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The 2013 Common Agricultural Policy reform and its impact on small ruminant farming in Austria

Following a transition year, the new Common Agricultural Policy period, starting in 2015, is expected to bring a number of major changes in the payment scheme of Pillar 1. Using the example of the Austrian small ruminant sector (sheep and goats), this paper describes the effects of an area-based payment scheme instead of the Single Farm Payment Scheme applied previously. The calculations are based on the specification and simulation of seven different farm models and on an analysis of the Austrian Integrated Administration and Control System data sets. The results of both analyses suggest redistribution effects in favour of less extensive farm management systems. However, farms with high single farm payments per hectare are expected to face big cuts in direct payments by 2015. To avoid hardship the amount of the payments will be gradually amended over the coming years until 2019.

Keywords: CAP Reform, direct payments, farm simulation, small ruminants, Austria

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Introduction

The primary motivation for keeping small ruminants in Austria is the increasing demand for meat and milk. In this respect, the supply balance sheets published by Statistics Austria (2012) indicate a rise in the consumption of sheep and goat milk. Being ruminants, sheep and goats are capable of utilising grassland forage, which gives them a significant role in preserving the open cultural landscape (Hambrusch and Kirner, 2008). In this respect, Hofreither (1992) mentioned that landscape-related aspects were significant factors for the choice of holiday destination, which means that in Alpine regions the ecological effects of different forms of agricultural management are relevant for the region's appeal to tourists. Especially in less-favoured locations in mountainous areas, people who give up utilising agricultural land by setting aside domestic meadows and pastures frequently reforest such areas afterwards (Götzl *et al.*, 2011). As the production of cow's milk is more concentrated in the more favoured locations in mountainous areas (Kirner, 2007), the significance of small ruminants for the preservation of the countryside is likely to increase in the future.

The 2014-2020 Common Agricultural Policy (CAP) period, starting in 2015 after one year of transition, will bring about a fundamental change in the general framework conditions for European agriculture. It was agreed that special transition rules would be applied throughout 2014. The direction the new CAP will take is based on a set of legislative proposals presented by the European Commission (EC, 2011a) in October 2011. In the context of so-called dialogue, the European Commission, the European Parliament and the Council of EU Agriculture Ministers reached a final decision on the regulations for the reformed CAP in autumn 2013.

Against this background, this paper describes the effects a reformed CAP may have on specialised sheep and goat farms after 2013. The paper specifically examines the impacts of a change from the previous Single Farm Payment Scheme to a differentiated area-based model in the context of Pillar 1 of the CAP, which is to be introduced in five equal steps by 2019. The results are intended to help identify the conditions

and political incentives sheep and goat farming in Austria require, so it can continue to contribute towards maintaining an open cultural landscape, even where location conditions are difficult.

Methodology

Calculation of farm models

The calculations are based firstly on simulations of farm models and secondly on evaluations of Integrated Administration and Control System (IACS) data in Austria. The farm models were specified during two workshops held in February and June 2012 that were organised together with representatives of the Austrian sheep and goat farming associations. In order to reflect as broad a spectrum as possible, seven farm types with varying levels of production intensity (three lamb farms for meat production, two dairy sheep farms and two dairy goat farms) were modelled. Additional data were used from the results of evaluations of farming sectors (BMLFUW, 2012a) and from the standard gross margins for business planning (BMLFUW, 2008). The benchmarks used for these considerations were the total standard gross margins for each farm. Table 1 outlines key calculation assumptions on which the farm models are based.

The single farm payment level used in the farm models (shown in the lower section of Table 1) is based on historical entitlements with regard to land utilisation and animal stocks (animal density per ha). These essentially comprise the former premium for ewes and mother goats, the special aid for sheep and goats in less favoured areas and, in the case of farms with arable land, the formerly applied area-based compensatory payments. This is now to be compared with a differentiated area-based payment (DAP) model that, on the one hand, distinguishes between arable land or pastures and grasslands able to achieve average yields in monetary terms (EUR 294 per hectare) and extensively farmed grasslands (EUR 74 per hectare). The agro-political framework conditions were based on the principles for the implementation of the CAP until 2020 in Austria presented by the Federal

Table 1: Database for the seven farm models used in the study.

