Future CAP: Additional Scenario Analysis



Analysis of the consequences of using a \le 50 per hectare rate for the rough grazing land-type in a two-region basic payment scheme

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1 INTRODUCTION

This note presents an analysis of the use a €50 per hectare rate for the rough grazing (RGR) land type. The analysis uses the same methods and assumptions of the Phase 1 Modelling to allow direct like for like comparisons but supplements these with further analysis that considers the use of a stocking rate (SR) based minimum activity criterion (see Section 3).

The key assumption of the scenario is that a decision on the RGR rate drives the balance of the budget between the two regions. That is, as the rate increases from €27/ha to €50/ha all the additional funds are provided by decreasing the budget for the combined Arable and Permanent Grassland land type.

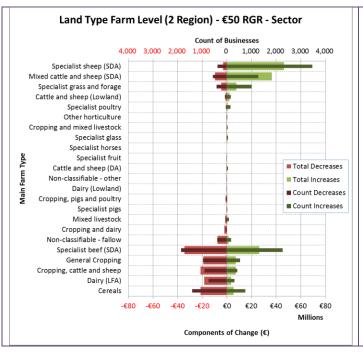
2 €50/HA RGR SCENARIO RESULTS

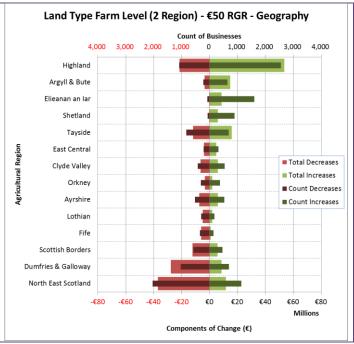
Table 1 summarises the overall outcomes for the €50/ha RGR scenario. The budget for RGR has increased from €75M in the €27/ha RGR scenario to €139M with a reduction for the other region from €566M to €503M. Overall redistribution is increased from €252M to €292M, and the percentage of gaining businesses in the current SFPS population declines from 62% to 57%.

Table 1

Land Type	Wt	Budget	Rate	Increase	Decrease	Redistribution	% SFPS Popn Gains
Arable and PGRS	78.31	€502,893,493.57	€283.60	€146,412,198.07	61.46.412.040.51	€292,825,046.57	57%
RGR	21.69	€139,282,657.59	€50.00		-€146,412,848.51		5/%

For the sectoral, geographical and size class effects see Figure 1 with the results also tabulated in Tables 1 to 4. The overall effect of the €50/ha rate for RGR is to generate larger increases (and to offset some reductions) for business types and regions with larger shares of the RGR land type. Larger increases occur for Specialist Sheep, Mixed Cattle and Sheep and Specialist Grass and Forage. Larger reductions occur for Cereals, Cropping Cattle and Sheep, Dairy (LFA), General Cropping and Specialist Beef. For size classes the use of a €50/ha rate for the RGR land type means smaller increases in net benefits for businesses less than 50 ha, a move from net gain to net loss for those in the 50-100 ha class, larger net reductions for the 100-150 ha, 150-200 ha and 200-250 ha classes and the near quadrupling of net increase for businesses over 250 ha. The changes vs. the €27/ha RGR scenario are set out in an Appendix to this paper.





