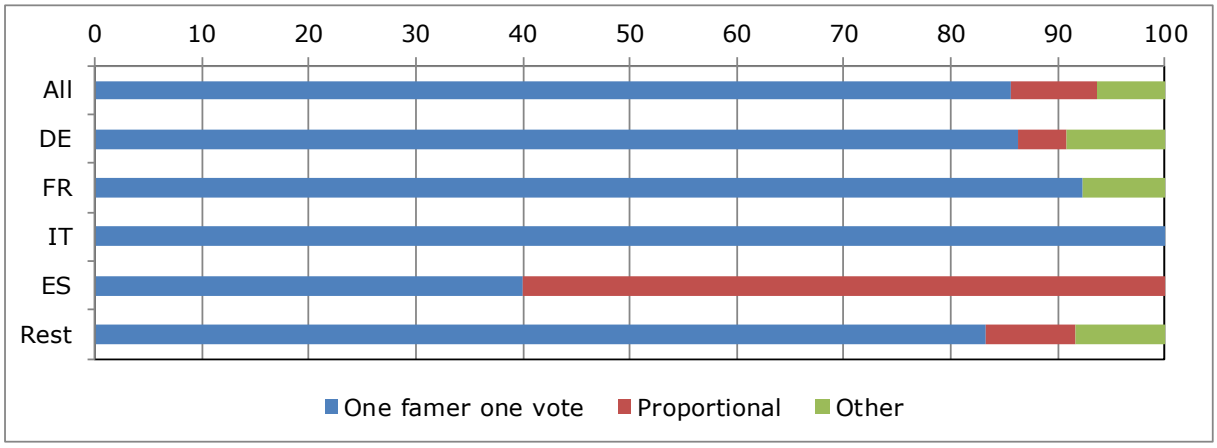
Figure 5.10 Requirements for becoming a member of the PO



Source: Electronic survey POs, question 22. Detailed information in Appendix 5, Table A5.10.

The voting rules are 'one-member-one-vote' for 86% of the surveyed POs (Figure 5.11). Eight per cent, mainly in Spain, have a voting system related to the quantity of milk deliveries (Electronic survey POs).

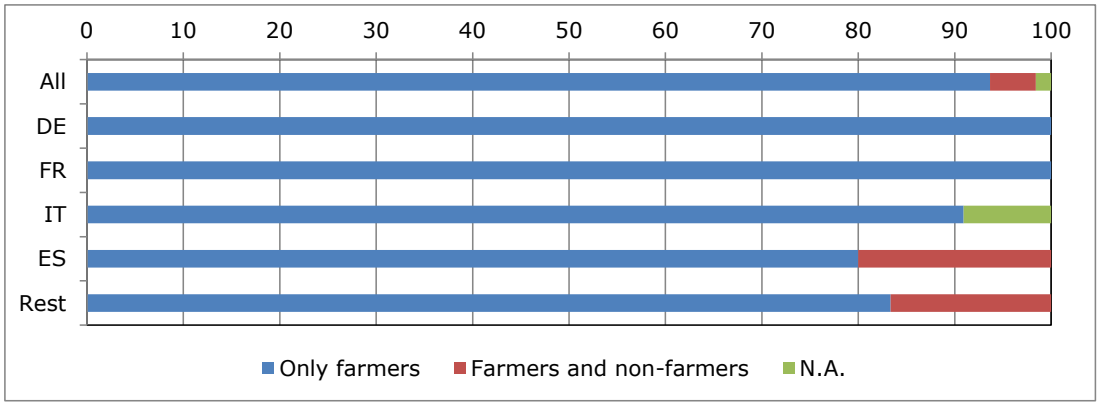
Figure 5.11 Voting rules (% of POs)



Source: Electronic survey POs, question 23.

The boards of the POs mainly (94%) consist of farmers (Figure 5.12). The differences between the countries are negligibly small: a few POs in Spain and the 'Rest' also have non-famers on their boards.

Figure 5.12 Boards of POs (% of POs)



Source: Electronic survey POs, question 24.

Box 5.6 Efficient management

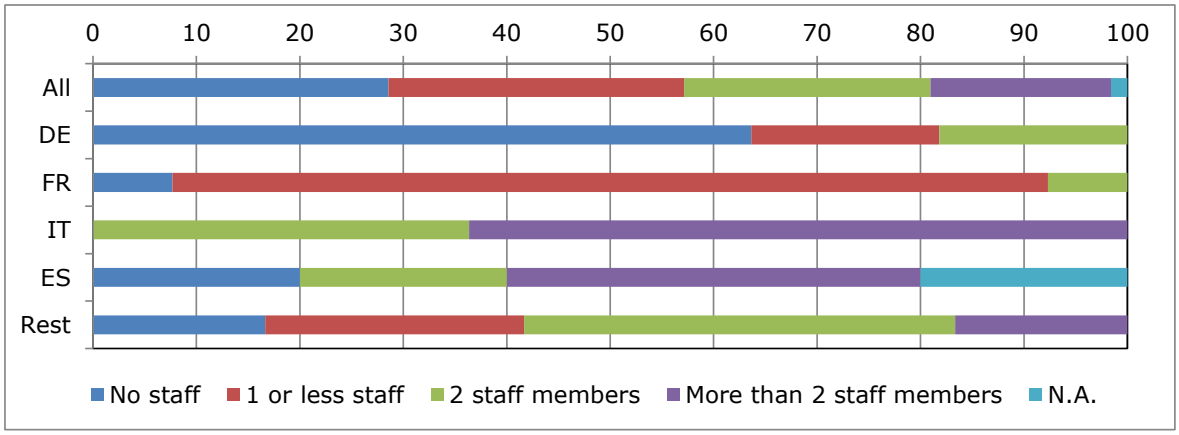
Initiating a PO from scratch without an existing infrastructure or financial means often occurs with a group of individual farmers and not with an association. The objective of this PO was to reach self-financing, to build up sufficient human and physical capital for the PO to operate and to fulfil its mission. The interviews indicate that, in general, fees are requested to cover all the operational costs.

Currently, this PO has three people working full time. Their tasks are keeping regular contact and transmitting information and decisions to the members (e.g. a weekly newsletter); regular checks of the invoices to see that the processors are fulfilling the contracts; and preparing contract proposals.

Rather than getting subsidies to assist the formation and operation of POs, the spokesperson proposed measures that are seen to be more effective, e.g. 'positive discrimination', i.e. a positive differential subsidy for insurance fees, modernisation or investments, for those farmers who are members of a PO.

Source: Statement of a specific PO (IDIP).

Figure 5.13 Number of full-time equivalent paid staff (% of POs)



Source: Electronic survey POs, question 25.

Twenty-nine per cent of the POs have no paid staff; in Germany, as many as 64% of POs do without (Figure 5.13). A similar proportion of POs, around 30%, have up to one full-time paid staff member, in France even 85%. This high proportion of POs with no or up to one paid employees might be because volunteers, members or processors do the administration. Another 24% of POs have two paid staff members. In Spain, two out of five POs have five or six paid staff members.

Over 80% of the POs mentioned that they received no support for establishing the PO: no financial support from national or EU authorities or from other public authorities. Three POs in Germany mentioned that they had gained financial support from public authorities before 2004. The UK PO, however, obtained support from the national authority. Six POs — one each in Croatia, France and Spain and three in Italy — received support from the regional authorities. The Croatian PO obtained support for office equipment and making a business plan. A Spanish PO got support but did not specify the authority (Electronic survey POs). A French PO expected financial support from the authorities, as it said that it had heard that in other countries this was given (IDIP). Several POs interviewed expressed their wish that more incentives and contributions to facilitate the establishment of a PO should be given (IDIP).

One-third (21 out of 63) of the POs received support from private bodies: four from processors, 12 from professional organisations (mainly in France), one from a collector

and one from members of the PO; three did not specify the source. The support was in kind (among others, provision of legal support) and sometimes a financial contribution for managing the PO was received (Electronic survey POs).

Managing the PO is time-consuming according to 50% of the surveyed POs, which agreed fully or largely with that statement (see Figure 5.14). The French and Spanish POs are even more explicit: 85% and 80% of them respectively endorse that statement. At the other extreme, only 23% of the German POs state that managing the PO is time-consuming (Electronic survey POs). All interviewed executives of POs in Germany understood the attitude of the members that the involvement of PO's staff taking part in management was a welcome relief from problems of marketing their milk (IDIP).

The statement that 'All members participate in the management of the PO' is often not confirmed; only a quarter of the respondents agreed fully or largely with this statement. The highest level of agreement can be found in Germany: 40% (Electronic survey POs). The respondents in the in-depth interviews of POs in Germany support this finding. However, there are differences, arising especially from very different membership numbers of the POs and the quantity of milk per member. It is easier to organise the involvement of many or all members in a PO with a low number of members than in a PO with 300 members or more. In POs with many members, the management (board and supervisory board) usually takes the decisions. The participation of members in these decisions takes place in the board of directors and the general assembly. From the perspective of the surveyed executive managers, this could be quite intensive (IDIP). This information might give rise to the thought that the question in the electronic survey is not well formulated or understood. Many POs in Germany answered that no paid staff are involved whereas according to the in-depth interviews the management performs several tasks.

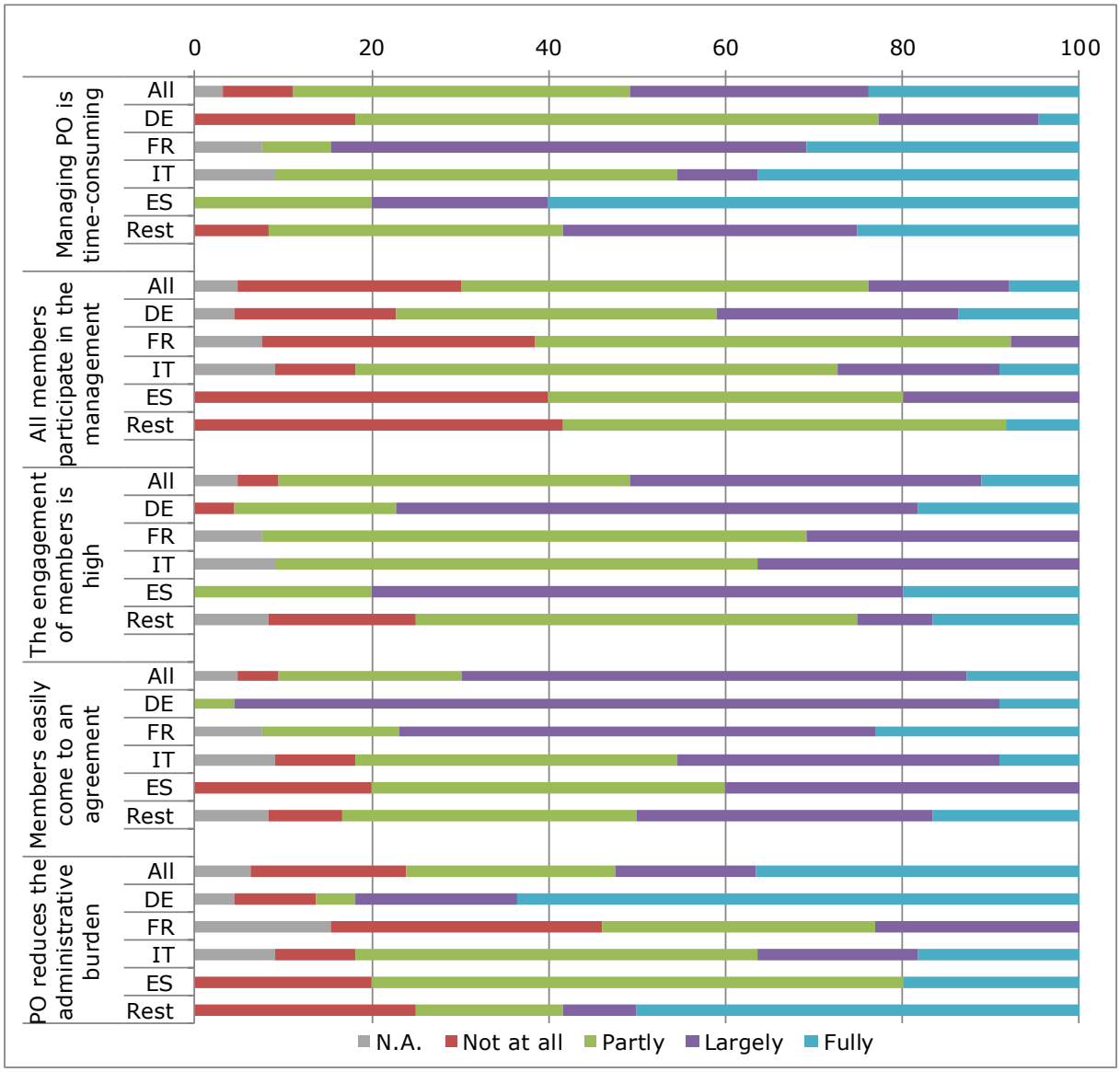
Around 50% of the surveyed POs agreed fully or largely with the statement that 'the engagement of members in the PO is high'. Three out of four POs in Germany and France agreed with this statement (Electronic survey POs).

'Members easily come to an agreement' is fully or largely the opinion of 70% of the surveyed POs. This overall high level is based on the high level in Germany: 95% of its POs endorse this statement. In addition, France has a rather high level: 77% (Electronic survey POs).

That the PO reduces the administrative burden for members is fully or largely the opinion of 82% of the German POs surveyed. The POs in France, Italy and Spain have quite the opposite opinion. One-fifth to one-third share the German point of view (Electronic survey POs).

Overall, the German POs are most positive on the management and engagement of members of the POs. This might be linked to the aforementioned long tradition of POs in Germany. Combined with the low level of paid staff — 64% have no paid staff — this might suggest that the POs themselves do not do the administration (Electronic survey POs).

Figure 5.14 Opinion on the management of the PO (% of total)



Source: Electronic survey POs, question 30. Detailed information in Appendix 5, Table A5.11.

Box 5.7 Trust in the board of the PO

PO A

We succeeded in obtaining more quality standards and we valorised all milk in the dairy supply chain, improving collaboration and relationships with other stakeholders. The internal decision-making structure, run by the Board, is still nowadays one of the key assets in the good functioning of the PO.

PO B

An Executive Board is created where members' representatives in each province take part, and which meets quarterly. The Executive Board takes decisions on the members' fees, the board coordinates for negotiation (e.g. range of prices; allocation of volume among farmers). The director leads individual strategies for contractual proposals. A selection of representative farmers delivering to specific processors have to agree. The director is satisfied but also cautious. He thinks that keeping the PO working needs constant attention and dedication.

Source: Statements of specific POs (IDIP).

5.8 Developing into a processing cooperative

In this section, the ambition of POs to evolve into a cooperative is discussed. Section 2.1 showed that a significant proportion of milk is processed by cooperatives. A cooperative can be seen as a PO with processing facilities.

Table 5.10 Developing the PO into a processing cooperative

Member State	Yes	No	N.A.	Total
DE	0	22	0	22
FR	0	13	0	13
IT	5	3	3	11
ES	0	4	1	5
Rest	6	5	1	12
All	11	47	5	63

Source: Electronic survey POs, question 33.

Three-quarters of the POs are not considering becoming processing cooperatives (Table 5.10). In Germany, France and Spain, none of the surveyed respondents indicated changing to a cooperative as an opportunity. In Italy and the 'Rest' of the MSs, the majority consider it an opportunity (Electronic survey POs).

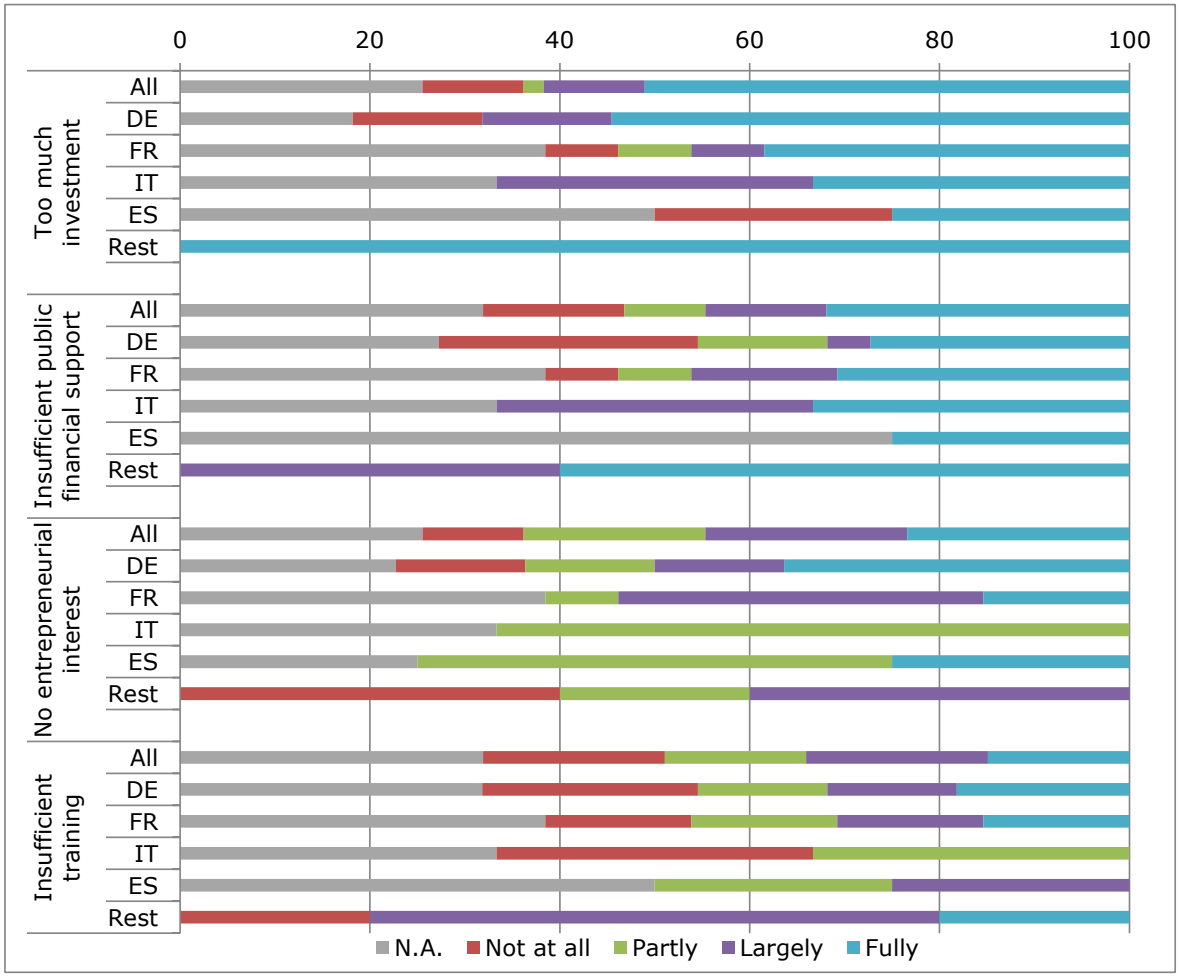
The overall opinion is that developing the PO into a cooperative needs too much investment, without public financial support and entrepreneurial interest among the PO members (Figure 5.15). For some of the POs interviewed, the transition towards a processing cooperative is not considered an important issue; this explains the total number of five non-responding POs. The opinion on training varies strongly. The 'Rest' of the MSs are rather outspoken on all issues except for entrepreneurial interest. Eighteen POs indicated other reasons; several mentioned that it is not their aim to become a processor; several also mentioned that they have no position in the value chain or the know-how (Electronic survey POs).

Box 5.8 Developing from a PO into a cooperative

> We established a PO under the cooperative status. We are currently a cooperative that involves more than 200 members. We reached for sure a stronger position in the negotiation power and having agreements with buyers. We succeeded also in avoiding individualistic behaviour that was quite common in our territory.

Source: Statements of a specific PO (IDIP).

Figure 5.15 Reasons for not changing into a cooperative

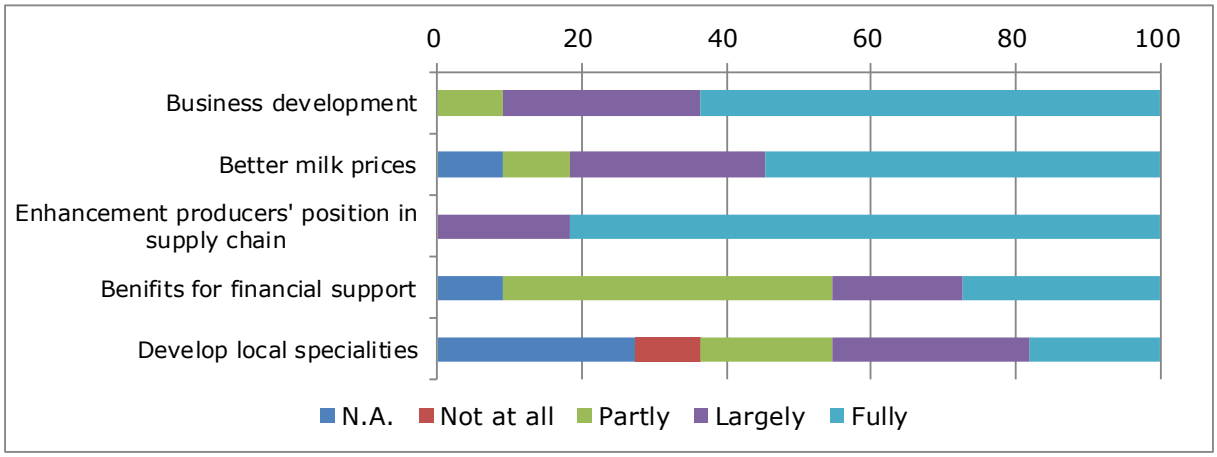


Source: Electronic survey POs, question 33. Detailed information in Appendix 5, Table A5.12.
Note: Responses of 47 POs that indicated that they would not consider such a development.

The number of POs that looked favourably on the opportunities for developing into a processing cooperative (11 POs, fewer than 20% of the surveyed POs) is too small for analyses at country level. Opportunities for business development, better prices and enhancement of the producers' position in the value chain are highly valued reasons for developing into a processing cooperative: 80% to 100% agreed fully or largely with these reasons (Figure 5.16). The two reasons 'benefits for financial support' and 'develop local specialties' are endorsed by of 45% of the 11 POs (Electronic survey POs).

One interviewed PO moved in the opposite direction: from a processing cooperative to a PO. One of the main objectives was to become eligible to receive subsidies for POs. The structure of the organisation remained largely similar (IDIP).

Figure 5.16 Reasons for developing into a processing cooperativea)



Source: Electronic survey POs, question 33.
Note: Response of 11 POs that indicated that they would consider such a development.

5.9 Potential for more POs

Around three-quarters of the respondents (46 POs) indicate that there is potential for more POs in their country. Twenty-five per cent (16 POs) indicated no potential and one PO did not express an opinion. Figure 5.17 does not include Spain separately, as only three POs indicated the possibility, and their responses are added to the 'Rest' group. Furthermore, in Figure 5.17 the 'Not available' (N.A.) answers are also counted. In the textual overview below, we present the proportion of POs that agreed fully or largely as percentage of the POs that provided an answer (hence excluding N.A.).

POs were requested to respond to suggested reasons why the possibilities for establishing more POs in an MS were not exploited:

- Sector is well organised.

  Only 20% (8 of 41 respondents that answered) are fully or largely of the opinion that the sector is well organised to exploit the full potential of POs. In Italy, not a single PO indicated that the sector is prepared to exploit the potential of POs (Electronic survey POs).

- Value chain functions properly.

  Twenty-six per cent (9 out of 35) are of the opinion that the sector functions properly. More German POs agree fully or largely, and fewer POs in the 'Rest' of the MSs (Electronic survey POs).

- Sector is insufficiently organised.

  This question refers to questions discussed under the first bullet point above. The answers indicate that the dairy sector is insufficiently organised and prepared to achieve the maximum benefits from POs.

- Benefits are lower than costs.

  Twenty-nine per cent (10 out of 34) fully or largely agree that the benefits do not outweigh the costs. The remainder are of the opinion that POs are beneficial for the producers. The German POs endorse this opinion most strongly (Electronic survey POs). In addition, the in-depth interviews expressed the opinion that the POs offer their members support in the market when there is an oversupply of milk combined with low producer prices. Members already appreciate a small price premium of, for instance, EUR 0.001 (IDIP). Italian informants tend more towards the opinion that POs are not beneficial and the 'Rest' support each opinion 50-50 (Electronic survey POs). Several interviewed POs stated that POs are not considered an appropriate

instrument to influence the development of supply and demand in the global market (IDIP).

Box 5.9 Milk Package reduces transaction costs

The Milk Package provisions are intended to create benefits for the farmers, resulting in lower transaction costs for individual price negotiations, as purchase directors of the processor switched frequently. Furthermore, the processor has built up a focus group to discuss their different options for purchasing milk.

Source: Statements of a specific PO (IDIP).

- Farmers are unwilling to cooperate.

  Forty-six per cent (15 out of 35) of the respondents are of the opinion that farmers are not willing to cooperate. In the 'Rest' of the MSs, as many as 60% are of this opinion. Put differently, overall a very small majority believes that farmers are willing to cooperate (Electronic survey POs). An interviewed PO considered from personal experience that farmers do not want to cooperate (IDIP).

- Farmers prefer direct contact with purchaser.

  A possible preference for direct contact between farmers and producers is not a major reason for not exploiting the possibilities of POs: 30% (11 out of 37) mentioned it as a reason. In Germany, this proportion is only 14%; however, in France and the 'Rest' it varies between 40% and 43% (Electronic survey POs).

- There is insufficient information/training.

  Insufficient information and training are indicated as important reasons for a low number of POs: 56% (20 out of 36) agree fully or largely. Germany is on the low side of agreement (36%), and France (63%) and the 'Rest' (80%) are on the high side (Electronic survey POs).

