UNFAIR TRADING PRACTICES IN THE DAIRY FARM SECTOR
IN SLOVAKIA

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Abstract: In recent years the agricultural sector in Slovakia has faced difficult challenges. Different development patterns of the market have led to significant structural changes which severely impacted especially dairy farms. Dairy farmers occupy a weak position in the food supply chain whereas dairy processors and retailers are highly concentrated. As a result, differences in bargaining power may lead to competition inequalities. The abuse of these imbalances may lead to the occurrence of unfair practices. Because the research of the presence of unfair trading practices in the dairy sector is limited and there has been no evidence of this kind of studies in Slovakia, the purpose of this paper is to investigate UTPs occurrence among primary milk producers in Slovakia through the survey carried out in 2 regions. The results show that occurrence of UTPs in dairy sector in Slovakia is very frequent. 87% of respondents reported at least 1 UTP in relationship with their main buyer.

Keywords: dairy sector, farm survey, milk production, unfair trading practices

JEL Classification: Q10, Q12, Q13

INTRODUCTION

In recent years, the food supply chain has transformed significantly – the relations in the chain have become more complex, and increased concentration and changes in organization structure have been characterized by complex interactions with raising vertical coordination (Marcantionio et al., 2018). Significant structural changes in the food supply chain have led to the changing conditions in markets in the different sectors. Increasing market power of stronger parties on weaker ones has been shown as a serious problem which together with other factors may lead to unfair trading practices (UTP) among businesses in the entire food supply chain. UTPs are practices that grossly differ from good commercial conduct and are contrary to good faith and fair dealing (European Commission, 2013). They were discussed for the first time at the European level in 2009 because the lack of transparency, anti-competitive activities and imbalances in the bargaining power in the markets negatively influenced the competition and competitiveness of the food supply chain as a whole (Glöckner, 2017). In last years, the interest in the UTP area has increased significantly, particularly from parties directly influenced by these changes and policymakers (European Commission, 2013, 2014, 2018) what causes the gradual effects in the legislative measures in the member states.

Contracting relations and agreements usually reflect the relationship between both business parties (MacDonald, 2011). Similarly, the competitiveness of market actors is considered as the important element affecting the functioning of the food supply chain and fair competition. However, the unfair trading practices interfere the fair competition in the market. Delayed payments are one example of the practices that are considered as unfair (Falkowski, 2017). They are considered as one of the most crucial limitations for the growth of the companies. They negatively influence the profits, cash flows and investments or farm production (Rozelle and Swinnen, 2004). Although the legal framework regulates the late payments, it
provides relatively long payment period, that is not appropriate particularly for farmers producing perishable products.

Due to a rising vertical concentration in the food supply chain, particularly at the processing and retail sectors, a lot of attention has been paid to price monitoring, to mergers and organizations of processors and retailers in the agricultural market with focus on fair competition among the economic subjects (Sexton et al., 2007). Lately, increased coordination has led to the problems of market power with a direct consequence of the imbalance in the bargaining power of the weaker parties. The imbalance in bargaining power does not necessarily mean market distortions but the limitation of weaker parties may evoke the violations of the principles of fair competition and this kind of an imbalance exists whenever one participant 'unilaterally governs the agreement'. Exercise of market power and imbalances in the bargaining power are perceived as the basic causes of unfair practices but authors (Renda et al., 2014, Falkowski et al., 2017, Di Marzantonio et al. 2018a) underline the subsequent factors like asymmetric information, costs of contract enforcement, switching costs, transaction costs, perishability of goods and seasonality of production as the other important factors behind UTPs.

One of the indirect (or partial) solutions to the issues of excessive market power and imbalanced bargaining power is the cooperation on a horizontal level, by setting up producer organizations (POs). The legislature of EU makes provision to recognize producer organizations across the majority of agricultural sectors (Defra, 2014). The cooperation should contribute to strengthening producers' relatively weaker position by allowing them to use economies of scale in producing and marketing their output, reduced costs, improved market reach and increased access to services or opportunities (Penrose and Buckley, 2007).

