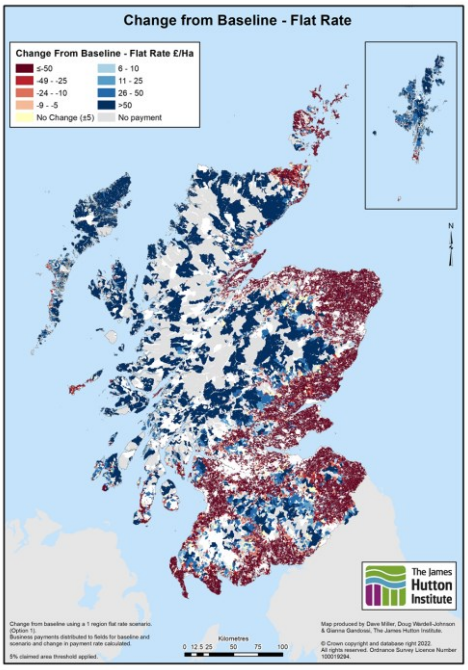
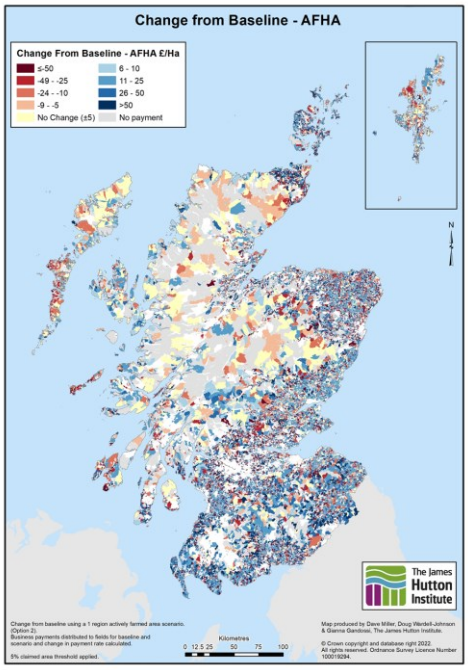
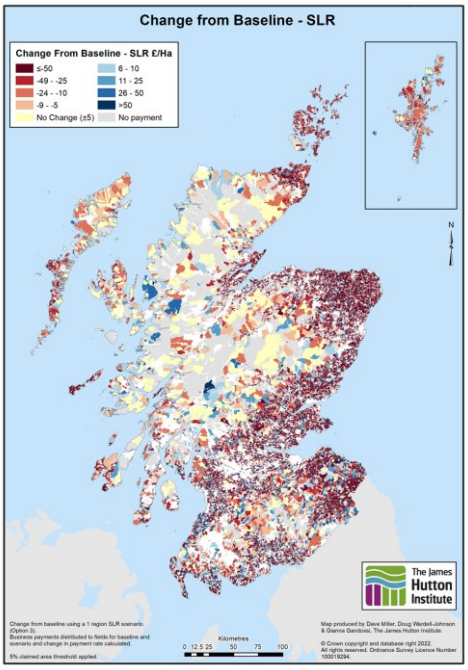
SRUC

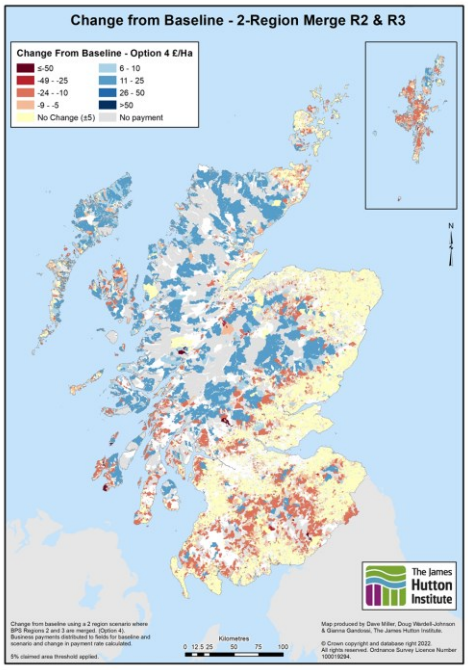
Economic Advice & Related Services to Support Development of a New Rural Support Scheme for Scotland RESAS/005/21