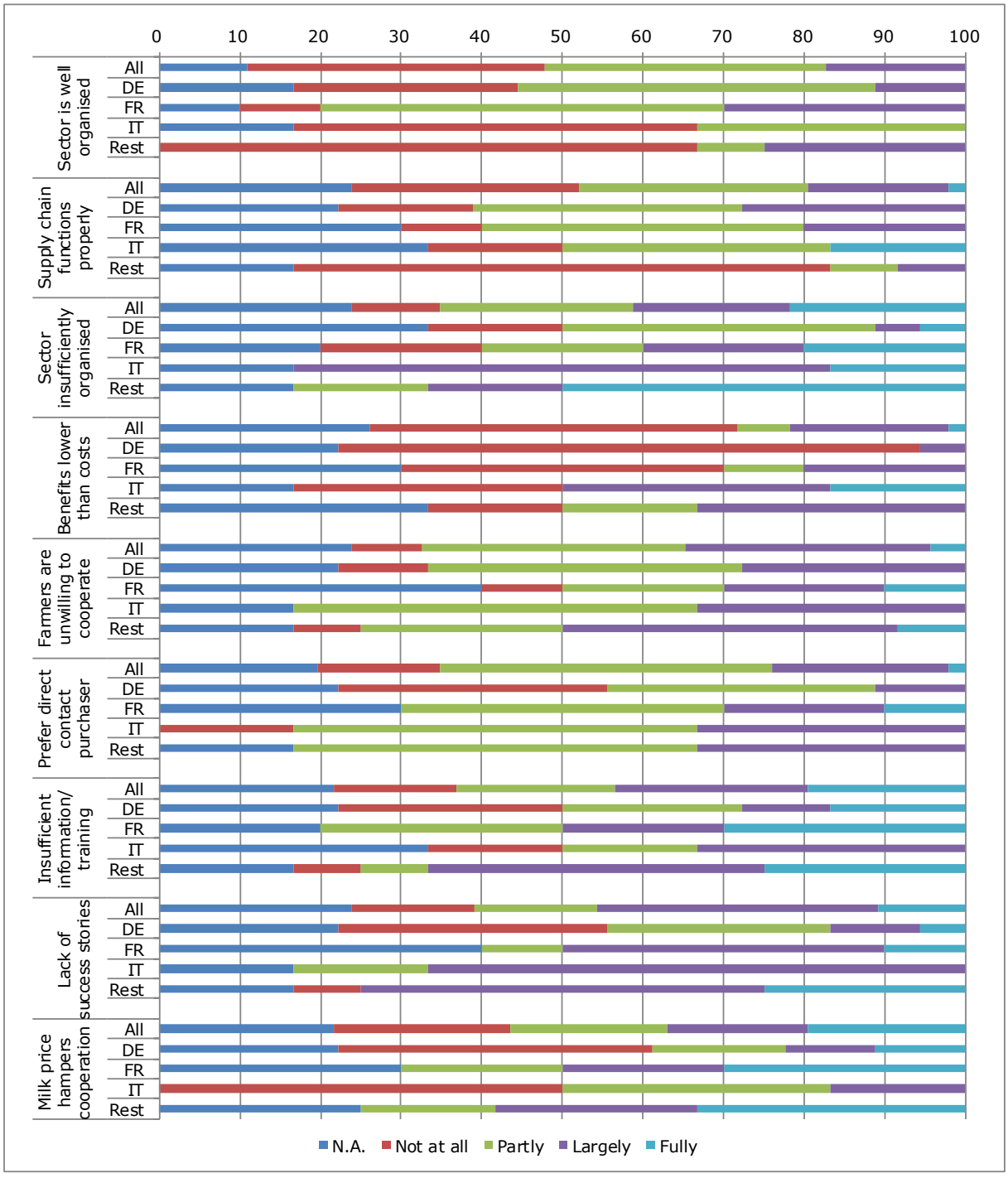
- There is a lack of success stories.

  Sixty per cent of the respondents indicated that the absence of success stories of functioning POs strongly demotivates people to establish POs. The difference between Germany (21% agree) and all other countries (80-90%) is striking (Electronic survey POs).

- Recent milk price developments do not encourage cooperation among farmers.

  Opinion on this is split almost 50-50 (17 out of 36 agree largely or fully) for all respondents; however, there are differences between MSs. Germany (29%) and Italy (17%) do not agree that this hampers the establishment of POs, whereas France (71%) and the 'Rest' (78%) strongly support this opinion (Electronic survey POs).

Figure 5.17 Potential for establishing POs



Source: Electronic survey POs, question 34. Detailed information in Appendix 5, Table A5.13.
Note: Responses of 46 POs that indicated potential.

5.10 Supplementary information on challenges

The questionnaire asked what benefits and drawbacks the members of the POs have. Alongside the closed questions, which are discussed above, there were also a number of open questions (see Section E of the survey; Appendix 1)[11]. Most answers to these questions are in line with what is stated on the motives for establishing a PO (Section 5.3). Several other answers are just statements on the weak position of producers, the

[11] Some of the answers have been excluded because they were not readable or recoverable.

need for financial means or, positively, that the PO adds value (Electronic survey POs). In this section, we mention the number of POs that filled in these question and we summarise their statements.

The POs could also indicate if they had ideas about preferred changes in the Milk Package provisions. Their answers relate to:

- Contractual relations

  Fifteen POs suggested changes in contractual relations. They mostly refer to providing a more important position for the producers, encouraging other processors to follow voluntary codes for contractual relations, forbidding exclusivity between PO and purchaser, and favouring of collective contracts. Some underlined the positive contributions of the actual Milk Package (Electronic survey POs). They argue that such changes could lead to a strengthening of the position of POs and producer cooperatives (IDIP).

Box 5.10 Suggestion for a voluntary code for contractual relations

Processors have no obligation to recognise POs, just a few adhere to this. Farmers have to coordinate themselves and spend money and much effort to form a PO, with the risk of being left empty-handed in the end. The interviewed PO signalled that action by the national authority is needed on:

1. Introducing a label on dairy products, which indicates a fair value chain from producer to consumer.
2. Obliging processors to recognise approved POs and work with them in all MSs.
3. Helping farmers to extend such a code throughout the value chain, so they need to deal with only processors that are complying with the fair supply code.

The PO suggested either making the fair value chain obligatory or introducing a 'fair value chain' label for market transparency and increasing the use of it.

Source: Statement of a specific PO (IDIP).

- Producer organisations

  In addition, 15 POs provided some information about this. Overall, they consider that the role of POs has to be strengthened and that recognition by processors should become obligatory (Electronic survey POs).

- Collective negotiation

  Nine POs suggested increasing the negotiation power of the POs and also providing more financial means for their activities (Electronic survey POs).

Box 5.11 Promoting local product

We wanted to improve the production and quality of an important local product, starting a dialogue with important local buyers. The (achieved) objective was to make a written contract that is able to recognise the quality of the local product as an added value for the territory. The PO contacted the largest local producers and agreed on compensation for suppliers and buyers. We established constant dialogues and monthly meetings, trying to plan expectations and benefits. We improved the production and the provision of raw milk in our territory, simply getting together as producers and establishing key agreements with main buyers.

Source: Statement of a specific PO (IDIP).

- Interbranch organisations

  Eleven POs provided some comments. They suggest more collaboration and also the possibility of intervention in case of crises (Electronic survey POs).

  - Regulation of supply for PDO (protected designation of origin)/PGI (protected geographical indication) cheese

    Five POs indicated no interest or that the regulation is not applicable to their country (Electronic survey POs).

  - General remarks on the Milk Package as a whole

    Eight POs provided some text. They state mainly that the Milk Package did not solve their problems. One, however, states that the position of the producers has been enhanced (Electronic survey POs).

6 Opinions of POs compared with those of FOs and the EDA

6.1 Introduction

In several MSs, no or only a few POs have been established. The question arises what the reasons could be. The existing POs were asked to give their views, as were FOs and the EDA, on a set of prepared statements reflecting obstacles to starting a PO. Their answers contribute to addressing research objective 2: 'Evaluate the potential for POs where they have not been constituted yet'.

In this chapter, we compare the opinions provided by the three groups of respondents: existing POs, the EDA and FOs. The last group is assumed to have a broad overview of the sector and know about power relations in the value chain. Moreover, FOs are assumed to represent farmers' interests and may play an important role in encouraging farmers to establish a PO.

In the overviews in the next sections, opinions of POs are presented as 'All POs'. Responses of the FOs are presented in several ways. Their general, overall view is indicated as 'All FOs' in the tables and figures below. Next, FO responses are classified according to the four categories defined in Chapter 4 (Section 4.4), in order to identify whether or not the opinions of the surveyed FOs differ between:

a. MSs with and without POs;
b. the EU15 and EUn13;
c. MSs where a certain type of contractual arrangement predominates, namely a cooperative, mixed or private type (this is indicated as MS Cooperative — i.e. an MS where we find predominantly cooperative contractual arrangements — MS Mixed and MS Private);
d. the group of Copa-Cogeca members and members of other FOs.

In the following sections, we report on the outcomes of the survey following its structure (see Appendices 2 and 3 for the questionnaires). Section 6.2 addresses in how many organisations dairy farmers cooperate or are united. This is to get an insight into the level of organisation. Section 6.3 reports on the views of existing POs, FOs and EDA members on what may be important reasons for low numbers of POs. Section 6.4 presents the motivation for possibly joining or establishing a PO. Finally, section 6.5 discusses the respondents' opinions on the terms of contracts.

6.2 Cooperation between farmers and other stakeholders

This section reports on the form of cooperation (if any) between farmers and other stakeholders in the milk sector. The results indicate how the sector is organised. The presence of different forms of FO and cooperation among them and with other actors in the value chain might explain farmers' attitudes towards establishing POs. The assumption is that POs are more likely to be established in an MS where the sector has a more positive attitude towards cooperation.

Question 2 in the FO and EDA surveys (see Appendices 2 and 3) refers to five types of organisations: FOs, POs, trade unions, cooperatives and milk collection organisations. Farmers can be members of more than one of these. Table 6.1 shows the number of forms of cooperation of which farmers are members according to the electronic surveys. The results show that EDA and (all) FO respondents count on average 3.0 and 2.4 forms of cooperation respectively. FO respondents in MSs with POs estimate that farmers are involved in a higher number of organisations than those in MS without POs. This suggests that in MSs with POs farmers would be more organised. Looking at FOs in MSs differentiated by predominant contractual arrangement, the conclusion is that the level of organisation seems highest in MSs with mixed contractual arrangements and lowest in

MSs with cooperatives dominating. The interpretation of the number of organisations is ambiguous, though: a high number of organisations can signal a strong interest in joining forces in the sector. However, it can also signal that they have few shared and common interests, resulting in many organisations with different focuses. Hence, a clear view on the link between the structure and governance of the chain and the attitude towards cooperation would need further analyses.

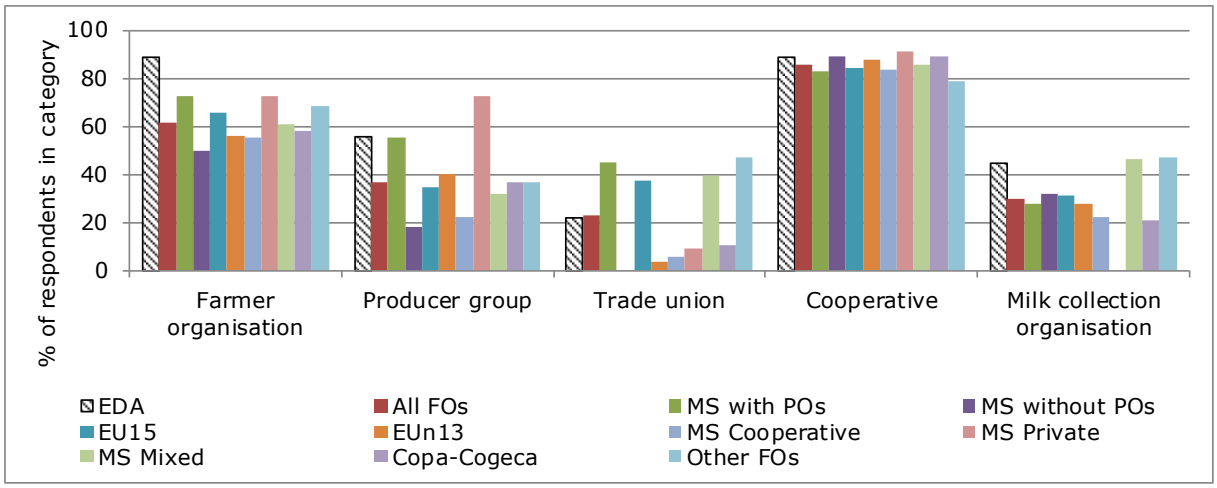
Table 6.1 Average number of organisations of which farmers are members, mentioned by FOs respondents, by category of FOs

Category	Average number of organisations per MS
EDA	3.0
All FOs	2.4
MSs with POs	2.8
MSs without POs	1.9
EU15	2.5
EUn13	2.2
MS Cooperative	1.9
MS Private	2.5
MS Mixed	2.6
Copa-Cogeca	2.2
Other FOs	2.8

Source: Electronic survey FOs, question 2, and Electronic survey EDA, question 2.

The majority of respondents most often mention cooperatives as the dominant type of organisation for farmers working together in the milk sector. FOs rank second (see Figure 6.1). Differences exist between categories of MS. Respondents in MSs with POs mention FOs, producer groups and trade unions more often than MSs without POs. FOs in MSs with private contractual arrangements also mention producer groups more often than FOs in mixed and cooperative oriented MS.

Figure 6.1 Organisations for cooperation among farmers in the milk sector



Source: Electronic survey FOs, question 2, and Electronic survey FOs, question 2. Detailed information in Appendix 6, Table A6.1.

6.3 Reasons for low number of POs

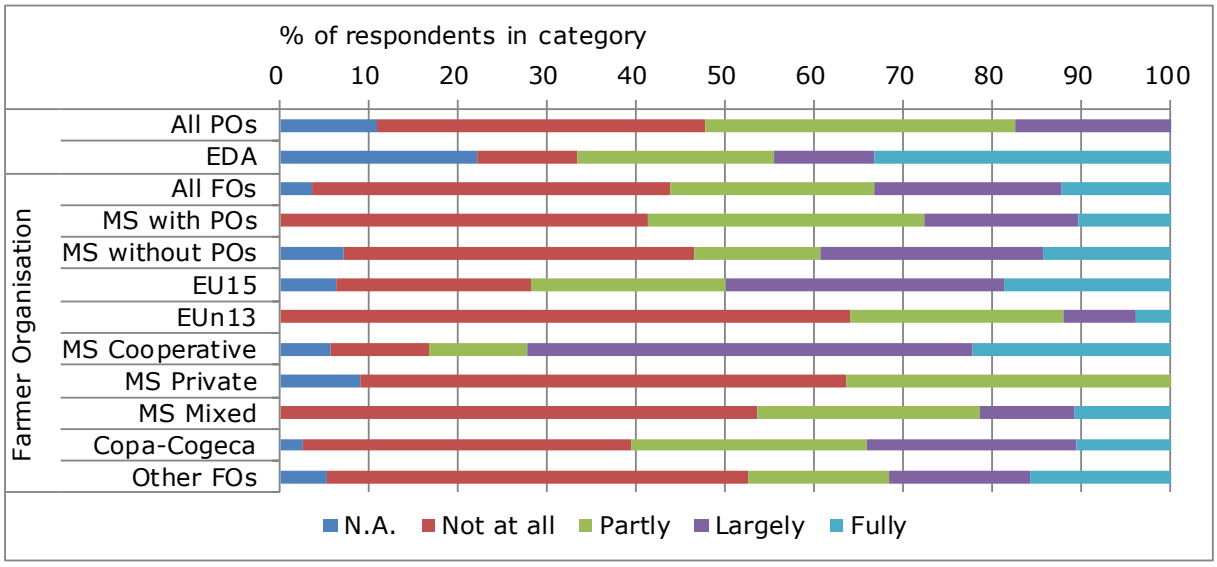
The questionnaire lists several reasons for the low number of POs that have been established up to now. This section analyses the responses given by the POs, FOs and

EDA members. As mentioned before, the FOs will be sub-divided into four categories. Each reason will be discussed concisely and presented in a graph.

The sector is already well organised

Behind this statement is the thought that a 'well-organised' sector does not need an additional institution to improve the functioning of the milk and dairy market. In their responses to this statement, only 17% of 'All POs' agreed ('largely' and 'fully') which is quite a difference from the opinions of EDA members and 'All FOs', of which 44% and 33% agreed respectively. Existing POs are apparently less confident that current organisations and contractual arrangements can manage the milk and dairy market in such a way that farmers receive cost-effective and stable prices (the major motivations for establishing a PO; see Section 5.4). The FOs in the EUn13 have a similar opinion to the POs, indicating that only 12% agree with this statement and 64% do not agree at all. The most positive responses came from FOs based in MSs with cooperatives: 72% agree largely or fully. The differences between the other FO categories are rather small.

Figure 6.2 Opinions of organisations on the statement 'The sector is already well organised' as a reason for not establishing a PO



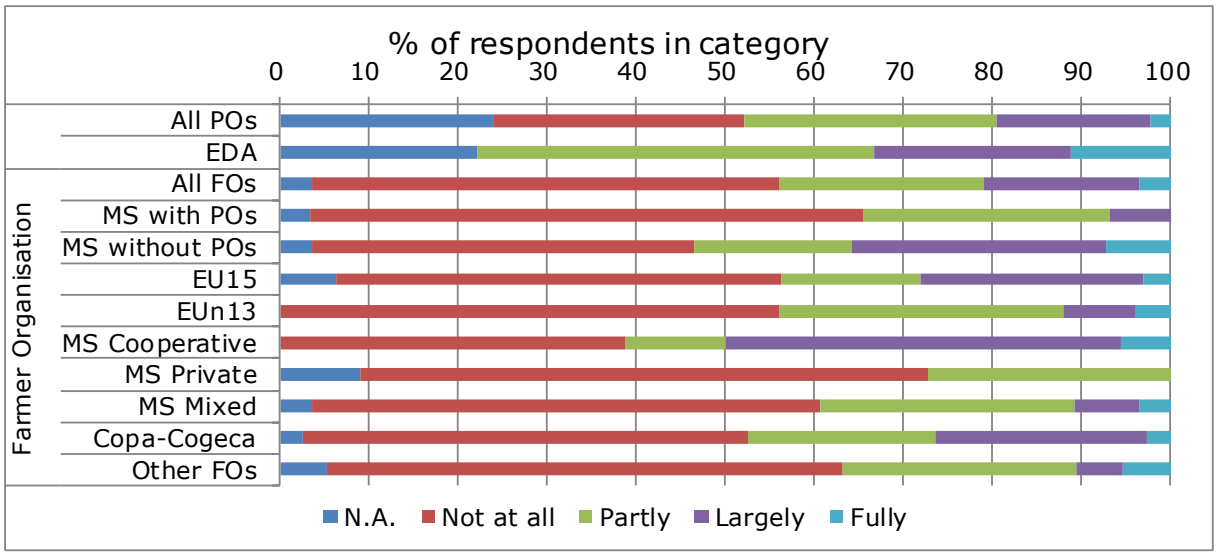
Source: Electronic survey POs, question 34, Electronic survey FOs, question 3, and Electronic survey EDA, question 3. Detailed information in Appendix 6, Table A6.2.

The respondents in the in-depth interviews (FOs) confirm the survey outcomes for this group, suggesting that there is no need for POs, as the agricultural sector in general and the milk sector in particular are well organised (IDIF). FO respondents comment that, given the already high level of organisation of the sector, another PO would probably have difficulties in finding purchasers. Still, respondents of FOs also recognise that the Milk Package provisions might contribute to more concentration of supply and could increase the bargaining power of their dairy farmers. The Milk Package is in this respect considered a positive policy, although not (much) applied in their countries (IDIF). Several FOs mentioned the presence of a processing cooperative with a large market share as an important factor restricting the establishment of a PO (IDIF). The latter suggests that the position of processing firms plays an important role in the establishment of a PO. This is addressed in the next statement.

The value chain functions properly

This statement is confirmed by about one-third of the EDA members, with another 44% of the EDA respondents indicating partial agreement. The opinions of the processing industry contrast with FOs and POs: a significant proportion of POs and FOs respondents completely disagree with this statement. This is the case in both the EU15 and EUn13. However, note that it is especially in MSs with predominantly private and mixed contracts that FOs disagree with the statement that the value chains functions well.

Figure 6.3 Opinions on the statement 'The supply chain is already functioning properly' as a reason for not establishing a PO

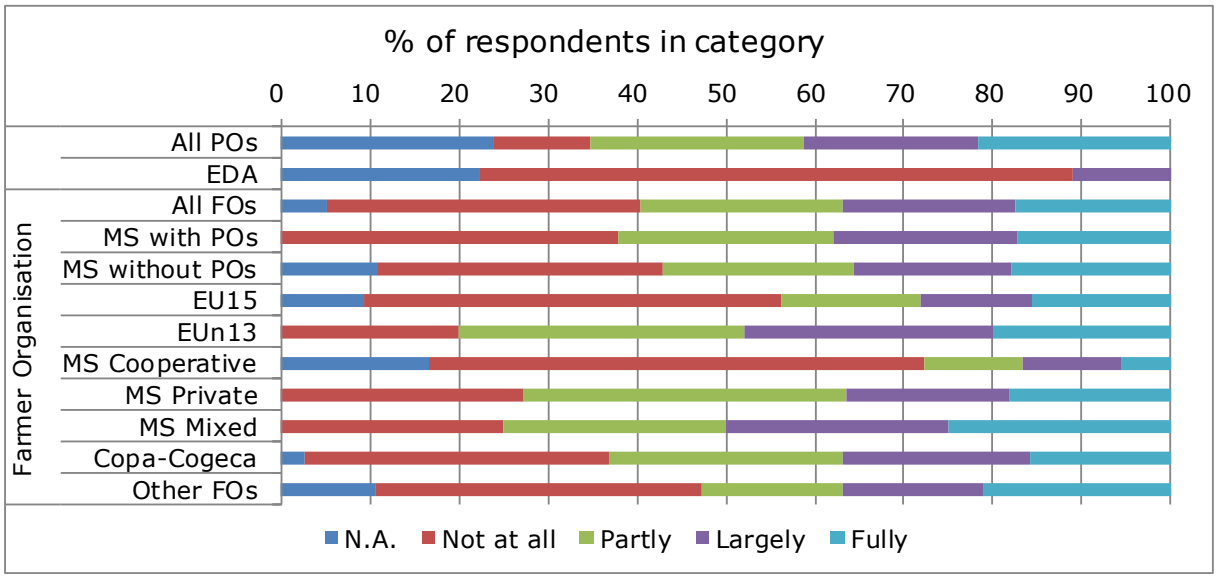


Source: Electronic survey POs, question 34, Electronic survey FOs, question 3, and Electronic survey EDA, question 3. Detailed information in Appendix 6, Table A6.2.

Insufficient organisation in the sector

This reason for not having established a PO is more or less the opposite of the first statement discussed. Insufficient organisation of the sector would imply that farmers do not see the benefit of working together, and consider other farmers more competitors than a group having similar interests to their own which can be better defended by working together. This statement claims that, because of the weak organisation of the sector, it would be difficult to establish POs. One would expect answers that are consistent with how respondents reacted to the statement that the sector is well organised. However, some divergences in the responses can be found for EDA members, FOs in the EU15 and respondents in cooperative-oriented MSs. More respondents disagree with the reason 'insufficient organisation' than agree with the reason 'well organised' for not having established a PO. Overall, however, the respondents answered fairly consistently to both statements.

Figure 6.4 Opinions on the statement 'Insufficient organisation in the sector' as a reason for not establishing a PO



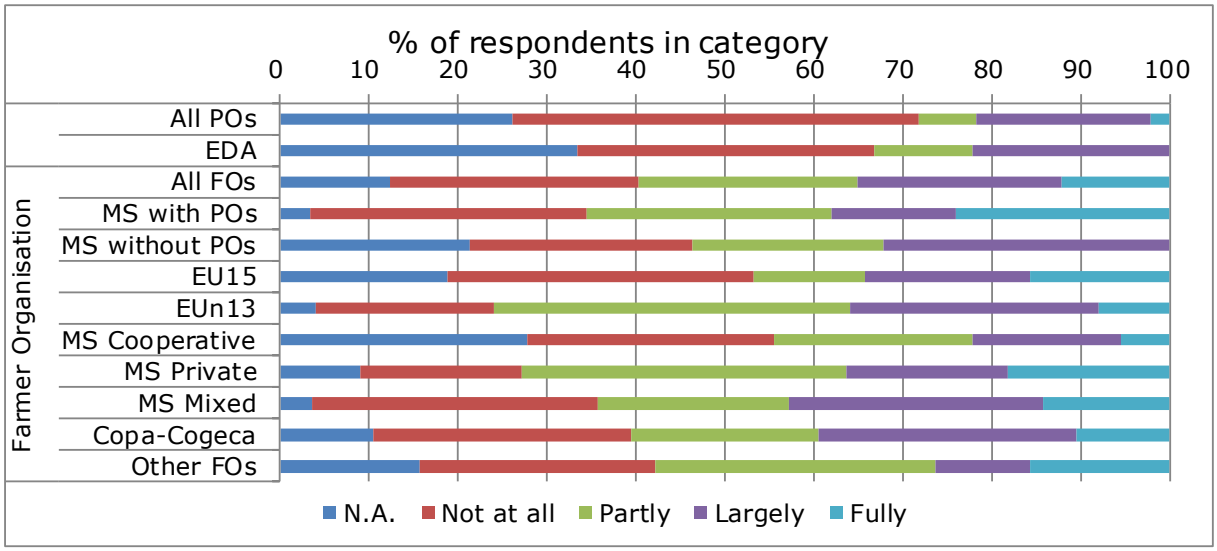
Source: Electronic survey POs, question 34, Electronic survey FOs, question 3, and Electronic survey EDA, question 3. Detailed information in Appendix 6, Table A6.2.

