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Vertical coordination as a driving force for structural change in the Romanian dairy market

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Abstract

This paper addresses the various modes of access to production factors, such as capital, specific inputs and know-how, as reasons for the varied development of Romanian dairy supply chains and their respective actors (farmers, processors). The paper draws on results from an ongoing World Bank study. The findings are based on semi-structured telephone and face-to-face interviews conducted in January-February 2009. The interviews indicate that large and prosperous dairy chains have better access to all production factors, which allows the strengthening of their relationships, especially in the upstream stages (farmers), and supports their competitive advantages in the domestic market. Many barriers exist in the domestic market, particularly for small and medium-sized dairy chains, which hamper their potential exploitation of particular stages in the chain. In the same way the findings indicate that virtually only large companies and farms benefit from public support regarding access to capital (EU funding, governmental programmes) and know-how (extension service).

Keywords

vertical coordination, structural change, small farms, Romania, dairy.

1. Introduction

The increasing demand for high value dairy products and investments by foreign companies in processing and retailing have led to a diffusion of higher quality standards in Romania. This, together with globalisation and European Union (EU) integration, has had considerable overall effects on the domestic agricultural sector. In particular, in the context of retail internationalisation, it can be observed that 'western' retailers are taking their own business models into the new markets (Hanf and Pieniadz, 2007; Palmer, 2005; Roberts, 2005). Thus, one can say that modern management concepts and their demands on the business partners are exported. This results in the following changes: The traditional, local, store-by-store procurement should be shifted to centralised, large and modern distribution centres and external specialised logistics firms should be used. Furthermore, modern retailers set their own standards of food quality and safety that are often much higher than those of the local governments (Dries et al., 2004, Fulponi L., 2006). Moreover, the requirements of the newly established procurement systems demand that suppliers are able to guarantee both disruption-free product flows and delivery of products of a certain quality. Thus, domestic producers should keep up with the demanded quantity and quality or products will be imported instead. Foreign direct investments are particularly regarded as a catalyst for vertical coordination (Gorton 2006, Swinnen and Vandeplass, 2008).

In Romania, a majority of raw milk deliveries still come from smallholders (Fritzsch et al., 2008; van Berkum, 2005). At the same time, purchasers (retailers, processor) requiring a certain quality of raw materials apply their standards equally to all suppliers regardless of their size. To adjust production technology and meet the higher quality standards, farmers require access to dif-

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ferent production factors as well as to input and output services on reasonable terms. As Hazell et al. (2007) indicated, “If one element of the set is missing, then the benefits of investments in all of the others will be lost or significantly reduced”. Thus, both private (i.e. dairies) and public (EU, Romanian government) stakeholders have recognised these needs, and different forms of assistance have been provided so far. These include support for investments in agricultural holdings and food processing (i.e. to facilitate the adoption of EU standards); setting up producer groups (horizontal integration) and improving vocational training for actors in agri-business (knowledge transfer), (World Bank, 2005a, 2005b).

The aim of this paper is to analyse the vertical coordination between dairy farmers and the downstream businesses and to identify opportunities and challenges, as well as possible development paths, for different types of dairy chains and farmers. Since smallholders face major challenges regarding access to production factors and hence integration within modern supply chains, the main part of this paper, as well as our recommendation, focus on issues affecting small dairy chains/farmers. One research question is whether the Common Agricultural Policy (CAP) is able to correct the market failures or rather increases the disparities among chains, processors and farmers.

The remainder of the paper is organised as follows. The next section elaborates the general developments in the Romanian dairy markets and the particular actors involved in the markets (consumers, processors, producers, public service). The third section focuses on vertical coordination and especially on the position of small farmers in modern supply chains. The results presented in this section are based on the semi-structured interviews conducted in January and February 2009. The fourth section concludes the paper and suggests possible extensions.

2. Characteristic of the Romanian dairy market

2.1. Developments on the product market

The economic, legal and political adjustment processes induced by globalisation and EU integration have had a considerable effect on the dairy sector, a market with 21.5 million consumers. The average consumption of dairy products is still far behind the European average but is constantly growing as consumer purchasing power increases. Additionally, roughly 55% of raw milk (about three million tons) is still marked as individual consumption and losses. However, the majority of this quantity is reckoned to be sold on the black market. These figures indicate that there is a considerable demand for milk products and hence an unexploited potential for high value products.

In the retail sector, German (Metro, Rewe, Real, Kaufland), French (Carrefour, Auchan, Interrex/Intermarche Group), and Belgian (Cora) retailers, all of which require International Food Standards (IFS), dominate the Romanian market. Meanwhile, multinationals are increasingly switching their focus from Bucharest and other large cities (which have already reached a certain degree of saturation) to other regions, and they are also targeting smaller towns, depending on their profile. Regarding the processing sector, top international dairy producers have already entered the domestic market via green field investments (Danone, Tnuva) or acquisitions (Lactalis, Campina, Nordex Food) or both (Friesland, Hochland). Even some dairies from eastern central European countries (e.g. the Hungarian company Sole-Mizo) are considering investing in the Romanian dairy market.