The James Hutton Institute









Basic Payment Regionalisation Options – Analysis of Spend and Redistribution Implications

Basic Payment Regionalisation Options – Analysis of Spend and Redistribution Implications

An output to RESAS as part of commissioned project on Economic Advice & Related Services to Support Development of a New Rural Support Scheme for Scotland

Output Ref: RESAS/005/21 – W6

Keith Matthews[1], Douglas Wardell-Johnson[1], Dave Miller[1], Steven Thomson[2], and Andrew Moxey[3]

June 2022

(Updated Jan 2023)

[1] JHI
[2] SRUC
[3] Pareto Consulting

Research funded through grants RESAS/005/21, JHI-C3-1, SRUC-C3-1

Key Points

- The current baseline of three payment regions can be modified in various ways. Selected different one, two and three region structures are presented here, with some further variations to budgets and/or payment criteria. The options include: (1) a single flat payment rate across all hectares; (2) a single flat rate payment scaled back to'actively farmed hectares'; (3) a single flat rate payment based on standard labour requirement; (4) a 2 region model where current R2 and R3 are merged; (5) the 2 regions model with SUSS budget included; (6) a new 3 region model where the current R1 is split into rotational cropland and permanent grass and the current R2 and R3 are merged; (7) Option 6 including SUSS budget.
- The relative payment rates for different regionalisation options (including with only 50% of the existing budget) are summarised in Table 1.

Table 1: Budgets, payment rates per region and paid area per Option for 100% and 50% of assumed budgets.

Regionalisation option		100% Budget: £405m			50% Budget: £203M			
		Payment Rates (£/ha)			Payment Rates (£/ha)			Paid Area
No	Name	R1	R2	R3	R1	R2	R3	(M ha)
0	Baseline	£211	£42	£12	£106	£21	£6	3.8
1	1 Region - Flat	£105			£53			3.8
2	1 Region - AFHA	£236			£118			1.7
3	1 Region - SLR	£8,259 per FTE			£4,130 per FTE			3.8
4	2 Region - Merge R2&R3	£211	£24		£106	£12		3.8
5	2 Region - Merge R2&R3 + SUSS	£211*	£27*		£106*	£13*		3.8
		R1a	R1b	R2/3	R1a	R1b	R2/3	
6	3 Region – Merge R2&R3 (R3), split R1 into rotational cropland (R1) permanent grass (R2)	£211	£211	£24	£106	£106	£12	3.8
7	3 Region – option 6 +SUSS	£211	£211	£27	£106	£106	£13	3.8
		*budget £412m			*budget £206m			

- Each regionalisation options led to differing distributions of support across regions, farm types and farm sizes. These patterns are complex and best viewed in map, tabular and graphical form (see Appendices), but may be summarised briefly as follows.
- One region with a uniform, flat rate payment (£105/ha) is the simplest structure. It leads to significant support redistribution between recipients across regions, farm types and farm sizes. It also increases the budget share to the highest 1% of payment recipients (n=192) from 10% in the baseline to 24%. It also increases the budget share to the highest 1% of payment recipients from 10% in the baseline to 24%.
- Restricting single region payments to only 'actively farmed hectares' (defined by an effective stocking rate of 0.8LU/ha with a payment rate of £236/ha) curbs

regional redistribution, but still generates significant redistribution within farm types and sizes. The budget share of the top 1% of payment recipients remains at 10%.