Designation	Unit	Lamb meat			Dairy sheep		Dairy goats	
		less intensive	intensive		conventional	organic	conventional	organic
			conventional	organic				
Mother animals	number	40	100	80	200	120	150	100
Livestock/hectare	mother animal/ha	3	8	6	8	7	8	7
Usable Agricultural Area (UAA)	ha	13.3	12.5	13.3	25.0	17.1	18.8	14.3
Grassland	ha	13.3	10.5	11.3	10.0	17.1	3.8	14.3
Arable land	ha	0	2	2	15	0	15	0
Fodder silage	%	20	65	45	72	40	75	0
Fodder hay	%	35	15	15	28	40	25	80
Fodder pasture	%	45	20	40	0	20	0	20
Organic farm	yes/no	no	no	yes	no	yes	no	yes
Farm Cadastre (FC) points	number	200	55	125	50	85	50	100
Direct payments	EUR/farm	952	2,904	3,464	8,080	2,856	8,550	2,380
	EUR/ha	72	218	277	323	168	428	164

Source: own composition based on data from an expert workshop

Minister in late August 2012 (BMLFUW, 2012b), which essentially correspond to the area-based payment scheme applied in this study. As for Pillar 2 of the CAP, the assumption was that the level of payments would remain the same.

Integrated Administration and Control System evaluations

With regard to the IACS evaluations, the sheep and goat farms were divided into several groups. To make the direct payment models comparable (single farm payment versus differentiated area-based payment model), the initial situation not only includes the single farm payment but also the milk and suckler cow payments. The individual agricultural area units comprise: extensively farmed grasslands consisting of alpine pastures, mountain meadows, once-mown meadows, rough grazing, litter meadows and grasslands lying fallow; intensively farmed grasslands with meadows mown several times a year and cultivated pastures as well as arable land. Besides the classic types of arable land, the latter also includes land with permanent crops. Finally, it should be noted that the evaluations were carried out at a level of sub-operations.

Results

Effects of a transition to an area-based payment scheme at the level of farm models

With regard to the farm models, the change in the total gross margin in conjunction with the unchanged level of payment from Pillar 2 (Rural Development) produce a mixed picture (Figure 1). While the organic farms and less extensively managed lamb farms show a growth in the total gross margin, the conventionally farmed operations show a decline. A direct link can be seen between the size of the area and the previous level of payment. All three conventionally managed farms also farm arable land which was eligible for payments in the past and contributed towards the previous farm payment. With these farms, the direct payments were correspondingly higher in the initial situation. When comparing the relative changes, it is also necessary to take into account the differing base levels. In the case of the exten-

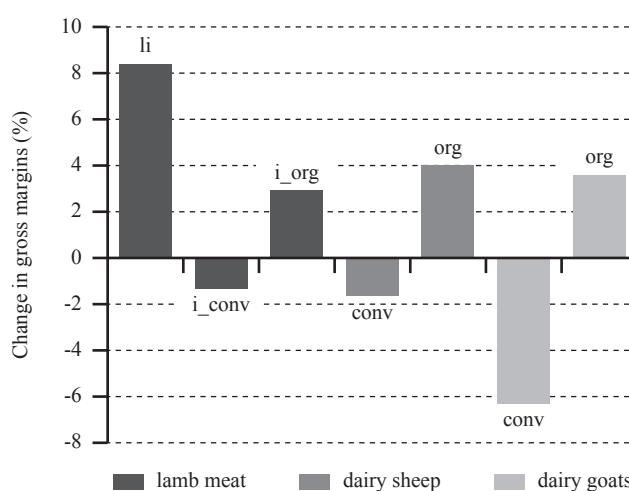


Figure 1: Change in the total gross margin of farm models in Austria applying the differentiated area-based payment scheme compared to the Single Farm Payment Scheme.

li: less intensive; i_conv: intensive, conventional; i_org: intensive, organic; conv: conventional; org: organic

Source: own calculations

sively managed lamb farms, for example, the single farm payment was EUR 72.00 per hectare of utilised agricultural area (UAA), whereas with the conventionally managed dairy goat farm the amount was EUR 428.00.

Comparative analysis of Integrated Administration and Control System data

The presentation of the IACS evaluation is based on the differing intensities of sheep and goat farming. The topmost, general level refers to all farms which, according to the 2011 IACS data, have kept at least one sheep or one goat. Where these farms are concerned, it can be assumed that small ruminant farming is subordinated to other farming sectors (e.g. dairy or suckler cow farming). For this reason, further farm categories were specified based on the share of sheep and goat farming in the farm's entire livestock unit per hectare (>20 per cent and >50 per cent livestock unit share). Additionally, the data allow distinguishing between non-milked and milked mother animals (in other words dairy sheep and dairy goats).

Table 2: Comparison between the level of payments under Single Farm Payment Scheme (including coupled livestock payments) and the differentiated area-based payment scheme in Austria according to farm categories (2011).