At the same time, the traditional domestic dairies still face complex challenges regarding adaption of their current business strategy to the changing environment. Considerable investments have been allocated to reconfiguring the production system (technology, management) within the

firm and improving the quality of inputs, as well as redesigning the food chains. Because economies of scale have become an important factor in the milk sector, the largest Romanian enterprises strive to expand in the milk market by applying various growth strategies. The most common strategy is internal growth via entering more new (export) markets, coupled with market penetration. For example, LaDorna exports about 20% of its products to countries such as Greece, Great Britain, Germany, Spain and the United States, with the focus on organic products. Some dairies decide to expand by building a new processing plant (i.e. “Albalact” in Oiejdea) or through mergers and acquisitions (i.e. Albalact and Raraul). In addition to rapidly increasing revenue, this allows them to use economies of scope, e.g. the transfer of capital, technology and know-how within the company, as well as synergies associated with using common brand names. However, buy-outs of relatively well-performing dairies by foreign investors still dominate in Romania; this seems to be a more effective method of external growth, since this gives domestic dairies access to approved technologies and business concepts. Experts expect further consolidation in the dairy market via mergers and acquisitions.

Increasing demand for high value dairy products attracts further investments in the production process as well as in marketing and logistics. Some domestic companies, such as Albalact (“Zuzu”, “Fulga”), LaDorna (“LaDorna”), Brailact (“Brenac”), and Lacta Prod (“Paco”) have successfully managed to create several distinct brands in the last five years. Today their products are listed in almost all large, modern retailers located in urban areas. Other domestic dairies are also planning to increase their portfolio of products and brands. Investments into brand, reputation and the reduction of information asymmetry about product quality are becoming a priority for the large companies. Thus, significant players in the market (foreign, domestic) use much diversified campaigns (television advertisements, food exhibitions etc.) and allocate considerable shares of their budgets to advertising and marketing activities. Tnuva, Friesland, and Albalact are among the companies with very aggressive and ongoing marketing campaigns. The required capital for these activities is (or was) usually supplied through bank credit, SAPARD³ funds and the company’s resources. The intensive promotion campaigns generate additional demand for products and hence strongly increase the market shares of those firms. Despite some successes, some of the domestic leaders may become easy takeover targets within the next few years, which is consistent with the increasing consolidation process in the European market. However, local brands that have managed to build significant brand equity will stand a good chance of being preserved or even promoted to international status, thereby increasing the acquisition value of their owners.

2.2. The quality of raw milk

The adaptation of EU hygiene rules for food of animal origin is still one of the biggest challenges for the majority of actors involved in the Romanian dairy market. The EU regulations contain various obligations for construction, layout and equipment in enterprises (called structural requirements) and organisation of the supply chain that requires extensive investments. Transitional arrangements based on those of the past were agreed upon with Romania (and Bulgaria) to ensure the smoothest possible integration into the EU. Of all the companies that were registered in February 2009, half of the dairies (trade companies) and 70% of the collecting points are still in the transition period, and hence obliged to comply with community structural requirements until the end of 2009 (Figure 1). All of the collecting points in the transition period are located in Transylvania; most are located in Cluj County and belong to the Napolact company which is owned by Friesland Romania. The share of dairies not complying with EU standards ranges between 48% in Transylvania (57), to more than 51% (45) in Moldova, to 60% (58) in south Romania.

³ SAPARD: Special Accession Program for Agriculture and Rural Development.

