

## Article

# Geographical Indications and Risks of Unsustainability Linked to “Disaffection Effects” in the Dairy Sector

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**Abstract:** This paper deals with the role of geographical indications (GI) in the dairy sector of Italy, with the purpose of highlighting eventual negative dynamics in the adhesion to the GI by the potential operators of Italy. A negative adhesion to the GI circuit shows a “disaffection effect,” and has relevant implications on sustainability on account of the role of a GI in boosting various dimensions of sustainability (economic, social, environmental). In order to verify the presence of a disaffection effect, an empirical analysis of the actors adhering to the GI dairy sector is carried out. Through the collection of secondary sources from official databases, the paper emphasises a negative trend in the adhesion to the GI dairy sector, which also reveals diversified territorial impacts. More precisely, unlike other sectors, the dairy sector reveals negative dynamics in the operators choosing to adhere to the GI circuits. The results of the analysis address some policy issues and solicit policy action to limit the disaffection effect on GI in the dairy sector.

**Keywords:** GI sustainability; dairy sector; adhesion to the GI; GI cheeses



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## 1. Introduction

The new European agricultural model provides farming activity with policy support granting food security, sustainability and balanced territorial development. The new perspective is focussed on a high added value of farming, which is able to obtain high-quality primary and processed products. These products are realized through sustainable agricultural systems, providing them with sound competitiveness: as pointed out by van der Ploeg [1] (p. 8), “Competitiveness does not stand on its own. It crucially depends on other, increasingly decisive features such as quality, sustainability, animal welfare, contributions to the quality of life, and trust (i.e., the acceptance on the part of society at large).”

The dairy sector fits within this context, as the growing attention to sustainable livestock farming demonstrates. As a matter of fact, diversified patterns of sustainable development for livestock farming have been emerging in the past years, one of the most important of which is to count on specific quality of products. As underlined by FAO [2]:

- Generic (or basic) quality corresponds to the minimal requirements that a producer must comply with, in order to market a product;
- Specific quality corresponds to new, voluntarily added quality attributes that allow a product to create added value and to differentiate itself on the market.

Specific quality relies on the presence of unique characteristics in the products which make them appreciated by the final consumers. These unique characteristics are grounded in either natural or human resources and represent strategic assets for promoting farm competitiveness in rural contexts.

Nonetheless, when strategic actions aiming to add specific quality attributes are taken on, new standards are set up which may also be validated through a rigorous control system [3].

Among various alternatives for sustainable dairy production, a relevant role is played by the adoption of Geographical Indications (GIs). As defined in the TRIP agreement in 1994 (article 22), “GIs are indications which identify a good as originating in the territory of a member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin”. Important examples of GIs are protected designation of origin (PDO) or protected geographical indication (PGI), which have been supported by the European Union since the '90s, through regulations 2081/90 and 2082/92, thereafter modified by regulations 509–510/2006 and by the currently working regulation 1151/2012. The recent political debate on a possible revision of the rules for GIs stresses the relevance of the GIs and the objective of attracting more producers in the GI systems, under the hypothesis that promoting the participation of more producers brings about more sustainable agrifood systems and more profitable and marketable products.

The launch of GIs at the beginning of the '90s has stimulated high levels of adoption at territorial levels, above all in Mediterranean countries. Available figures underline the very positive GI performance (turnover, exports, territorial impact, etc.). As a consequence, the impact on sustainability provided by the GIs has dramatically increased, thus contributing to the achievement of Sustainable Development Goals through more territorialized approaches [4].