Category of farm	Sum Direct Payments (EUR million)		Direct Payments per farm (EUR)	
	Differentiated Area Payment	Single Farm Payment	Differentiated Area Payment	Single Farm Payment
All farms	693.3	724.1	5,047	6,393
With animals	470.8	543.9	4,833	5,935
Without animals	222.5	180.2	5,568	8,334
With arable farming	543.5	609.6	6,479	7,957
Sheep farms	38.2	36.8	3,163	3,493
>20% livestock unit share sheep	16.4	11.9	2,179	1,935
>50% livestock unit share sheep	12.2	8.1	2,084	1,727
Mother sheep not milked	30.1	28.8	2,964	3,255
Mother sheep milked	3.2	2.8	4,400	4,156
Goat farms	32.0	35.0	3,913	4,751
>20% livestock unit share goats	3.6	2.7	2,400	2,437
>50% livestock unit share goats	2.2	1.7	2,662	2,796
Mother goats not milked	14.4	16.0	3,508	4,383
Mother goats milked	6.4	6.5	3,520	3,935

Source: own calculations based on IACS data, 2011

When comparing the individual direct payment schemes, it is important to keep in mind that the introduced payment models target a larger group of recipients (+ 24,000 farms). At the same time, the amount of eligible land increases by 0.42 million hectares to 2.73 million hectares (e.g. orchards with fruit trees and vineyards, which previously were not eligible for receiving payment).

In Table 2, the first columns show the budget requirements, in other words the sum of funds for one farm category for each direct payment scheme. Owing to the budgetary requirements, the volume of payments drops to EUR 693.3 million ('all farms') when compared to the previously applied Single Farm Payment Scheme. A comparison between farms with and without livestock shows a shift towards the latter. This is attributable to the animal premiums that are incorporated into the single farm payments, which have now been transferred to all farms via the land formula, as well as the fact that with the area-based payment scheme, the number of farms eligible for payment that have no animals shows stronger growth. With operations that keep sheep and goats, the picture is quite different. If all operations are considered that keep sheep, the increase in payment is low or, in the case of goat farming, even negative. In many of these farms, other farming sectors led to a relatively high farm payment. The increasing degree of specialisation goes hand in hand with a growing share of livestock units in sheep or goat farming. With these farms, the single farm payment was frequently below average – the amount of payment increases correspondingly when the area-based payment scheme is applied.

After the introduction of the area-based payment scheme the increasing number of farms leads to a decline in the value of direct payments per farm when compared to the total payment volume (Figure 2). This trend is particularly noticeable in the many farms without livestock due to the more than 80 per cent increase in the number of farms entitled to receive payments (wine and fruit production operations). The situation is somewhat different where sheep and goat farms are concerned; depending on the type of operation, for the former the levels of payment received can even be increased.

Municipalities with pronounced arable or cattle farming

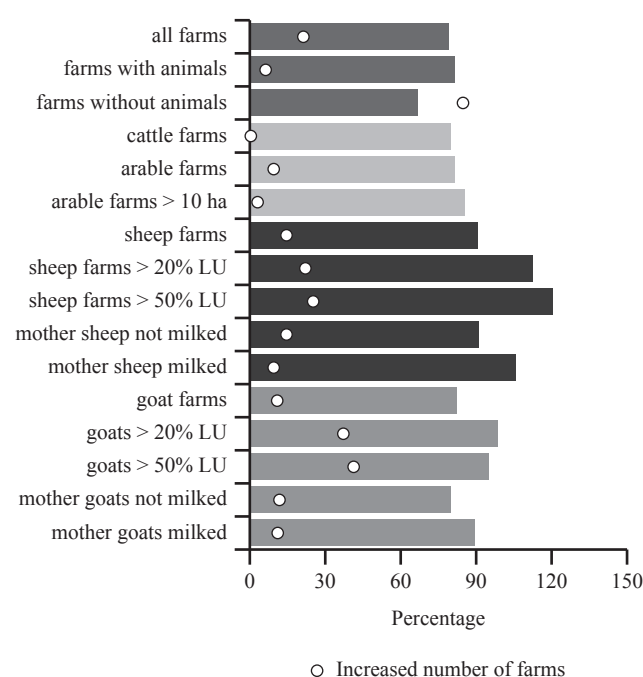


Figure 2: Change by farm category in the direct payment level per farm in Austria after the introduction of the differentiated area-based payment scheme compared to the Single Farm Payment scheme (including dairy and suckler cow premiums), 2011. The points represent the increase in the number of eligible farms in each of the farm categories.