According to an Italian FO, better organisation between producers and trade unions is needed to encourage aggregation of supply and thereby ensure better and stable prices. This FO also suggests that the experiences of the fruit and vegetable sector should be used as a successful example (IDIF).

Benefits of PO do not outweigh the costs

Establishing, registering and managing a PO imply costs. The majority of the respondents of all three groups surveyed do not agree with this statement, indicating that they acknowledge the benefits of starting a PO despite the initial investments and operating costs.

Figure 6.5 Opinions of organisations on the statement 'The benefits to participate in a PO will not outweigh the costs' as a reason for not establishing a PO

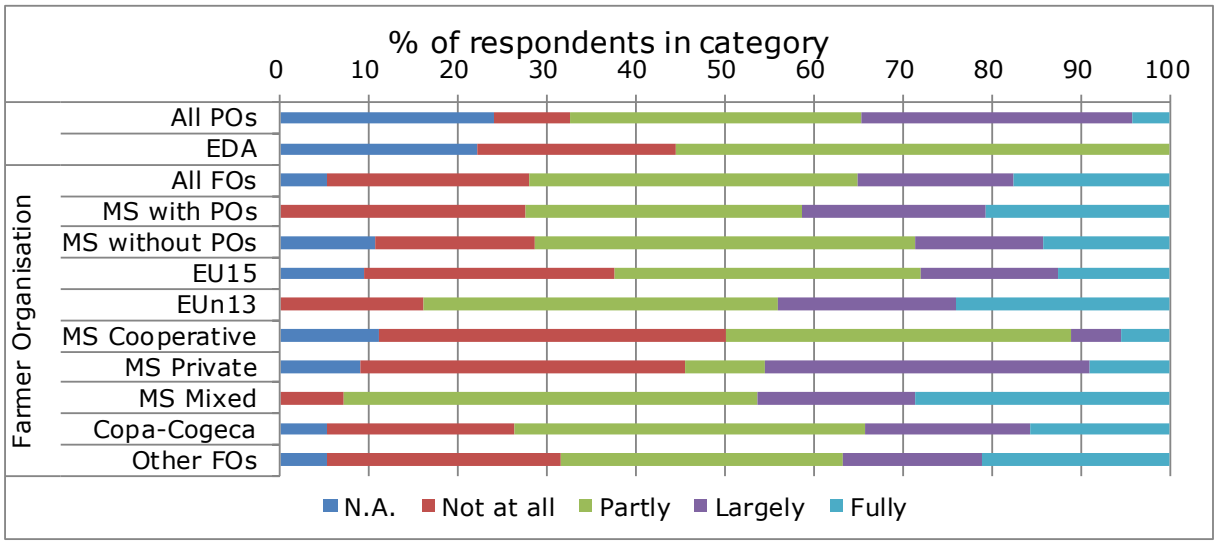


Source: Electronic survey POs, question 34, Electronic survey FOs, question 3, and Electronic survey EDA, question 3. Detailed information in Appendix 6, Table A6.2.

Insufficient willingness to cooperate

If farmers do not have a positive attitude towards cooperation in general, it might be difficult to get them to be enthusiastic about creating a PO. Only a small proportion of the interviewees answered that they do not agree at all with the statement (Figure 6.6). To put it differently: the majority of those who answered agree partly, largely or fully with this statement and find that insufficient willingness to cooperate is an important obstacle to starting up a PO. The EDA and MS Cooperative respondents have a slightly different opinion, indicating that they estimate that farmers' unwillingness to cooperate is only partly a reason why few or no POs are established.

Figure 6.6 Opinions of organisations on the statement 'Insufficient willingness of farmers to cooperate' as a reason for not establishing a PO



Source: Electronic survey POs, question 34, Electronic survey FOs, question 3, and Electronic survey EDA, question 3. Detailed information in Appendix 6, Table A6.2.

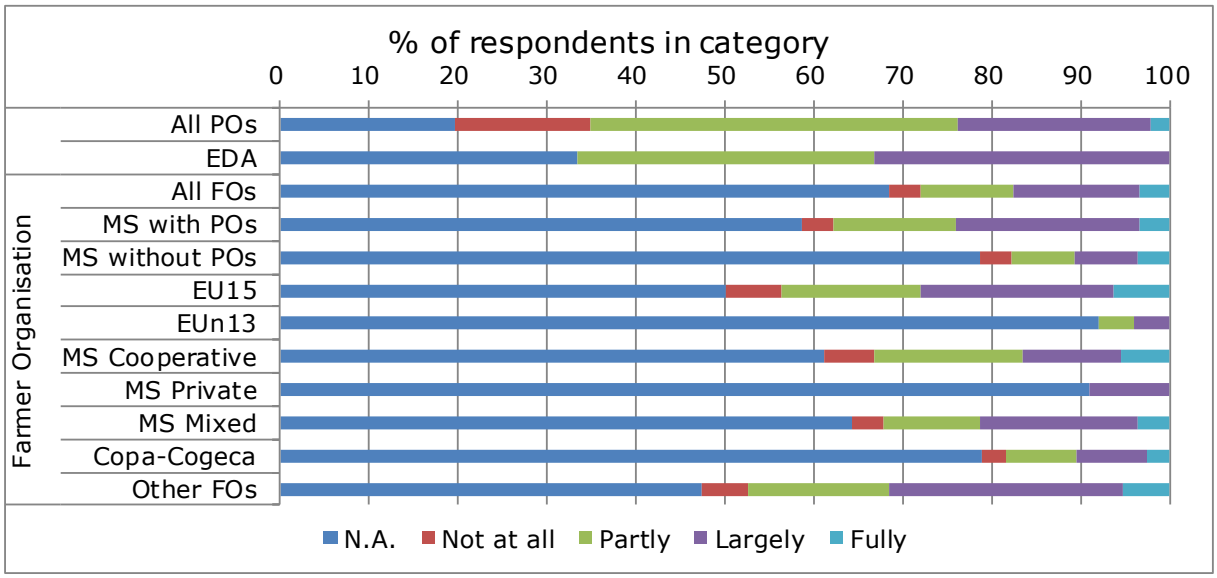
The survey shows that respondents from the EUn13 agree with this statement. This is confirmed by several open interviews in this region. For instance, the interviewed Bulgarian FO stated that the farmers in its country are problematic team players with little willingness to cooperate. The intervention of an FO that is very proactive in explaining the benefits of a PO may contribute to a more cooperative attitude among farmers (IDIF). Respondents from Lithuania and Poland also highlight unwillingness to cooperate as an important obstacle to setting up POs in their countries (IDIF). Several FOs support the opinion that establishing well-functioning POs needs significant support from third parties, other than farmers (IDIF).

Farmers prefer direct contact with purchasers

The background of this statement is that farmers would prefer to directly negotiate with milk processors in order to get the best deal. Delegating the contractual and delivery arrangements to a PO might lead to a focus on the 'average', which leaves the best-performing dairy farmers dissatisfied. Therefore, farmers would prefer individual and direct contact with purchasers of their milk in order to be remunerated for the quality of their milk.

This reason for not needing to establish a PO is hard to evaluate, as a significant proportion (68% N.A.) did not express their opinion (see Figure 6.7). Some remarkable difference between the three groups can be observed, If we correct the data for the non-responses and will analyse only the completed answers. Then, over 50% of the EDA respondents (50% of the six remaining observations) and 'All FOs' (56% of 18 observations) agree fully or largely with this statement as a reason for not establishing POs. On the other hand, 70% (of 35 observations) of 'All POs' disagree with this statement and in fact argue that collective arrangements with purchasers are preferred to individual contacts.

Figure 6.7 Opinions of organisations on the statement 'Farmers prefer to have direct contact with purchasers' as a reason for not establishing a PO

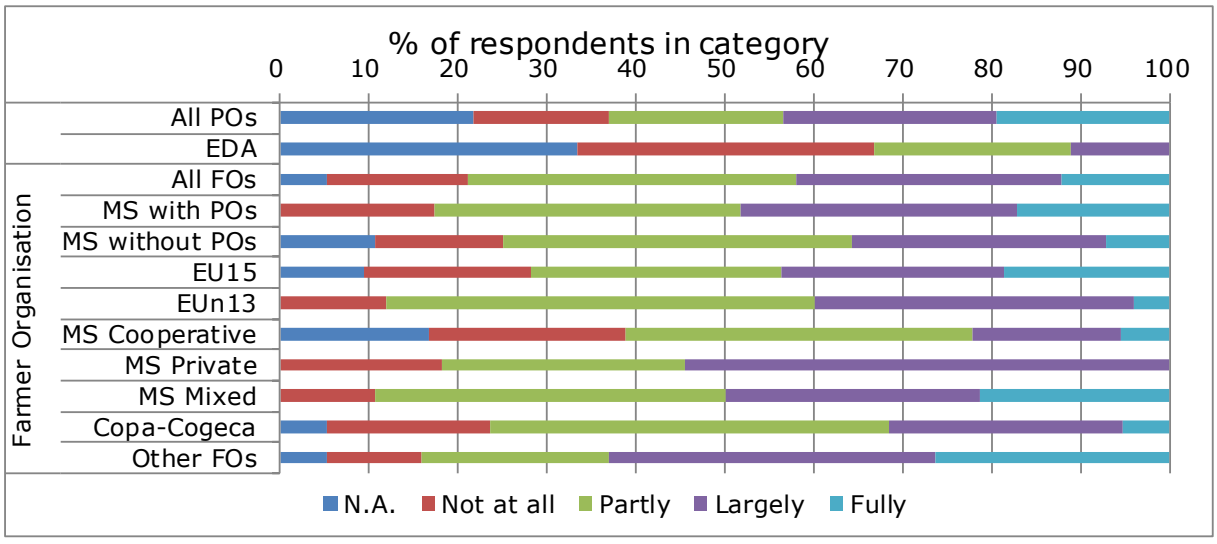


Source: Electronic survey POs, question 34, Electronic survey FOs, question 3, and Electronic survey EDA, question 3. Detailed information in Appendix 6, Table A6.2.

Insufficient information and training

Many farmers would not know about the option of establishing a PO and the possible benefits a PO may provide. This statement addresses to what extent the 'lack of information' is an obstacle to starting a PO.

Figure 6.8 Opinions of organisations on the statement 'Insufficient information and training' as a reason for not establishing a PO



Source: Electronic survey POs, question 34, Electronic survey FOs, question 3, and Electronic survey EDA, question 3. Detailed information in Appendix 6, Table A6.2.

With a score of 40-42%, both PO and FO respondents agree (largely and/or fully) with the statement that insufficient information to and training of farmers is hindering the establishment of (more) POs (see Figure 6.8). A slightly higher level of agreement with this statement can be observed in MSs with POs, the EU15, MS Mixed, MS Private and

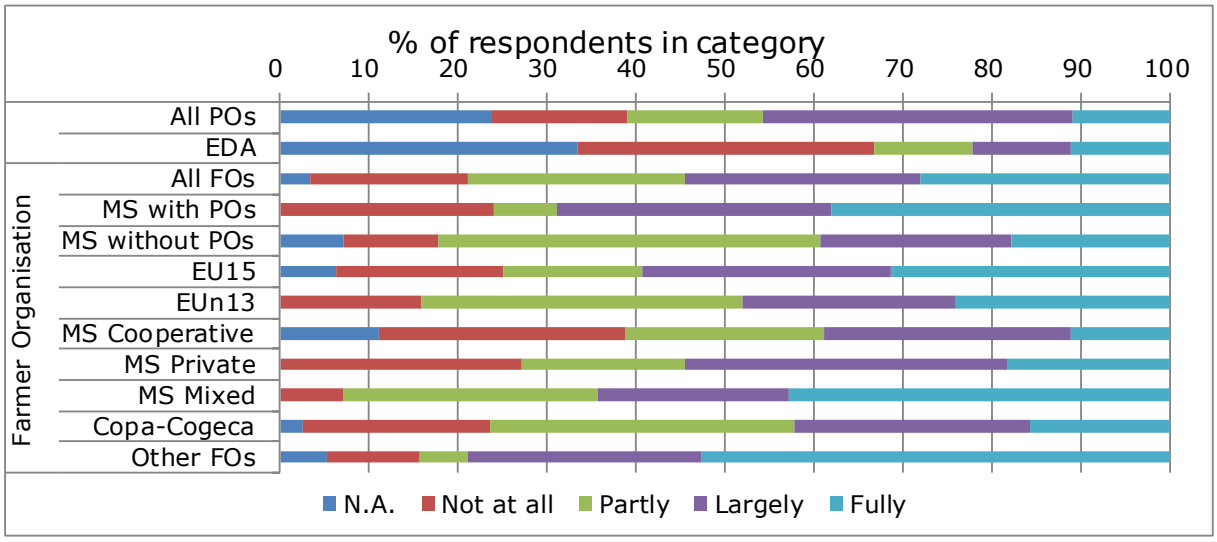
the 'Other FOs'. Note that the EDA members included in the survey do not find that a lack of information and training is an important reason for not having started a PO.

Lack of success stories

Dairy farmers may want to have a successful example to convince them that starting a PO would be beneficial for them. The lack of success stories, then, could be an important reason for not having established a PO. According to the majority of the respondents of 'All POs' and of 'All FOs', this is indeed the case. FOs in the EUn13 and in MSs with predominantly private contracts agree with this statement even more than FOs overall. Dairy processors have a different opinion (although a third of the interviewees did not answer the question), indicating a balanced view; half of those dairy processors who answered the question estimate that a lack of success stories is an important factor explaining why there are little POs, whereas the other half disagreed with this statement.

A Lithuanian FO suggested presenting the advantages of POs with success stories from other MSs (IDIF).

Figure 6.9 Opinions of organisations on the statement 'Lack of success stories' as a reason for not establishing a PO



Source: Electronic survey POs, question 34, Electronic survey FOs, question 3, and Electronic survey EDA, question 3. Detailed information in Appendix 6, Table A6.2.

Recent milk price developments do not encourage cooperation

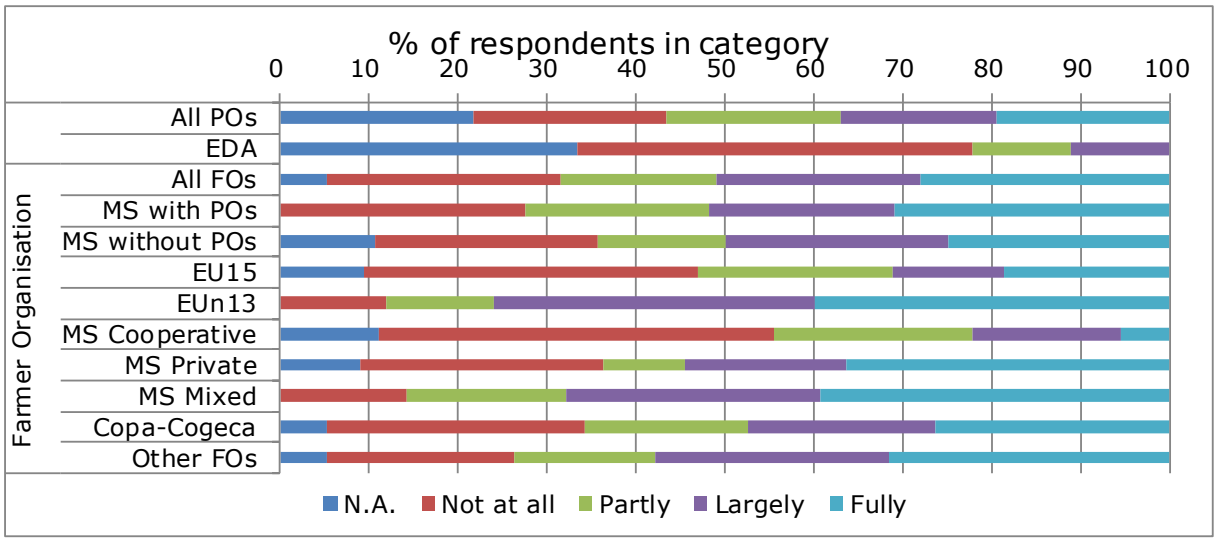
This statement aims to test if there is a link between the recent milk price developments — which show considerable fluctuation — and the role of a PO in obtaining better and more stable prices. The assumption is that, in periods of high prices, farmers have no incentive to form a PO because they are satisfied with the current situation, whereas, in periods of low prices, the bargaining power of farmers is limited by a surplus of supply, and a PO might not be able to arrange better prices with milk processors. Basically, a perceived 'too high' or 'too low' milk price in comparison with a long-term market equilibrium price is an obstacle to starting a PO.

In the responses to the statement, differences exist between the three types of organisations analysed. Only 11% of EDA respondents agree (largely or fully) with this statement, against 37% of 'All POs' and 51% of 'All FOs' (see Figure 6.10). Especially FOs in the EUn13 (76%) and in private-oriented and mixed MSs (55% and 68% respectively)

support this statement. The opinions of FOs in cooperative-oriented MSs are rather similar to those of the EDA members.

The responses to this statement would need further discussion and clarification in order to understand what the respondents really mean. For instance, do they consider recent milk price levels too low compared with a long-term trend, and find that milk processors exert market power? Unfortunately, the survey does not provide further the background information that would be necessary for a useful evaluation of the responses.

Figure 6.10 Opinions of organisations on the statement 'Recent milk price evolution does not encourage cooperation among farmers'



Source: Electronic survey POs, question 34, Electronic survey FOs, question 3, and Electronic survey EDA, question 3. Detailed information in Appendix 6, Table A6.2.

Conclusions on reasons why few or no POs are established in some MSs

Possible obstacles to establishing a PO are reported in the paragraphs above. The survey responses do not seem to support the statements that (assumed) strong organisation of the sector and properly functioning value chains are important reasons for not creating a PO. The statement that 'Benefits of POs do not outweigh the costs' and hence would be an important reason for not creating a PO is endorsed by many FOs, but not by POs, indicating that the currently existing POs are convinced that starting a PO is financially beneficial although it requires some initial investments and operating costs. POs and FOs, however, do agree that insufficient willingness to cooperate, insufficient information and training, and lack of success stories are important obstacles to starting POs. Next, FOs have a rather strong view on the impacts of recent milk price developments as a reason for farmers not to engage in POs. This last reason, though, would need further clarification for an interpretation of the statement to be possible.

The reporting of the FO respondents classifies FOs in several subcategories. A question is whether or not these subcategories provide insights showing systematic differences in answers between categories. In Appendix 6, Figure A6.1, the statements are presented by category. Overall, no systematic divergences between groups can be distinguished. In other words, no specific category answers most statements in a similar way that is distinctive from the answers of other categories.

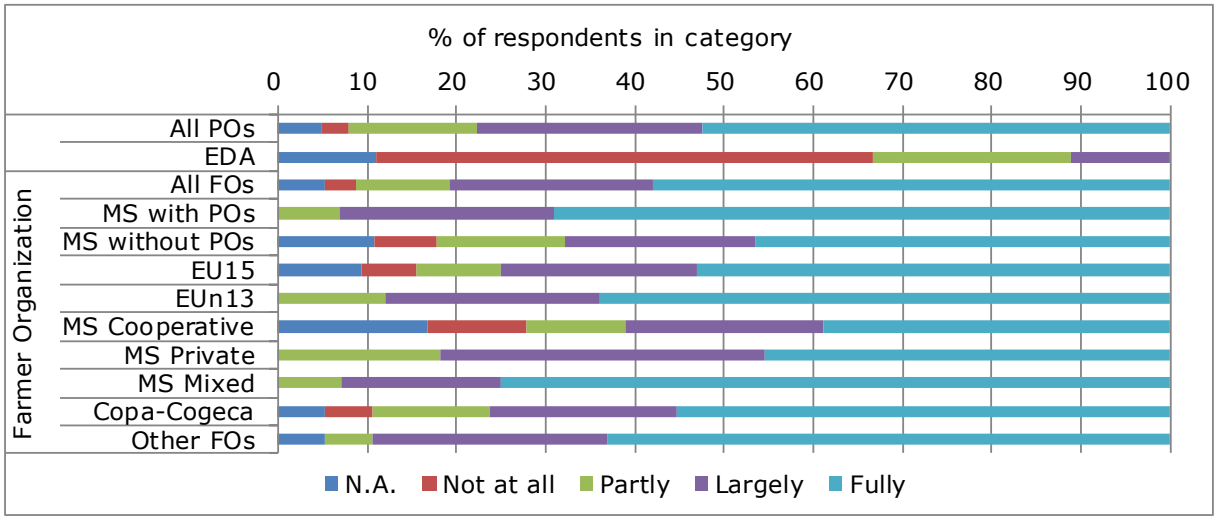
6.4 Motivations to join or establish a PO

This section analyses the reasons for joining a PO. The questions in the surveys of the POs and FOs on the one hand and the EDA on the other hand are slightly different, which makes comparing results somewhat complicated. Moreover, POs had to rank the reason with a priority and FOs and EDA had to indicate their extent of agreement with the statement. In order to allow comparison, we translated priority 1 (highest) as 'fully', 2 as 'largely', 3 as 'partly' and the remainder as 'not at all' important. For EDA members, we used the same ranking as for FOs; however, some questions were different, as the interests of EDA members in the value chain are different from those of POs and FOs.

Getting 'better' prices or lower costs

'Better' prices depend on whether you are a seller or buyer. A better price for farmers (sellers) is interpreted as a higher price. For members of EDA (buyers), we asked about cost reduction as a motive for doing business with POs: lower costs for EDA members are interpreted as lower raw milk prices or reduced costs of procuring raw materials.

Figure 6.11 Opinions of organisations on the statement on 'Getting better prices' for farmers and 'Reduce cost' for EDA



Source: Electronic survey POs, question 12, Electronic survey FOs, question 5, and Electronic survey EDA, question 6. Detailed information in Appendix 6, Table A6.3.
Note: For POs, priority rank 1 (highest) is fully, 2 is largely, 3 is partly and >3 is not at all.

The surveys show two noteworthy results:

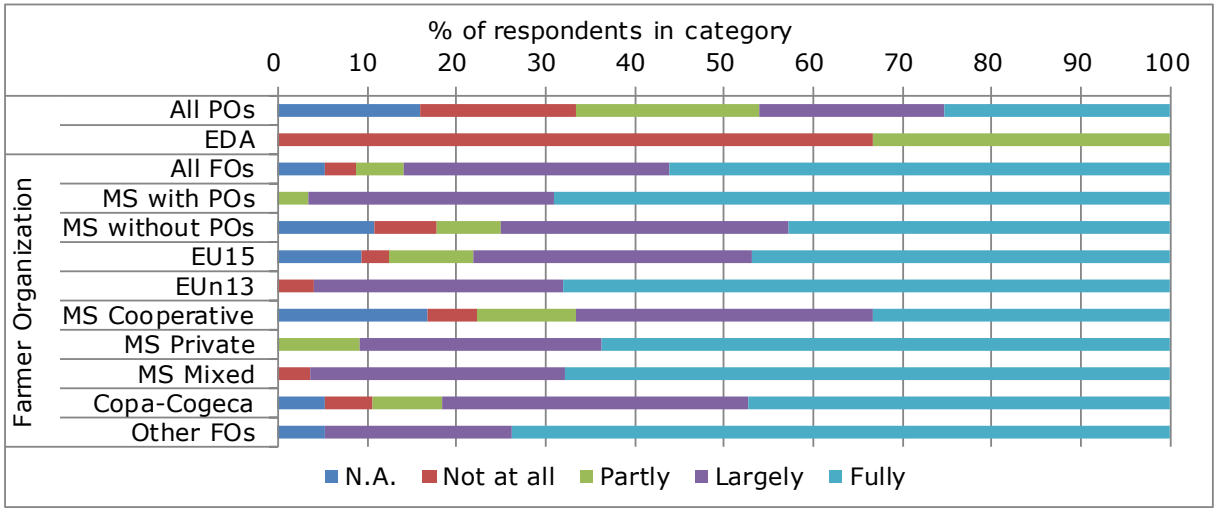
1. The opinions of 'All POs' largely match those of 'All FOs', indicating that on average 80% of these organisations have the opinion that better prices for their farmers are an important motivation for starting a PO.
2. Over two-thirds of EDA members do not consider that reducing costs for the purchaser/processor is a major motivation of doing business with POs, and only 12% agrees with the statement. This means that the purchasers and processors do not have the opinion that working with POs contributes to reducing their costs.

Stable prices

Stable prices give farmers and processors some certainty on the returns and costs and hence can improve their production decisions. The responses to the question about whether or not stable prices are an important motivation for establishing a PO differs

among the three groups. Almost 46% of 'All POs' consider this important, while no EDA members agree fully or largely that it is important. In contrast, an overwhelming majority (86%) of 'All FOs' value stable prices as important. The opinions of categories of MSs differ little, with a majority of FOs supporting the statement.