In order to both grant the respect of additional quality attributes and promote a sustainable strategy of GI valorisation, collective action is a key condition [4]. However, although collective action allows the GI to reconfigure food products as public goods [5,6], on the other side, this is not always a purpose that can be easily secured [7,8]. Thus, the GI's long-term sustainability cannot be taken for granted and relies on numerous factors which, in some cases, may put these products at risk of unsustainability. One of the main problems refers to the economic sustainability when faced with the relatively higher costs of obtaining a PDO/PGI. Faced with these costs, in all sectors, some producers are revealing many difficulties in persisting, which may bring about mistrust and the search of an exit strategy from the GI circuit. This is particularly true in some rural marginal areas, where production costs are generally higher. This has brought about the search for further recognition to differentiate the GI products, as witnessed by the optional quality term “mountain product”. Moreover, the compliance with rigorous sanitary standards discourages some producers to adhere. These issues may be amplified by other “traditional” factors affecting the farming sector, such as socio-demographic ones, linked to the composition of the family farm business and to the localisation in the life cycle. Accordingly, adherence to the GI system may be a complex decision-making process involving the farmers. This process may involve two phases: entrance and stay/exit decision. In these phases, trust/distrust may affect the decision of either staying in or exiting from the GI circuits. Literature has not given adequate attention to this topic, thus showing a gap we aim to fill.

This paper is set against this background, and attempts to provide evidence of the rates of affection/disaffection to GIs in the dairy sector of Italy. With this purpose, grounded in demographic and territorial tools of analysis, the aim is to show that distrust dynamics may emerge in this sector, bringing about unsustainability risks in the dairy GI system.

## 2. GI and Sustainability Issues in the Dairy Sector

Sustainability in the dairy sector is under debate in recent literature, and is identified as a viable pathway to reduce its environmental impact. In fact, many studies are focussing on reducing greenhouse gas emissions and the use of natural resources in dairy farms. The huge demand to make dairy farming more sustainable has prompted a radical rethinking of milk production models [9,10]. In this context, the adherence to a GI circuit has provided an important contribution for building up sustainable management of animal farms. As a matter of fact, many processed food products with a GI, such as a PDO or PGI, are drawn from the livestock sector, thus providing a relevant contribution to building up a sustainable dairy sector and positively impacting rural development. This is attributable to

a virtuous circle activated by the numerous stakeholders involved in the GI supply chain, aiming at implementing value creation strategies not only for the enterprise, but also for the broader society. Therefore, through GI valorisation, it is possible to identify a value-adding entrepreneurship, on account of the valorisation of the sustainable dimension bringing about a positive SROI (social return on investment) [11]. Value-adding entrepreneurship is grounded in the high degree of multifunctionality typifying GI dairy farms, which may be articulated according to a diversified set of dimensions, such as biodiversity preservation, valorisation of breed varieties, preservation of soil and natural resources [12] and ecologically valuable landscapes [13]. Furthermore, in the dairy sector, a fundamental contribution is provided in terms of animal welfare and management practices fostering a transition towards more sustainable dairy cattle systems. This means that, if well managed, GIs offer a sound contribution to build up a strong vision of multifunctional agriculture in the sense expressed by Wilson [14]. Accordingly, the European Union has correctly adopted a set of regulations which are justified by the following dimensions:

- Market justification: necessity for protecting GIs relies on the higher difficulties for these products to pursue cost leadership strategies, since they are mainly located in disadvantaged rural areas, thus providing a contribution to the production of public goods [5]. Small-size livestock farms are not able to persist in a globalised market where competitiveness cost engenders well-known phenomena of price–cost squeeze [15];
- Rural development justification: in many cases, the recognition of a GI is the engine for promoting integrated models of rural development through the diversification of economic activities in rural areas [16]. This pattern is encouraged by the recent trend in rural tourism, underlining how rural spaces are no longer considered spaces of production only, but also spaces of consumption [15];
- Consumer justification, in that final consumers are even more interested in purchasing high quality products, such as products with a GI, by showing a relatively higher willingness to pay for them;
- Justification for a fair competition, which aims to protect GIs from numerous attempts of agropiracy and Italian sounding, which may damage the reputation of the GIs and downsize their turnover.