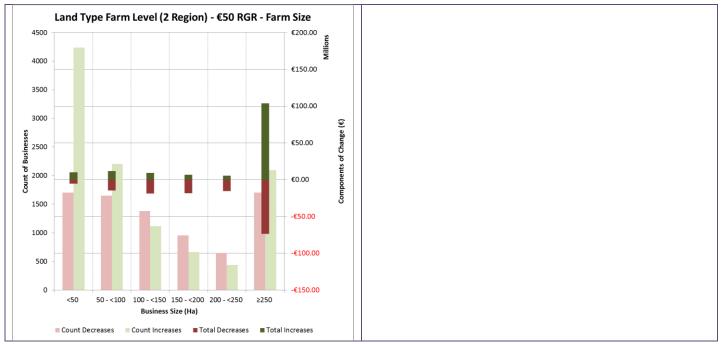


Figure 1

Table 2: Sectoral outcomes for the two-region, €50/ha RGR scenario

Main Farm Type	Total Decreases	Total Increases	Count Decreases	Count Increases	Net Change
Cereals	-€21,372,960	€5,444,109	1,403	749	-€15,928,851
Dairy (LFA)	-€18,484,427	€3,443,028	743	304	-€15,041,400
Cropping, cattle and sheep	-€21,505,838	€7,237,462	912	423	-€14,268,376
General Cropping	-€19,094,276	€7,205,463	964	534	-€11,888,812
Specialist beef (SDA)	-€34,364,422	€26,187,001	1,858	2,266	-€8,177,421
Non-classifiable - fallow	-€7,708,041	€1,378,539	397	165	-€6,329,502
Cropping and dairy	-€2,035,383	€47,164	51	9	-€1,988,220
Mixed livestock	-€1,241,462	€427,882	57	80	-€813,580
Specialist pigs	-€309,618	€47,137	14	17	-€262,481
Cropping, pigs and poultry	-€744,253	€516,206	49	12	-€228,047
Dairy (Lowland)	-€220,104	€23,229	7	3	-€196,875
Non-classifiable - other	-€123,823	€931	8	2	-€122,891
Cattle and sheep (DA)	-€380,255	€263,335	21	48	-€116,920
Specialist fruit	-€3,312	€3,539	3	1	€227
Specialist horses	€0	€28,054	0	9	€28,054
Specialist glass	-€143,378	€279,717	22	48	€136,339
Cropping and mixed livestock	-€58,518	€208,397	8	35	€149,879
Other horticulture	-€93,269	€256,364	17	25	€163,095
Specialist poultry	-€250,530	€634,695	47	141	€384,165
Cattle and sheep (Lowland)	-€1,119,268	€2,188,558	83	152	€1,069,290
Specialist grass and forage	-€4,498,870	€7,697,690	421	1,004	€3,198,820
Mixed cattle and sheep (SDA)	-€9,666,237	€36,594,795	572	1,268	€26,928,558
Specialist sheep (SDA)	-€2,994,601	€46,298,902	376	3,462	€43,304,301
All Types	-€146,412,849	€146,412,198	8,033	10,757	-€650

Table 3: Regional outcomes for the two-region, €50/ha RGR scenario

AgRegion	Total Decreases	Total Increases	Count Decreases	Count Increases	Net Change
North East Scotland	-€37,099,496	€11,808,909	2,037	1,138	-€25,290,588
Dumfries & Galloway	-€27,778,436	€8,640,090	1,028	693	-€19,138,346
Scottish Borders	-€12,230,929	€5,780,953	575	459	-€6,449,976
Fife	-€6,073,445	€950,752	344	144	-€5,122,693
Lothian	-€5,004,345	€1,969,680	300	178	-€3,034,665
Ayrshire	-€7,307,764	€5,902,460	519	533	-€1,405,304
Orkney	-€3,309,478	€1,933,867	307	374	-€1,375,611
Clyde Valley	-€6,494,583	€5,986,033	427	537	-€508,550
East Central	-€4,067,591	€4,777,796	210	318	€710,205
Tayside	-€11,671,096	€15,854,413	835	688	€4,183,317
Shetland	-€211,942	€5,845,954	68	892	€5,634,012
Elieanan an Iar	-€69,400	€8,593,502	82	1,604	€8,524,102
Argyll & Bute	-€3,487,913	€14,711,861	218	644	€11,223,948

AgRegion	Total Decreases	Total Increases	Count Decreases	Count Increases	Net Change
Highland	-€21,606,432	€53,655,929	1,083	2,555	€32,049,497
All Regions	-€146.412.849	€146.412.198	8033	10757	-€650