Over the last few years, a number of studies (i.e. Martin and Zering, 1997; Swinnen and Maertens, 2007; Dries et al., 2009; Fischer et al., 2009; etc.) have been carried out focusing on the relationships in the food supply chain. However, overall there have been only a few empirical studies of unfair trading practices, particularly in the farming sector. The problem occurs already at the definition of UTP because the definition does not often provide a sharp delineation of this term i.e. what should be called UTPs and what should not (Falkowski, 2017), also at the setting of regulations and their slow implementation into practice. Obtaining information appears to be another significant challenge. In a lot of cases, the source information is reported directly from suppliers or producers themselves – thus injured parties (Sexton, 2017) and according to Gorton et al. (2017) one reason for the lack of evidence is the reluctance to report UTPs for fear of retaliation, so-called fear factor (Lee, 2017) or delisting by buyers. Commonly, for weaker parties it is difficult to take legal action against such practices, particularly because of concerns about the ending of business contracts.

For the mentioned reasons, the attention has been focused on finding indirect evidence of distortions of competition or the presence of one unfair practice in vertical relationships of the chain. Past studies have revealed the asymmetries in price transmission (e.g. Goodwin and Harper, 2000; Vavra and Goodwin, 2005; Bukevicute et al. 2009; Rajcaniova and Pokrivca, 2013), the problem with late payments, market power (Sheldon and Sperling, 2003; Sexton, 2012; Perekhozhuk 2017), bargaining power (Battigalli et al. 2007), the negative impact of reverse margin practices (e.g. slotting fees) on the consumer (Rennhoff, 2004; Chambolle and Christin, 2017) or on the producer welfare (Shaffer, 2005).

One of the studies (Basic, 2015) dealing directly with UTPs shows how growing market power of EU supermarkets affect small producers of bananas and plantation workers. The authors emphasized that modern retailing is increasingly concentrated and during the collecting of evidence of UTPs, a 'fear factor' was apparently present. They found that prices and contracts were mostly negotiated on the short-term basis, but even the largest traders proved the imbalance of their bargaining power with retailers. Authors also found that a trend for longer-term contracts increases the commercial pressure from retailers. Importers make use of one-sided clauses containing withdraw from a contract if "his margin is insufficient". The risk is passed from buyer to exporters and producers, particularly smaller ones.
In 2011, the survey by Dedicated Research on behalf Ciaa-Aim (2011) was carried out in 15 European Union countries and covered a sample of 684 suppliers. The surveyed firms were the brand producers only (48.4%), producers and retailers' brands (49.6%) and retailers brand only (2%) of mainly food and drink products (79.7%), non-food grocery (14.9%), or both (5.4%). The results showed that more than 96% of the surveyed organizations were ever exposed to unfair trading practices. In 84% cases it was the factor of the non-respect of contractual terms by some customers, then the second most common practice (77%) was delisting threats to obtain unjustified advantages or unilateral deductions from invoice payments without sound business reasons (63%). According to the survey, about 65% of the firms did not take any action after being exposed to the UTP. The research on the economic impact of Unfair Trading Practices was provided by Copa-Cogeca (2013). The main purpose of this survey was to quantify the influence of UTPs in the agro-food sector in EU, so that the representing bodies could take the necessary actions against UTPs. The latest empirical evidence was provided by Di Marcantoni et al. (2018), who conducted extensive research on unfair trading practices in the food supply chain within the dairy sector. This research was carried out in the four selected European regions i.e. France, Germany, Poland, Spain and is based on the 1248 observations. A total of 29 types of UTPs were identified. The occurrence of UTPs was investigated in the contract content, contract negotiation and contract execution. A total of 93% of surveyed milk producers have reported at least one and 46% have reported at least three of UTPs. There has been no evidence of the research of UTP presence in the dairy sector in Slovakia. Therefore, the purpose of this paper is to investigate the occurrence of UTPs among primary milk producers in Slovakia. The dairy sector in Slovakia has faced difficult challenges in recent years. The Russian food embargo combined with abolition of milk quotas in 2015 caused problems to farmers across the whole EU. Market was flooded with milk and dairy products and the purchase price of milk has significantly declined. However in Slovakia the prices are below the EU average. This situation also led to the reduction of the number of primary producers.