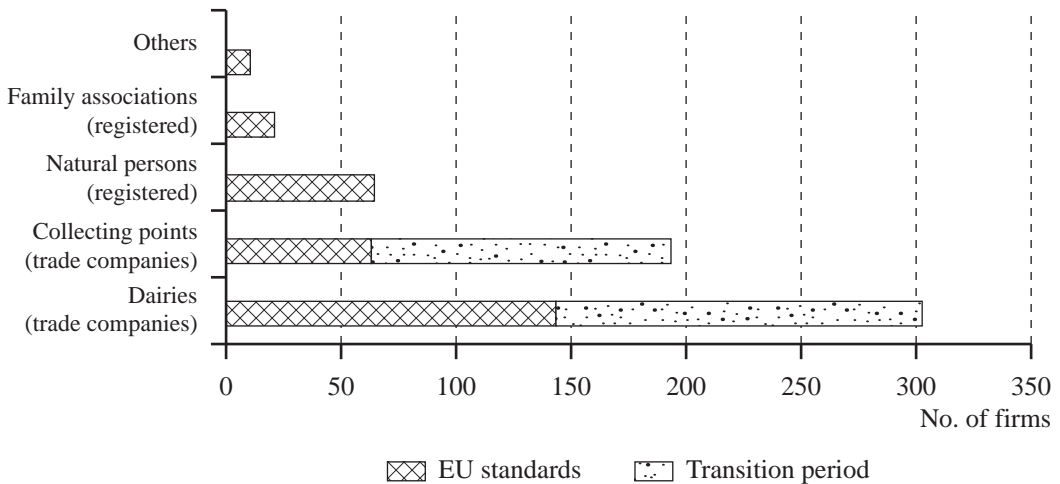


Figure 1: State of compliance with the EU standards in the Romanian dairy sector

Source: Own illustration based on Romanian Ministry of Agriculture, Forestry and Rural Development.

Due to the high restructuring need it is likely that until the end of 2009, more dairies and collecting points in Romania will have to cease business activities altogether due to delays in their modernisation process. The above-mentioned figures indicate that the most relevant structural changes are expected in Transylvania. Additionally, it is likely that the most frequently affected will be small and medium sized entities that are not registered – in other words, those operating in the black market.

2.3. The structure of dairy farming

During the first phase of transition in Romania, there was an immediate and strong increase in individual farms, while on average, agricultural labour use also increased. Furthermore, parts of the collective land were restituted to members and workers of collective farms. In a second phase, labour use in agriculture started to decline while the shift to individual farms slowed (Swinnen, 2005). On the other hand, many households already possessed small plots and some animals for their own production before transition. Today the Romanian farm structure is still highly fragmented especially in dairy production (Figure 2).

In April 2009, the MAPDR⁴ reported that there were roughly 850 thousand dairy producers of which 89% still hold one or two cows. The interviews indicated that small dairies in particular still procure the milk from these farmers. The procurement occurs both legally and on the black market. The majority of those suppliers are older farmers without a successor. Some of them do not (or are not willing to) understand the quality requirements and have problems with adjusting to new organisational rules (contracting, farm economics). The delivered milk usually does not comply with the mandatory standards. The small farms rarely discontinue their production. Rather, they reduce their stock to one or two cows to ensure self-sufficiency. Relatively low incomes in rural areas and rising unemployment, particularly in under-developed regions (i.e. the Carpathian region) contribute to the persistence of subsistence producers. Thus, part-time livestock breeding still plays a significant role in Romania. Due to the high entry barriers, those farmers are not expected to surpass their subsistence status. However, they can still contribute to the persistence of the black market.

⁴ MAPDR: Romanian Ministry of Agriculture, Forestry and Rural Development.

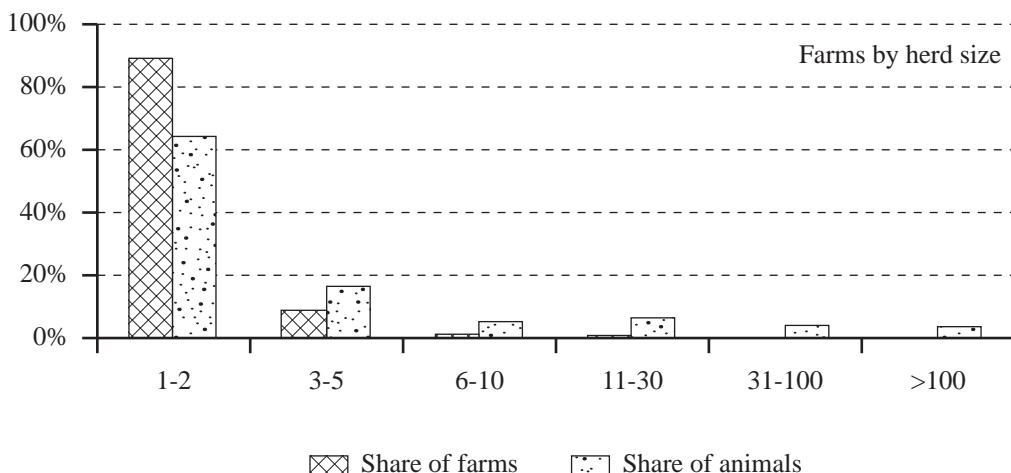


Figure 2: Structure of cow milk production in Romania, April 2009

Source: Own illustration based on Romanian Ministry of Agriculture, Forestry and Rural Development.

However, despite a general fragmentation, a gradual increase in average farm size can be observed. This is especially true in the case of full-time enterprises, where there is a general tendency towards forming fewer but larger units. Adopting the EU standards and activities of the focal companies are the driving forces behind the dynamic development of more competitive and sustainable agricultural structures. Because the Romanian milk quota⁵ has not yet been reached, specialised dairy farms are not restricted in their growth. Thus, the role of specialised, large-scale milk producers (>30 cows) is recently disproportionately increasing in this market.