Table 4: size class outcomes for the two-region, 50€/ha RGR scenario

Size Class (ha)	Total Decreases	Total Increases	Count Decreases	Count Increases	Net Change
<50	-€5,465,344	€9,910,989	1,705	4,240	€4,445,645
50 - <100	-€14,749,080	€11,681,595	1,647	2,205	-€3,067,485
100 - <150	-€18,823,550	€9,060,137	1,377	1,118	-€9,763,413
150 - <200	-€18,480,702	€6,680,511	952	662	-€11,800,191
200 - <250	-€15,284,803	€5,433,264	650	438	-€9,851,539
≥250	-€73,609,370	€103,645,702	1,702	2,094	€30,036,333
All Sizes	-€146,412,849	€146,412,198	8,033	10,757	-€650

3 ALTERNATIVE BUDGET OPTIONS

It has been suggested that this increase in rate for RGR could be achieved by setting a sufficiently high SR threshold on an activity criterion to ensure that the area of the RGR region is reduced. The implications of this option are explored in this section.

Given the increase in rate from €27/ha to €50/ha is an increase of 85%, the reduction in area would need to be 43% to balance the budget. The area of RGR currently within the SFPS claims is 2.785 million hectares, so a 43% reduction is 1,186,482 hectares. Drawing on the parallel analysis being conducted on SR rates and areas the SR needed to achieve this reduction from existing claimants can be estimated (see Figure 2). So considering only existing claimants the SR threshold would be close to 0.06 lsu/ha.

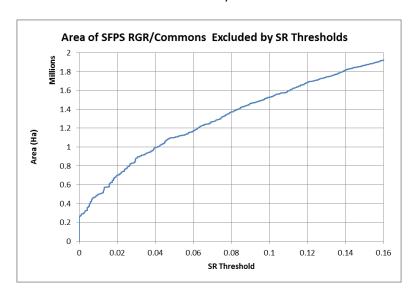


Figure 2

This threshold would, however, need to be raised were additional RGR land type land included. Estimates made for those businesses that submit SAF but do not claim SFPS (considered those most likely to be included in a new Basic Payment Scheme) are that 21,290 ha have a SR greater than the 0.06 lsu/ha threshold. This is a relatively small area and would not increase the required activity threshold markedly. For the other RGR/Commons that could be included there are potentially large areas but most would be excluded by a SR threshold of 0.06.

The threshold value could, however, be affected by other factors:

Environmental Designations

Drawing on previous analysis of stocking rates for environmentally designated areas in 2009 it is possible to suggest that there are likely to be substantial areas where the SR considered appropriate is likely to be below a threshold of 0.06 lsu/ha. In 2009 of the 1.147M ha of all land with environmental designations, where the SR was known, only 410,598 ha had an SR of greater than 0.06 lsu/ha and given continued destocking this area may to have decreased. This means that, at least potentially, in 2009 736,566 ha could have made a case for inclusion within an area-based payment scheme with derogation from an SR activity criterion on the basis of environmentally appropriate management. From another analysis with 2011 data it was found that approximately 80% of the designated area is within businesses submitting a SAF and 59% are part of businesses submitting SFPS claims. Furthermore 86% of designated sites are predominantly RGR to which the minimum activity criterion would apply (92% when considering only eligible land uses). This means that designated areas are likely to be a major part of the RGR land type payment region. Taking the SFPS/SAF and land use shares together with the previous estimates of designated area with an SR less than 0.06 Isu/ha then it is possible to estimate that between 372,000 ha and 504,000 ha of RGR land could be in businesses that may seek such derogation. Inclusion of this area implies the exclusion of other areas of RGR that do not have environmental designations, otherwise the budget for RGR would have to rise to maintain the rate per ha. To exclude the additional areas necessary the SR threshold for existing SFPS claimant s would have to rise to between 0.10 lsu/ha and 0.12 lsu/ha. To be more definitive on these effects a further analysis incorporating land use and SR for designated sites would be desirable but the existing evidence provides a clear statement of the potential issue and its likely magnitude.

Business Adaptation

Depending on how the regulations were implemented it would be possible for those businesses that currently choose to stock below the carrying capacity of their land to increase stocking rates to ensure that land is not excluded on the basis of activity. It has not been possible to quantify in how many cases this would occur but it is possible to estimate the additional numbers of livestock needed to meet a threshold. For all businesses with a SR of less than 0.06 lsu/ha then it would require 48,537 sheep with lambs. This is an increase of 0.7% of the national flock as reported in the 2012 census results (ERSA 2013). This is substantially less than the reduction in sheep numbers over the period of the current decoupled SFPS.