1. DATA AND METHODS
Since the contractual terms are often set by stronger parties of the business relationship, the research of UTPs is closely related to the investigation of contractual agreements. This research was carried out among dairy producers in Slovakia through the questionnaire. Questions were focused on investigation of the contractual arrangements used in dairy sector and on investigation of the presence of UTPs in the contract content and in different phases of the contract development. Interviews were carried out face-to-face with 47 dairy producers in Slovakia in the Nitra and Trnava region. The list of primary producers and buyers was obtained from the database of APA (Agricultural Paying Agency). According to this data, there were 115 dairy producers in both regions, representing almost 28% of the total number of dairy producers in Slovakia. Although we reached out to 83% of producers in selected regions, only 49% of them were willing to participate and to share information. A large number of contacted farmers who refused to participate, reported the fear as the main reason of rejection. The fieldwork lasted from May 2018 until January 2019. The questionnaire consisted of 60 questions (first seven questions were demographic questions), and was divided into three sections focused on dairy farm characteristics, characteristics of contractual relationships and UTP occurrence. Filling in the questionnaire took on average 45 – 60 minutes. The questionnaire covered two periods – year 2014 and 2017.

2. EMPIRICAL RESULTS
2.1 Farm characteristics
With a high number of farms still focused on raising of dairy cattle and production of cow’s milk, two selected regions – The Nitra and Trnava region represent the area, where more than one quarter of all dairy producers in Slovakia operate. Interviews were carried out with farm managers or other persons at leading positions of selected farms. In the majority of cases, farm management was carried out by a man (93.6%). The common feature of all farms was cattle breeding for milk production as well as production
of cereals. The average number of dairy cows of the sample farms was 350 and average size of total bovine herd was 800 animals. In order to test whether there are significant differences between farms in Nitra and Trnava region in terms of their characteristics (farm area, number of other bovine animals, and number of dairy cows), we also ran a two-sample T-test for difference in means and F-test to check the homogeneity of variances. Results of T-test at significance level $\alpha = 0.05$ rejected alternative hypothesis, which means there are no significant differences between the size of farm area, number of bovine animals and number of dairy cows between farms in Nitra and Trnava region. All details of sample size are summarized in Tab. 1.

Tab. 1 Basic characteristics of dairy farms

<table>
<thead>
<tr>
<th></th>
<th>Sample size</th>
<th>Together</th>
<th>Nitra region</th>
<th>Trnava region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm area – 2017 (ha)</td>
<td></td>
<td>1973.3 (1771)</td>
<td>2389.3 (1686)</td>
<td>1691.0 (1415)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>198,0</td>
<td>338,3</td>
<td>224,3</td>
</tr>
<tr>
<td>$F$ test 0.300  t-test 0.300 &gt; 0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of other bovine animals - 2017 (pcs) (dairy cows, heifers, bulls, young heifers)</td>
<td>802 (567)</td>
<td>763 (583)</td>
<td>829 (496)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>70,7</td>
<td>45,9</td>
<td>113,9</td>
</tr>
<tr>
<td>$$F$$ test 0.943  t-test 0.836 &gt; 0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- thereof number of dairy cows - 2017 (pcs)</td>
<td>355 (271)</td>
<td>318 (280)</td>
<td>377 (190)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>75,1</td>
<td>117,7</td>
<td>95,7</td>
</tr>
</tbody>
</table>