The institutional support provided by the current regulation provides livestock farms with a legal protection secured by the registered GI. As a consequence, the product cannot be produced outside the rules which are set up in the code of practices. Of course, origin-linked quality brings about rising costs for animal farms as for all farms adhering to a GI circuit. The costs linked to the adhesion to the GI circuits are classified for each sector according to the following Table 1 [6].

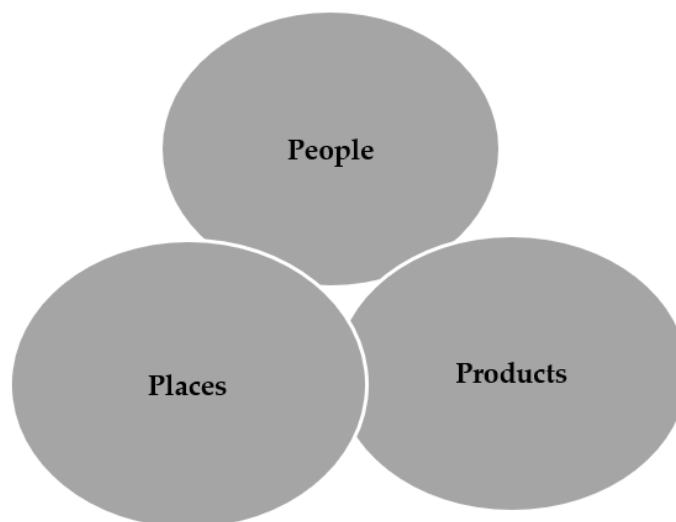
**Table 1.** Costs linked to the GIs.

Preliminary costs	<ul style="list-style-type: none"> <li>• Costs to be sustained before the recognition</li> </ul>
Direct costs	<ul style="list-style-type: none"> <li>• Costs for certification and monitoring</li> </ul>
Indirect costs	<ul style="list-style-type: none"> <li>• Costs for structural and organisational adjustments</li> <li>• Costs for operational adjustments</li> <li>• Costs for non-compliance</li> </ul>
Complementary costs	<ul style="list-style-type: none"> <li>• Promotional costs</li> <li>• Surveillance and sanctioning costs</li> </ul>

Source: Adapted from Belletti et al. [6].

For instance, Belletti et al. [6] provide evidence on certification costs associated with the production of a famous Italian cheese, such as the Tuscany Pecorino PDO: these costs are

sustained on a fixed and proportional share in all phases (milk production and collection, cheese making and the seasoning phases). The impact of these costs may vary among livestock farms and may have repercussions on the strategic decision to enter or, once entered, to either stay or exit from a GI circuit. The possibility of recovering these costs depends on to the capability of valorising the product on the market, which is directly connected to the ability of linking people, places and products [17], as evidenced in Figure 1.



**Figure 1.** Linking people, places and products to valorise GIs. Source: Own elaboration based on Vandecandelaere et al. [17].

Consequently, two main approaches are at stake in the valorisation process of a GI [18]:

- Physical approach, which synthesises the link between the place and the product. Physical, chemical and biological characteristics of the territory of origin may provide the product with unique quality attributes. In livestock farming, this includes the genetic resources of that territory or the breed variety.
- Human approach, regarding people in Figure 1, through collective action promoted by the local stakeholders. The human approach includes the local knowledge and expertise synthesising the historical identity, which is preserved generation after generation, thus contributing to the social sustainability of the GIs [19,20].

The previous physical and human approaches to GI valorisation provide products with a high degree of sustainability under the different perspectives, as abundant literature has demonstrated [21–23].