At the same time it is evident that the middle category (those with three to five cows) is declining, whereas the shares of relatively larger and smaller milk producers are increasing. Hence, a polarisation in the production structures can already be observed. This development is similar to processes observed in other countries with a similar agricultural structure.⁶

As the structure of dairy production changes, there is an increasing tendency towards replacing the indirect method of milk collection with direct deliveries from the farm to the processor. However, the choice of the procurement channel depends on the production structure in each individual market. In areas that still have fragmented farm structures (such as Transylvania), the indirect channels dominate. Generally, this structure impedes cost reduction and quality improvement. On the contrary, in areas such as south Romania (around Bucharest), direct deliveries predominate. Some dairies such as Danone no longer procure raw milk via collecting points; today, Danone procures raw milk directly from (relatively large) farmers. Some additional quantities are provided by an intermediary (from another region or country). Likewise, other foreign investors prefer to deal with a few larger suppliers to reduce the transaction costs (collection/transportation costs, quality risks).

⁵ For the 2007/08 quota year, the total quota for deliveries to dairies in Romania was 1.34 million tonnes, 70% of which was used. There is also a separate quota of 1.72 million tonnes for direct sales to consumers. The registered direct sales indicate that 83% of the direct quota was utilised in this period. In 2008 the total production in Romania accounted for 5.5 million tonnes. This implies that about three million tonnes are still marked as individual consumption and losses, and is indeed again an indication of the existence of a large black market.

⁶ For example, in Poland around the time of the EU accession, the number of farms with four to five cows started to decline. Currently (2007/2008) it can be observed that the group of farms with fewer than ten cows is decreasing. At the same time, many households still hold one (maximum two cows). The relevance of these semi-subsistence farms continually increased in the last decade; for example, their share of the total number of milk farms increased from 40% in 1996 to 48% in 2007.

For the southern part of Romania, the higher demand for quality products and hence the respective activities of retailers and leading companies have had a significant influence on consolidation of the procurement base. The relevance of milk procurement and the structure of deliveries with regard to direct and indirect (collecting points) deliveries is shown in Figure 3.

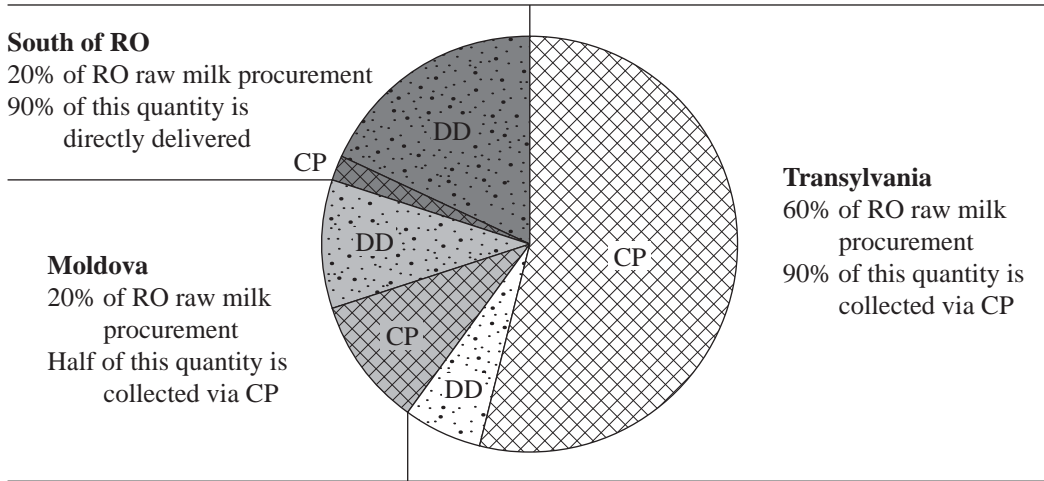


Figure 3: Regional structure of the milk procurement in Romania in 2008/2009.

Notes: DD: Direct deliveries from farm to dairy, CP: Collecting points.

Source: Own illustration based on estimations of an APRIL representative.