- Making payments on a labour proxy (£8,239/FTE), rather than land, is a more radical alternative. It leads to significant redistribution towards horticulture, dairy and granivore farms. The budget share of the highest 10% of payment recipients (n=1,929) rises to 55%.
- Merging the current R2 and R3 regions (at £24/ha, or £27/ha if SUSS rolled-into budget) leads to more modest redistribution and keeps the budget share of the top 1% of payment recipients at around 10%.
- For each regionalisation option Figure 1 illustrates the net budget redistribution (black), budget gains (orange) and budget losses (blue) by size category, farm types and agricultural regions. Here it is apparent that a single region flat payment leads to significant redistribution from those with smaller claim areas to the larger land holdings that are largely specialist sheep or cattle and sheep businesses – generally located in regions with the highest density of R3 and R2 land. In contrast the single region – labour option has quite large distributiuons within size classes but large net gains for the specialist (intensive) horticulture, dairying and granivore sectors, with the regions with high densities of these farm types (Tayside, Dumfries and Galloway and Fife) benefiting the most.
- Figure 1 reveals that options 4 and 5 (merging R2 and R3) would be a simple evolution of the 3 region baseline model with redistribution limited to R2 and R3 lands. Option 6 & 7 would follow similar redistribution as option 4 & 5, with the only difference being delimitation of rotational cropping land and permanent grassland that would be supported at the same rate (the benefit is derived from alignment to conditionality options and ease of adjustments to coupled support budgets).
- In contrast options 1 and 3 (the single payment rate and labour payment) offer more radical changes to the support distribution model. The active farmed hectares (option 2) sits in the middle – but still would see significant movement of budget between business sizes. The consequences of any redistribution on the ability to engage in conditionality tiers needs consideration – evolution (4&5) versus revolution (1&3) or fairly radical change (3) in terms of redistribution.
- Different stocking density and standard labour requirement (SLR) thresholds could be used with the single region model to produce different payment distributions. However, all would encounter implementation complexity and could risk breaching WTO rules on coupled support unless based on historical rather than ongoing resource usage values. Moreover, a single region structure necessarily hinders spatial targeting of support to specific outcome objectives.

  It should be noted that none of the options considered materially affect the budget share of the smallest farms, but also that membership of the top 1% of payment recipients differs greatly under different options.