$Note: \overline{X}$: average values, $\tilde{X}$: median values, St. dev.: standard deviation

Source: own processing

Dairy producers deliver their milk either directly to milk processing plants, traders or producer organizations. In 2017, the majority of milk production (84.2%) was delivered to milk processing plants, 10.6% of milk production was delivered to producer organizations and the smallest amount of milk production (0.8%) was sold directly on farms. 1.5% of milk production was used on own processing and own consumption accounted for 3.3% of production on average. Compared to 2014, the distribution of milk deliveries has changed. The deliveries to processing companies increased by 2.8%, however deliveries to producer organizations significantly decreased (by 6.1%).

2.2 Farmers’ business and contractual relationship with the main milk buyer

Given the length of a business relationship, the number of years of "loyalty" in the sample is characterized by high variability of contract length. If we assume that the length of long-term contract is more than 10 years, then in 2017, 36% of respondents reported the long-term cooperation with the same buyer. Another 17% of respondents cooperated with the same buyer for 5 years and almost one quarter of respondents (23.5%) cooperated with the same buyer for less than 5 years. Based on the respondents’ answers, the most common causes of the latest change of main buyer included late payments for milk delivery (n=11), winding up of a milk processing plant or a producer organization (n=11) as well as own decision due to other reasons (n=12). Unfair and abusive behaviour of a milk processing plant, violation of contract conditions by buyer and different results of milk quality testing were among mainly cited other reasons.

We were also interested in potential obstacles perceived by dairy farmers in case they decided to change their main buyer (Fig. 1).
Almost half of the respondents said that the most important obstacle is the risk posed by cooperating with a new milk processing plant. Written contract was perceived as another main obstacle (28%) despite the fact that all dairy farmers have the notice period determined in the contract. 18.6% of farmers think that other buyers would not offer them as good conditions as their current buyer, therefore they are not considering the change. Almost 50% of farmers who are not considering the change of their buyer agreed that the price is the most important factor in the business relationship with their buyer since it contributes to strengthening and maintaining the relationship. Payments for milk delivery on time, price stability and the constancy of milk collection were cited as the other most important factors. Due to significant importance of a price, we were interested in how the prices are established. In majority of cases (79%) the price is defined based on the situation in the market. 32% of farmers reported that the price is negotiated during the contract duration and 23% reported that price is imposed by buyer.

Bargaining power is also related to market position and power of a company. Each company has a certain level of bargaining power in relation to its buyer which can change over time. Farmers were asked if their bargaining power had changed compared to year 2014. In case of a positive answer, we were also interested in the main causes which led to such a change (Fig. 2). 60% of farmers reported that they had stronger bargaining power and they denoted the smaller number of dairy farms and thus the smaller milk production in the region and major changes in the farm as the main causes of this change.

Source: own processing
Further, we investigated whether the contract terms changed over the duration of a contract. As the results show, during the reference period (2014-2017) changes in the contract terms or additional specification of some contract terms occurred in 13 cases. The changes were related to required quality (55%), adjustments of required quantity of milk delivery (9%) and other contract terms (36%) such as pricing, maturity of receivables or extra fees for milk delivery.

2.3 UTPs occurrence

The next section of the questionnaire was centred on the investigating the presence of UTPs which may occur at different stages of the contract development. They might be included directly in the contractual agreement, or they might occur at any time during the duration of a contractual relationship, or even after termination of a contractual relationship.