2.4. The Common Agricultural Policy

The EU has recognised the specific needs of the new member states (NMS) with regard to the restructuring demand and the characteristic dualistic structure of the agri-food markets. Thus, financial aid has been provided and allocated to those countries to support the sustainable development of this sector. Prior to EU accession, the SAPARD programme in particular focused on the agri-food sector and rural infrastructure, and under this programme both the agricultural administration and the beneficiaries (farmers, processors) gained first-hand experiences with measures similar to those provided under the CAP. The majority of these funds were allocated to particular stages of the marketing chain. For example, the support focuses on investing in agricultural holdings and food processing (i.e. to facilitate the adoption of minimum [mandatory] quality standards), setting up producer groups (horizontal integration), or improving vocational training for actors in the agri-business (knowledge transfer). However, few financial resources have been allocated to foster the relationships between producers and downstream businesses to create sustainable partnerships. Additionally, some studies indicate that mostly large units (farmers, processors) benefited from these measures due to their improved access to information and possibilities to pre-finance and/or co-finance the investment projects (Luca, 2007). On the contrary, for most of the small and medium-sized units, the reduced capacity to co-finance the investment was one of the main limiting factors that delayed the absorption of the SAPARD funds, especially in the first period of the programme's implementation.

Since Romania's accession to the EU, agricultural policy implementation has been based on the CAP structure (two pillars). In each country, the organisational structure follows the administrative requirements of each of the two pillars.⁷ For the NMS, additional transitional measures have

⁷ Council Regulation (EC) No 1290/2005, Regulation (EC) no. 1698/2005.

been introduced into the second pillar, such as supporting semi-subsistence agricultural holdings undergoing restructuring and setting-up producer groups. Romania and Bulgaria, the newest member states, can potentially benefit from these measures until 2013. The objective of these measures is to improve the competitiveness of the agricultural sector by bringing small and semi-subsistence farms into the market (NRDP, 2008).

2.5. Vertical coordination and access to production factors

The findings discussed in this chapter are based on semi-structured interviews conducted with different stakeholders along the Romanian dairy supply chain and representatives of the Romanian agricultural administration in early 2009.

The representatives from the dairy sector were usually processors, producers and experts in relevant organisations; the goal of the survey was to identify the design of vertical coordination and the use and sources of structured finance instruments to provide access to production factors such as know-how/information, capital and specific inputs. Additionally, the intention was to identify opportunities and challenges fostering or hampering access to production factors and hence vertical coordination. The aim of the survey regarding representatives of the agricultural administration was to assess the quality of service provided to Romanian farmers within the CAP, the quality of back-office support to policy-makers and planners, as well as the quality and client orientation of technical and socio-economic advisory and extension services. In order to additionally assess the administrative service quality as perceived by the farmers, semi-structured interviews with farmers in one region (Harghita County, Transylvania) were carried out. The survey included both recipients and non-recipients of CAP payments.

The conducted surveys indicated that vertical coordination takes very heterogeneous forms in the Romanian dairy market. The most sophisticated instruments are provided by chains governed by a foreign direct investor (FDI) as an initiator of contracting. Domestic companies still lag. Small dairy chains have restricted access to all production factors (capital, inputs, know-how) and hence show quite loose partnerships along the chain or tend towards vertical integration. The results indicate that the majority of domestic dairy chains still have a large demand for any type of support. The main findings are summarised below.

i. The enormous demand for basic quality controls has not yet been met

The interview results reveal that especially small chains (farmers, processors) have restricted access to any kind of veterinary support and quality control, even to those which are required by law. The production holdings should undergo periodic inspections to ensure that the nationally-regulated hygiene requirements for the production of raw milk are met. For example, a milk holding is given an appropriate health certificate as a result of a positive inspection. To our knowledge, only a small share of farmers possess an appropriate certificate, which indicates considerable quality risks at the procurement stage.

Farmers in Romania generally have three alternatives for the control of raw materials: i) The farmer can receive the respective service free from the milk processor; ii) the Veterinary Sanitary County Department (DSV); or iii) independent laboratories.

Our findings indicate that because quality controls in independent institutions are both efficient and equally beneficial, the establishment of similar independent laboratories should be encouraged.

ii. The more sophisticated the dairy chain, the better its access to know-how

The provision of a technical advisory service appears to be more effective in well-functioning supply chains. Whereas the top companies usually provide a well-structured extension service and vocational training, the large and medium-sized domestic dairies focus on “informal information exchange” and usually give “...oral advice to farmers who wish to expand their milk holdings and specialise more strongly in milk production,” (respondents’ answers). It also holds that the larger the farm, the larger the processor’s willingness to advise the farmer. Respondents that represent small chains claimed that neither processors nor farms receive any kind of technical advice. It is interesting to note that the majority of small and medium-sized processors did not consider providing and do not wish to provide education to their suppliers. They indicated, however, that “...the system should solve the major problems first,” while providing more extension services and vocational training to the farmer. In some cases, they indicated that even education on basic farm economics and business culture is needed.

iii. Access to capital is strongly skewed among dairy chains

In order to exploit the full potential of the value chain, the initiators of contracting require sufficient funds and cash flow to finance the arranged instruments with suppliers. Again, the prosperous dairies have better access to financial sources originating from both i) private and ii) public providers.