Figure 6.12 Opinions of organisations on the statement 'Get more stable prices'

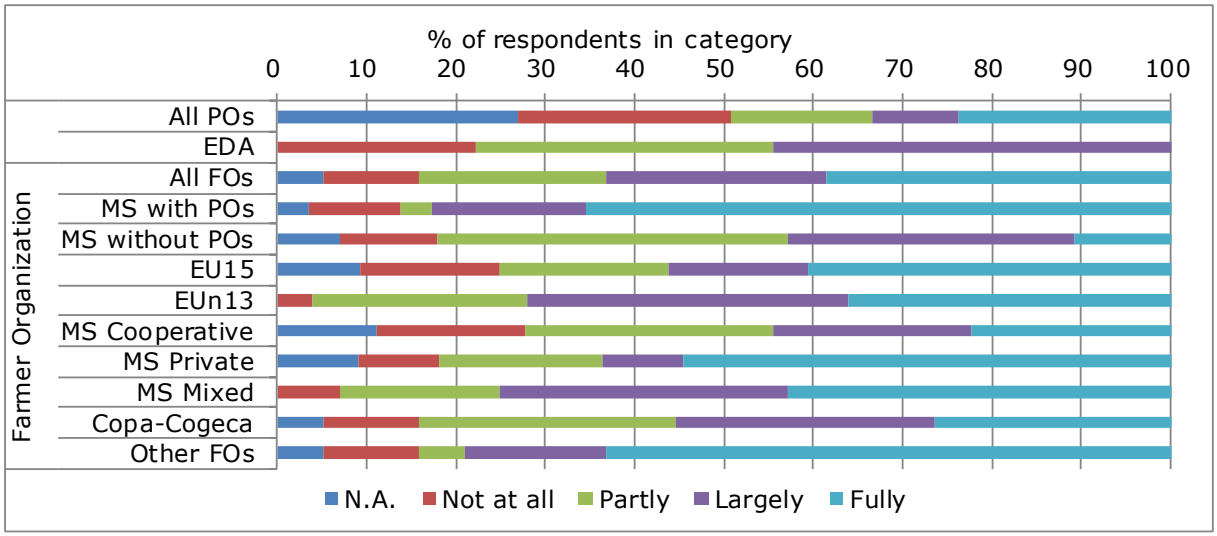


Source: Electronic survey POs, question 12, Electronic survey FOs, question 5, and Electronic survey EDA, question 6. Detailed information in Appendix 6, Table A6.3.
Note: For POs, priority rank 1 (highest) is fully, 2 is largely, 3 is partly and >3 is not at all.

Assurance of milk collection and delivery

Where farmers have the assurance that milk will be collected, processors have the guarantee that they will be delivered the raw materials they want. The surveys show that 40% of 'All POs' and EDA members consider assuring milk collection and delivery an important reason for starting a PO (ranks 1 and 2, i.e. largely and fully). FOs in MSs without POs and cooperative-oriented MSs have similar scores, but generally FOs are more supportive of this statement than POs.

Figure 6.13 Opinions of organisations on the statement 'Assure that milk of all members will be collected' for producers or 'Assurance of raw milk supply' for processors



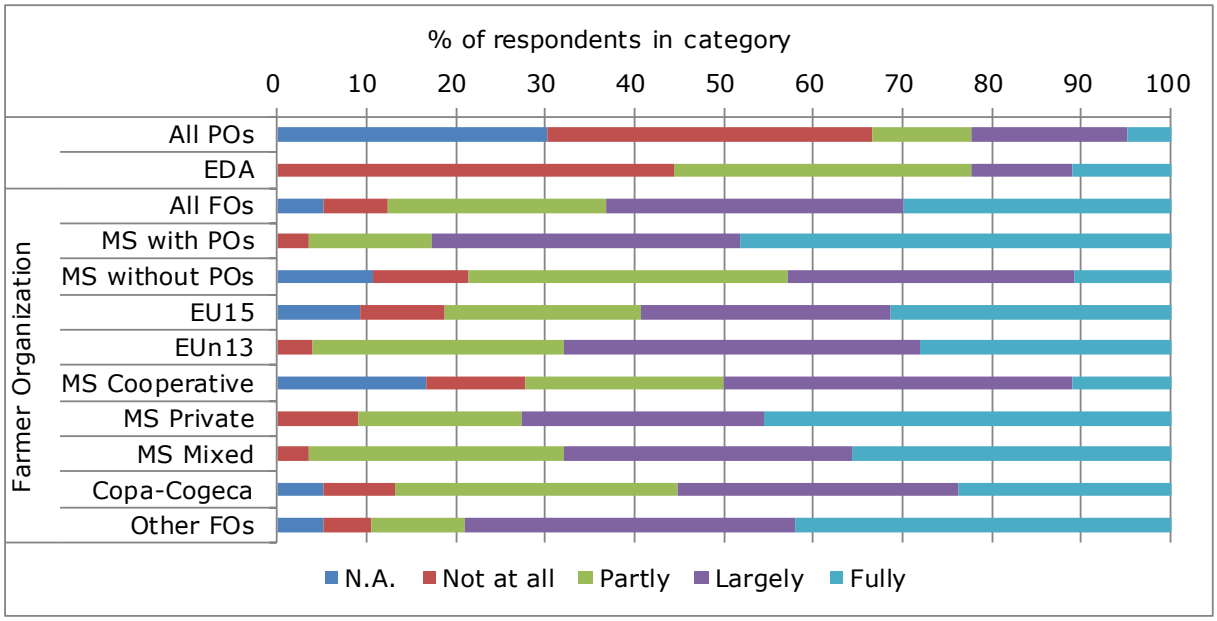
Source: Electronic survey POs, question 12, Electronic survey FOs, question 5, and Electronic survey EDA, question 6. Detailed information in Appendix 6, Table A6.3.
Note: For POs, priority rank 1 (highest) is fully, 2 is largely, 3 is partly and >3 is not at all.

Market information for production or processing decisions

Market information is an important (rank 1 or 2) motivation for joining a PO for 22% of 'All POs', far below the level of importance attributed to it by the FOs (63%). A similar percentage of the EDA members indicate that information is important for doing business with POs. One should take into account that better market information applies to their own enterprises for farmers and processors. The differences in valuation might be because members of POs and EDA have already access to market information: POs because they negotiate in the market, and EDA members for the same reason and also because they are further downstream in the value chain.

Differences between the categories of country selections are also visible: MSs with POs (79%), private-oriented MSs (73%) and 'Other FOs' (79%) agree largely or fully with the statement that better market information is a reason for joining a PO.

Figure 6.14 Opinions of organisations on the statement 'Better market information for taking production decisions' for farmers or ' Better production/market information for taking processing decisions' for the EDA

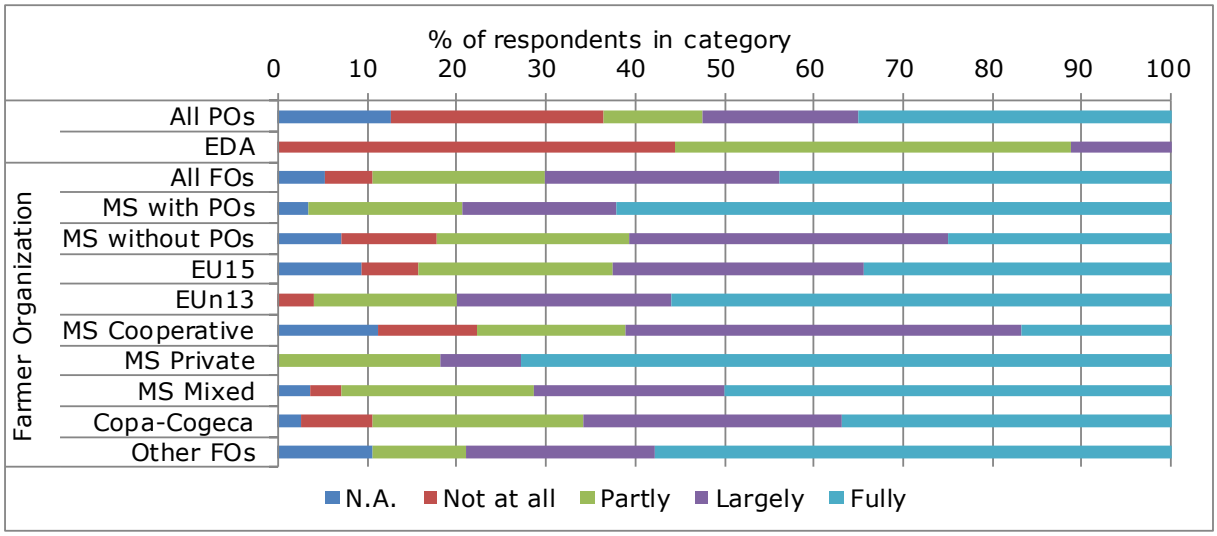


Source: Electronic survey POs, question 12, Electronic survey FOs, question 5, and Electronic survey EDA, question 6. Detailed information in Appendix 6, Table A6.3.
Note: For POs, priority rank 1 (highest) is fully, 2 is largely, 3 is partly and >3 is not at all.

Overall enhancement of producer position in the value chain

The majority of 'All FOs' (70%) support the statement that the enhancement of the producer's position in the supply chain is an important objective for joining a PO; this percentage is higher than the score for 'All POs' (52%). In the questionnaire for EDA members, we asked if enhancement of the processors' position in value chains is a reason for 'doing business with POs'; no respondents agreed with this statement.

Figure 6.15 Opinions of organisations on the statement 'Overall enhancement of producers' position in the supply chain' for producers or 'Overall enhancement of purchasers'/processors' position in the supply chain' for the EDA



Source: Electronic survey POs, question 12, Electronic survey FOs, question 5, and Electronic survey EDA, question 6. Detailed information in Appendix 6, Table A6.3.
Note: For POs, priority rank 1 (highest) is fully, 2 is largely, 3 is partly and >3 is not at all.

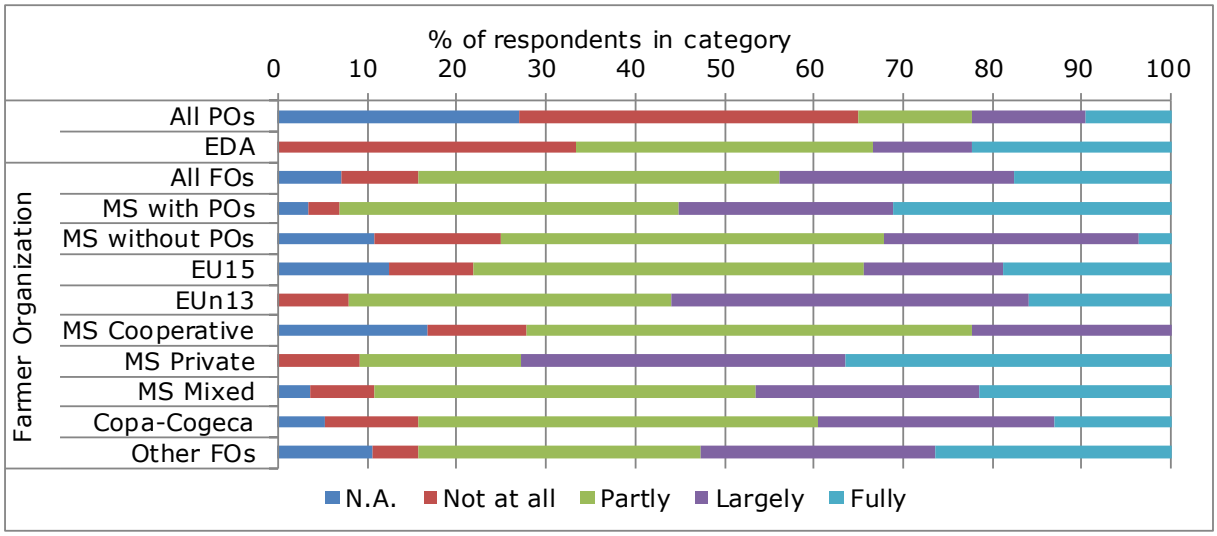
Some difference between the orientations of MS can be observed: compared with 70% of all FOs, only 61% of those in MSs without POs, 63% in the EU15 and 61% in cooperative-oriented MSs have the opinion that joining a PO enhances a producer's position in the value chain.

One interviewed PO is negative about the impact of the Milk Package, stating that 'we wanted to have better conditions for farmers, but now we only serve the processor and not the farmers'. The low bargaining power is perceived as troublesome. In Bulgaria, milk processors even establish farms, according to the FO respondent (IDIF).

Communication among farmers or between farmers and purchasers

Better communication as a motivation for establishing a PO is valued low by 'All POs' (22%). Maybe this is the result of their view that existing communication is already good. Over 40% of 'All FOs' agree with this motivation. FOs in MSs oriented towards private contractual arrangements indicate this as an important motive for joining a PO (73%). Communication between farmers and purchasers is indicated as important by one-third of the EDA members.

Figure 6.16 Opinions of organisations on the statement 'Better communication among farmers' for producers or 'Better communication between farmers and purchasers/processors' for the EDA



Source: Electronic survey POs, question 12, Electronic survey FOs, question 5, and Electronic survey EDA, question 6. Detailed information in Appendix 6, Table A6.3.
Note: For POs, priority rank 1 (highest) is fully, 2 is largely, 3 is partly and >3 is not at all.

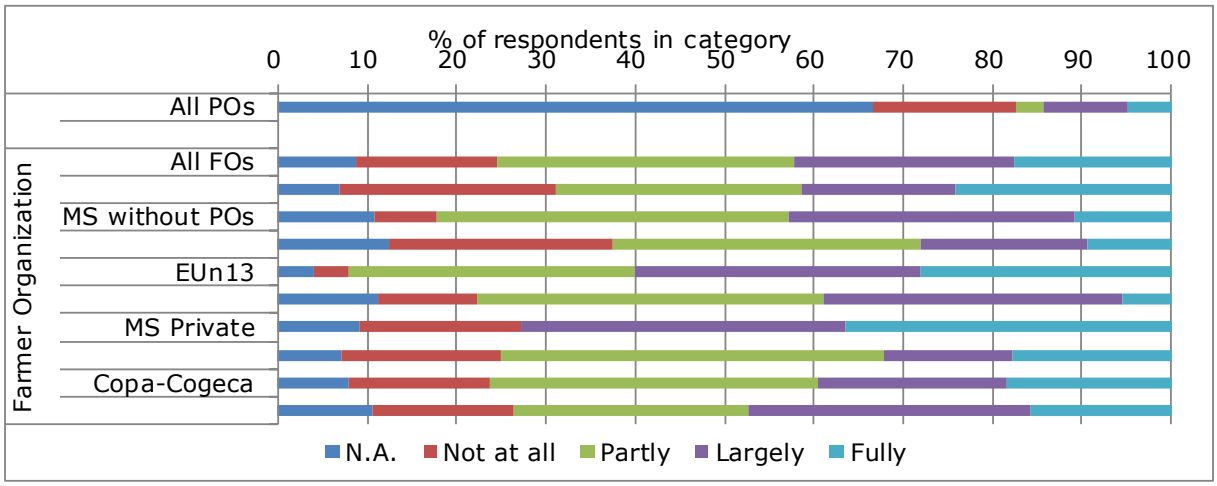
One interviewed FO emphasised the need for continuous improvement of milk quality and of production methods, to meet societal concerns such as climate change, energy consumption, biodiversity and animal health. The FO promotes a code of conduct that has to be obligatory for the whole sector after being tested in practice (IDIF).

Another interviewed FO mentioned that strengthening the relationship between producers and processors is a motive for joining a PO. Well-informed and educated farmers are able to negotiate and understand the market requirements. Such farmers use the PO as a vehicle for improving their own and the processors' positions (IDIF).

Getting price discounts on inputs

A comparison between the responses by 'All POs' and by 'All FOs' is hard to make, as two-thirds of the 'All POs' did not fill in the question on getting price discounts on inputs. It could be that this topic is considered unimportant. The in-depth interviews indicate that focus is necessary and that suppliers compete with each other and are considered competent; hence, there is no need for a PO to actively intervene (IDIP). FOs in MSs oriented towards private contractual arrangements (73%) and in the EUn13 (60%) attribute more significance to price discounts of inputs than FOs in all MSs (42%). The EDA's opinion was asked on whether or not 'Better quality of the raw milk' is a motive for working with POs; only one respondent out of nine agrees (Electronic survey EDA, question 6).

Figure 6.17 Opinions of organisations on the statement 'Price discount by collective purchase of means of production'



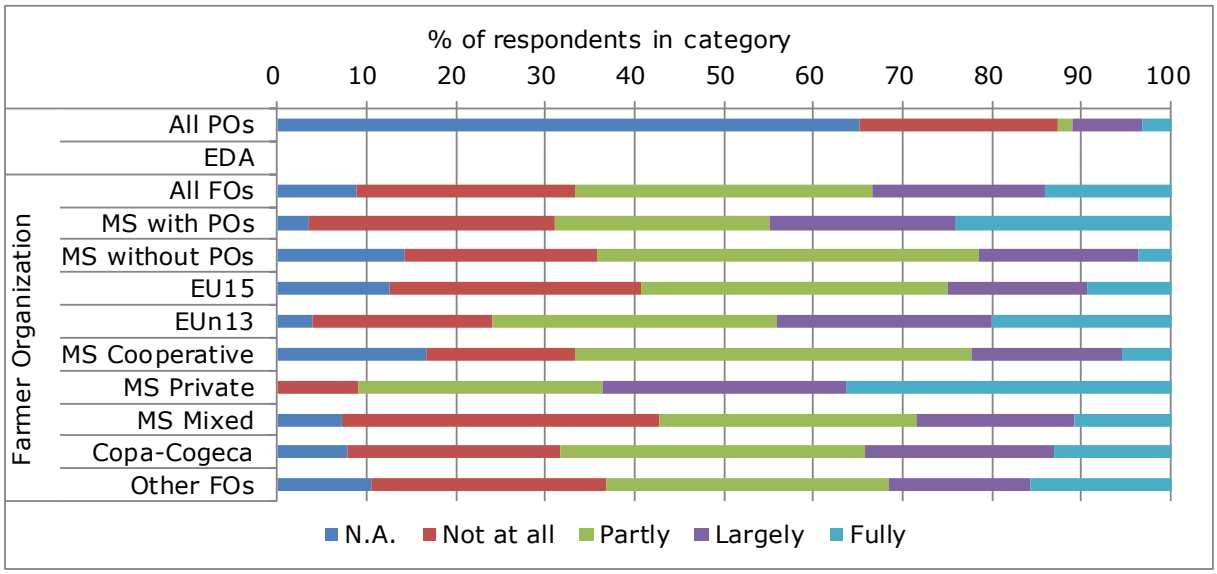
Source: Electronic survey POs, question 12, and Electronic survey FOs, question 5. Detailed information in Appendix 6, Table A6.3.
Note: For POs, priority rank 1 (highest) is fully, 2 is largely, 3 is partly and >3 is not at all.

Efficient use of means of production

The POs survey is hard to compare with the results from the FOs questionnaire, as only one-third of the POs provided their opinion about this motive. Most likely, it is not one of their priorities, as those POs who provided their opinion also indicate. The EDA was asked for an opinion on the reason 'More efficient milk collection'. None of the respondents agreed largely or fully (Electronic survey EDA, question 6).

Out of the FOs, one-third agree largely or fully that making an efficient use of means of production is an important reason for joining a PO. In MSs with predominantly private contractual arrangements, that proportion is even 64%.

Figure 6.18 Opinions of organisations on the statement 'Efficient use of means of production'



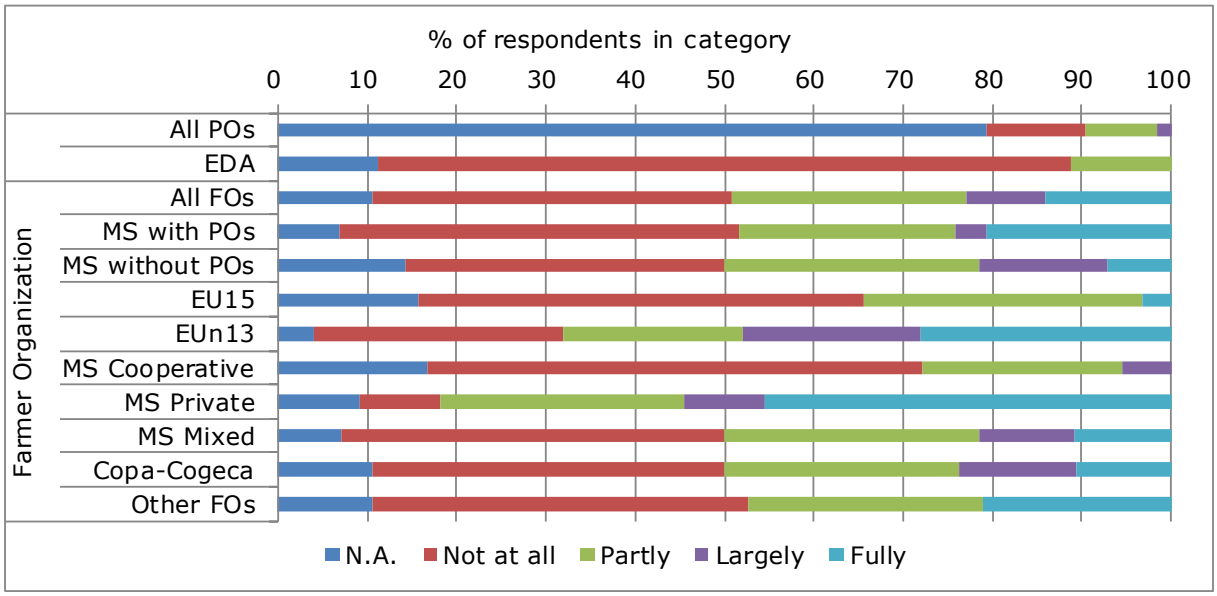
Source: Electronic survey POs, question 12, and Electronic survey FOs, question 5. Detailed information in Appendix 6, Table A6.3.
Note: For POs, priority rank 1 (highest) is fully, 2 is largely, 3 is partly and >3 is not at all.

Establishment of a cooperative and more integration in the value chain

Establishing a cooperative is not a focus of POs: 79% did not provide an answer. EDA members do not indicate doing business with POs as a step for more chain integration.

Large proportions of FOs in the EUn13 (48%) and in MSs with predominantly private contractual arrangements (55%) agree fully or largely that a PO is an interim step for establishing a cooperative. The proportion is 23% in 'All FOs'.

Figure 6.19 Opinions of organisations on the statement that a PO is an 'Interim step for further constitution of a cooperative' for POs, 'Interim step for further establishment of a cooperative' for FOs or 'Interim step for more integration in the chain' for the EDA



Source: Electronic survey POs, question 12, Electronic survey FOs, question 5, and Electronic survey EDA, question 6. Detailed information in Appendix 6, Table A6.3.
Note: For POs, priority rank 1 (highest) is fully, 2 is largely, 3 is partly and >3 is not at all.

Conclusions

A great majority of POs and FOs are of the opinion that better and more stable prices are important motivations for starting a PO. Over two-thirds of EDA members do not consider that reducing costs for the purchaser/processor is a major motivation for purchasing milk from POs, and none of the EDA members values finds 'more stable prices' for raw milk an important reason for having POs. Next, assuring milk collection and delivery are also important motivations for starting a PO according to POs and FOs, whereas it is mainly the FOs that take the view that access to (better) market information is an important motivation for joining a PO; POs and the EDA members do not support this view. Both FOs and POs indicate that enhancing the milk producer's position in the supply chain is an important objective for joining a PO. POs do not consider getting price discounts on inputs or using means of production more efficiently important drivers of joining POs, but FOs indicate that these aspects may play a role.

FOs are classified in several subcategories. A question is whether or not these subcategories provide insights showing systematic differences in answers between categories. In Appendix 6, Figure A6.1, the statements are presented by category. Overall, no systematic divergences between groups can be distinguished: it depends on the specific statement.

6.5 Contracts

This section reports on three questions with regard to contracts. The first two ask if the use of written contracts is common and, if so, whether the written contract is concluded in advance or not. The third question asks what terms are covered in contracts. This information is based on the views of FOs and the EDA. Of course, POs and not these organisations conclude contracts, but we consider that the views expressed reflect the observed practice in these countries.

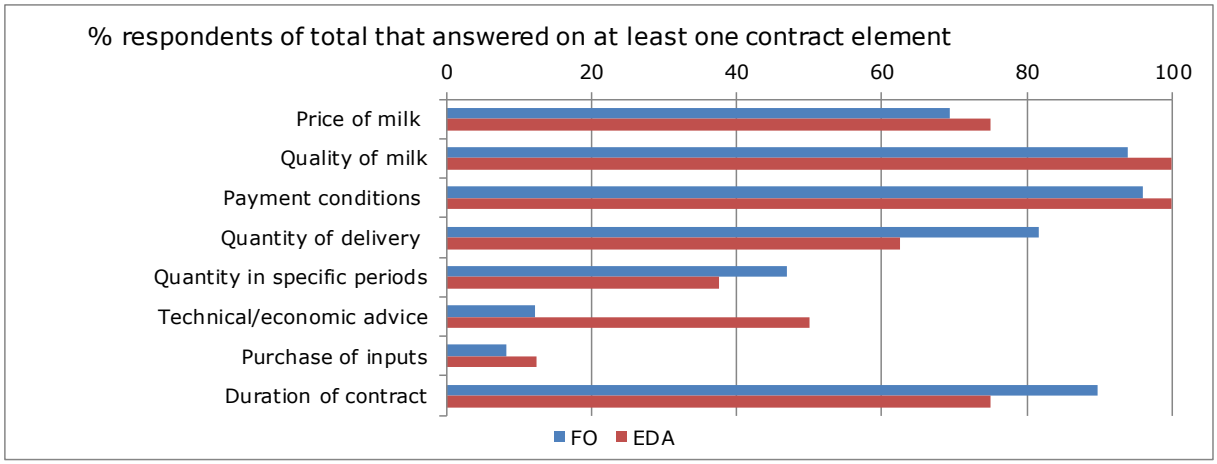
With regard to the question whether written contracts are common, 39 out of 57 respondents indicate that written contracts are common and 40 out of 57 FOs ,respondents indicate a written contract is concluded in advance. Nevertheless, 49 FOs instead of 40 specified the terms that the contract covers, meaning that nine FOs did not conclude contracts in advance. The respondents indicated that on average 91% of the raw milk is delivered under contract conditions. Relatively low proportions — between 40% and 65% of the milk delivered — are sold under contract in Bulgaria, Spain, Croatia, Italy and Romania. However, we have only one observation for each country (Electronic survey FOs).

Eight out nine EDA members indicated that a written contract is concluded in advance for on average 87% of the milk deliveries (Electronic survey EDA). This proportion is close to the 91% mentioned by the FOs.

Figure 6.20 depicts the terms covered by contracts for both FOs and the EDA. The surveyed FOs indicated that on average 4.5 terms are covered; the EDA average is 6.1. Quality and payment conditions are covered according to 94% (FOs) and 100% (EDA). Duration of the contract is covered according to 90% of the FOs and 75% of the EDA members. Quantity (63-82%) and price (69-75%) are also often covered in the contract.