Nonetheless, there is not convergence in all dimensions of sustainability (economic, social, environmental) [4]. In this article, it is assumed that in some cases, benefits cannot cover the associated costs of the GI adhesion, bringing about a phenomenon we identify here as “GI disaffection and distrust”. How to measure this distrust will be clarified. In this paper we point out a methodology based on the entry and exit rates in the GI system of potential adherents, that is, the farmers and the processors. Measuring the adhesion to GIs is a key indicator of the attractiveness of the system towards potential adherents, whose decision to enter/exit depends on both costs and benefits. To the best of our knowledge, research has not devoted enough attention to this issue; therefore, the paper attempts to fill a gap in the literature with the purpose of:

- a. Explaining trends in the adhesion to the GIs by the producers of Italy, with special reference to the dairy sector;
- b. Exploring eventual regional differences in Italy, where the dairy sector boasts a long-standing tradition characterized by the presence of historical GI brands.

The hypothesis is that the more attractive the GI system is for potential producers, the more sustainable and sound the agrifood system—in our case, the dairy sector. As a

matter of fact, numerous studies have clearly highlighted the drive towards sustainability provided by the GIs, with reference to economic, social and environmental dimensions of sustainability [4]. On the contrary, producers' disaffection and distrust brings about a loss of sustainability in the dairy sector.

### 3. The Dairy Sector in the Italian GI Scenario

Geographical indications represent a key sector in the Italian agrifood system. The leadership of the Italian sector in typical production is witnessed by the available data. According to the last report of Qualivita Foundation [24], the so-called GI economy provides 21% of the national agrifood economics, with a total value of production equal to 19.1 billion €. The export of GI products is higher than 10 billion €, with a 21% incidence of the total Italian agrifood exports. The good aggregate performance characterizes the whole GI economy throughout Italy.

The cheese sector is confirmed to be one of the most important in Italy, in terms of number of operators, number of certified products and, above all, in terms of total value produced. According to Qualivita Foundation [24], GI cheeses cover 58.7% of the total value of Italian GI food production. It is the first in terms of relevance in the food category. It is second to wine products in the food-and-wine GI system. Some basic data are reported in Table 2.

**Table 2.** Economic data of the GI Cheese sector.

Variable	€
Production value	4.677 billion €
Consumption value	8.006 billion €
Certified production	582,480 tons
Export value	2.384 billion €
Certified products	56

Source: Own elaboration based on Qualivita Foundation, ref. [24].

Therefore, on an aggregate level, the figures show an economically sustainable system whose performance positively impacts the entire Italian agrifood system. Nonetheless, the next section will shed light on new perspectives of analysis of GI performance through an articulated set of dimensions to be explored.

### 4. Materials and Methods

Empirical analysis takes into account the GI dairy sector of Italy and is grounded in secondary data, collected from the database of the Italian institute of statistics. More precisely, data have been collected from the quality products database in the section devoted to the dynamics of operators. The period under investigation is 2010–2018.

The methodology adopted follows a two-step analysis:

In the first step, we calculate some basic demographic indicators aiming to evaluate gains/losses of operators within the livestock GI sector.

The first indicator is the percentage variation of the GI operators, as reported in the Formula (1):

$$\text{Variation (\%)} \text{ of operators in the dairy sector} = \frac{\text{Operators 1.1.2018} - \text{Operators 1.1.2010}}{\text{Operators 1.1.2010}} \times 100 \quad (1)$$

Thereafter, some demographic indicators are extracted—more precisely, entry and exit rates (Formulas (2)–(4)).

- Annual average entry rate (*Aaenr*): ratio between the average annual entry rate and the total number of operators, multiplied per 1000 population.

$$Aaenr = \frac{\text{average annual entry}}{\text{average number of operators}} \times 1000 \quad (2)$$

- Annual average exit rate (*Aaexr*): ratio between the average annual exit rate and the total number of operators, multiplied per 1000 population.

$$Aaexr = \frac{\text{average annual exit}}{\text{average number of operators}} \times 1000 \quad (3)$$

- Natural average rate of growth (*Narg*): difference between entry and exit rates.

$$Narg = \text{Entry rate} - \text{Exit rate} \quad (4)$$

A negative *Narg* is identified as disaffection and distrust index (DDI).