We found that farmers and processors linked to foreign investors have the best access to capital. International foreign investors (Danone, Friesland) have access to their own companies’ capital. Furthermore, we found that domestic processors who have links with international finance through contracts with international companies (such as Friesland/Napolact and Covalact/Campina) can more easily access money from the parent company. Our findings suggest that only a proportion of domestic companies and farms benefit from governmental support. The interviews indicated that small and medium-sized dairies have restricted access to governmental programmes because not all domestic companies were or are eligible for different governmental programmes.

Some of the initiatives were again hampered by the lack of capital needed to cover the farmer’s own participation in the investment. Commercial banks usually refused to provide credits to cover the farmer’s own participation. The banks did not accept any farmer’s pledge or mortgage as a loan guarantee. The respondents mentioned that banks did not consider livestock, equipment or buildings owned by farmers as eligible criteria for credit. The only factor increasing the farmers’ ability to secure credit was a large area of land. Hence, the majority of farmers are unattractive to banks. In some cases the dairies offered to provide respective pre-financing to the affected farmers. An interesting issue is that some of the farmers did not accept this offer, because they were afraid of “...becoming too dependent on both the processor and the bank”.

iv. Small chains face additional challenges that are not only due to the heterogeneous support in the past

The investigated small and very small dairy chains usually provide generic products at the cheapest possible prices. They normally distribute their products via their own outlets (60%), wholesalers and food services and small shops, usually “...by its own car from gate to gate of the purchasers.” Oral contracts predominate. Some of the chains are not registered, as was the case of one investigated farmer-processor involved in black market operations. The main reason for the low competitiveness of these products and their marketing to small shops is the low quality of raw

materials. The respondents indicated that many of their suppliers are not certified producers, and provide milk quality that is far below EU standards. Additionally, the quantity produced is low as there is a lack of both specialised dairy cow breeds and "...prospective to grow for small farmers". Quality control is a challenging issue for these chains. Some of the dairies provide a 'trusted' man at the collecting point, who supports the dairy while controlling for quality and preventing any fraud. However, "...even if at the collecting point the quality of delivery is controlled (fat, protein) it does not restrain some small suppliers from ongoing cheating", e.g. by adding water to the milk. To reduce the hazards of providing low quality products, some small processors provide certain financial assistance to the farmer (e.g. financial support to renovate farmers' residences).

2.6. Institutional development

The responses of the representatives of the Romanian dairy market argued at many stages that the institutional framework should still be improved to support the efficiency of market coordination mechanisms. In this part of the study we consider how the business environment works.

i. General institutional framework

Our findings suggest that there are major impediments regarding the scale of i) the black market and ii) contract enforcement.

a) The black market is not effectively addressed by governmental institutions. The increasing requirements implemented in the course of EU accession have intensified dairy milk operations on the black market. Additionally, certain farmers and small processors avoid paying taxes and hence avoid registering their business activities. Some respondents mentioned that the numerous middlemen especially contribute to the persistence of the black market. Many of the interviewees indicated that governmental institutions must provide instruments to reduce the scale of the black market. It is interesting to note that the call for such solutions was not very intensive and was very seldom, even though the share of raw milk sold on the Romanian black market is considerable (30% to 40% of milk production).

b) Contract enforcement is (still) difficult but essential. Enforcement is crucial to make any of the contracts or supplier-assistance programmes sustainable. Enforcement is especially problematic in environments in which public enforcement institutions are essentially absent. Evidence from the interviews suggests that all dairies – regardless of their size – face contract enforcement risks. For example, some farms diverted their pre-paid inputs for other uses. In other cases, despite being provided assistance instruments on a contractual basis, the suppliers sold all or part of their produce to other companies or traders. Trust is also often lacking within the large chains. Even within the small chains, contract enforcement is still a challenge. The small dairies usually use short-term (monthly) contracts with small (one or two cows) and medium (11 or 20 cows) farmers. The biggest farm is seldom larger than 40 cows. Contracts are mainly trust-based, even if they are written. The respondents indicated that they do not pay much attention to the formal (written) contract. The low level of contract enforcement is also one reason why the small chains see vertical integration via the establishment of farms as one solution to overcoming delivery problems within one firm (internalisation of market transactions). Thus, the government should be encouraged to create the proper institutional conditions for successful contracting. Alternatively, the initiators of contracting must find an innovative way to design self-enforcing contracts. This, however, requires extensive knowledge of the local partner.

ii. Quality of agricultural service delivery

Additionally, the surveys regarding the quality of the delivery service provided the following main results:

a) CAP measures not targeted to small farmers require conditions that are difficult to fulfil for smallholders. Two specific challenges are advising and delivering information to small farms, as these issues are completely dependent on personal advice, which demands a substantial amount of administrative resources. Small farmers do not have proper records, their land is often unregistered and they are not accustomed to formal paperwork; thus, advising them on applications ties up much of the agencies' capacities at both the county and local level. For instance, field checks have to be repeated for revising failures in land declaration and the fieldworkers, not the farmers themselves, fill out these application forms.