Overall, 'All FOs' and EDA have almost identical opinions on the terms covered in contracts. An exception is the low importance of 'providing technical or economic advice' for the FOs, whereas 50% of the EDA members find this important. Joint purchasing of inputs is not seen as an important element that should be covered by contract (Electronic survey FOs and Electronic survey EDA).

Figure 6.20 Terms of contract covered (% of respondents)



Source: Electronic survey FOs, question 9, and Electronic survey EDA, question 9. Detailed information in Appendix 6, Table A6.4.
Note: 49 FO respondents and 8 EDA respondents.

Some differences between the answers provided by the distinguished categories of MSs or FOs exist, even if at first sight the differences between the EDA and FOs are small. Figure 6.21 presents the terms that at least 20 FOs indicated as important.

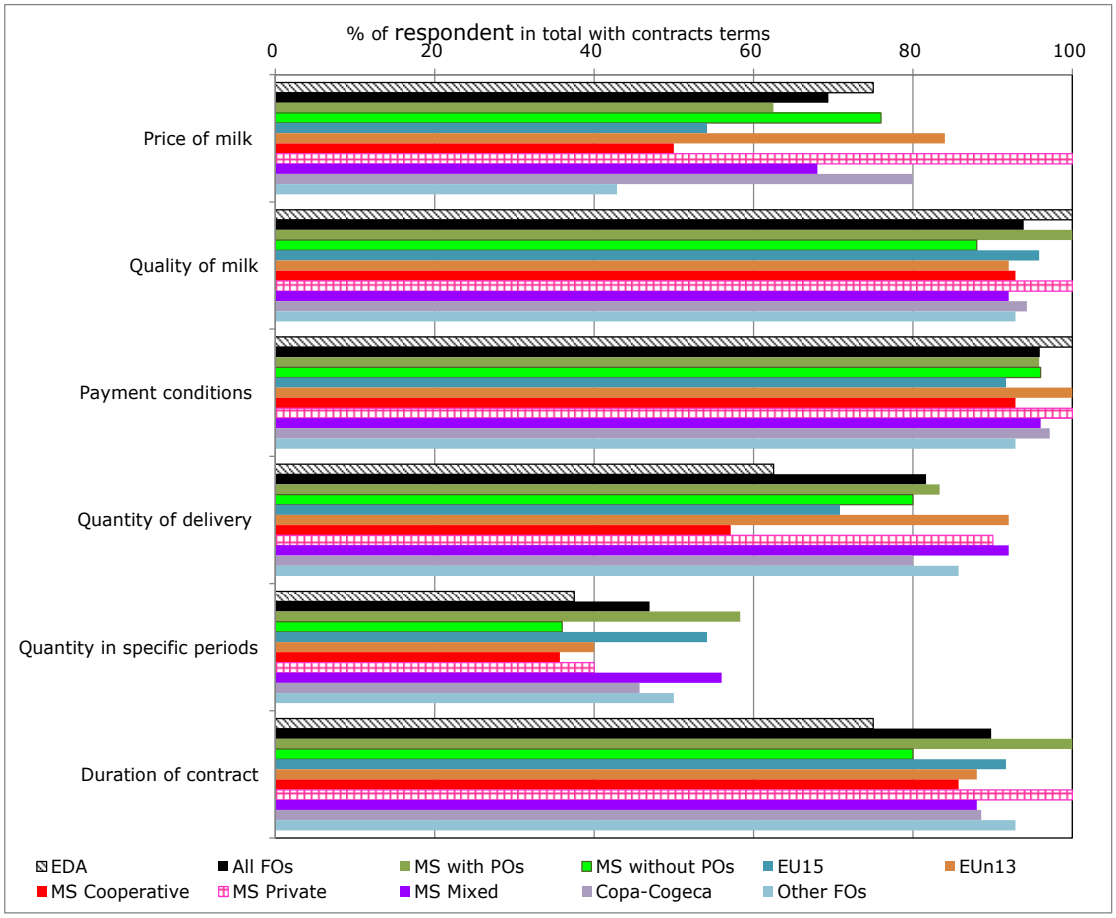
The observed differences are:

1. FOs in MSs with POs mention the following more often than FOs in MSs without POs: quality of milk, deliveries in specific periods and contract duration. They mention price less often. This suggests that the first group of items are important aspects of the cooperation between producers and processors.
2. FOs in the EU15 mention the following more often than those in the EUn13: quality, deliveries in specific periods and duration of contract. Price, payment conditions and

delivery quantity are mentioned less often. More product specificity seems important in the EU15 compared with more basic contractual terms. The EU15 resembles MSs with POs in this regard.

3. FOs in MSs with cooperative contract arrangements mention contract terms less often overall. On the other hand, FOs in MSs with private contract arrangement mention specific contract terms more often, such as price (twice as often as FOs in MSs with predominantly cooperative contract arrangements), quality, payment conditions and contract duration.
4. The difference in mentioning a contract term between members of Copa-Cogeca and other FOs is small: Copa-Cogeca members more often (80%) mention price than other FOs (43%).

Figure 6.21 Terms of contract, mentioned by at least 20 FOs, covered (% of respondents for categories of MSs or FOs)



Source: Electronic survey FOs, question 9, and Electronic survey EDA, question 9. Detailed information in Appendix 6, Table A6.4.
Note: % respondents that filled in contracts terms

Processors are not obliged to implement bonus schemes and/or quality premiums. Some Bulgarian processors provide small bonuses, sufficient to encourage farmers. Contracts are valued positively; they provide transparency and stability and guarantee milk collection. In France, one respondent argued that no competition exist, as only one contract is available or nothing (IDIF).

7 Assessing the functioning of the Milk Package provisions

7.1 Introduction

This chapter presents the assessment of the functioning of the Milk Package provisions with respect to POs in the milk and milk product sector. Results from the surveys and in-depth interviews among POs, FOs and the EDA, which were presented in the previous two chapters, are brought together and, based on the evaluation of them, responses to the research objectives are drafted. Furthermore, references to literature will be added as a base for reflection on the findings. Note that the nature of this chapter (evaluating survey results) leads to some overlap with the previous two chapters; some repetition, however, cannot be avoided in making arguments and drawing conclusions.

Chapter 7 is structured as follows. Sections 7.2-7.5 focus on the first research objective (evaluate the functioning of existing POs and APOs formally recognised under the Milk Package; see also Chapter 1). This evaluation of the first research objective is decomposed into an assessment of the requirements and an assessment of the objectives of POs. Section 7.2 reports the findings, conclusions and recommendations with respect to the three requirements defined (producer initiative, maximum volume and minimal size criteria). Section 7.3 discusses the assessment of the functioning of POs with respect to the objective 'ensuring that production is planned and adjusted to demand' (quality, quantity). Section 7.4 presents the assessment of the functioning of POs with respect to the objective 'concentration of supply and the placing on the market of the products produced by its members'. In Section 7.5 is discussed to what extent POs contribute to the objective 'optimising production costs and stabilising producer prices'. The second research question (evaluate the potential for POs where they have not been constituted yet) will be dealt with in Section 7.6. Note that the drafting of recommendations (the third research objective) is left out at the request of the client.

7.2 Requirements included in the Milk Package provisions

POs should be formed on the initiative of the producers

According to the legislation, a first requirement that POs recognised under the Milk Package shall satisfy (see Article 152 of Regulation EU1308/2013) is that 'Member States shall recognise producer organisations, constituted by producers in the milk and milk products sector, which: (a) are formed on the initiative of the producers'.

We interpret the requirement that POs should be initiated by dairy farmers as a safeguard to ensure that POs under the Milk Package shall promote the interests of their farmer members to the maximum extent possible and shall not incline to the interests of other stakeholders in the value chain.

Evidence

Table 7.1 Summary of results found on initiation of POs

Information source/survey question	Summary of the information
Who initiated the PO?	As shown in Section 5.2, farmers have established 62% (39 out of 63) of the POs included in the survey. Trade unions (being representatives of farmers or producers) were involved in establishing 17% (11 out of 63) of the POs considered in the analysis. One-fifth of all POs in the sample were established by another organisation, such as a processor or a milk-collecting organisation.

Assessment

The survey results reveal that 62% (39 out of 63) of the POs included in the survey were established by dairy farmers. This means that 24 of the 63 POs (38%) were created by other organisations.

As the results of the survey indicate, 17% of the respondent POs indicate that they were initiated by a trade union or FO. These results are highly affected by the survey results from Germany, where trade unions are considered to represent farmers' interests. Hence, it can be argued that the interests of dairy farmers and their trade unions run in parallel. Following this reasoning, we could claim that initiation by or 'assistance' from trade unions does not necessarily introduce a bias against the interest of the dairy producers.

About 20% of the POs (13 out of 63) were initiated by other organisations, such as a processor or a milk-collecting organisation. In these cases, one may claim that the interests of the PO members are not central. There are obvious reasons why the interests of the dairy farmers and the other organisation could be in conflict, such as dairy farmers having an interest in a high milk price and dairy processors preferring low prices. On the other hand, dairy farmers and processors may also find shared interests in pursuing some of the objectives mentioned in the Milk Package of the CMO. Examples are the concerns that supply should adjust to demand, the value chain should strive for high-quality products and resource use should be optimised. Given this, it may very well be possible that POs established by other organisations than dairy farmers can successfully achieve one of the objectives of the Milk Package. Therefore, whether or not the involvement of an organisation that is not a trade or farmers' union could hinder the functioning of the PO will depend on the specific case, that is, which specific objective the PO finds most important and how this is achieved.

When other parties than milk producers initiate a PO, it is important to have insight into the governance structure of the PO. If the initiating body is also involved in the governance of the PO after its start, its interests are expected to be represented in the PO management structure too. If a third organisation (e.g. a trade union or FO) initiates a PO, but lets the dairy producer members be the managers, there is no reason to expect that such a PO would defend farmers' interests less than POs initiated by farmers. Our survey results show that respondents find that initiating a PO involves significant start-up costs and requires organisational capacity, which can be a barrier to entry. Other organisations that have the organisational capacity could play a facilitating role during the start-up phase of a PO, providing help and assistance with knowledge and services.

Again, whether the involvement of third organisations hampers the functioning of POs or not will depend on the specific case at stake.

The in-depth interviews confirmed the problems that dairy farmers face in establishing a PO and the administrative burden associated with this. Negotiating with the authorities and complying with the Regulation were also sometimes indicated to be difficult hurdles to take when establishing a PO (Sections 5.2 and 6.2). In addition, farmers indicated that some FOs also continue to support the PO after it has been created, for instance with administration services. These types of findings are in line with Brusselaers et al. (2014), who show that many countries in Europe provide support for setting up (agricultural) cooperatives.

Conclusion

The requirement that POs recognised under the Milk Package should be initiated by producers is not met in about 40% of the cases that were present in the sample. In 20% of the cases (13 out of 63), the PO was established by another organisation, such as a processor or a milk-collecting organisation, potentially leading to conflicts of interest between dairy producers and the initiating organisation. Conflicting interest are most likely to hindering the PO from achieving one or more of the Milk Package objectives, but the survey does not provide evidence that the objectives of the regulation are not achieved because of conflicting interests.

Restriction on volume of raw milk covered by contractual negotiations

Another set of requirements that POs recognised under the Milk Package should meet concerns the maximum volume of raw milk covered by collective negotiations on behalf of the farmers. These requirements specify that (Article 149 of Regulation EU 1308/2013):

1. the volume of raw milk covered by such negotiations does not exceed 3.5% of total Union production,
2. the volume of raw milk covered by such negotiations which is produced in any particular Member State does not exceed 33% of the total national production of that Member State, and
   the volume of raw milk covered by such negotiations which is delivered in any particular Member State does not exceed 33% of the total national production of that Member State.

Evidence

Table 7.2 summarises the survey results found from the POs included in the study with respect to the volume of milk they represent; see column 'Maximum marketable milk production of surveyed POs'. The volume of milk delivered under collective negotiations (see column 'Maximum deliveries under collective negotiations') is also presented. Note that this amount can be less than the total amount of milk produced by the POs, since not all POs deliver their milk under collective negotiations. The table also specifies the maximum amount of raw milk that is allowed to be covered by collective negotiations, following the criteria of the legislation and taking into account EU and MS milk productions as realised in 2015 (see column 'Maximum amount of milk per MS that can be covered by collective negotiation').

Table 7.2 Cow milk production, maximum amount per PO, observed maximum marketable production and observed maximum deliveries under contract (in 1,000 tonnes)

MS	Cow milk production 2015 per MS[a]	Maximum milk production per MS that can be covered by collective negotiation[b]	Maximum marketable milk production of surveyed POs in 2015[c]	Maximum deliveries under collective negotiations of surveyed POs in 2015[d]
DE	32,381	5,594	750	219
FR	25,800	5,594	317	30
IT	11,500	3,795	199	140
ES	6,780	2,237	517	240
BE	3,710	1,224	1,250	N.A.
RO	4,101	1,353	79	79
BG	1,103	364	4	4
HR	712	235	16	N.A.
UK	15,088	4,979	1,613	796
CZ	2,994	988	900	476
PT	2,000	660	N.A.	N.A.
EU	159,825			

[a] Source: Commission Communication (1) (2016/C 125/02).
[b] Maximum amount is the lower of 3.5% of EU production and 33% of the MS deliveries (double ceiling); see Article 149 of Regulation EU 1308/2013.
[c] Source: Electronic survey POs, question 7.
[d] Source: Electronic survey POs, question 21. It has to be noted that the majority of the answers are N.A.

Assessment

Note that from the legislation it follows that the maximum amount of raw milk delivered under collective negotiations per PO is the lower of 3.5% of the EU production and 33% of the MS production (double ceiling). The criterion of a maximum proportion of 3.5% of EU milk production is relevant for EU MSs with a large dairy production, notably Germany and France. For all other EU28 MSs represented in Table 7.1, the maximum proportion of 33% of domestic production is the effectively restricting criterion.

Table 7.2 shows that the (only) PO in Belgium (included in the survey) could market a production level that exceeds the maximum amount allowed according to the criteria. What counts is the volume collectively negotiated and delivered. Whether or not this latter volume is below the country ceiling cannot be checked, as the information on the volume delivered was not provided by the survey respondent.

Conclusion

The requirements in the legislation restricting the maximum volume of raw milk covered by contractual negotiations have been met for all the cases analysed. Given this, there is no evidence that the maximum requirements are constraining POs from exercising their bargaining power.

Minimum criteria set by MSs

Another requirement that POs recognised under the Milk Package should satisfy is to meet the minimum criteria set by the MSs (see Article 161 of Regulation EU1308/2013).

Here MSs have the freedom to make their own choice. They may define a minimum condition in terms of a minimum number of members, a minimum volume of marketable production or a combination of the two.

Evidence

Table 7.3 provides the evidence found from the analysis. It provides the minimum criteria by MS and shows how this compares to the POs that are analysed.

Table 7.3 The minimum criteria as defined by the MSs and observed values in the survey

MS	Criterion: minimum number of farmers	Lowest number of members of surveyed POs	Minimum marketable production (1 000 tonnes)[a]	Lowest marketed production of surveyed POs (1,000 tonnes)[a]
DE	5	14	–[c]	
FR	200	65	Or 60	29[b]
IT	5	28	3	14
ES	–		200	240[b]
BE	40/20	64	–	
RO	5	114	0.035	79
BG	5	8	–	
HR	7	26	3	4
UK	10	1,050	6	1,613
CZ	10	42	–	
PT	12	N.A.		

Sources: EC (2016) and Electronic survey POs.
[a] Cumulative with the requirement for number of farmers, unless indicated otherwise.
[b] In France and Spain, one PO in each country indicates a lower amount of marketable milk: on average below 1 tonne per member. These observations are not included in this table, as such low volumes seem to be not realistic. We cannot check this with the source, as the electronic survey was filled in anonymously.
[c] '-' not a criterion, if not a criterion observed value will be not mentioned (blanc)

Table 7.3 (as well as Table 3.1) shows there is a considerable variation in the minimum criteria specified by the MSs. In 8 out of the 11 MSs where POs responded to the survey, the number of farmers needed to start a PO was 12 or fewer. For Belgium, the number is 40 in Flanders or 20 in Wallonia. In France, POs should have at least 200 farmers, which is out of line with the other MSs. In addition, with respect to the minimum marketable production a PO should have, France has a high minimum requirement, namely 60,000 tonnes, and Spain's is even higher. Based on the figures in Section 2.2, a specialist dairy farm in France produces 356 tonnes and one in Spain produces 339 tonnes. Given the minimum marketable production required, in France around 170 specialist dairy farmers could combine to supply that amount and in Spain a PO would require 590 specialist dairy farmers. In both countries, the numbers of specialist dairy farmers required to establish a PO are rather high, although in France specific legislation for PDO/PGI refers to lower requirements. Given the relative high minimum criteria applied in Spain and that it is often more difficult to organise a large group of farmers than a small one (organising large groups may imply more transaction costs than small groups), these minimum criteria in Spain could possibly act as a barrier to creating POs. Table 7.3 also shows that in Spain one PO did not reach the minimum marketable production of 200,000 tonnes. This suggests that the minimum criteria are not strictly enforced in this MSs.

The UK is a special example, as the amount of milk delivery of the only PO in the UK that was included in the survey exceeded the minimum volume required (6,000 tonnes) by far and is even higher than the minimum requirements in France and Spain. This example shows that a PO could deliver an amount equal to the requirement set in France and/or Spain, but, taking into account the average size in many (other) countries, no POs would be established if the requirements for France or Spain applied throughout the EU.

Assessment

In the 11 MS with established POs, the minimum criteria are generally rather low, except for France and Spain, where the minimum number of members of a PO (France) or the minimum marketable production of the PO (Spain) is relatively high. Creating large POs satisfying relative high minimum criteria, such as apply in Spain and France, is not impossible (see evidence from the UK), but realising this solely by farmers' initiative is likely to be difficult, as it requires considerable organisational skills and capacity.

Conclusion

The criteria for recognising a PO differ significantly between MSs, in terms of both the minimum number of members (between 5 and 200) and the minimum marketable production (between 35 tonnes and 200,000 tonnes) required. This wide range is difficult to justify on the basis of only structural differences between MSs. MSs that define high minimum size requirements seem to favour large-scale POs. From studies on POs in other agricultural sectors, it is known that collective action organisations such as POs often start as small organisations because trust has to build up and experience needs to be gained (Bijman, 2015; Bijman et al., 2012). High minimum criteria can operate as a barrier to starting a PO, even though they may not be the only factor explaining small numbers of POs.

7.3 Objective 1: production is planned and adjusted to demand

In this and the following two sections, we discuss to what extent POs contribute to the three key objectives of the Milk Package regulation. In order to assess the performance of a PO with respect to each of the three objectives, it should be emphasised that POs have indicated that they do not always pursue each of the three objectives in the same way: POs sometimes evaluate the importance of the Milk Package regulation differently. If a PO in the survey indicates an objective to be important, we interpret this as the objective the PO pursues. The degree to which the PO thinks the objective is realised provides a proxy of the performance of the PO in this respect.

The first objective to be discussed is the first specific aim mentioned in the Regulation: '(i) ensuring that production is planned and adjusted to demand, particularly in terms of quality and quantity'.

The survey did not include a question addressing to what extent this objective was achieved. Therefore, we deduce from the answers to the survey questions those that may indicate that establishing the PO has contributed to improved matching of production and demand, in terms of both quantity and quality. For this, we need to link relevant survey questions to this objective; that is, to identify which questions — or parts of questions — may give insights into how far the objective has been achieved by the PO. We use the following reasoning for linking survey questions to this Milk Package objective.

Reasoning

In order to match supply and demand, coordination is necessary between the supplier — in this case the milk producer — and the user/purchaser — the milk processor. Coordination includes information exchange on supply and demand volumes between the two actors, and the market price that results. The PO, as a representative of the milk producer, may focus on this information exchange and use the market information in negotiating with the dairy industry on volumes to be delivered and prices. The more farmers, and hence the greater the volume of production, a PO represents, the better supply and demand can be coordinated, in terms of both quantities and milk quality. At the same time, a dairy processor would prefer to make arrangements with a small number of suppliers rather than with many, in order to reduce transaction costs with its suppliers. Given this reasoning of how POs could contribute to improved matching of supply and demand, survey questions on market information, contractual negotiations and size (i.e. marketable milk production) may help to draw conclusions on how POs contribute to this aim of the Regulation.

Evidence and assessment

First, we look at the motivations of the established POs. Section 5.4 has shown that POs' main motivations are to obtain better and/or more stable prices. Only about one-fifth of the POs indicate that 'Better market information for taking production decisions' has been an important motive for the PO, with POs in Italy and Spain indicating a relatively high

priority for this reason to start a PO. Two-thirds of the POs that indicated this as important for them were satisfied with the extent to which this objective was realised (see Figure 5.7).

Second, survey results indicate that PO negotiation activities focus on prices, payment conditions and delivery volumes (Section 5.5). In addition, over 70% of all respondent POs claim that the contracts negotiated are binding on all members. In most cases (65%), the contracts include a fixed proportion of production to be delivered. This holds especially for Germany and France. At the same time, a significant number of POs (30%) observed that producers negotiated and concluded individual contracts without interference by the PO, especially in Spain. The survey results also indicate that quality is not a big issue in the contractual negotiations for most of the POs, although it is an important criterion for becoming a PO member (Section 5.7), and is of course part of contracts (Section 6.4). Note that, in Italy, POs indicate that quality (more specifically: quality control) has their major attention, which may suggest that quality is considered a key attribute of the produce to balance the market. The surveys also indicate that especially in some of the new MSs (e.g. Bulgaria, Romania) POs can play an important role in improving the quality of milk produced by including quality issues in their negotiation strategies (price premiums for higher-quality milk).

Third, the sizes of POs are very different both within and between MSs, and the total volumes delivered under negotiation contracts also differ quite a lot. Moreover, the 63 POs covered in the survey produce 10.2 million tonnes of milk, which is a mere 7% of the EU's total production level. Hence, it is not very likely that the negotiated contracts of these POs (of whose production again only 35% is delivered under the negotiated contracts) affect the EU milk and dairy market substantially. However, with raw milk being a high-volume product, there may be some aspects of spatial competition, implying that POs can play a role at local level even though at the level of the EU market as a whole their ability to create countervailing market power would be limited. In addition, POs may organise milk farmers in a region, supplying a local or regional milk processor that (partly) produces niche products. In such a case, the establishment of the PO and the outcome of the contractual negotiation process may contribute to the improved balancing of supply and demand.

Conclusions

Quite a number of the POs in the sample find better market information of paramount importance, and many do negotiate how much to deliver (which is, in itself, the result of matching demand and supply). Thus, POs seem to act as a coordinating body that helps match supply and demand. At the same time, though, POs do not seem to control the volumes delivered very strictly: a significant number of the contracts negotiated are not binding and in addition many PO members sell to purchasers independent of POs' contracts. POs' role in controlling quality is also modest in most countries, as the existing quality assurance system is generally more than adequate to guarantee high-quality milk deliveries. Still, POs do play an important role in either maintaining or improving the quality of the produce in niche markets (e.g. Italy) and in several new MSs.

7.4 Objective 2: concentration of supply and placing on the market

According to the Regulation, a second objective that a PO under the Milk Package can choose to achieve is to contribute to the '(ii) concentration of supply and the placing on the market of the products produced by its members'.

We interpret this objective as being related to the concentration of supply, with the aim of increasing the bargaining power of milk producers or reducing transaction costs in the value chain. Given this, concentration is not a goal in itself, but rather instrumental in strengthening the position of milk producers in the value chain. The objective also refers to the placing of products on the market. We interpret this to refer to the selling of the products of the members of the PO to the next stage in the value chain (e.g. the

assurance that the milk is collected) as well as the delivery conditions. One of these conditions refers to price. However, issues linked to the level and stability of the price that POs receive for products are discussed under the heading of the third objective.

Reasoning

POs' contribution to the concentration of supply is a direct function of the number of PO members, as well as of the amount of raw milk produced per member (farm). Concentration is a relative concept: it relates not only to the amount of raw milk a PO delivers, but also to how this amount relates to the structure of the market and its regional definition. For example, if a PO delivers to more than one processor/buyer, this shows that POs have the opportunity to choose between multiple buyers, which suggests that POs would have at least some bargaining power. In addition, it is interesting to see how the total marketable output of POs in an MS relates to the maximum amount allowed according to the definition in the Regulation. The latter indicator refers to the concentration as this is achieved not by individual POs, but rather by the set of all established POs. Thus, it provides an indicator of the extent to which all POs together concentrate supply. In dairy, an activity that is spatially dispersed in the EU, the concentration of supply potentially influences competitiveness and producer bargaining power at regional, national and even EU level.

The placing of the produce on the market has several aspects. One is the assurance that members of a PO have that their produce will be collected and sold. Here it is not only the assurance of milk collection that counts, but also the delivery conditions associated with it; indeed, accepting a very low price may guarantee that purchasers are interested in buying the milk of a PO, but is not likely to satisfy members of a PO that would like to, at the same time, receive a competitive price (e.g. a price that is at least as high as farmers receive who are not organised by POs).

Another aspect of collectively placing raw milk is that producers can focus on farm activities and do not need to spend time on marketing activities. In the literature on agricultural cooperatives, the opportunity for farmers to specialise in farming activities is considered a classical benefit of marketing cooperatives (Bonus, 1986). Being responsible for production and marketing activities means more dispersed management focus. Brush and Karnani show that focus through specialisation increases productivity and, hence, income (Brush and Karnani, 1996).