The second step provides a territorial analysis, with the purpose of highlighting eventual regional disparities in the rates of adhesion. To this end, a shift and share analysis is carried out [25,26], which allows breaking down a regional variation into three dimensions: a national trend (which is equal for all regions), a structural effect, or MIX effect, and a local effect, or DIF effect. More precisely,

$$Yr = y^* + s \quad (5)$$

where:

$Y$  = rate of growth (of the operators working in the GI system)

$r$  = region

$y^*$  = rate of growth the region should achieve to equalize the national growth

$s$  = differential between the regional and the national rate of growth

The differential may be decomposed into two main effects which, jointly with the national trend, explain the regional variation in the considered timespan (2010–2018).

The first component is the MIX, and it underlines the presence in the region of a certain structure of the variable under study which shows a positive (negative) dynamics at a national level, as shown in the following Formula (6):

$$\text{MIX effect} = \sum_{i=1}^n \frac{E_{ir}^0}{E_r^0} \left( \frac{E_{in}^1}{E_{in}^0} - \frac{E_n^1}{E_n^0} \right) \quad (6)$$

where:

$E$  = employees in the GI system

$i$  = sector

$r$  = regional level

$n$  = national level

0 and 1 = 2010 and 2018 respectively

In the parenthesis, the difference between the variation of operators in the sector  $i$  at a national level and the aggregate variation of all operators in the GIs is measured in the considered timespan. This value is multiplied by the weight that the sector holds at a regional level at the time 0.

On the other side, the local competition effect (DIF) focusses on the regional economy, with the purpose of comparing the regional growth/decline with the national level and, consequently, the presence of eventual competitive advantage in that region, leading to higher levels of regional prosperity with respect to the national one. In our case, the DIF component highlights a relatively higher/lower capability of a certain sector which is present in the region to attract/repel operators compared to the national level (7).

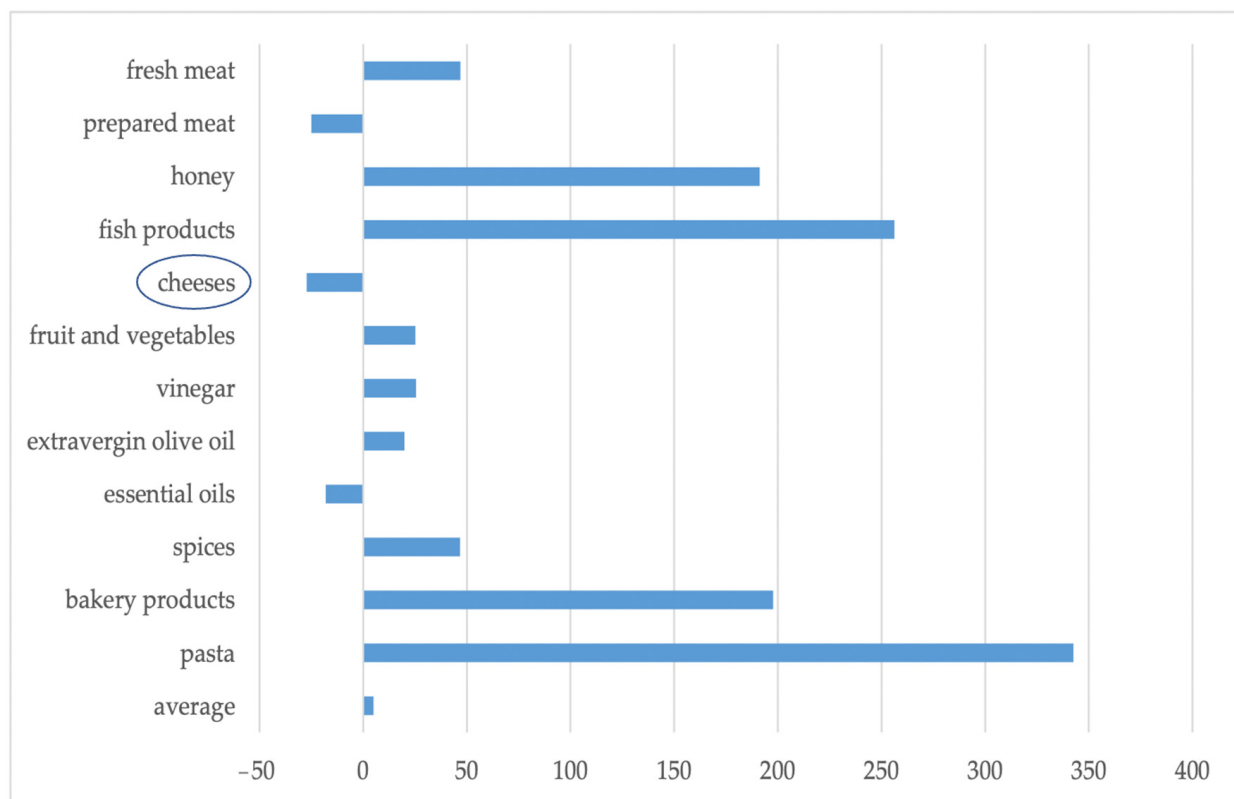
$$\text{DIF} = \sum_{i=1}^n \frac{E_{ir}^0}{E_r^0} \left( \frac{E_{ir}^1}{E_{ir}^0} - \frac{E_{in}^1}{E_{in}^0} \right) \quad (7)$$