b) There are still many structural obstacles regarding the functioning of the public agencies that provide services to farmers. For example, agencies at the county level are sometimes found in multiple locations. This makes the contact that farmers do have with the administration more cumbersome and increases farmers' transaction costs, e.g. for requesting information. In addition, this may also lead to incoherent information provided by the agencies, as the distance hampers direct and informal communication. Additionally, agencies are challenged by human resource management, which results in less motivated and less qualified staff. The main obstacle of human resource management seems to be the wage system. Firstly, due to low wages, qualified employees leave for the private sector after receiving training and insight into public administration. Low salaries also hamper the recruitment of qualified employees. Secondly, different salary levels, for instance between the paying agencies on the one hand and the DARD⁸ and the COAC⁹ on the other hand, can lead to conflicts. Furthermore, single agencies pay diverse bonuses as top-ups, an arrangement which makes the system even more opaque. Further problems, such as the changing legal administrative framework (ongoing adjustment to changing EU legislation), conflicts of interest and public internal financial control still exist.

c) A lack of producers' associations and their feedback lead to low enforceability and little participation. Farmers do not have clear means of claiming their interests and there is a lack of farmers' associations that represent small farmers. Due to their experience with cooperatives during the socialist era, in general most farmers are sceptical of associations or producers' groups. Farmer and expert interviews revealed once again that lack of trust is still a problem for increased cooperation among farmers. Nevertheless, there are some success stories, such as the Farmers' Association from Udvarhely, Harghita County, which began assisting farmers with applications. Moreover, there are also some newly-founded farmers' associations like the LAPAR¹⁰ and FNBAR¹¹, which represent farmers' interests at the national level, but thus far they represent mainly large farms. There are still no associations that represent small farmers at the national level. All in all, associations and NGOs play a minor role in the farmers' business. Both activities and the farmers' courage to improve implementation of CAP measures are missing. Moreover, farmers rarely provide individual feedback to agencies and do not know about the client charter. In addition, agencies do not systematically collect feedback from farmers about the delivery of service.

⁸ DARD: Directorate for Agriculture and Rural Development.

⁹ COAC: County Office for Agricultural Consultancy.

¹⁰ LAPAR stands for "Romania Agricultural Procedures Associations League".

¹¹ FNBAR stands for "Romania Agricultural Procedures National Federation".

d) Producers' associations seem to be less attractive partners for the processors. The evidence from our survey suggests that the initiators of contracting in dairy chains prefer to invest in partnerships with trade companies, rather than farmers' associations. Some respondents indicated that "...due to the lack of solidarity among farmers' associations it is difficult to build a strong lobby or any kind of umbrella organisation". Thus, the Romanian government should rethink how to more effectively support the establishment and functioning of producer organisations to make them attractive to partners in dairy supply chains and to strengthen their 'articulation power'.

3. Conclusions and recommendations

The results indicate that the dairy market, likewise the whole agri-food business in Romania, is characterised by a dualistic production and processing structure. In dynamically changing market conditions, the relatively small chains (farmers, processors) are usually disadvantaged regarding access to input and output markets. Following Hertel (2007), targeted policy interventions that correct the underlying market failures might be win-win solutions for efficiency and equity. The development of (dairy) farmers requires sufficient access to different production factors, i.e. land, labour, technical skills and information, purchased inputs, and fixed and working capital. We found that growth for some large dairy producers, especially in relatively prosperous regions (Bucharest area) is increasingly restricted by access to additional land (only), as in the majority of producers in Western countries. On the contrary, the majority of farmers and dairy chains are restricted by almost all other production factors. The majority are small or medium-sized units, all of them demanding a complete set of these factors of production and input and output services on reasonable terms.

This situation raises three key questions: i) how can agricultural policy measures adjust to the unique circumstances of the NMS and what are the unique service demands of the different groups of farms; ii) what strategies are needed to deal with the large number of small entities (Fritzsche et al., 2008) to help with adjustment and modernisation or exit from agriculture; iii) how to increase competitiveness of the few medium-sized farms?

How can the CAP effectively engage in the problem?

Our first conclusion is that two years after accession, the CAP has successfully supported many investments to upgrade the dairy chain in Romania. However, this support seems only to facilitate the development of relatively large and financially strong farms and firms, which usually have sufficient financial means to access modern agricultural supply chains. At the same time, the traditional financial instruments do not help establish mechanisms to connect small producers and producer organisations with food processors, marketers and traders. Thus, the gap between the prospering chains and small or medium-sized dairy chains seems to have increased over the last two years. This result questions the effectiveness of the traditional CAP instruments, which seem to be unsuitable for the dualistically-structured NMS.