Evidence and assessment

As presented in Chapter 3 and discussed in Section 7.2, the number of members of the surveyed POs ranges from 14 to 1 050 and the minimum marketable production ranges from 4,000 to 1.6 million tonnes. On average, the surveyed POs had 674 members and hence a concentration of the production of a similar number of farmers (Section 2.4). POs contribute to the concentration of supply into the market, in particular in the UK and Spain. An indicator of the relative degree of concentration is how the collectively negotiated volumes of POs relate to the maximum amount allowed according to the criteria set in the legislation. In the Czech Republic, the deliveries under collective negotiations represent 16% of the total milk production. For the UK, Spain, Romania, Germany, Italy, France and Bulgaria the corresponding market shares of the surveyed POs in the domestic market are respectively 5%, 4%, 2%, 1%, 1%, 0% and 0%. Therefore, in all MSs with POs that were in the sample, the aggregate shares in the domestic milk supply for all surveyed POs are rather modest. On the other hand, in Belgium and the Czech Republic the market share of all POs in total domestic milk production could increase to 34% and 30% respectively if POs delivered the maximum marketable amount allowed under collective negotiations.

As regards the purchasers of the raw milk from POs, processors are the main type (29 out of 63), followed by traders (18) and cooperatives (8). In the overall sample, the average PO delivers to 4.4 purchasers, with a significant variation between MSs: for instance, German POs deliver on average to 1.9 buyers, and Italian POs to 20.4 buyers. This shows that POs can deliver their milk to alternative purchasers, which indicates that

POs do not market their milk towards only one buyer and suggests that they potentially have some bargaining power. As has also been pointed out in Section 7.2, the sizes of POs are very different both within and between MSs, and the total volumes delivered under contracts negotiated also differ quite a lot. The roughly 60 POs covered in the survey produce 10.2 million tonnes of milk, which is a mere 7% of the EU's total production. As was noted before, it is not very likely that the negotiated contracts of these POs (of whose production again only 35% is delivered under the negotiated contracts) affect the EU milk and dairy market substantially. However, this does not preclude the possibility that POs may organise milk farmers in a region, supplying a local or regional milk processor that (partly) produces niche products (spatial competition).

With respect to the placing on the market, several questions of the survey have been used to come to a judgement. The first question considered is the assurance that all milk is collected. This is linked to the questions of whether POs were active in organising the milk supply and negotiating delivery volumes. The questions about to whom POs sell their produce, and whether they sell to more than one buyer, have also been considered. Fifty per cent of the POs surveyed ranked the assurance of the milk being collected as an important issue (in their top three priorities). Almost two-thirds of all POs participating in the survey agree largely or fully that this objective has been achieved. For the POs that indicated this motive as top or second priority, as many as 95% indicated that this objective is largely or fully achieved. From the survey, it does not appear that the POs take an active role in organising milk supply, although 60% of POs indicated that negotiating the volume of milk with processors, traders and cooperatives is an important activity, especially in France.

To evaluate the functioning of POs with respect to this objective, two questions from the survey were considered in particular: (1) the extent to which the POs have been able to assure the collection and processing of their members' milk and (2) the enhancement of the position of producers in the value chain. The latter is a proxy for the performance of POs with respect to non-price objectives (the price aspects will be dealt with in Section 7.5). Of the POs that indicated as important the assurance that milk is collected (i.e. ranked it with a priority score of 1 or 2), 95% indicated that this objective is largely or fully achieved. More than 60% of the POs in the survey ranked enhancement of the position of producers in the supply among the top three priorities. However only 23% of the POs agree that this objective is achieved largely or fully. More specifically, a mere 40% of those POs that ranked 'enhancement in the value chain' as priority 1 or 2 agree that this objective is largely or fully achieved.

Conclusion

The evidence of the surveyed POs suggests they contribute to the concentration of milk supply to a limited extent. The degree of concentration of milk supply varies greatly between MSs. In only two MSs, the aggregate amount of milk produced by PO members was similar to the maximum amount of milk that is allowed to be covered by collective negotiations. In all other MSs where POs were active, this amount was much lower. At aggregate EU28 level, the market share of POs in the milk supply is limited (for the surveyed POs it amounted to 7%). Whereas POs are unlikely to influence the aggregate EU dairy market, the concentration of supply may have impacts at national and regional levels, since concentration can also occur at those levels (e.g. spatial competition).

According to their self-assessment, the surveyed POs have been successful to different degrees in assuring that the milk of its members is collected and processed and in enhancing the position of producers in the value chain. Of the POs indicating that assured milk collection was an important reason for establishing them, almost all indicated that this objective was achieved. This is a very high score, indicating successful functioning of the surveyed POs in this respect. However, to draw a more firm conclusion it would be necessary to compare the assurance of milk being collected for farmers that are members of a PO and farmers that are not. With respect to improving the position of producers in the value chain, a mere 40% of the POs found this objective important and

indicated that their position was indeed strengthened. Still, this implies that a majority of POs are not satisfied with their achievements in this regard.

7.5 Objective 3: optimising production costs and stabilising producer prices

According to the Regulation, a third objective for a PO under the Milk Package is '(iii) optimising production costs and stabilising producer prices'.

We interpret this objective as including all aspects of POs that contribute to the rationalisation and increase of resource efficiency in milk production. All the aspects related to the producer price that the POs achieve are also interpreted to be captured under this objective, even though it is recognised that the level of the price that is achieved could also be linked to the previous objective.

Reasoning

Input costs

Producer collaboration can contribute to the optimisation of costs in various respects. Producers can share knowledge with each other, identify best practices (benchmarks) and learn from that, resulting in increased production efficiency. Producers can also collaborate by sharing the use of certain means of production (e.g. machinery), which may allow them to reduce capital costs per kilogram of milk produced. Producers may, by joining or initiating a PO, concentrate demand and use their bargaining power to negotiate price reductions for inputs. Thus, collaboration within and between different stages of the dairy value chain can contribute to achieving efficiency gains as well, implementing innovations and tailoring actions at different levels of the value chain (e.g. commitments to deliver a certain volume of milk, which matches the sourcing objectives of processing industries; application of quality standards along the value chain). This also includes (contractual) agreements about the application of a milk-pricing formula and the distribution of (price volatility) risk along the different stages of the value chain.

Producer price stabilisation

With respect to the level and stabilisation of producer prices, POs may be able to bargain a better price and better delivery conditions, including more stable prices. The extent to which this might be feasible will, on the one hand, depend on the bargaining power of a PO (which in turn is likely to depend on issues such as the concentration of supply and the members of a PO being obliged to channel their produce exclusively through the PO to the market). On the other hand, it will depend on the space for manoeuvre in the supply chain, or more specifically on the extent to which there are rents in the value chain because of imperfect competition in the downstream part of the dairy value chain. In the latter case, POs can contribute to the rebalancing of market power and push for a more competitive equilibrium (potentially including a better milk price and a larger amount of milk collected). The extent to which imperfect competition plays a role is difficult to assess, however, although there are indicators which are at least informative about this, such as the structure of the dairy industry (e.g. cooperative versus private; dairy-processing firm size distribution), the market asymmetry between different stages of the value chain (e.g. number of dairy producers per processor or its reciprocal, the number of dairy processors or buyers of raw milk per farmer). If the value chain is fully competitive, it is likely to be difficult for POs to make improvements for their members and those might well be achieved at the expense of other stages of the value chain.

POs can negotiate reductions in price fluctuations with the downstream stages of the value chain. With respect to price variability, the duration of contracts and conditions with respect to price are particularly important: from a farmers' perspective, long-term contracts provide more certainty about prices paid but there may be a trade-off with not benefiting from price increases. Processors and traders may have access to futures markets (hedging of price and exchange-rate risks) and have a wide portfolio of clients

and products that allows a certain degree of smoothing of price fluctuations. In addition, the downstream stages of the value chain may have access to private and public storage facilities that they can exploit to manage price volatility, options that primary producers do not have.

In the following, we first look at the evidence from the surveys (both electronic and in-depth interviews) that address the input cost optimisation sub-objective. In Section 5.4, the answers to questions on price discounts with respect to input purchases are discussed. The question on the organisation of advice by POs (see Section 5.5) and joint input purchasing (see also Section 5.5) are also relevant in addressing the producer cost optimisation sub-objective. In Section 6.2, further questions are asked about efficient use of the means of production. With respect to the milk price, the questions regarding getting better prices (see Section 5.4), getting stable prices (Section 5.4), negotiating milk prices (Section 5.5) and negotiating payment conditions (Section 5.5) are particularly relevant. The cross-linkages with other objectives and requirements are also considered.

Evidence and assessment

Input costs

Only one-third of the POs included in the survey answered the question regarding negotiating input price discounts and only 50% of these (or 17% of all POs) found getting input price discounts an important objective. Almost a quarter of those who gave a high priority to input discounts indicated that the PO helped to achieve this objective. The question on improving the efficient use of means of production by means of a PO also got a poor response: only one-third filled in this question, and about 30% of them gave high priority to it (13% of all POs). Of those who gave a high priority to achieving efficient use of production means, 43% indicated that the objective was achieved. The answers to the survey question on organising advice showed that POs do not consider this an important activity: only 21% of the surveyed POs gave it a high priority (ranging from 1 to 3), with 82% of the POs in Italy indicating the organisation of advice as of high importance. The latter might relate to the high proportion of PDO/PGI products, which require a special means of production and the application by farmers of several product-specific standards that go beyond the normal standards applying to dairy. Several FOs argued that improving the knowledge of farmers needs more emphasis in the Milk Package. Since a small reduction in costs can result in significantly higher incomes thanks to leverage effects, improving farmer's capabilities is seen as important by these respondents. Intermediate inputs account for two-thirds of the total expenses (Hill and Bradley, 2015). Even small reductions in costs per kilogram of milk may have a positive impact on the farmers' margin (IDIF).

Conclusion

Only a minority (fewer than 20%) of the interviewees found having a PO in order to achieving producer cost optimisation most important. Of those who indicated that this was important, only 25% claimed that the cost optimisation or input price reduction objective has been achieved largely or fully (hence 4% of 'All POs').

Producer price stabilisation

In contrast with the sub-objective of producer cost optimisation, the objectives of getting better and more stable prices were indicated as important reasons for members to join a PO. Some 95% of respondent POs indicated that improving the milk price level was considered to be the most important motive for joining a PO. As can be seen from Table 7.2, however, on average less than 60% of the total milk produced by a PO is delivered under collective negotiations. Given the key importance of the milk price sub-objectives (price level and price variation), one would expect that the POs would try to sell a larger proportion of the total milk collected by them under collectively negotiated deliveries.

The survey finds that getting stable prices is the second most important motive for joining a PO: 67% of the surveyed POs gave it a priority of 1 to 3. These findings are

confirmed by those for negotiating milk price, which was given a high priority too (ranging from 1 to 3) by 83% of the POs (in France, 100%). Further supporting evidence is provided by answers to the question on the negotiating of payment conditions. This activity is indicated as third most important: 59 (out of 63) POs gave it a priority of 1 to 3.

In order to assess the functioning of the POs with respect to the objectives of cost optimisation and milk price improvement and stabilisation, it is relevant to know not only how important PO members consider them to be, but also to what extent these objectives, especially the ones indicated to be important, are being achieved or not. Here one finds mixed and generally rather modest results. Almost a quarter of those POs which put a high priority on achieving input price discounts indicated that this objective has been achieved. Between 25% and 30% of the POs confirmed that a higher and more stable price has been largely or fully realised (Section 5.3).

The success of a PO depends on the ability to manage and develop the PO and also on the level of the bargaining skills of the negotiators. About 40% of the POs (and also of the FOs) indicated that they had insufficient information and training (see also Figure 6.8). Although this refers to POs in general, the interviews suggest that it could also indicate that PO representatives responsible for contract negotiations need better insights into market conditions (i.e. how prices are determined) and need to improve their negotiation abilities. Given the high priority expressed by the POs for improving milk prices and associated delivery conditions, support in this respect could be a welcome contribution to help improve the functioning of POs in terms of responding to market developments and negotiating a favourable price for their members. Nearly half of 'All POs' indicated that they lack PO success stories. Information on best practices and good examples among POs could contribute to their learning and improved operation (benchmarking), as well as having a spin-off effect for farmers who are not members of a PO or for regions where POs do not yet exist.

Conclusion

Improving the level of the producer price and stabilising it can be considered the key objectives of POs under the Milk Package, even though POs may also simultaneously pursue other goals. Between 25% and 30% of the POs claim that a higher and more stable price has been largely or fully realised. This suggests that there is ample room for improvement of the functioning of POs in this regard.

It has to be acknowledged, however, that both the producer cost and producer price (level and stability) objectives have been analysed only to a limited extent. For example, no comparison of production costs, milk price levels and price fluctuations has been made between farmers in POs and outside POs (the counterfactual). Moreover, representatives (managers) of POs provided the answers to the survey questions; they may have a more different opinion from the POs' members.

7.6 The potential for POs where they have not been constituted yet

Alongside assessing the functioning of existing POs in the context of the Milk Package, another research objective of this study is to evaluate the potential for POs where they have not been constituted yet. In order to consider the potential of POs, questions have been asked of existing POs and FOs that may have valuable experiences in tackling start-up problems. The FOs usually have members in areas with and without POs, which may put them in a unique position to also provide useful reflections on what could be important obstacles for creating POs.

Reasoning

POs are organisations meant to favour producer interests. By doing that, they are to achieve gains for their members. At the same time, operating POs involves costs. A positive incentive to establish a PO requires that the benefits of initiating a PO outweigh

the costs. The costs can include membership fees, but also transaction costs and opportunity costs of the time spent and efforts made to manage the PO. Benefits can be derived from receiving a better and/or more stable milk price, being able to produce at lower costs, having assurance that the milk will be collected, and getting a price mark-up for a quality premium or niche market dairy product (all relative to not being a member of a PO). Costs may exceed benefits in time at certain points, for instance when investments are needed, with start-up costs usually closely related to the moment of initiating the PO, whereas the benefits might be more dispersed and are expected to develop positively over time.

There might be uncertainty among producers about the benefits that can be realised by creating a PO. Producers may lack information and awareness about the factors explaining successful POs. Dairy farmers may also expect POs to solve their economic issues, which may lead to disappointment when this does not come true. Moreover, there is a social issue. POs require multiple producers to collaborate, which requires a certain degree of trust, solidarity and loyalty, which might not occur automatically or might develop only gradually. There might also be a cultural element here: past experiences in which cooperation failed may create insufficient willingness to cooperate at present.

Evidence and assessment

Chapter 6 discusses several reasons for the small number of POs. First, FOs claim that the small number of POs is linked to the fact that the dairy value chain is well organised. The argument is that in a well-functioning (competitive) value chain there are no or only small rents in the value chain, which would limit the gains a PO can achieve. In MSs where the contractual arrangements are predominantly cooperative ('MS Cooperative'), 70% of the FOs are of the opinion that POs do not add (much) to the already existing cooperatives, whereas in MSs with other contractual arrangements ('MS Private' or 'MS Mixed') fewer than 25% are of that opinion. This suggests that, according to FOs, POs are more likely to be initiated in countries or markets where cooperatives are less important. To put it another way, where cooperatives serve the interest of producers there seems to be less room for POs than where cooperatives are absent. This is, however, contrary to the conclusions of Bijman (2015), who has studied the cooperative structures in the European fruit and vegetable sector and found a relatively high number of POs in countries with a strong cooperative organisation. An alternative argument could therefore be that a well-organised sector enhances the establishment of POs. This is also the impression resulting from the in-depth interviews with POs and FOs. The explanatory factor here could be that the presence of cooperatives and a well-functioning market reflect the willingness and ability of producers to collaborate. One-third of the POs' and FOs' respondents agreed that insufficient willingness of farmers to cooperate is an important reason for the small number of POs in many EU countries.

Next, the value added of POs turns out to be often not clear to potential members: only one-fifth of the surveyed POs agree that the benefits outweigh the cost (Section 6.2). The chance of not being successful (i.e. the risk of not achieving goals and the associated benefits) may discourage producers from developing any initiatives but those with a strong expectation of success. As is clear from Section 6.2, the lack of information and awareness may also contribute to a biased perspective on the costs and benefits of POs. Information deficits about POs and their potential, in particular what they can achieve (success stories), as well as about the access to support in establishing a PO, affect the (negative) attitude towards establishing a PO.

Over 50% of the FOs agree with the statement that the lack of success stories is a reason for the small number of POs, and the majority of POs that provided an answer are also of that opinion (Section 6.2). Furthermore, 'Getting better prices' is considered an important motivation for establishing a PO (around 80% of the POs indicated this; Section 6.3.). Only one-quarter of the POs indicated that this objective has been realised. This implies that the majority of the surveyed POs disagreed, which means that, according to most interviewed POs, the PO has not achieved better prices for its farmers.

Answers to survey questions indicate that expectations in the sector about how the Milk Package could lead to a better farm income lack realism. The bottom line in several interviews is that farmers expect the PO to improve their (low) incomes. However, the respondents to the questionnaire (managers or representatives of POs, FOs and the EDA, hence not farmers) argue that establishing a PO is unlikely to solve the pressure on farm incomes, nor will the PO's activities easily result in a higher share in the consumer's expenditures, in particular not where markets are competitive. Respondents also made it clear that the Milk Package is not intended to be an industry or trade policy, as it does not provide subsidies or market intervention, nor does it aim to implement trade restrictions. POs offer an opportunity for collective bargaining as an exemption to competition law. As POS are instruments of producer self-organisation, producers need to make substantial efforts and enter into longer-term commitments if they would like to initiate and develop a PO.

In a competitive market, no stakeholder can make excessive profits. Obtaining a higher profit by farmers can be realised by (1) increasing off-farm prices (but that would be at the expense of other stakeholders in the value chain), (2) reducing costs in the value chain or (3) adding more value to the products. With the increase in market orientation of the Common Agricultural Policy, and the increasing reliance of the EU on exporting products outside the EU, the competitive pressure has also increased. The gains from POs will then most likely have to come from the second and third options.

Conclusion

Based on the evidence obtained from the surveys, there are some hints of major reasons why most MSs have only a small number of POs. The analysis of the answers of existing POs and FOs indicates that often the value added by establishing a PO is not very clear; starting a PO implies costs (time and money) and the benefits might come over time but are not guaranteed. Success stories are lacking. Moreover, potential members of POs lack information about and awareness of how PO could work for their benefit. At the same time, respondents (mainly managers of POs, FOs and EDA) voice the view that farmers have high expectations of POs, namely that they will contribute to balanced markets and better milk prices.

8 Summary of major findings

8.1 Introduction

The assessment of the functioning of POs includes on the one hand an assessment of the general and MS-specific legal requirements that POs have to meet and to what extent they affect the functioning of POs, and on the other hand an assessment of the objectives that POs choose to pursue and their performance in achieving these objectives. Our surveys and interviews provided the building blocks for the assessment summarised below.

8.2 Findings with respect to the legal requirements that POs have to satisfy

Initiation of POs by producers

As regards the requirement that POs recognised under the Milk Package shall be initiated by milk producers (farmers), our observation is that this requirement is not met in about 40% of the cases in the sample. More than 20% (13 out of 63) of the POs included in the sample were established by another organisation, such as a processor or a milk-collecting organisation, potentially leading to conflicts of interest between milk producers and the initiating organisation. Conflicts of interest may hinder the PO from achieving one or more of the Milk Package objectives, but the survey does not provide evidence that the objectives of the regulation are not achieved because of conflicting interests.

Maximum volume of raw milk covered by contractual negotiations

All the cases analysed meet the requirements in the legislation restricting the maximum volume of raw milk covered by contractual negotiations. Given this, there is no evidence that the maximum requirements are constraining POs from exercising their bargaining power.

Criteria with respect to minimum number of members or minimum marketable production volume

The criteria for recognising a PO differ across MSs. Wide ranges in the minimum number of members (between 5 and 200) and in the minimum marketable production (between 35 and 200 000 tonnes) have been observed. These are difficult to justify only on the basis of structural differences between MSs. MSs that define high minimum size requirements seem to favour large-scale POs. From studies on POs in other agricultural sectors, it is known that collective action organisations such as POs often start as small organisations because trust has to build up and experience needs to be gained (Bijman, 2015; Bijman et al., 2012). High minimum criteria can operate as a barrier to entry to the rise of POs, even though they may not be the only factor explaining small numbers of POs.

8.3 Conclusions with respect to the objectives that POs pursue

Objective i: Production is planned and adjusted to demand

With respect to the objective that production is planned and adjusted to demand, no strong conclusions could be drawn from the results from the surveys. Quite a number of the POs in the sample find better market information of paramount importance, and many do negotiate how much to deliver (which is the result of matching demand and supply). In addition, the POs deliver all the milk contracted under Article 149 of the CMO to the processor, which may indicate that supply matches demand well. Meanwhile, though, POs do not seem to supervise the volumes delivered very strictly: a significant proportion of the contracts negotiated are not binding and, in addition, many PO

members do sell to purchasers outside the PO's contracts. POs' role in controlling quality is also modest in most countries, as the existing quality assurance system is generally more than adequate to guarantee high-quality milk delivery. Still, POs do play an important role in either maintaining or improving the quality of the produce in niche markets (e.g. Italy) and in several of the MSs that joined the EU in or after 2004 (EUn13).

Objective ii: Concentration of supply and placing on the market

This objective of establishing POs is to bring together individual supplies in a collective selling milk to a processor to enhance farmers' position in the supply chain. Every PO realises concentration of supply compared with the individual farmer. Yet at national level POs do so only to a limited extent. The survey shows that the degree of concentration of milk supply varies greatly between MSs. In only two MSs was the total marketable production of PO members similar to the maximum amount of milk that is allowed to be covered by collective negotiations. In all other MSs where POs were active, this amount was much lower, the 63 POs covered in the survey produce 10.2 million tonnes of milk, which is a mere 7% of the EU's total milk supply. According to their self-assessment, the surveyed POs have been successful to different degrees in assuring that the milk of their members is collected and processed and in enhancing the position of producers in the value chain. Of the POs for which assured milk collection was an important reason for their establishment, almost all indicated that this objective was achieved. This is a very high score, indicating successful functioning of the surveyed POs in this respect. However, to draw a firmer conclusion it would be necessary to compare the assurance of milk being collected for farmers that are members of a PO and farmers that are not. With respect to the objective of improving the position of producers in the value chain, a mere 40% of the POs found this objective important and indicated that their position was indeed strengthened. Still, this implies that a majority of POs are not satisfied with the achievements of POs in this regard.

Objective iii: optimising production costs and stabilising producer prices

Improving the level of and stabilising the producer price can be considered the key objectives of POs under the Milk Package, even though they may also simultaneously pursue other goals. Between 25% and 30% of the POs claim that a higher and more stable price has been largely or fully realised. This suggests that, alongside successes that are achieved, there is ample room for improvement in the functioning of POs in this regard.

It has to be acknowledged, however, that both the producer cost and producer price (level and stability) objectives have been analysed only to a limited extent. For example, no comparison of production cost, producer milk price levels and milk price variation has been made for farmers in POs and those outside POs (the counterfactual). Moreover, the survey was done at a time when prices were low (spring 2016). This could have a bearing on the result.

8.4 Conclusion with respect to the potential for POs where they have not been constituted yet

Based on the evidence obtained from the surveys, there are some hints of major reasons for having only a small number of POs in most of the MSs. The analysis of the answers of existing POs and FOs indicates that often the value added by establishing a PO is not very clear, especially in countries where many farmers are member of a dairy cooperative. Starting a PO implies costs (time and money) and the benefits might come over time but are not guaranteed. Success stories are lacking, which might also be because the regulation is only recent and market circumstances (low prices due to oversupply) are difficult. Moreover, potential members of POs lack information about and awareness of how PO could work for their benefit. The historical connotations of collectives make farmers in most of the recently accessed MSs (EUn13) reluctant to get

organised. This is a special hurdle that supports of POs must surmount in putting forward possible gains from a PO. A policy recommendation for further promoting the use of POs is to reduce the information and awareness gap by targeted communications and information activities, including profiling success stories. Offering training (e.g. in bargaining techniques) to potential PO managers may also contribute to improving the competence of PO staff and hence the functioning and success of POs.

8.5 Closing remarks

The measures established by the Milk Package will apply until mid-2020. As part of a discussion on extending and/or adjusting the Milk Package, this raises the question of whether or not the legislation with respect to POs and APOs should be extended. This research has a limited scope and provides a preliminary assessment of POs, but nevertheless offers some relevant insights into answering this question. This research shows that POs partly contribute to the objectives for which they have been initiated. As it appears from the surveys, POs have not been successful in fully achieving all their objectives. Moreover, there are several MSs where POs have not caught on at the time of writing (mid-2016). This could be related to the start-up costs of a PO, but also to alternative organisational arrangements being available that are also able to address the needs of the producers. This latter possibility has not been addressed in this research. Although there are still a number of open questions, there is also evidence that POs have made a positive contribution to achieving one or more of the three objectives. For this reason, our recommendation is to extend the legal provision for POs and schedule a more in-depth evaluation, to help gain more definite insights into the functioning of POs.

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Appendix 1 Questionnaire addressed to POs in the milk sector

A. General information

1. In what year was the PO constituted? Year .....
2. In what year was the PO recognised by the national authorities (under the Milk Package provisions)? Year.....
3. Who took the initiative?
   □ Farmer(s)
   □ Trade union
   □ Milk collecting organisation
   □ Processor
   □ Other (please specify).....
4. Did you experience any difficulties linked to the recognition? If yes, why?
   □ No.
   □ Yes, because of.....
5. Did you experience difficulties to find members? If yes, why?
   □ No.
   □ Yes, because of.....
6. Did you experience difficulties with your milk purchasers? If yes, why?
   □ No.
   □ Yes, because of.....
7. How many members had the PO and what was the marketable milk production per animal species (tonnes/year) on 1st December 2015?

	Cow	Ewe	Goat	Buffalo
Members				
Tons/year				

8. How many PO members are located in areas with structural limitations and what is the approximate annual milk production (tonnes per year) in each?