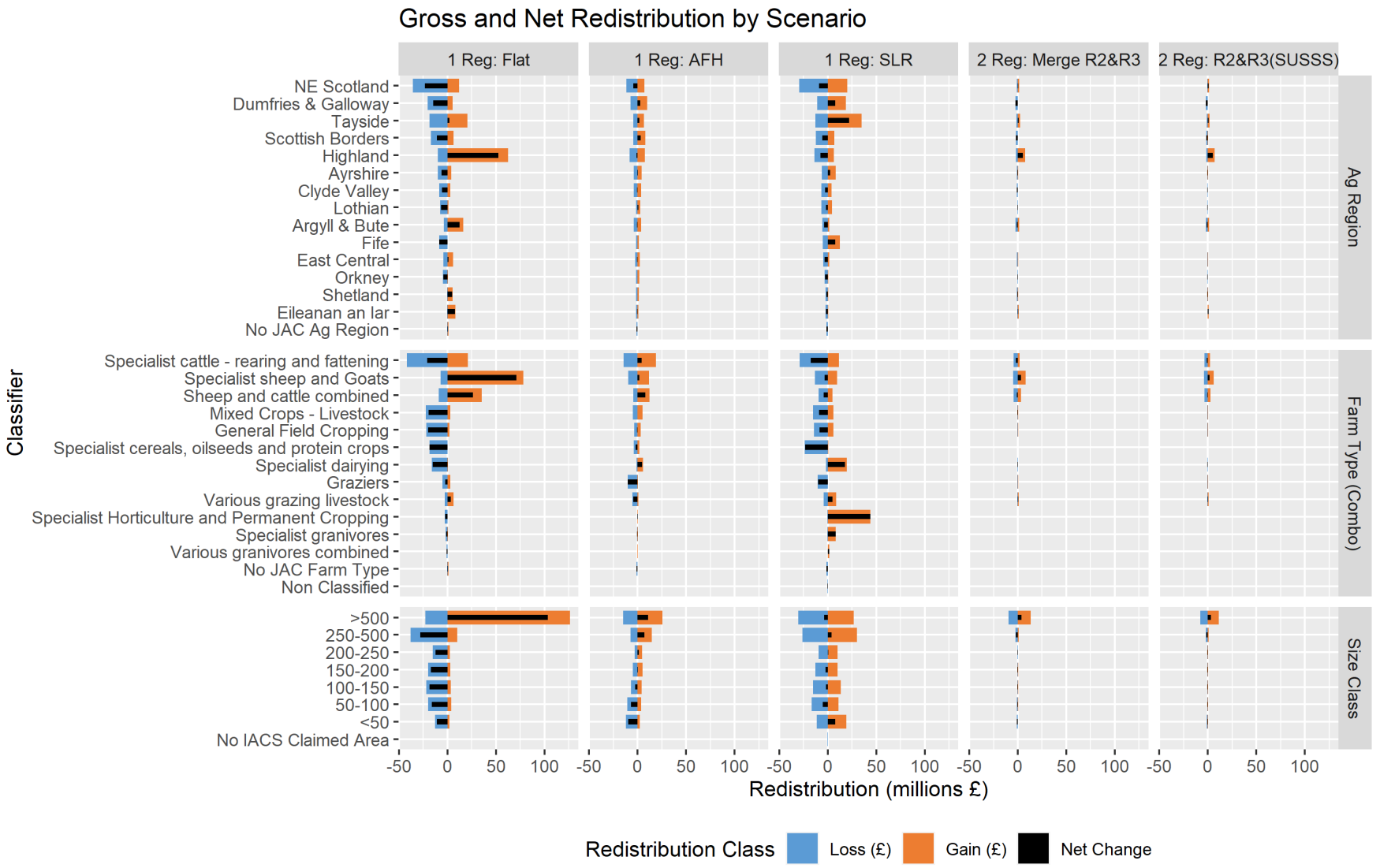


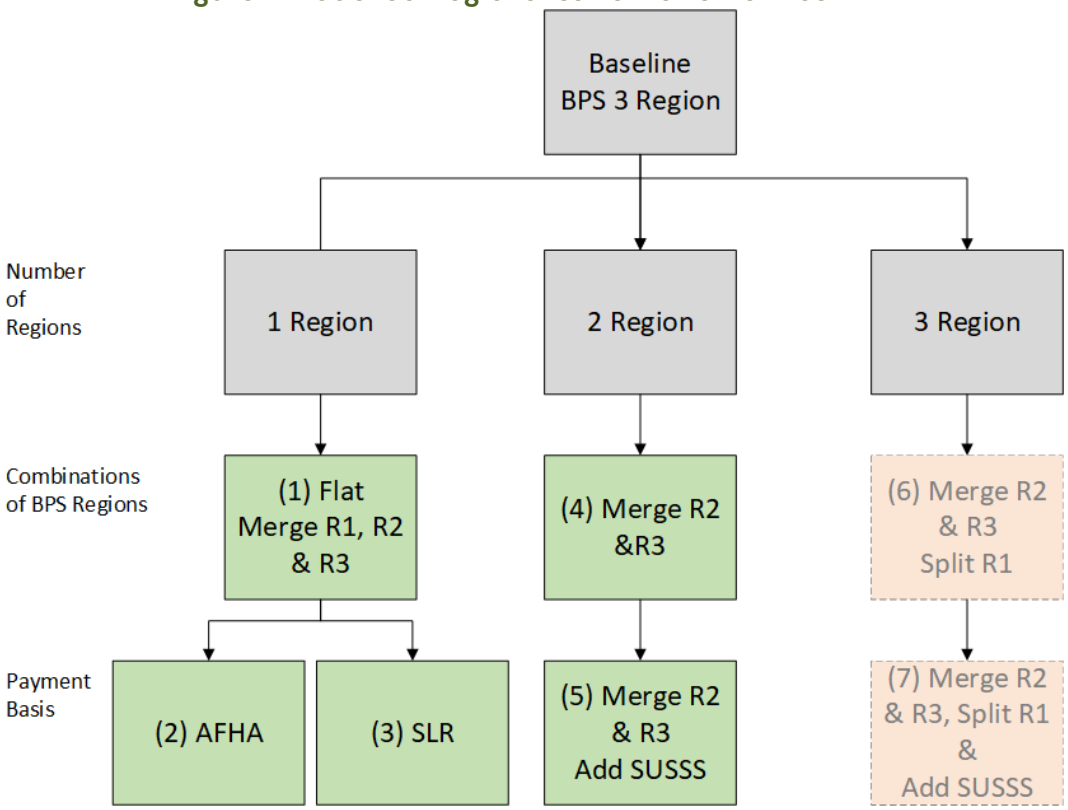
Figure 1 Redistribution (£m) by regionalisation option, showing monetary gains, losses and net impacts by size class, farm type and region

1 Introduction

2. Following discussion with RESAS, SG policy and RPID five options for regionalisation of "Basic Payments" were modelled. These are illustrated in Figure 2 and differ in the number of regions, the combinations of BPS regions, or in the basis on which funds are allocated within each region – specifically the Active Farmed Hectares (AFHA) and the Standard Labour Requirement (SLR) options. Note that a sixth option (Merge R2 and R3 and Split R1 into two regions) has been implemented but needs decisions on payment rates before it can be analysed. Variant options in which the VCS SUSSS budget is added to BPS are also included (5 and 7).