Taken together, these two factors mean that it is unlikely that an SR based activity criterion alone would be effective in reducing the area of RGR land type substantially as required to balance the budget. Environmental designations in particular mean that the threshold value would need to be set at a level that would be difficult to justify as a minimum activity threshold rather than being seen as a *de facto* recoupling of payment based on intensity of production. The potential for management adaptation in all but the most marginal circumstances means that the eligible area will remain as current or increase. It is also difficult to reconcile the outcome of excluding active farmers and crofters on the most marginal lands to increase support for those with better quality though still limited resources.

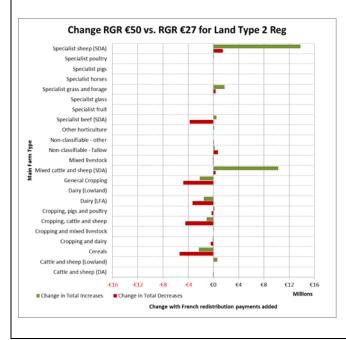
APPENDIX – CHANGE VS. THE €27/HA RGR SCENARIO

This appendix sets out the differences between the €27/ha RGR and €50/ha RGR scenarios for the two region land type regionalisation. This is presented as it makes clearer the differences between the two scenarios by showing the effects of the additional €23 per RGR ha. This in no way implies that the €27/ha RGR scenario is preferred, has the backing of Scottish Government or is a baseline against which other scenarios necessarily have to be compared. The comparison is deliberately included as an Appendix so that the overall outcomes of the €50/ha RGR scenario are

The comparison is deliberately included as an Appendix so that the overall outcomes of the €50/ha RGR scenario are presented in the same way as other scenarios. However, since this scenario has been suggested to address particular concerns the change analysis is appropriate as it is thereby possible to disentangle the specific effects of the increased RGR rate.

The following figures present the effects of the increase in RGR rate to €50/ha using the same conventions as for the French Redistribution paper. The green bars show the change in increases – that is a positive green bar means that the increases are larger, whereas a negative green bar means the increases are smaller. The red bars show the changes in reductions – here positive bars mean the reductions are smaller and negative bars mean the reductions are larger.

For sectors there is a minimal effect in making reductions smaller (positive red bars) but the largest effect by enlarging the existing increases for the Specialist Sheep and Mixed Cattle and Sheep Businesses. Without other restrictions on budgets this would be paid for by smaller gains or larger reductions for most other sectors, especially Specialist Beef, General Cropping, Dairy (LFA), Cropping Cattle and Sheep and Cereals. There are several regions where there is a small enlargement of increases but one region (Highland) stands out as seeing very large net gains from the use of a €50/ha RGR rate. Regions facing larger reductions are North East Scotland and Dumfries and Galloway but larger reductions (even if not greatly so) are near ubiquitous. For size classes it is only the >250 ha size that sees any positive change and this only in enlarging the increases delivered by the use of a €27/ha RGR rate. Note in particular that the largest reduction is also experienced by the >250 ha size class but that gains are smaller and reductions larger for all the smaller size classes. The change data that supports these figures is tabulated below.