LU: livestock unit

Source: own calculations based on IACS data, 2011

(e.g. in the foothills of the Alps, in valleys and basins), a decline in the volume of payments is to be expected (Figure 3). The extent to which the payments either increase or decline in a municipality after introduction of the area-based payment scheme depends not only on the previous amount of single farm payments, but primarily on the particular structure of the agricultural land. In the calculations, it was assumed that in future land with permanent crops would also be eligible to receive an area-based payment, which would increase the area for which payments can be received.

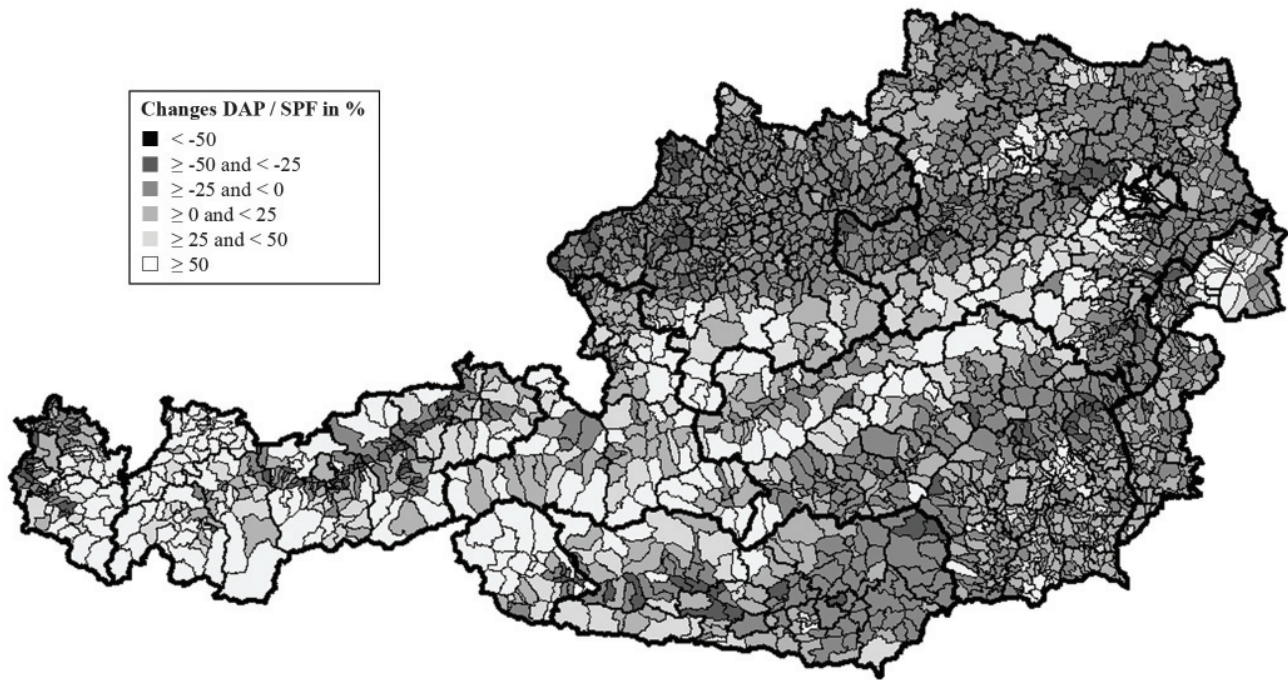


Figure 3: Change in the amount of payments at municipal level in Austria after changing from the Single Farm Payment Scheme to the area-based payment scheme.

DAP: Differentiated Area Payment; SPF: Single Farm Payment
Source: own composition based on IACS data, 2011

Discussion

These calculations are based on a series of assumptions which may even deviate further from the final formulation of Pillar 1 of the CAP and thus from the direct payments (e.g. the definition of areas for which payments can be received, the payment amount per category). Nevertheless, the two calculations (farm models, IACS evaluation) still allow several fundamental statements to be made on the switch from the Single Farm Payment Scheme, taking into account the coupled animal premiums, to an area-based payment model:

- Owing to the low budget and the increased number of applicants, lower payments per farm should generally be assumed;
- There will be a tendency for payments to be shifted towards more less extensively managed farm operations;
- The extent to which the changed direct payments will affect a farm depends heavily on the previous value of the farm payment entitlement – i.e. every operation requires separate analysis;
- The structure of the agriculturally utilised area (arable land, intensively or extensively farmed grasslands) affects the value of the new area-based payment entitlement;
- Besides changes in price and the management skills of farmers, the changed architecture (e.g. discontinuation of the suckler cow payment) may lead to a change in the relative competitiveness in individual agricultural sectors.