Comparison of UTPs occurrence in the contract content in Nitra and Tmava Region is presented in Fig. 3. The results of the survey show that the most frequently occurring UTP included in the contract content is "no protection defined if the buyer fails to fulfil the contract" – reported by more than half of surveyed dairy farmers in both regions. This UTP refers to case when the contract does not include any protection clause that would somehow eliminate the buyers' non-performance of the contract. Unilateral price setting by the buyer reflects limited possibilities of dairy farmers to influence the price and was encountered by similar number of dairy farmers in both regions (21.4 % in Tmava Region and 26.3 % in Nitra Region). Similarly, 15.8 % of dairy farmers in Nitra Region and 17.9 % in Tmava Region reported that their contracts include "constraints for milk sale". This unfair practice limits farmer's possibilities of selling milk to other processors/buyers, because farmer is usually committed to supply total production only to one buyer. While farmers in Nitra Region reported another two UTPs included in their contracts – better contract cancellation terms for a buyer and possibility to refuse or adjust milk delivery conditions, farmers from Tmava Region did not encounter these practices in their contracts. Two-sample T-test did not confirm significant differences in results of two regions (T-test = 0.621 > 0.05).

Fig. 3 Comparison of UTPs occurrence in the contract content in Nitra and Tmava Region

The most common UTP encountered by farmers during contract execution (Fig. 4) is "unilateral change in price imposed by the buyer" (21.1% in Nitra Region and 21.4% in Tmava Region). "Delays in payments for milk delivery" were reported by more than 14 % of farmers in Tmava Region and by 5.3 % of farmers in Nitra Region. Farmers who reported the occurrence of delays in payments, were also asked about their reaction to this practice. 80% of them did not take any action, which can be attributed to 'fear factor' – some respondents even indicated it. Farmers in both regions had also experience with a unilateral change in the required quality by the buyer, moreover farmers in Tmava Region encountered also a unilateral
change in the required quantity. Two-sample T-test did not confirm significant differences in results of two regions (T-test = 0.849 > 0.05). Other serious unfair practices such as additional fees or deductions from price, refusal to accept milk delivery, unilateral change of contract terms by the buyer were not reported by dairy farmers.

Fig. 4 Comparison of UTPs occurrence during contract execution in Nitra and Tmava Region

Unilateral ending of the contract by the buyer before expiration is the case of UTP related to contract finalization – the occurrence of this practice was confirmed by 21% of dairy farmers in Nitra Region and by 18% of farmers in Tmava Region.

Table 2 shows total occurrence of UTPs in the period under investigation at all three levels of business relationships in Nitra and Tmava region together. The incidence of UTPs is very common – 87% of dairy respondents reported that in the considered period at least 1 UTP occurred in the contractual relationship with their main buyer. 49% of respondents confirmed at least 2 UTPs and 17% of respondents reported that they encountered at least 3 UTPs.

Tab. 2 Occurrence of UTPs at dairy farms

<table>
<thead>
<tr>
<th>UTPs</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 1 UTP</td>
<td>87.23%</td>
</tr>
<tr>
<td>At least 2 UTPs</td>
<td>48.94%</td>
</tr>
<tr>
<td>At least 3 UTPs</td>
<td>17.02%</td>
</tr>
<tr>
<td>At least 4 UTPs</td>
<td>6.38%</td>
</tr>
<tr>
<td>At least 5 UTPs</td>
<td>4.26%</td>
</tr>
<tr>
<td>At least 6 UTPs</td>
<td>2.13%</td>
</tr>
</tbody>
</table>

Source: own processing

Table 3 compares the occurrence of UTPs between the group of dairy farmers who delivered their production to producer organization (PO) and the group of farmers who are not members of PO and delivered to other processors. In order to investigate whether a membership in a PO means a fairer relationship, we ran a two-sample T-test. However, we failed to reject null hypothesis which means that there is no significant difference in UTPs occurrence between members and non-members of POs. But the results show that those farmers who are members of POs did not encounter higher number of UTPs, whereas the higher number of UTPs (n ≥ 4) occurred in case of dairy farmers whose main buyers are processors.
Tab. 3 Occurrence of UTPs and farmers’ membership of producer organizations.