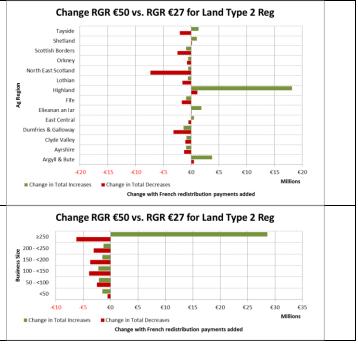


Figure 3

Table 5

Change €50/ha RGR vs. €27/ha RGR – 2 Region – Land Type							
Sector (Main Farm Type)	Change in Total Decreases	Change in Total Increases	Change Count	Change Count	Net Change		
			Decreases	Increases			
Cattle and sheep (DA)	-€62,968	-€44,413	40	-2	-€107,380		
Cattle and sheep (Lowland)	-€51,185	€587,239	163	-3	€536,054		
Cereals	-€5,392,272	-€2,299,328	2461	-345	-€7,691,601		
Cropping and dairy	-€451,613	-€103,926	94	-8	-€555,539		
Cropping and mixed livestock	-€2,831	€21,375	16	0	€18,544		
Cropping, cattle and sheep	-€4,464,102	-€1,073,821	1689	-135	-€5,537,923		
Cropping, pigs and poultry	-€321,989	€172,156	80	-18	-€149,834		
Dairy (LFA)	-€3,311,190	-€1,538,324	1378	-108	-€4,849,514		
Dairy (Lowland)	-€39,851	-€19,946	12	-2	-€59,798		
General Cropping	-€4,792,789	-€2,175,857	1644	-284	-€6,968,646		
Mixed cattle and sheep (SDA)	€352,375	€10,257,790	1163	19	€10,610,166		
Mixed livestock	-€98,000	-€111,886	113	-1	-€209,886		
Non-classifiable - fallow	€677,603	€216,344	793	-1	€893,946		
Non-classifiable - other	€22,473	-€321	16	0	€22,152		
Other horticulture	-€2,088	€86,133	33	-1	€84,045		
Specialist beef (SDA)	-€3,770,711	€479,870	3471	-245	-€3,290,841		
Specialist fruit	-€1,914	-€501	5	-1	-€2,415		
Specialist glass	-€36,299	-€39,237	39	-5	-€75,536		
Specialist grass and forage	€349,960	€1,765,630	826	-16	€2,115,590		
Specialist horses	€0	-€5,441	0	0	-€5,441		
Specialist pigs	-€24,799	-€14,040	27	-1	-€38,838		
Specialist poultry	-€1,081	€42,558	89	-5	€41,477		
Specialist sheep (SDA)	€1,458,183	€13,763,034	938	186	€15,221,217		

Table 6

Change €50/ha RGR vs. €27/ha RGR – 2 Region – Land Type								
Agricultural Region	Change in Total Decreases	Change in Total Increases	Change Count Decreases	Change Count Increases	Net Change			
Argyll & Bute	€520,083	€3,742,949	475	39	€4,263,031			
Ayrshire	-€1,261,147	-€918,044	946	-92	-€2,179,191			
Clyde Valley	-€1,052,135	-€857,698	782	-72	-€1,909,833			
Dumfries & Galloway	-€3,178,426	-€1,379,115	1955	-101	-€4,557,540			
East Central	-€476,906	€496,200	390	-30	€19,294			
Elieanan an Iar	€78,358	€1,853,737	219	55	€1,932,095			
Fife	-€1,674,174	-€905,816	594	-94	-€2,579,990			
Highland	€1,118,770	€18,135,115	2188	22	€19,253,885			
Lothian	-€1,562,882	-€592,741	529	-71	-€2,155,623			
North East Scotland	-€7,359,760	-€516,151	3717	-357	-€7,875,911			
Orkney	-€772,859	-€519,185	545	-69	-€1,292,044			
Scottish Borders	-€2,453,528	-€926,676	1062	-88	-€3,380,204			
Shetland	€132,794	€1,026,020	215	79	€1,158,814			
Tayside	-€2,023,277	€1,326,494	1473	-197	-€696,783			

Table 7

Change €50/ha RGR vs. €27/ha RGR – 2 Region – Land Type									
Size Class	Change in Total Decreases	Change in Total Increases	Change Count	Change Count	Net Change				
			Decreases	Increases					
<50	-€559,498	-€1,481,699	199	-199	-€2,041,197				
50 - <100	-€2,507,892	-€2,109,856	271	-271	-€4,617,748				
100 - <150	-€3,900,736	-€2,249,129	243	-243	-€6,149,866				
150 - <200	-€3,685,819	-€1,496,927	137	-137	-€5,182,746				
200 - <250	-€3,084,717	-€1,268,879	104	-104	-€4,353,596				
≥250	-€6,226,425	€28,571,578	22	-22	€22,345,153				