In the parenthesis, the change of operators in the sector  $i$  at a regional level with respect to the variation at a national level in the same sector in the period of reference is illustrated. This value is multiplied by the weight that the sector holds at a regional level at the time 0.

## 5. Results

Figure 2 illustrates the first results of the empirical analysis by providing an overview of the natural rates of growth of all GI products. As shown in the figure, a positive  $Narg$  emerges, witnessing an increase in the total number of operators in the GI system. This confirms that the protected designation of origin and protected geographical indications continue to attract many farmers and processors in origin-linked quality circuits. Accordingly, GIs still offer a fundamental contribution to sustainable agrifood systems and boost sustainable rural development. Nonetheless, an in-depth analysis focussed on the dairy sector pointed out clear differences. Although there are sectors with very high performance, such as pasta, fish and bakery products, on the other side, a clear contraction in the adherence to the dairy GI sector is evident. In the time period of reference, GIs linked to the livestock and dairy sectors show a negative trend in the adherence; an exception is the case of honey. In the cheese sector, we can observe a very negative rate ( $-25,0$ ), pointing out a negative performance in the operators working in the GIs circuits.



**Figure 2.** Natural rates of growth of the operators in the Italian GIs (average means per 1000 operators—years 2010–2018), also detailing the trend in the cheese sector.

This aggregate data can be articulated in the two building indicators, entry rate ( $aaenr$ ) and exit rate ( $aaexr$ ), which are reported in Table 3. Data have been processed from the Istat database.

**Table 3.** Demographic indicators. (average means per 1000 operators—years 2010–2018).

Item	<i>Aaenr</i>	<i>Aaexr</i>	<i>Narg</i>
fresh meat	129.4	82.5	46.9
prepared meat	55.8	80.8	−25.0
honey	287.4	96.2	191.2
fish products	418.7	162.6	256.2
cheeses	79.5	106.6	−27.2
fruit and vegetables	109.3	84.1	25.2
vinegar	104.4	79.0	25.5
extra virgin olive oil	149.5	129.7	19.9
essential oils	101.4	119.6	−18.1
spices	215.2	168.4	46.8
bakery products	340.6	142.9	197.7
pasta	379.6	37.0	342.6
average	108.9	103.9	5.0

The negative result of the cheese sector is determined by an annual exit rate of 106.6, well above the annual entry rate, which is equal to 79.5. This means that, in the reference period, rates of retirement exceed rates of adhesion of new producers. In general, the only positive animal sector is the honey sector, where the annual entry rate is much higher than the exit rate (287.4 versus 96.2).