<table>
<thead>
<tr>
<th></th>
<th>Members</th>
<th>Non-members</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 1 UTP</td>
<td>89%</td>
<td>89%</td>
</tr>
<tr>
<td>At least 2 UTPs</td>
<td>44%</td>
<td>51%</td>
</tr>
<tr>
<td>At least 3 UTPs</td>
<td>11%</td>
<td>19%</td>
</tr>
<tr>
<td>At least 4 UTPs</td>
<td>0%</td>
<td>8%</td>
</tr>
<tr>
<td>At least 5 UTPs</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>At least 6 UTPs</td>
<td>0%</td>
<td>3%</td>
</tr>
</tbody>
</table>

\[ F\text{-test} = 0.912, \; T\text{-test} = 0.805 > 0.05 \]

Source: own processing

CONCLUSIONS

During the last twenty years, high fluctuation of prices of agricultural commodities has raised concerns about proper functioning of food supply chains, especially the dairy sector has attracted significant attention. In Slovakia, considerable differences in price developments at all levels of supply chain were partly caused by significant structural changes in the country, but they also reflected imbalances of market power among the agents in the supply chain. This kind of imbalances often leads to occurrence of unfair trading practices. Therefore, the main objective of the paper was to acquire complex information about dairy supply chain in Slovakia with focus on the problem of UTPs. Almost 50% of respondents agreed that the price is the most important factor that contributes to strengthening and maintaining the business relationship. The survey showed that the price is also the most sensitive issue, which is reflected in frequent occurrence of UTPs related to price. The most common UTPs encountered by farmers during contract execution are “unilateral change in price imposed by the buyer” and “delays in payments for milk delivery”. In case of delayed payments 80% of farmers reported that they did not take any action partly due to fear factor as many of them indicated.

Overall, the results show that 87% of respondents reported at least 1 UTP in reference period and almost half of the respondents (49%) confirmed occurrence of at least 2 UTPs in relationship with their main buyer. Comparison of UTPs occurrence between farmers who are members of producer organizations and those who are not, showed very similar results, but members of producer organizations were not exposed to occurrence of higher number of UTPs (more than 4 UTPs).

This paper has contributed to empirical research of UTP issue which is still very limited. To the best of our knowledge there is no other research covering the issue of UTPs in Slovakia, especially in dairy sector which has faced many problems in recent years. Moreover, compared to other existing studies of UTPs, our paper deals with investigation of UTPs occurrence and thus provides a proof, whereas many studies in the past focused only on a few of selected aspects of contracts in agriculture mainly from theoretical point of view and not necessarily investigating the unfairness of practices. One line of research is focused on price formation process along the agri-food supply chain (Vavra and Goodwin, 2005; Lloyd et al., 2006; Bakucs et al., 2014) and analyses how the price movements are transmitted from farm to processors and retailers or in opposite direction. Thus, these studies refer to impact of market power which is the main concept in UTP but only in an indirect way. Another branch of research is focused on delayed payments which were reported also by farmers in our survey (Gorton and White, 2007). However, delayed payments are only one example of UTPs. We decided to employ a complex approach reflected in investigation of UTP at all stages of trade relationship. Furthermore, our findings are very similar to the results of survey carried out by Di Marcantonio et al. (2018) who investigated UTPs occurrence in dairy sector in selected regions of France, Germany, Poland and Spain, which confirms that UTPs is issue in the whole EU. 98% of farmers in the survey by Marcantonio et al. (2018) reported at least one UTP and 54% reported at least two UTPs. Because our sample size is small, the results cannot be generalized for the whole dairy sector, but it is still a proof that UTPs are present also in Slovakia. Results of Marcantonio et al. (2018) confirming UTPs incidence in dairy sector in four another countries imply that UTPs in dairy sector is a serious issue that deserves the attention and solution at EU level in order to improve transparency of dairy supply chain.
Acknowledgements
This paper was supported by the Slovak Research and Development Agency under the contracts No. APVV-15-0552 and No. APVV-16-0321.

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