Area		Cow	Ewe	Goat	Buffalo
Mountain Area	Members				
	Tonnes/year				
Other Areas with Natural Constraints	Members				
	Tonnes/year				
Others(specify).....	Members				
	Tonnes/year				

9. What kind of purchasers does the PO deliver the milk to, and how many?

Purchasers	If Yes, number of Purchasers
□ Processor	
□ Trader	
□ Cooperative	
□ Others	

10. Is the main purchaser a milk processor?
    □ No, the main purchasers is **not** a milk processor.
    □ Yes, the main purchaser is a milk processor.
    If yes, could you indicate its geographical dimension?
    □ Local.
    □ Regional.
    □ National.
    □ International.

11. Does the PO belong to an APO (Association of Producer Organisations)?

□ Yes If yes, what is the name of the APO?.....

□ No If not, do you see potential to constitute an APO?.....

12. What were the motivations for the constitution of the PO?

Please rank the most important reasons: 1 is most important, 2= second, 3 = third and so on, no indication means not important or not applicable.

Motivation	Rank
Get better prices.	
Get more stable prices.	
Assure that milk of all members will be collected.	
Better market information for taking production decisions	
Overall enhancement of producers' position in the supply chain	
Better communication with other milk producers	
Price discount by collective purchase of means of production.	
Efficient use of means of production	
Interim step for further constitution of a cooperative.	
Others, please specify	

13. To what extent are the following objectives accomplished?

		Extent of realisation			
Objective	Not applicable	Not at all	Partly	Largely	Fully
Get better prices.					
Get more stable prices.					
Assure that milk of all members will be collected.					
Better market information for taking production decisions.					
Overall enhancement of producers' position in the supply chain.					
Better communication with other milk producers					
Price discount by collective purchase of means of production.					
Efficient use of means of production.					
Interim step for constitution of cooperative.					
Others.					

B. Activities

14. What are the core activities of the PO? Please rank the most important reasons: 1 is most important, 2= second important, 3 = third important and so on, no indication means not important or not applicable.

Activity	Rank
Negotiating milk price	
Negotiating payment conditions	
Negotiating delivery volumes	
Negotiating delivery conditions	
Negotiating delivery schedule	
Organising the milk collection	
Organising technical and/or economic advice	
Organisation of information/experience exchange	
Organising quality controls	
Organising joint inputs purchase	
Providing other services to farmers, please specify.....	
Others (please specify)...	

C. Contractual negotiations

15. Since when is the PO **negotiating** contracts on behalf of the members?
Since .....(year)

16. Is PO's **negotiation** result binding for the members?
□ No
□ Yes

17. Would you consider **obliging members** in your PO to deliver a fixed share of their production through the PO?
□ No
□ Yes

18. Are any members of the PO **negotiating** and delivering milk outside the PO (directly with the purchasers)?
□ No
□ Yes

19. Does the PO **conclude delivery contracts** on behalf of the PO members?
□ No
□ Yes

20. Do the PO members conclude individual contracts?
□ No
□ Yes

21. What volume of raw milk (**tonnes per year** and per animal species, if applicable) was actually **delivered under contracts negotiated by the PO**, in the last three years ?

Year	Cow	Ewe	Goat	Buffalo
2013				
2014				
2015				

D. Organisation and governance

22. What are the requirements to become a member of the PO?
□ Payment of a fee
□ Being established in a certain region
□ Quantity to deliver
□ Quality requirements
□ Delivery to specific processor
□ Method of production (e.g. Organic, pasture grazing, GMO-free feed,…)
□ Membership of a trade Union
□ Others.....

23. How are the voting rules?
□ One farmer one vote?
□ Votes are proportional to the milk deliveries
□.Others .....

24. Who are on the board of the PO?
□ Only farmers
□ Farmers and non-farmers

25. How many paid staff does the PO have?
..... employees.

26. Did you get any **national** financial support for establishing your PO?
□ No.
□ Yes. What was the amount of support? ..... EUR.

27. Did you get any **EU** financial support for establishing your PO?
□ No.
□ Yes. What was the amount of support? ..... EUR.

28. Did you receive any **other** support from **public** authorities?
□ No
□ Yes
□ If yes, from what authority..... and which type of support did you get:.....

29. Did you receive any support from **private** bodies (farmers' union, processor, etc.)?
□ No.
□ Yes.
□ If yes, from what body..... and which type of support did you get:.....

30. To what extent are following statements on the management of the PO valid?

	Extent of being valid			
	Not at all	Partly	Largely	Fully
Managing the PO is time consuming				
All members participate in the management of the PO				
The engagement of members in the PO is high				
Members easily come to an agreement				
The PO reduces the administrative burden for members				

E. Challenges and solutions

31. What are the main actual benefits of belonging to the PO for your members?
1.....
2.....
3.....

32. And what are the main drawbacks, if any? .....
1.....
2.....
3.....

33. Would you consider evolving the PO into a processing cooperative
Yes / No
□ No.
□ Yes.
If no, why?

Reason	Not at all	Partly	Largely	Fully
Too much investment needed				
Insufficient public financial support				
No entrepreneurial interest of the PO members				
Insufficient training				
Others (please specify).....				

If yes, what would be your motivation?

Reason	Not at all	Partly	Largely	Fully
Opportunity for business development				
Obtain better milk prices for your members				
Overall enhancement of producers' position in the supply chain				
Benefit from financial advantages available in your Member State				
Develop local specialities				
Others (please specify).....				

34. Do you see potential for more POs in your country?

□ No

□ Yes.

If yes, why is this possibility not fully exploited?

Reason	Not at all	Partly	Largely	Fully
The sector is already well organised				
The supply chain is already functioning properly				
Insufficient organisation in the sector				
The benefits to participate in a PO will not outweigh the costs				
Insufficient willingness for cooperation among farmers				
Farmers' preference to have direct contact with the purchasers				
Insufficient information / training				
Lack of success stories				
Recent milk price evolution doesn't encourage cooperation among farmers				
Others (please specify).....				

35. Would you propose any change in the Milk Package provisions, notably in view of its potential prolongation beyond 2020?

Aspect	If relevant, which change
Contractual relations	
Producer Organisations	
Collective negotiating	
Interbranch Organisations	
Regulation of supply for PDO/PGI cheese	
General remark on the Milk Package as a whole	

36. Any remarks / additional information: .....

Thank you for filling in this questionnaire!

It is possible that we will call you for additional information. In that case, we hope that you are willing to cooperate as well.

Technical notes on the PO questionnaires

Question 12: Some respondents did not fill in a priority order. Some ranked several motivations with the same number: e.g. 4 times the number 1 and 2 times the number 2, and no other rankings. In the analysis, we did not change this ranking.

Appendix 2 Questionnaire addressed to FOs

1. Which forms of cooperation between farmers does the milk sector have?
   - ☐ Farmer organisation
   - ☐ Producer groups
   - ☐ Trade union
   - ☐ Cooperative
   - ☐ Milk collection organisations
   - ☐ Other,.....

2. What are the reasons for the low number or absence of recognised Producer Organisations (PO) in your country?

Reason	Not at all	Partly	Largely	Fully
The sector is already well organised	☐	☐	☐	☐
The supply chain is already functioning properly	☐	☐	☐	☐
Insufficient organisation in the sector	☐	☐	☐	☐
The benefits to participate in a PO will not outweigh the costs	☐	☐	☐	☐
Insufficient willingness for cooperation among farmers	☐	☐	☐	☐
Insufficient information / training	☐	☐	☐	☐
Lack of success stories	☐	☐	☐	☐
Recent milk price evolution doesn't encourage cooperation among farmers	☐	☐	☐	☐
Others (please specify).....	☐	☐	☐	☐

3. Do you see potential for POs and APOs in your country and why?

   ☐ No, because of.....

   ☐ Yes, because of .....

4. Are you aware of ongoing/past initiatives to form POs

   ☐ No

   ☐ Yes, which .....

5. What might be reasons for farmers to join or form POs?

Reasons	Not at all	Partly	Largely	Fully
Get better prices.	☐	☐	☐	☐
Get more stable prices.	☐	☐	☐	☐
Assure that milk of all members will be collected.	☐	☐	☐	☐
Better market information for taking production decisions	☐	☐	☐	☐
Overall enhancement of producers' position in the supply chain	☐	☐	☐	☐
Better communication with other milk producers	☐	☐	☐	☐
Price discount by collective purchase of means of production.	☐	☐	☐	☐
Efficient use of means of production	☐	☐	☐	☐
Interim step for further establishment of a cooperative.	☐	☐	☐	☐
Others, please specify	☐	☐	☐	☐

6. Is the use of written contracts common?
   - ☐ No
   - ☐ Yes, for approximately .... % of the total milk deliveries.

7. If so, is the written contract concluded in advance? ☐ No ☐ Yes

8. If written contracts are used, which terms are covered?
   - ☐ Price of milk
   - ☐ Quality of milk
   - ☐ Payment conditions
     - ☐ Quantity of delivery
     - ☐ Other delivery conditions (please specify) .....
     - ☐ Quantity of delivery in specific periods
   - ☐ Providing technical and/or economic advice
   - ☐ Purchase of inputs
   - ☐ Duration of contract
   - ☐ Others (please specify).....

9. Would you propose any change in the Milk Package provisions, notably in view of its potential prolongation beyond 2020?

Aspect	If relevant, how
Contractual relations	
Producer Organisations	
Collective negotiating	
Interbranch Organisations	
Regulation of supply for PDO/PGI cheese	
General remark on the Milk Package as a whole	

10 Any remarks / additional information: .....

Thank you for filling in this questionnaire!
It is possible that we will call you for additional information. In that case, we hope that you are willing to cooperate as well.

Appendix 3 Questionnaire addressed to the national members of EDA

1. Country you represent: …….
2. Which forms of cooperation between farmers does the milk sector have? (More answer possible)
   - ☐ Farmer organisation
   - ☐ Producer groups
   - ☐ Trade union
   - ☐ Cooperative
   - ☐ Milk collection organisations
   - ☐ Other,.....

3. What are the reasons for the low number or absence of recognised Producers Organisations (PO) in your country?

Reason	Not at all	Partly	Largely	Fully
The sector is already well organised	☐	☐	☐	☐
The supply chain is already functioning properly	☐	☐	☐	☐
Insufficient organisation in the sector	☐	☐	☐	☐
The benefits to participate in a PO will not outweigh the costs	☐	☐	☐	☐
Insufficient willingness for cooperation among farmers	☐	☐	☐	☐
Farmers' preference to have direct contact with the purchasers	☐	☐	☐	☐
Insufficient information / training	☐	☐	☐	☐
Lack of success stories	☐	☐	☐	☐
Recent milk price evolution doesn't encourage cooperation among farmers	☐	☐	☐	☐
Others (please specify).....	☐	☐	☐	☐

4. Do you see potential for Producers Organisations (POs) and Associations of Producers Organisations (APOs) in your country and why?

   ☐ No, because of.....

   ☐ Yes, because of .....

5. Are you aware of ongoing/past initiatives to form POs

   ☐ No

   ☐ Yes, which .....

6. What might be reasons for processors/purchasers to do business with POs?

Reasons	Not at all	Partly	Largely	Fully
Reduce costs	☐	☐	☐	☐
Get more stable raw milk prices.	☐	☐	☐	☐
Assurance of raw milk supply	☐	☒	☐	☐
Better production/market information for taking processing decisions.	☐	☐	☐	☐
Overall enhancement of purchasers'/processors' position in the supply chain.	☐	☐	☐	☐
Better communication between farmers and purchasers/producers.	☐	☐	☐	☐
Better quality of the raw milk.	☐	☐	☐	☐
More efficient milk collection.	☐	☐	☐	☐
Interim step for more integration in the chain	☐	☐	☐	☐
Others……	☐	☐	☐	☐

7. Is the use of written contracts between farmer and processor/buyer common?
   - ☐ No
   - ☐ Yes, for approximately .... % of the total milk deliveries.

8. If so, is the written contract concluded in advance? ☐ No ☐ Yes

9. If written contracts are used, which terms are covered in the contract? (More answers possible)
   - ☐ Price of milk
   - ☐ Quality of milk
   - ☐ Payment conditions
     - ☐ Quantity of delivery
     - ☐ Other delivery conditions (please specify) .....
     - ☐ Quantity of delivery in specific periods
   - ☐ Providing technical and/or economic advice
   - ☐ Purchase of inputs
   - ☐ Duration of contract
   - ☐ Others (please specify).....

10. Would you propose any change in the Milk Package provisions, notably in view of its potential prolongation beyond 2020?

Aspect	If relevant, how
Contractual relations	
Producers Organisation	
Collective negotiating	
Interbranch Organisations	
Regulation of supply for PDO/PGI cheese	
General remark on the Milk Package as a whole	

11 Any remarks / additional information: .....

Thank you for filling in this questionnaire!
It is possible that we will call you for additional information. In that case, we hope that you are willing to cooperate as well.

Appendix 4 Sample and response Farmer organisations

	Invited						Response						In-depth interviews
	Copa-Cogeca	EMB	La Via Campesina	CEJA	Others	Total	Copa-Cogeca	EMB	La Via Campesina	CEJA	Others	Total	
Austria	2	1	0	1	0	4	2	1	0	0	0	3	3
Belgium	2	2	2	1	0	7	1	1	2	0	0	4	3
Bulgaria	0	0	0	0	6	6	0	0	0	0	2	2	1
Croatia	1	1	0	1	0	3	1	1	0	1	0	3	*
Cyprus	4	0	0	1	0	5	0	0	0	0	0	0	*
Czech Rep.	3	0	0	1	0	4	1	0	0	0	0	1	2
Denmark	1	1	0	1	0	3	1	1	0	0	0	2	2
Estonia	3	0	0	0	0	3	1	0	0	0	0	1	2
Finland	2	0	0	1	0	3	1	0	0	0	0	1	1
France	3	2	1	1	0	7	1	1	1	0	2	5	1
Germany	1	2	1	1	0	5	0	1	0	0	1	2	*
Greece	1	0	0	0	0	1	1	0	0	0	0	1	*
Hungary	3	0	0	1	0	4	1	0	0	0	0	1	1
Ireland	1	1	0	1	0	3	1	0	0	0	0	1	2
Italy	3	1	1	1	0	6	2	0	0	0	0	2	2
Latvia	6	1	0	1	0	8	6	0	0	0	0	6	*
Lithuania	6	1	0	1	0	8	6	0	0	1	0	7	1
Luxembourg	1	1	0	1	0	3	0	0	0	0	0	0	*
Malta	1	0	0	0	0	1	0	0	0	0	0	0	*
Netherlands	1	2	0	1	0	4	1	1	0	0	0	2	2
Poland	6	0	0	1	0	7	1	0	0	0	0	1	2
Portugal	1	0	1	1	0	3	1	0	1	0	0	2	1
Romania	0	0	0	0	4	4	2	0	0	0	0	2	1
Slovakia	1	0	0	1	0	2	0	0	0	0	0	0	*
Slovenia	1	0	0	1	0	2	1	0	0	0	0	1	*
Spain	3	1	2	0	0	6	2	1	0	0	0	3	2
Sweden	1	1	0	1	0	3	1	0	0	0	0	1	2
UK	3	0	0	1	0	4	3	0	0	0	0	3	2
Total	61	18	8	22	10	119	38	8	4	2	5	57	33

* no in-depth interview

Appendix 5 Detailed information on Electronic survey POs

Table A5.1 Members of POs in type of area

Type of area	All	DE	FR	IT	ES	Other
Mountainous	1,967	851	62	484	424	146
Natural constraints	2,577	449	100	142	1,650	236
Other limitations	756	313	26	32	385	0
Total with structural limitations	5,136	1,613	188	658	2,295	382
No structural limitations	35,275	21,375	3,655	1,531	410	8,304
Total	40,411	22,988	3,843	2,189	2,705	8,686

Table A5.2 Cow milk production (1,000 tonnes) in type of area

Type of area	All	DE	FR	IT	ES	Other
Mountainous	481	159	21	85	70	147
Natural constraints	1,017	213	52	64	632	57
Other limitations	276	178	9	14	75	0
Total with structural limitations	1,774	550	81	163	777	203
No structural limitations	8,407	1,455	1,251	825	496	4,379
Total	10,181	2,005	1,332	988	1,273	4,583

Table A5.3 Number of POs by period of constitution

Period	All	DE	FR	IT	ES	Other
Before 2008	24	15	1	5	0	3
Between 2008 and 2012	20	3	8	3	4	2
After 2012	18	4	3	3	1	7
N.A.	1	0	1	0	0	0
Total	63	22	13	11	5	12

Table A5.4 Number of POs by period of recognition

Period	All	DE	FR	IT	ES	Other
Before 2008	16	11	0	3	0	2
Between 2008 and 2012	12	2	5	3	2	0
After 2012	35	9	8	5	3	10
N.A.	0	0	0	0	0	0
Total	63	22	13	11	5	12

Table A5.5 Motivation for constitution of POs

Region	Ranking	Better price	Stable price	All milk collected	Information for decisions	Enhance position in chain	Better communication	Cheaper inputs	Efficient use of inputs	Interim to cooperative	Others
All	1	33	16	15	3	22	6	3	2	0	6
	2	16	13	6	11	11	8	6	5	1	1
	3	9	13	10	7	7	8	2	1	5	1
	>3	2	11	15	23	15	24	10	14	7	1
	N.A.	3	10	17	19	8	17	42	41	50	54
	Total	63	63	63	63	63	63	63	63	63	63
DE	1	15	2	2	0	9	2	0	0	0	2
	2	3	7	3	4	6	3	0	0	0	0
	3	4	6	3	1	1	3	1	1	0	1
	>3	0	5	8	11	3	9	1	2	1	0
	N.A.	0	2	6	6	3	5	20	19	21	19
	Total	22	22	22	22	22	22	22	22	22	22
FR	1	6	1	3	0	4	1	0	0	0	1
	2	6	4	1	0	0	0	0	0	0	0
	3	0	3	2	2	2	2	0	0	0	0
	>3	0	3	2	6	6	8	3	3	1	0
	N.A.	1	2	5	5	1	2	10	10	12	12
	Total	13	13	13	13	13	13	13	13	13	13
IT	1	7	6	3	1	5	2	0	1	0	1
	2	2	0	1	4	3	3	5	4	1	0
	3	1	2	3	2	0	2	0	0	4	0
	>3	0	0	0	1	0	0	1	2	1	0
	N.A.	1	3	4	3	3	4	5	4	5	10
	Total	11	11	11	11	11	11	11	11	11	11
ES	1	1	1	2	0	1	0	0	0	0	0
	2	3	1	0	1	0	0	0	0	0	0
	3	0	1	2	1	1	1	0	0	0	0
	>3	1	1	1	1	3	1	2	2	1	1
	N.A.	0	1	0	2	0	3	3	3	4	4
	Total	5	5	5	5	5	5	5	5	5	5
Others	1	4	6	5	2	3	1	3	1	0	2
	2	2	1	1	2	2	2	1	1	0	1
	3	4	1	0	1	3	0	1	0	1	0
	>3	1	2	4	4	3	6	3	5	3	0
	N.A.	1	2	2	3	1	3	4	5	8	9
	Total	12	12	12	12	12	12	12	12	12	12

Note: 1, most important motivation; 2, second; 3, third; >3 least important. Some POs filled in the same ranking for several motivations: therefore, the total for one ranking can be greater than the number of POs.

Table A5.6 Extent of realisation of the motivations for constitution of POs

Region	Extent of realisation	Better price	Stable price	All milk collected	Information for decisions	Enhance position in chain	Better communication[a]	Cheaper inputs	Efficient use of inputs	Interim to cooperative	Others
All	Not applicable	1	1	3	3	5	0	11	8	12	0
	Not at all	13	14	3	0	9	1	10	8	4	0
	Partly	27	25	2	21	24	3	4	5	2	0
	Largely	12	11	6	15	14	9	5	7	1	0
	Fully	4	3	37	12	3	8	1	1	2	3
	N.A.	6	9	12	12	8	6	32	34	42	60
	Total	63	63	63	63	63	27	63	63	63	63
DE	Not applicable	0	0	0	0	0	0	0	0	0	0
	Not at all	3	5	1	0	2	0	1	1	0	0
	Partly	9	8	0	6	11	1	0	0	0	0
	Largely	7	4	1	4	5	8	1	2	0	0
	Fully	2	1	16	7	2	8	0	0	0	1
	N.A.	1	4	4	5	2	5	20	19	22	21
	Total	22	22	22	22	22	22	22	22	22	22
FR	Not applicable	0	0	1	0	1		3	3	4	0
	Not at all	6	5	0	0	5		5	4	2	0
	Partly	7	5	0	9	6		1	1	1	0
	Largely	0	2	3	3	1		0	0	0	0
	Fully	0	0	9	0	0		0	0	0	0
	N.A.	0	1	0	1	0		4	5	6	13
	Total	13	13	13	13	13		13	13	13	13
IT	Not applicable	0	0	2	3	2		3	2	5	0
	Not at all	2	1	0	0	0		3	2	0	0
	Partly	4	3	1	3	3		1	0	0	0
	Largely	2	3	0	1	3		2	3	0	0
	Fully	2	2	5	2	1		0	1	1	1
	N.A.	1	2	3	2	2		2	3	5	10
	Total	11	11	11	11	11		11	11	11	11
ES	Not applicable	1	0	0	0	1	0	3	2	2	0
	Not at all	0	1	1	0	0	1	0	0	0	0
	Partly	2	4	1	1	1	2	0	0	0	0
	Largely	1	0	1	3	2	1	0	1	1	0
	Fully	0	0	1	0	0	0	0	0	0	0
	N.A.	1	0	1	1	1	1	2	2	2	5
	Total	5	5	5	5	5	5	5	5	5	5
Others	Not applicable	0	1	0	0	1		2	1	1	0
	Not at all	2	2	1	0	2		1	1	2	0
	Partly	5	5	0	2	3		2	4	1	0
	Largely	2	2	1	4	3		2	1	0	0
	Fully	0	0	6	3	0		1	0	1	1
	N.A.	3	2	4	3	3		4	5	7	11
	Total	12	12	12	12	12		12	12	12	12

[a] This question was translated and included in only the German and Spanish questionnaires.

Table A5.7 Motivation realised 'fully' or 'largely' for POs that indicated it in top two priorities for constitution

Priority of motivation	Better price	Stable price	All milk collected	Information for decisions	Position in chain	Better communication	Cheaper inputs	Efficient use of inputs	Interim to cooperative	Rest
POs listing motivation as 1 or 2	49	29	21	14	33	14	9	7	1	7
Accomplishment (largely or fully)	14	8	20	9	13	4	3	3	1	3
% realisation of motivations	29	28	95	64	39	29	33	43	100	43

Table A5.8 Importance of core activities of POs

Region	Ranking	Negotiating					Organising					Others	
		Milk price	Payment conditions	Delivery volumes	Delivery conditions	Delivery schedule	Milk collection	Advice	Information exchange	Quality control	Inputs purchase	Other services	Others
All	**1**	42	10	10	8	3	8	5	3	9	3	1	3
	2	6	15	21	8	3	3	5	16	4	6	1	1
	3	4	12	7	11	7	7	3	11	2	2	3	0
	>3	2	7	9	12	13	14	13	12	16	8	5	3
	N.A.	9	19	16	24	37	31	37	21	32	44	53	56
	Total	63	63	63	63	63	63	63	63	63	63	63	63
DE	**1**	17	3	1	3	0	1	1	0	3	0	0	2
	2	2	5	6	5	1	1	0	7	0	0	0	0
	3	0	5	3	2	3	2	0	1	0	0	0	0
	>3	0	3	3	2	1	3	0	3	3	1	0	1
	N.A.	3	6	9	10	17	15	21	11	16	21	22	19
	Total	22	22	22	22	22	22	22	22	22	22	22	22
FR	**1**	11	0	3	0	0	0	0	0	0	0	0	0
	2	2	3	7	1	0	0	0	2	0	0	0	0
	3	0	3	2	1	1	0	1	5	0	0	0	0
	>3	0	1	0	5	3	3	3	4	5	2	3	0
	N.A.	0	6	1	6	9	10	9	2	8	11	10	13
	Total	13	13	13	13	13	13	13	13	13	13	13	13
IT	**1**	4	3	2	2	1	3	3	1	5	1	1	0
	2	0	2	3	1	1	2	4	6	4	4	1	1
	3	4	4	2	3	3	3	2	0	1	0	2	0
	>3	0	0	1	1	2	1	1	0	0	1	0	0
	N.A.	3	2	3	4	4	2	1	4	1	5	7	10
	Total	11	11	11	11	11	11	11	11	11	11	11	11
ES	**1**	2	0	0	0	0	2	0	1	0	0	0	0
	2	0	0	3	0	0	0	0	0	0	0	0	0
	3	0	0	0	1	0	0	0	1	0	1	0	0
	>3	1	2	1	1	2	1	2	2	1	0	0	1
	N.A.	2	3	1	3	3	2	3	1	4	4	5	4
	Total	5	5	5	5	5	5	5	5	5	5	5	5
Rest	**1**	8	4	4	3	2	2	1	1	1	2	0	1
	2	2	5	2	1	1	0	1	1	0	2	0	0
	3	0	0	0	4	0	2	0	4	1	1	1	0
	>3	1	1	4	3	5	6	7	3	7	4	2	1
	N.A.	1	2	2	1	4	2	3	3	3	3	9	10
	Total	12	12	12	12	12	12	12	12	12	12	12	12

Table A5.9 Contractual negotiations

Subject of contract	Region	Yes	No	N.A.	total
Negotiation binding for members	All	46	9	8	63
	DE	20	0	2	22
	FR	10	3	0	13
	IT	6	1	4	11
	ES	4	1	0	5
	Rest	6	4	2	12
Obliging PO members to deliver fixed proportion	All	41	15	7	63
	DE	18	1	3	22
	FR	10	3	0	13
	IT	5	3	3	11
	ES	3	2	0	5
	Rest	5	6	1	12
Do members deliver outside the PO?	All	9	52	2	63
	DE	3	18	1	22
	FR	2	11	0	13
	IT	0	11	0	11
	ES	2	3	0	5
	Rest	2	9	1	12
Does PO conclude delivery contract for members?	All	37	22	4	63
	DE	20	1	1	22
	FR	2	11	0	13
	IT	6	4	1	11
	ES	2	3	0	5
	Rest	7	3	2	12
Do members conclude individual contracts?	All	18	43	2	63
	DE	3	19	0	22
	FR	5	8	0	13
	IT	0	11	0	11
	ES	5	0	0	5
	Rest	5	5	2	12