The aggregate results could be furtherly articulated on a regional basis, with the purpose of investigating eventual regional differences. This is carried out through a shift and share analysis, whose results are reported in Table 4. The table reports the results of both MIX and DIF effects, with special reference to the Cheese sector as compare to total results.

**Table 4.** Shift and share analysis.

MIX Effect	Cheeses	Total
Piedmont	−0.0076	−0.0257
Valle d’Aosta	−0.0221	−0.0224
Liguria	0.0000	0.0648
Lombardy	−0.0144	−0.0264
Trentino A.A.	−0.0022	−0.0086
Veneto	−0.0135	−0.0090
Friuli V.G.	−0.0178	−0.0265
Emilia R.	−0.0140	−0.0246
Tuscany	−0.0012	0.0525
Umbria	−0.0001	0.0261
Marche	−0.0015	−0.0415
Lazio	−0.0061	−0.0145
Abruzzo	0.0000	0.0088
Molise	−0.0038	0.0147
Campania	−0.0080	−0.0129



Table 4. Cont.

MIX Effect	Cheeses	Total
Puglia	−0.0006	0.0608
Basilicata	−0.0075	0.0037
Calabria	−0.0018	0.0021
Sicily	−0.0007	0.0224
Sardinia	−0.0152	−0.0290
DIF Effect	Cheeses	Total
Piedmont	−0.0649	0.2555
Valle d’Aosta	−0.2124	−0.2111
Liguria	-	−0.3361
Lombardy	−0.1146	−0.1479
Trentino A.A.	−0.0081	−0.1739
Veneto	−0.1714	−0.2454
Friuli V.G.	−0.2132	−0.2099
Emilia R.	−0.1069	−0.0686
Tuscany	−0.0018	−0.1924
Umbria	0.0003	−0.1602
Marche	0.0047	0.0799
Lazio	0.0439	0.0869
Abruzzo	-	0.3068
Molise	−0.0140	−0.0169
Campania	−0.0549	0.0910
Puglia	0.0061	0.3440
Basilicata	−0.0026	0.0413
Calabria	0.0364	1.3036
Sicily	0.0034	0.7461
Sardinia	0.1822	0.1766

The MIX effect confirms the presence in all regions of dairy sectors with a negative trend at a national level. As a matter of fact, in the cheese-making sector, all the values registered in the Italian regions are negative, thus confirming the previous demographic analysis and the negative evolution of operators in the reference period. However, as far as the DIF effect is concerned, a clear regional divide emerges between northern and southern regions of Italy. Although the northern regions are characterised by a negative DIF effect, the southern regions show a positive local effect. This highlights a relatively worse dynamic of retirement by the operators of the dairy sector, while in southern regions a local countertrend capability of attracting farmers and processors emerges, despite the negative trend at a national level.

## 6. Discussion

The contribution of geographical indications to setting up sustainable agrifood systems is confirmed, due to the good performance observed in the last decades. In this context, the results of our analysis offer useful insight into the perspective of the contribution to sustainability that the dairy sector may offer within the GI system. The GIs’ provision to sustainability appears indisputable: the increase of the operators adhering to the GI

circuits in the period of reference confirms the high capability of GIs to build up sustainable agrifood systems under different points of view, as pointed out by a wider literature:

- Economic, through higher premium prices, allowing escape from the price–cost squeeze [15];
- Environmental, through the positive externalities which are provided by local products, on account of the high contribution to biodiversity preservation and sustainable methods of production [17];
- Social, due to the cultural biodiversity and contextual knowledge preserved by the GIs [27].

Consequently, GIs remain an attractive sector for farmers and processors to valorise agricultural products and to position farm products in high-quality markets. Against this background, the competitive provision of quality in agricultural markets by the GIs is confirmed [4,28].