When interpreting the results, it is necessary to keep in mind that this study is based on a static method of analysis, i.e. no assumptions were made regarding adjustment steps

taken by the farms. The final level of the area payments will only be known after the next multiple application in 2014. According to Goldberger (2014), various analyses expect a premium per hectare between EUR 270 and EUR 280. In order to receive direct payments via Pillar 1 the farmers will have to comply with ‘cross compliance’ rules that cover, for example, animal and health protection or environmental requirements. Additionally, up to 30 per cent of the basic area payment will constitute a ‘greening’ component designed to shift the agricultural sector in a more sustainable direction (EC, 2011b). In Austria this will include, for example, participation in the equivalent measures of the Austrian agro-environmental programme (ÖPUL), crop rotation requirements, preservation of permanent pastures or the provision of 5 per cent of ecological focus areas. To avoid hardship the amount of the direct payments will be gradually amended over the coming years until 2019.

It is also still unclear in what way the specific support measures of Pillar 2 of the CAP will be defined and how much funds these will involve. As in the past the second pillar of the CAP represents a core element within the Austrian agricultural policy. Altogether EUR 8.8 billion is allocated by the EU for the period 2014-2020 and, including the co-financing contribution from the Federal state of Austria and its provinces, more than 61 per cent of the overall budget will be devoted to Pillar 2. Particularly for farms managed extensively, including many sheep and goat farms, agro-environmental and compensatory payments for less favoured areas are of high importance. It can be assumed that because of a reduction of the overall budget these measures will also be endowed with less financial support although, as described above, at least in the case of less intensively run farms these losses can be compensated at least to a certain extent by gains from Pillar 1.

References

- BMLFUW (2008): Deckungsbeiträge und Daten für die Betriebsplanung 2008 [Gross margins and data for operational planning]. Wien: BMLFUW, 188-191.
- BMLFUW (2012a): Lämmer- Ziegen- und Schafmilchproduktion 2011 – Ergebnisse der Betriebszweigauswertung aus den Arbeitskreisen. [Lamb goat milk and sheep milk production 2011 – Results of the branch evaluation of working group farms] Wien: BMLFUW, 15-33.
- BMLFUW (2012b): Die Eckpunkte für ein neues Regionalmodell. [The principles of the new regional model] [www document]. <http://www.lebensministerium.at/land/eu-international/gap/gap-2020/regionalmodell.html> (accessed 10 November 2012).
- EC (2011a): Proposal for a Regulation of the European Parliament and of the Council establishing rules for direct payments to farmers under support schemes within the framework of the Common Agricultural Policy. COM(2011) 625 final. Brussel: European Commission.
- EC (2011b): Commission staff working paper - impact assessment: Common Agricultural Policy towards 2020: Annex 2: Greening the CAP. SEC(2011) 1153 final/2. Brussel: European Commission.
- Goldberger, R. (2014): Welche Direktzahlungen bekomme ich? [What kind of direct payments will I receive?] *Der fortschrittliche Landwirt*. No. 5/2014. 8-9.
- Götzl, M., Schwaiger, E., Sonderegger, G. and Süßenbacher, E. (2011): Ökosystemleistungen und Landwirtschaft - Erstellung eines Inventars für Österreich. [Ecosystem services and agriculture – Generation of an inventory for Austria]. Report 0355. Wien: Umweltbundesamt.
- Hambrusch, J. and Kirner, L. (2008): Wirtschaftlichkeitsaspekte der Schafmilchproduktion in Österreich. [Economic aspects of sheep milk production in Austria], in proceedings of the International Conference on Dairy Sheep in Berlin, 17-19 October 2008. Berlin: Deutsche Gesellschaft für Züchtungskunde, 16-26.
- Hofreither, M.F. (1993): Landwirtschaft, Landschaftspflege und Tourismus. [Agriculture, Landscape Management and Tourism]. Diskussionspapier Nr. 22-W-93. Wien: Institut für Wirtschaft, Politik und Recht, Universität für Bodenkultur Wien.
- Kirner, L. (2007): Analyse der Wettbewerbsfähigkeit der Milchproduktion in Österreich zur Abschätzung des Produktionspotenzials nach natürlicher Erschwernis. [Competitiveness of milk production in Austria as basis for an assessment of the production potential in less favoured areas]. *Die Bodenkultur* **58**, 5-14.
- Statistics Austria (2012): Versorgungsbilanz für Rohmilch und Milchprodukte 2006 bis 2011. [Supply balances of raw milk and milk products 2006 to 2011] [www document]. http://www.statistik.at/web_de/statistiken/land_und_forstwirtschaft/preise_bilanzen/ (accessed 18 December 2012).