3. Further, following a request from RESAS and SG policy these options have also been modelled for 50% of the budget – but are not reported in any detail here, rather they appear in Appendix III – 50% Budget Comparison Charts.

Figure 2 Modelled 'regionalisation' alternatives



2 Data Analysis

4. The implementation of the options is presented in Table 2[1].

Table 2: Implementation of the regionalisation options

Option		Number of Regions	Payment Basis	Definition
No	Name			
0	Baseline	3	BPS regions	BPS rates
1	1 Region - Flat	1	Flat rate	Budget/BPS area
2	1 Region - AFHA	1	Stocking Rate & R1 Area	For R2&3 the eligible area is scaled back against SR=0.8LU/ha. Flat rate of £236/ha for all R1 and the scaled back area of R2 and R3[2].
3	1 Region - SLR	1	SLR	Payments based on SLR at £8,259 per FTE.
4	2 Region - Merge R2&R3	2	BPS regions	Combine R2 & R3 budgets to set single rate for the combined region.
5	2 Region - Merge R2&R3 add SUSSS	2	BPS regions	As (5) but adding the VCS SUSSS to the merged R2&R3 budget
6	3 Region - Combine and Split	3	BPS regions and Land Use	As (5) but split R1 rotational (730k ha) vs pastures (946k ha)
7	3 Region - Combine and Split add SUSSS	3	BPS regions and Land Use	As (6) but adding the VCS SUSSS to the merged R2&R3 budget

5. The payments per business were calculated for each option using those businesses with BPS eligible land claimed in 2019 as the population. Where, for any of the options, there was any change in the number of recipients this is noted in the options Interpretation notes.

6. As far as possible, the comparisons for the options have been made on a like-for-like basis, with the 2019 BPS *3-Region Baseline*, so that it is possible to be clear on the effects of a change to the basis or implementation of the regionalised support model. Where there are exceptions to this, they are also noted in the Options Interpretation notes (Section 4)[3].

7. The budget was fixed at the 2019 level - £405M (that includes BPS, Greening and FDRI). Thus, effects from any budget reduction are not considered. Indeed, since none of the options include payment threshold values (e.g., redistributive support)

[1] For Option 6 to be analysed the relative share of budgets between the two parts of current Region 1 will need to be defined otherwise the outcomes will be as for the two region Options 4 and 5.
[2] The basis and detailed analysis of the AFHA option is in Thomson et. al. 2022
[3] In a small number of cases (<50) there are mismatches in the data held between payments for BPS, Greening and FDRI and the BPS claimed area – this results in unrealistic rates in the baseline that means options comparisons are compromised.

then any reduction in budget would simply be reflected pro-rata in rates and payments per business.

8. The consequences of the payments options are reported in terms of **Budget**, **Rates** per Region or other basis, **Paid Area**, and **Count of Businesses** categorised by **gain**, **loss**, **no change**, **excluded**[4] and **not BPS**[5]. The analysis also summarises **Redistribution** (gross and that occurring between Ag Regions, Farm types and Size classes) and the **Distribution** of funds allocated to the top 1% of businesses with the largest payments, the top 10%, those above the median, and the bottom 10%.

9. Maps, comparisons and detailed charts for the performance of each option are included in, Appendix I – Change in Payment Maps, Appendix II – Option Comparison Charts, Appendix III – 50% Budget Comparison Charts, Appendix IV - Detailed Option Analysis Charts. These are based on the methods and charts used for the 2014 to 2019 CAP reform impacts analysis undertaken for the ARD stakeholders.