Nonetheless, when the GI dairy sector is considered (which is made up of PDO and PGI cheeses) and when more disaggregated data are analysed, it is possible to stress some critical points. Actually, the empirical analysis has shed light on the relatively bad performance of the dairy products. More precisely, a negative DDI index emerges, with negative rates of attraction for the dairy sectors. These results are confirmed also at a territorial level, as revealed by the shift and share analysis, which underlines a reduction of the territorial impact of GI adhesion by the potential operators.

These figures cannot be reduced, as they are unavoidable due to the stagnation of agricultural activities, to the extent that in other sectors the GI attractiveness is increasing (+10% in the fruit and vegetable sector, +12.4% in the extra virgin olive oil sector and, above all, fresh meat, with an increase of 40%).

Therefore, it is necessary to delve into the motivation of this “disaffection” to a brand which should represent a trump card for supporting farm competitiveness and rural development. The causes of the DDI have not been explored, and this represents a limit of this paper. Therefore, the need to investigate whether or not there is an economic reason to leave GIs in the cheese sector should represent the object of future research, to be carried out with the help of primary sources.

Certainly, joining the GI circuit encourages strengthening the assumption of all-around sustainability practices and the respect of specific quality attributes which require additional costs to be borne by the farmer. We believe that this may engender a perceived complexity of the adhesion: uncertainty, lack of compatibility with farmers’ routines and regulatory and institutional barriers could discourage farmers from adhering to the GI circuit. This is particularly relevant for the GI cheese production in some rural marginal areas.

Therefore, further analyses could explain what has generated disaffection and distrust in the GI system, as pointed out in other research analysing willingness to participate in alternative food networks [29]. Recent literature points out the neutral impact of the GI policy on the export of agricultural products [30]. Other authors underline that negative performance may negatively affect farms located in lagging rural regions, which are not able to escape the price–cost squeeze [31].

The empirical analysis based on entry/exit rates underlines how the level of sustainability provided by the GI dairy sector is at risk, on account of the negative balance between entry and exit rates characterising the most important GI sector in the food category of Italy.

## 7. Conclusions

The valorisation of territorial products through a geographical indication represents a fundamental strategy for relaunching the agrifood system in rural areas, as mentioned in the regulation for the GI recognition. The enthusiasm about the GIs is well-founded due to the excellent economic performance the GIs register each year, which is well-documented. This paper has attempted to put forward an “alternative” analysis which focusses on the affection/disaffection processes behind the GI system by monitoring the operators adhering to/leaving the GI circuit. As far as the GI sector is concerned, our data emphasize that it is clear that an ongoing disaffection process could emerge, with a reduction in the rate of adhesion in the dairy sector of Italy. This has been registered also at a territorial level,

with special reference to the northern regions of Italy. Future research must explore the motivation of the trend in the dairy sector. In this context, we can only point out that a life cycle of the GI seems to emerge, which highlights a sort of “maturity/decline phase” for the GI dairy sector. This adds up to watering down the positive effects of the GI on the global sustainability of the dairy sector specialised in the production of territorial products. Consequently, it is urgent to explore this phenomenon in more depth and try to reverse it through policy mechanisms which could reduce costs of access to the GI systems and the rate of competition in the GI market, with special reference to the operators located in rural marginal areas. Policy action has tried to preserve some enogastronomic niches through the possibility of adding other quality signals, such as the brand of mountain products to be added to the classic GI. Nonetheless, it seems that the results are not sufficient for recreating the conditions necessary for developing affection and trust mechanisms in the GI system.

Future research should also take into account the current revision of the EU geographical indications system, which could significantly reform the GI system among different member states. The European Commission’s objective to strengthen the legislative framework on GIs, with the additional purpose of improving the role of producers in the value chain and providing clearer information to the consumer, was already announced in the Farm to Fork strategy. Consequently, in order to analyse the real bottlenecks to GI adherence but also disaffection in the long run, it will be important to conduct further studies to also test the effectiveness of the new legislative proposal.

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