Table A5.10 Requirements to become a member

Requirement	All	DE	FR	IT	ES	Rest
Payment of a fee	41	12	13	6	1	9
Being established in a certain region	25	11	11	2	0	1
Quantity to deliver	6	2	1	2	0	1
Quality requirements	17	9	0	4	0	4
Delivery to specific processor	17	6	9	0	0	2
Method of production	6	3	1	2	0	0
Membership of a trade union	0	0	0	0	0	0
Others	11	5	1	5	0	0
POs with no requirement or N.A.	7	2	0	0	4	1
POs with 1 requirement	19	6	0	5	1	7
POs with 2 requirements	13	3	5	2	0	3
POs with 3 requirements	19	9	6	4	0	0
POs with 4 and more requirements	5	2	2	0	0	1
Total POs	63	22	13	11	5	12

Table A5.11 Managing the PO

Statement	Region	Not at all	Partly	Largely	Fully	N.A.	Total
Managing the PO is time-consuming	All	5	24	17	15	2	63
	DE	4	13	4	1	0	22
	FR	0	1	7	4	1	13
	IT	0	5	1	4	1	11
	ES	0	1	1	3	0	5
	Rest	1	4	4	3	0	12
All members participate in the management	All	16	29	10	5	3	63
	DE	4	8	6	3	1	22
	FR	4	7	1	0	1	13
	IT	1	6	2	1	1	11
	ES	2	2	1	0	0	5
	Rest	5	6	0	1	0	12
The engagement of members in the PO is high	All	3	25	25	7	3	63
	DE	1	4	13	4	0	22
	FR	0	8	4	0	1	13
	IT	0	6	4	0	1	11
	ES	0	1	3	1	0	5
	Rest	2	6	1	2	1	12
Members easily come to an agreement	All	3	13	36	8	3	63
	DE	0	1	19	2	0	22
	FR	0	2	7	3	1	13
	IT	1	4	4	1	1	11
	ES	1	2	2	0	0	5
	Rest	1	4	4	2	1	12
The PO reduces the administrative burden for members	All	11	15	10	23	4	63
	DE	2	1	4	14	1	22
	FR	4	4	3	0	2	13
	IT	1	5	2	2	1	11
	ES	1	3	0	1	0	5
	Rest	3	2	1	6	0	12

Table A5.12 Reason for not developing into a cooperative

Reason	Region	Not at all	Partly	Largely	Fully	N.A.	Total
Too much investment	All	5	1	5	24	12	47
	DE	3	0	3	12	4	22
	FR	1	1	1	5	5	13
	IT	0	0	1	1	1	3
	ES	1	0	0	1	2	4
	Rest	0	0	0	5	0	5
Insufficient public financial support	All	7	4	6	15	15	47
	DE	6	3	1	6	6	22
	FR	1	1	2	4	5	13
	IT	0	0	1	1	1	3
	ES	0	0	0	1	3	4
	Rest	0	0	2	3	0	5
No entrepreneurial interest	All	5	9	10	11	12	47
	DE	3	3	3	8	5	22
	FR	0	1	5	2	5	13
	IT	0	2	0	0	1	3
	ES	0	2	0	1	1	4
	Rest	2	1	2	0	0	5
Insufficient training	All	9	7	9	7	15	47
	DE	5	3	3	4	7	22
	FR	2	2	2	2	5	13
	IT	1	1	0	0	1	3
	ES	0	1	1	0	2	4
	Rest	1	0	3	1	0	5
Other	All						18
	DE						6
	FR						6
	IT						3
	ES						0
	Rest						3

Note: due to the low numbers other is not broken down

Table A5.13 Reason for potentials for more POs

Reason	Region	Not at all	Partly	Largely	Fully	N.A.	Yes
Sector is well organised	All	17	16	8	0	5	46
	DE	5	8	2	0	3	18
	FR	1	5	3	0	1	10
	IT	3	2	0	0	1	6
	Rest	8	1	3	0	0	12
Supply chain functions properly	All	13	13	8	1	11	46
	DE	3	6	5	0	4	18
	FR	1	4	2	0	3	10
	IT	1	2	0	1	2	6
	Rest	8	1	1	0	2	12
Sector insufficiently organised	All	5	11	9	10	11	46
	DE	3	7	1	1	6	18
	FR	2	2	2	2	2	10
	IT	0	0	4	1	1	6
	Rest	0	2	2	6	2	12
Benefits lower than costs	All	21	3	9	1	12	46
	DE	13	0	1	0	4	18
	FR	4	1	2	0	3	10
	IT	2	0	2	1	1	6
	Rest	2	2	4	0	4	12
Unwillingness of farmers to cooperate	All	4	15	14	2	11	46
	DE	2	7	5	0	4	18
	FR	1	2	2	1	4	10
	IT	0	3	2	0	1	6
	Rest	1	3	5	1	2	12
Preference for direct contact with purchaser	All	7	19	10	1	9	46
	DE	6	6	2	0	4	18
	FR	0	4	2	1	3	10
	IT	1	3	2	0	0	6
	Rest	0	6	4	0	2	12
Insufficient information/training	All	7	9	11	9	10	46
	DE	5	4	2	3	4	18
	FR	0	3	2	3	2	10
	IT	1	1	2	0	2	6
	Rest	1	1	5	3	2	12
Lack of success stories	All	7	7	16	5	11	46
	DE	6	5	2	1	4	18
	FR	0	1	4	1	4	10
	IT	0	1	4	0	1	6
	Rest	1	0	6	3	2	12
Milk price hampers cooperation	All	10	9	8	9	10	46
	DE	7	3	2	2	4	18
	FR	0	2	2	3	3	10
	IT	3	2	1	0	0	6
	Rest	0	2	3	4	3	12

Appendix 6 Detailed information on Electronic survey FOs and EDA

Table A6.1 Cooperation between farmers in the milk sector

Category	Farmer organisation	Producer group	Trade union	Cooperative	Milk collection organisation	Average number of cooperations	Total number of informants
EDA	8	5	2	8	4	3.0	9
All FOs	35	21	13	49	17	2.4	57
MS with POs	21	16	13	24	8	2.8	29
MS without POs	14	5	0	25	9	1.9	28
EU15	21	11	12	27	10	2.5	32
EUn13	14	10	1	22	7	2.2	25
MS Cooperative	10	4	1	15	4	1.9	18
MS Private	8	8	1	10	0	2.5	11
MS Mixed	17	9	11	24	13	2.6	28
Copa-Cogeca	22	14	4	34	8	2.2	38
Other FOs	13	7	9	15	9	2.8	19

Table A6.2 Reasons for low number of POs

Reason	Category	Not at all	Partly	Largely	Fully	N.A.	total
Sector is well organised	All POs	17	16	8	0	5	46
	EDA	1	2	1	3	2	9
	All FOs	23	13	12	7	2	57
	MS with POs	12	9	5	3	0	29
	MS without POs	11	4	7	4	2	28
	EU15	16	6	2	1	0	25
	EUn13	7	7	10	6	2	32
	MS Cooperative	2	2	9	4	1	18
	MS Private	6	4	0	0	1	11
	MS Mixed	15	7	3	3	0	28
	Copa-Cogeca	14	10	9	4	1	38
	Other FOs	9	3	3	3	1	19
Supply chain functions properly	All POs	13	13	8	1	11	46
	EDA	0	4	2	1	2	9
	All FOs	30	13	10	2	2	57
	MS with POs	18	8	2	0	1	29
	MS without POs	12	5	8	2	1	28
	EU15	14	8	2	1	0	25
	EUn13	16	5	8	1	2	32
	MS Cooperative	7	2	8	1	0	18
	MS Private	7	3	0	0	1	11
	MS Mixed	16	8	2	1	1	28
	Copa-Cogeca	19	8	9	1	1	38
	Other FOs	11	5	1	1	1	19
Sector insufficiently organised	All POs	5	11	9	10	11	46
	EDA	6	0	1	0	2	9
	All FOs	20	13	11	10	3	57
	MS with POs	11	7	6	5	0	29
	MS without POs	9	6	5	5	3	28
	EU15	5	8	7	5	0	25
	EUn13	15	5	4	5	3	32
	MS Cooperative	10	2	2	1	3	18
	MS Private	3	4	2	2	0	11
	MS Mixed	7	7	7	7	0	28
	Copa-Cogeca	13	10	8	6	1	38
	Other FOs	7	3	3	4	2	19
Benefits lower than costs	All POs	21	3	9	1	12	46
	EDA	3	1	2	0	3	9
	All FOs	16	14	13	7	7	57
	MS with POs	9	8	4	7	1	29
	MS without POs	7	6	9	0	6	28
	EU15	5	10	7	2	1	25
	EUn13	11	4	6	5	6	32
	MS Cooperative	5	4	3	1	5	18
	MS Private	2	4	2	2	1	11
	MS Mixed	9	6	8	4	1	28
	Copa-Cogeca	11	8	11	4	4	38
	Other FOs	5	6	2	3	3	19
Unwillingness of farmers to cooperate	All POs	4	15	14	2	11	46
	EDA	2	5	0	0	2	9
	All FOs	13	21	10	10	3	57
	MS with POs	8	9	6	6	0	29
	MS without POs	5	12	4	4	3	28
	EU15	4	10	5	6	0	25
	EUn13	9	11	5	4	3	32
	MS Cooperative	7	7	1	1	2	18
	MS Private	4	1	4	1	1	11
	MS Mixed	2	13	5	8	0	28
	Copa-Cogeca	8	15	7	6	2	38
	Other FOs	5	6	3	4	1	19

Table A6.2 continued Reasons for low number of POs

Reason	Category	Not at all	Partly	Largely	Fully	N.A.	total
Preference for direct contact with purchaser	All POs	7	19	10	1	9	46
	EDA	0	3	3	0	3	9
	All FOs	2	6	8	2	39	57
	MS with POs	1	4	6	1	17	29
	MS without POs	1	2	2	1	22	28
	EU15	0	1	1	0	23	25
	EUn13	2	5	7	2	16	32
	MS Cooperative	1	3	2	1	11	18
	MS Private	0	0	1	0	10	11
	MS Mixed	1	3	5	1	18	28
	Copa-Cogeca	1	3	3	1	30	38
	Other FOs	1	3	5	1	9	19
Insufficient information/training	All POs	7	9	11	9	10	46
	EDA	3	2	1	0	3	9
	All FOs	9	21	17	7	3	57
	MS with POs	5	10	9	5	0	29
	MS without POs	4	11	8	2	3	28
	EU15	3	12	9	1	0	25
	EUn13	6	9	8	6	3	32
	MS Cooperative	4	7	3	1	3	18
	MS Private	2	3	6	0	0	11
	MS Mixed	3	11	8	6	0	28
	Copa-Cogeca	7	17	10	2	2	38
	Other FOs	2	4	7	5	1	19
Lack of success stories	All POs	7	7	16	5	11	46
	EDA	3	1	1	1	3	9
	All FOs	10	14	15	16	2	57
	MS with POs	7	2	9	11	0	29
	MS without POs	3	12	6	5	2	28
	EU15	4	9	6	6	0	25
	EUn13	6	5	9	10	2	32
	MS Cooperative	5	4	5	2	2	18
	MS Private	3	2	4	2	0	11
	MS Mixed	2	8	6	12	0	28
	Copa-Cogeca	8	13	10	6	1	38
	Other FOs	2	1	5	10	1	19
Milk price hampers cooperation	All POs	10	9	8	9	10	46
	EDA	4	1	1	0	3	9
	All FOs	15	10	13	16	3	57
	MS with POs	8	6	6	9	0	29
	MS without POs	7	4	7	7	3	28
	EU15	3	3	9	10	0	25
	EUn13	12	7	4	6	3	32
	MS Cooperative	8	4	3	1	2	18
	MS Private	3	1	2	4	1	11
	MS Mixed	4	5	8	11	0	28
	Copa-Cogeca	11	7	8	10	2	38
	Other FOs	4	3	5	6	1	19

Table A6.3 Motivation for joining a PO

Reason	Category	Not at all	Partly	Largely	Fully	N.A.	total
Better price	All POs	33	16	9	2	3	63
	EDA	5	2	1	0	1	9
	All FOs	2	6	13	33	3	57
	MS with POs	0	2	7	20	0	29
	MS without POs	2	4	6	13	3	28
	EU15	0	3	6	16	0	25
	EUn13	2	3	7	17	3	32
	MS Cooperative	2	2	4	7	3	18
	MS Private	0	2	4	5	0	11
	MS Mixed	0	2	5	21	0	28
	Copa-Cogeca	2	5	8	21	2	38
	Other FOs	0	1	5	12	1	19
Stable prices	All POs	16	13	13	11	10	63
	EDA	6	3	0	0	0	9
	All FOs	2	3	17	32	3	57
	MS with POs	0	1	8	20	0	29
	MS without POs	2	2	9	12	3	28
	EU15	1	0	7	17	0	25
	EUn13	1	3	10	15	3	32
	MS Cooperative	1	2	6	6	3	18
	MS Private	0	1	3	7	0	11
	MS Mixed	1	0	8	19	0	28
	Copa-Cogeca	2	3	13	18	2	38
	Other FOs	0	0	4	14	1	19
Assurance of collection/supply	All POs	15	6	10	15	17	63
	EDA	2	3	4	0	0	9
	All FOs	6	12	14	22	3	57
	MS with POs	3	1	5	19	1	29
	MS without POs	3	11	9	3	2	28
	EU15	1	6	9	9	0	25
	EUn13	5	6	5	13	3	32
	MS Cooperative	3	5	4	4	2	18
	MS Private	1	2	1	6	1	11
	MS Mixed	2	5	9	12	0	28
	Copa-Cogeca	4	11	11	10	2	38
	Other FOs	2	1	3	12	1	19
Information for production/processing decisions	All POs	3	11	7	23	19	63
	EDA	4	3	1	1	0	9
	All FOs	4	14	19	17	3	57
	MS with POs	1	4	10	14	0	29
	MS without POs	3	10	9	3	3	28
	EU15	1	7	10	7	0	25
	EUn13	3	7	9	10	3	32
	MS Cooperative	2	4	7	2	3	18
	MS Private	1	2	3	5	0	11
	MS Mixed	1	8	9	10	0	28
	Copa-Cogeca	3	12	12	9	2	38
	Other FOs	1	2	7	8	1	19
Enhancement of position in supply chain	All POs	22	11	7	15	8	63
	EDA	4	4	1	0	0	9
	All FOs	3	11	15	25	3	57
	MS with POs	0	5	5	18	1	29
	MS without POs	3	6	10	7	2	28
	EU15	1	4	6	14	0	25
	EUn13	2	7	9	11	3	32
	MS Cooperative	2	3	8	3	2	18
	MS Private	0	2	1	8	0	11
	MS Mixed	1	6	6	14	1	28
	Copa-Cogeca	3	9	11	14	1	38
	Other FOs	0	2	4	11	2	19

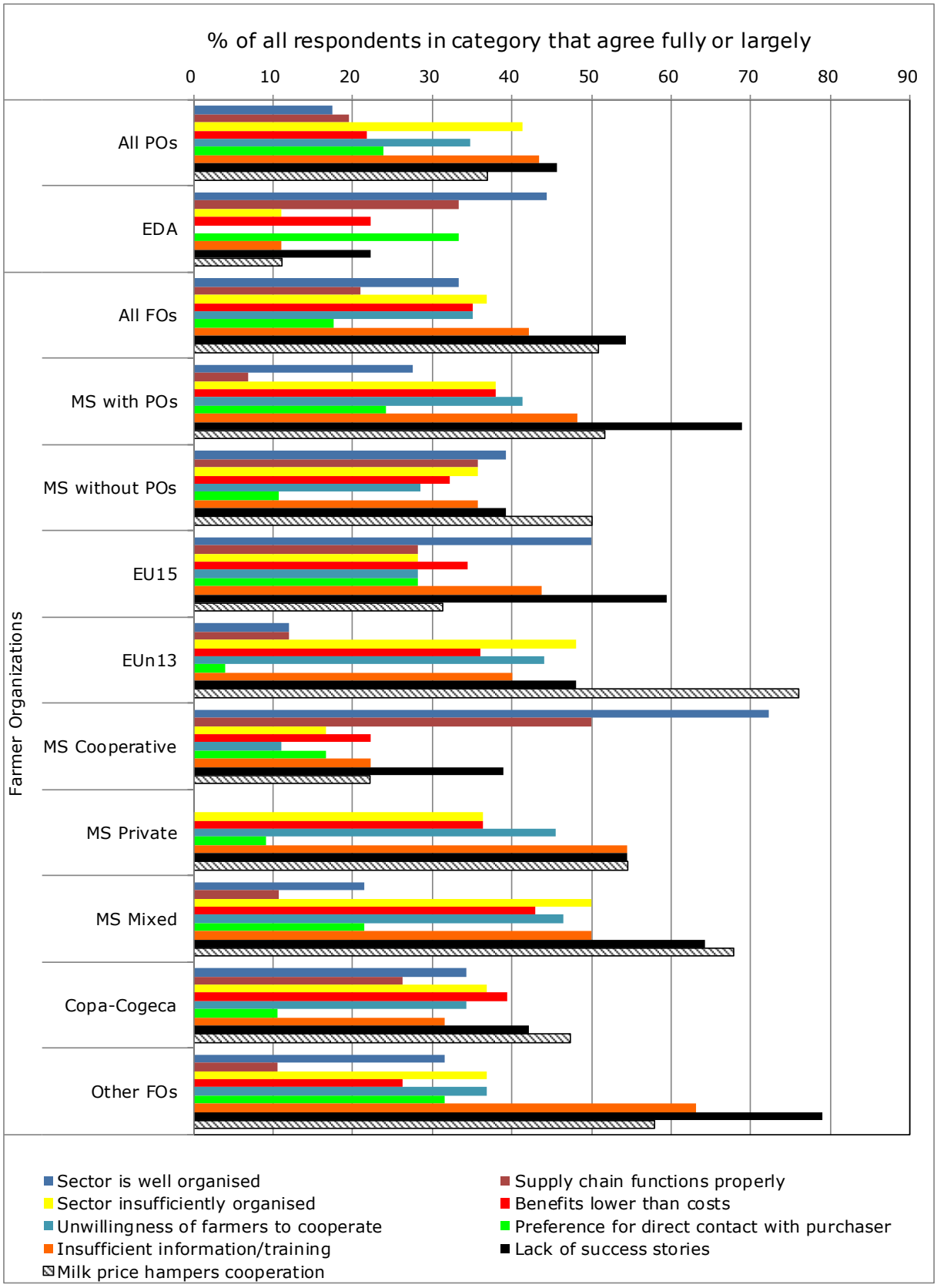
Table A6.3 continued Motivation for joining a PO

Better communication	All POs	6	8	8	24	17	63
	EDA	3	3	1	2	0	9
	All FOs	5	23	15	10	4	57
	MS with POs	1	11	7	9	1	29
	MS without POs	4	12	8	1	3	28
	EU15	2	9	10	4	0	25
	EUn13	3	14	5	6	4	32
	MS Cooperative	2	9	4	0	3	18
	MS Private	1	2	4	4	0	11
	MS Mixed	2	12	7	6	1	28
	Copa-Cogeca	4	17	10	5	2	38
	Other FOs	1	6	5	5	2	19
Price discounts on inputs	All POs	3	6	2	10	42	63
	EDA						
	All FOs	9	19	14	10	5	57
	MS with POs	7	8	5	7	2	29
	MS without POs	2	11	9	3	3	28
	EU15	1	8	8	7	1	25
	EUn13	8	11	6	3	4	32
	MS Cooperative	2	7	6	1	2	18
	MS Private	2	0	4	4	1	11
	MS Mixed	5	12	4	5	2	28
	Copa-Cogeca	6	14	8	7	3	38
	Other FOs	3	5	6	3	2	19
Efficient use of inputs	All POs	2	5	1	14	41	63
	EDA						
	All FOs	14	19	11	8	5	57
	MS with POs	8	7	6	7	1	29
	MS without POs	6	12	5	1	4	28
	EU15	5	8	6	5	1	25
	EUn13	9	11	5	3	4	32
	MS Cooperative	3	8	3	1	3	18
	MS Private	1	3	3	4	0	11
	MS Mixed	10	8	5	3	2	28
	Copa-Cogeca	9	13	8	5	3	38
	Other FOs	5	6	3	3	2	19
Cooperative/integration chain	All POs	0	1	5	7	50	63
	EDA	7	1	0	0	1	9
	All FOs	23	15	5	8	6	57
	MS with POs	13	7	1	6	2	29
	MS without POs	10	8	4	2	4	28
	EU15	7	5	5	7	1	25
	EUn13	16	10	0	1	5	32
	MS Cooperative	10	4	1	0	3	18
	MS Private	1	3	1	5	1	11
	MS Mixed	12	8	3	3	2	28
	Copa-Cogeca	15	10	5	4	4	38
	Other FOs	8	5	0	4	2	19

Table A6.4 Terms of contract covered

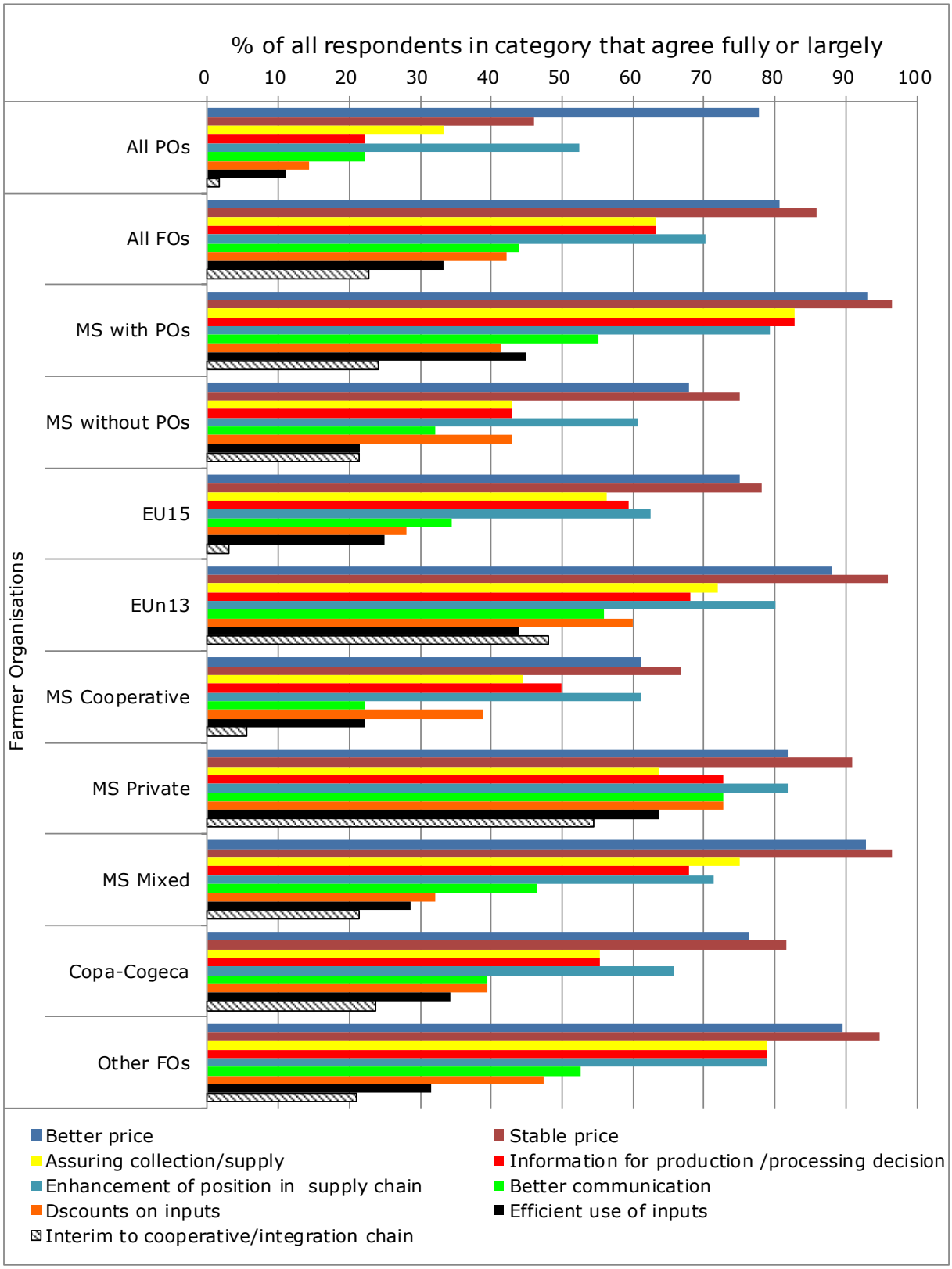
Term covered	FO	EDA
Price of milk	34	6
Quality of milk	46	8
Payment conditions	47	8
Quantity of delivery	40	5
Quantity of delivery in specific periods	23	3
Providing technical/economic advice	6	4
Purchase of inputs	4	1
Duration of contract	44	6
With specification	49	8

Figure A6.1 Reasons for low numbers of POs



Source: Electronic survey POs question 34, Electronic survey FOs, question 3, and Electronic survey EDA, question 3. Detailed information in Appendix 6, Table A6.2.

Figure A6.2 Reasons for farmers to join POs



Source: Electronic survey POs, question 12, Electronic survey FOs, question 5, and Electronic survey EDA, question 6. Detailed information in Appendix 6, Table A6.3.
Note: For POs, priority rank 1 (highest) is fully, 2 is largely, 3 is partly and >3 is not at all.

List of figures

List of tables

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