3 Results Summary

10. Table 3 shows the rates of payment for each of the regionalisation options. It is worth noting that the payment rate for the *1 Region - AFHA* Option is higher since the budget is allocated over a smaller area. For the *1 Region - SLR* option no rate per hectare is presented as this is not an area-based payment. The increase in payment rate for the merged Region 2 and Region 3 in Option 5 reflects adding funds to BPS from the VCS SUSS. In options 6 & 7 the assumption is that permanent grassland and rotational cropping would (initially at least) be afforded the same support rates, with the benefit arising from alignment with potential conditional options (i.e. on rough grazing, grassland and crop land) as well as the ability to adjust budgets based on coupled support decisions.

11. Note that for the baseline the payments rates reported in Table 3 are not the actual payment rates used in 2019 rather they are calculated from budgets and areas to allow a consistent comparison with those of the options. The actual payments[6] per businesses are used in the comparisons of the options versus the baseline.

[4] Those businesses that are either no longer qualify for payments or for which data is missing.
[5] Those businesses which while having BPS eligible land, do not receive BPS payments – though they may participate in other schemes e.g., those only currently active in Pillar 2.
[6] Actual payments incorporate many factors that cannot be incorporated in the estimations of payments per business for each payment option, so any estimates are necessarily indicative. The actual payments per business are though preferred as a basis for comparison as these do not rely on any assumptions or other caveats.

Table 3: Budgets, payment rates per region and paid area per Option

Option			Payment Rates (£/ha)			Paid Area
No	Name	Budget	R1	R2	R3	(M ha)
0	Baseline	£405M	£211	£42	£12	3.8
1	1 Region - Flat	£405M	£105			3.8
2	1 Region - AFHA	£405M	£236			1.7
3	1 Region - SLR	£405M	£8,259 per FTE			3.8
4	2 Region - Merge R2&R3	£405M	£211	£24		3.8
5	2 Region - Merge R2&R3 add SUSS	£412M	£211	£27		3.8
6	3 Region – Merge R2&R3 (R3), split R1 into rotational cropland (R1) permanent grass (R2)	£405M	£211'	£211'	£24'	3.8
7	3 Region – option 6 +SUSS	£412M	£211'	£211'	£27'	3.8

` Option 6&7 R1 = rotational cropland R2= permanent grass R3= rough grazing

12. The paid area for all options was constant at 3.8M ha except for the *1 Region – AFHA* Option where the area of grazing land was scaled back to 1.7M ha for estimating payments, though not necessarily for compliance purposes[7].

13. Table 4 classifies all the businesses (19,292) using their change in payments relative to the 2019 baseline.

Table 4: Counts of businesses classified by the nature of change per Option

Option		Business Counts					
No	Name	All	Gain	Loss	No Change	Excluded	Not-BPS
0	Baseline	-	-	-	-	-	-
1	1 Region - Flat	**19,292**	4,518	12,860	38	-	1,876
2	1 Region - AFHA	**19,292**	9,403	6,678	-	1,647	1,564
3	1 Region - SLR	**19,292**	4,998	12,191	-	227	1,876
4	2 Region - Merge R2&R3	**19,292**	2,892	7,872	6,652	-	1,876
5	2 Region - Merge R2&R3 add SUSSS	**19,292**	2,840	7,926	6,674	-	1,852
6&7	New 3 region model – split grass & crop and merge R2&3 (plus SUSS)	Same redistributions as Options 4 and 5					

14. The only option with more businesses gaining than losing was *1 Region - AFHA* (3). It should, however, be noted that if those with 'no change' were included then the *2 Region* options (4 and 5) also had more businesses gaining than losing support (~9,500)[8]. Both the *1 Region – Flat* (1) and the *1 Region - SLR* (2) see had over 12,000 businesses in the loss class, reflecting the more radical changes in the basis of payments implied by these options.

[7] Again, see the detailed analysis of the AFHA option is in Thomson et. al. 2022 [REF]

[8] No change occurs for those businesses with only Region 1 land present and thus unaffected by the merger or Region 2 and Region 3.

15. The 'Excluded' class (with no payment under an option) occurred either where there were issues in linking the business with June Census data (the source of the SLR figures) or when the option results in a zero payment– for example, under *1 Region – AFHA*, if no livestock are linked to the business then no payment for grazing land was estimated[9].