Since EU accession, the NMS have additionally benefited from transitional measures such as aids for semi-subsistence farmers and support for producers' groups. However, the effectiveness of these measures in the Romanian case seems to be low or should be questioned. For example, our results indicate that the access of potential beneficiaries to semi-subsistence aids is relatively restricted, indicating this measure's low impact. Additionally, we argue that these measures probably encourage some nonviable small farms to stay in agriculture (in the dairy market). Since the majority of these farmers do not comply with mandatory EU standards, their existence contributes to the persistence of the black market, which hinders the allocation of resources (i.e. land) to more effective units, and hence the competitiveness of the Romanian dairy supply chain.

The case of active entrepreneur (small commercial farms)

The need for governments to support commercially-oriented small farms (chains) to exploit growth opportunities is less obvious. In functioning markets, one expects that the government should stand back and let the ‘invisible hand of the market’ coordinate the behaviour of economic agents. In theory, this process should ensure the optimal allocation of production factors to the most efficient commodities, regions, organisational forms and farm sizes. Hazell et al. (2007) argue that in this case, “...policy interventions would focus on providing an enabling economic environment for market-led development, typically by providing stable and undistorted economic incentives and essential public goods and services”. However, our results indicate that both Romanian institutions and markets show many failures, which can lead to discriminatory and inefficient outcomes.

Generally, the importance of improving the delivery of service in Romania to reduce market distortions is obvious. However, even with effective institutions, transaction costs cannot be reduced to zero. Looking at the various marketing channels in the Romanian dairy chain, a self-enforcing dualism exists: the large supply chains (and commercially-oriented farmers) that use direct marketing channels usually face lower transaction costs (higher quality, lower transportation costs per unit and quality risks). In contrast, small farmers whose production does not considerably exceed the subsistence level incur relatively high (per unit) transaction costs when selling their produce on local markets or via collecting points.

In our opinion, the government should help maintain the dualistic structure of the dairy sector in Romania, due to the various advantages of such a structure (competition, landscape, job opportunities, etc.). These are our suggestions:

... provide financial aid to support niche marketing. Through negotiations with the EU, Romania obtained brand recognition and protection for the name of origin (PDO) and geographical designation (PGI) of several types of products (i.e. some yoghurt sorts and semi-hard cheeses). However, there is need for a better understanding of these protected products as well as a general regard for the ‘traditional/organic agriculture’ meeting of European standards. Some respondents indicated that lacking know-how and experience, as well as the complexity of applying for potential aid, are the major challenges to the development of marketable regional food production. For the producers it is important to change the thinking from a production orientation to market orientation to successfully target the market niches. Additionally, the provision of additional capital is needed to first invest in the local brand and finally to collectively promote the local products.

... however, target active farmers only. Effective policy measures (extension, financial support) should target active farmers or business starters with a high level of entrepreneurial skills and good business concepts. “Investing in education of farmers which are averse to any change is a waste of money.”

... do not mix agricultural and social policies. Some small chains still procure raw milk from very small farmers (with only one or two cows). However, the quality of the milk is low and the farmers are usually advanced in age and are neither flexible nor willing to adjust to changing market conditions (quality requirements, farm economics, contracting). The majority of these farmers do not possess milk quotas. Thus, for them it will be difficult to even enter the legal market. Due to these additional market entry barriers, it cannot be expected that those small farmers will ever be vertically integrated into modern supply chains. The case of the small farmers should not be the responsibility of the Romanian Ministry of Agriculture since they represent a social problem (“if the Ministry allocates money for them, the money is lost forever”). A solution for the dairy farms would be to help them diversify their production portfolios or to include them in the European retirement programmes.

In this context, the EC should consider an expanded range of eligible measures under Pillar II to provide advisory services geared exclusively towards the needs of smallholders who do not qualify for farm payments and who may want to explore off-farm employment, or alternative enterprise options while maintaining a semi-subsistence operation, or to exit agriculture altogether. After the Health Check of the CAP there are some additional opportunities to engage in and financial support is available to diversify the incomes of the rural population.

However, at this stage one might question the role/effectiveness of Pillar II measures, since some of them are linked to agricultural production. Since a clear differentiation between the agricultural and social (regional) policy is not given, it is likely that this structure contributes to the persistence (scale) of the currently observed paradigms such as the freezing of agricultural structures and the black market. Perhaps for the next CAP reforms (after 2013), joining the cohesion policy and Pillar II measures should be considered (especially the measures regarding water, landscape management, etc.) to guarantee a clearer direction and clearer goals for the particular EU policies. At the same time, the scale of the paradigms such as the freezing of agricultural structures and the black market could be reduced and the effectiveness of the EU policy measures increased.

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