16. Table 5 presents the redistribution of funds associated with each regionalisation option. The Gross redistribution is sum of gains and losses[10] and gives an overall indication of how different the option is compared with the baseline. The Net redistribution is the sum of the gains and losses within each of the classifications used: Agricultural Region, Farm Type and Size. The net figure shows the movement of funds between geographical areas, parts of the agricultural sector and between businesses of different size. The difference between Gross and Net figures are the redistribution within the classes i.e., how much of the redistribution occurs between businesses with some degree of similarity either in terms of region, enterprise mix or extent.

Table 5: The magnitude and form of redistribution of funds per option

Option		Redistribution			
			Net (between classes)		
No	Name	Gross (All)	Ag Region	Farm Type (Combo)	Size Class
0	Baseline	N/A	N/A	N/A	N/A
1	1 Region - Flat	£302M	£162M	£202M	£202M
2	1 Region - AFHA	£119M	£18M	£37M	£37M
3	1 Region - SLR	£242M	£81M	£153M	£19M
4	2 Region - Merge R2&R3	£31M	£16M	£8M	£7M
5	2 Region - Merge R2&R3 add SUSSS	£27M	£14M	£5M	£7M
6&7	New 3 region model – split grass & crop and merge R2&3 (plus SUSS)	Same redistribution as Option 4 & 5			

17. Table 4 highlights that the options vary very considerably in the magnitude of redistribution they imply (over an order of magnitude) between the evolutionary changes via merging regions (the *2 Region* options) and the more radical changes implied by the other options, especially *1 Region- Flat* and *1 Region – SLR*.

18. While high levels of redistribution could preclude an option, on the basis that it would potentially destabilise the whole sector, the nature of the specific patterns of redistribution may mean that the disruption is an acceptable or even necessary trade-off in achieving other objectives. More detail on the nature of the

[9] These issues for Graziers would likely be dealt with via specific eligibility criteria or other means for an operational implementation of the option but this was beyond the scope of this analysis.
[10] Using absolute values i.e., disregarding the negative sign for loss values.

redistribution per option is provided in the Options Interpretation (Section 4), but since none of the options (except for *1 Region – SLR* and to all lesser degree *1 Region - AFHA*) have clearly articulated intervention logics it is challenging to make any judgment of efficacy versus redistributive disruption.

19. The *1 Region AFHA* option was somewhat of a middle ground with £119M of gross redistribution but with relatively low levels of net redistribution, particularly between regions. Redistribution was mainly within the Farm Type and Size classes. Since the *1-Region AFHA* option *de facto* recouples payments to production intensity it drives some of this redistribution, – thereby reversing the "flattening" of payments between businesses in the 2015 reforms. The *1 -Region -AFHA* option's intervention logic is to address a perceived lack of "farming" activity. Whether the degree of redistribution implied is necessary to address issues of "inactivity", is questionable since eligibility criteria or enhanced conditionality may deliver the same effects with less disruption. The *1 -Region – AFHA* option may be undesirable to policy officials if it discourages the appropriate intensity of land management required to deliver climate change or biodiversity benefits.

20. Table 6 shows the total payment and the share of the budget for groups of businesses ordered by the size of their payments. The Highest 1% equates to 192 business with the biggest payments, the highest 10%, 1,929 etc. This provides an overview of the distributional impacts of the regionalisation Options. Note that the population of businesses in each of the cohorts differ considerably between the regionalisation Options.

21. Reflecting different scales and production intensities, Table 6 highlights the wide disparities in payments per business in Scotland, with the budget for the highest 10% being between 113 and 423 times larger than the lowest 10%.

22. None of the options make any substantial difference to the 50% of recipients receiving the smallest payments. At most, 10% of funds get allocated to this group and the Lowest 10% only receive c.£1M or < less than 1% of the budget between them. For both the Highest 1% and 10% there are options that see their payments increase – the *1 Region - Flat* option more than doubles the payments made to the highest 1%. The *1 Region - SLR* option payments does likewise, but for a radically different population of businesses. Options merging BPS regions (4 and 5) see less change in distributions, though again individual businesses may see substantial change.

23. Options for capping, degressive payments and redistributive payments (to increase the payment rates for smaller business or provide enhanced rates per ha

for the first 'X' ha[11]), or specific small business schemes have been studied extensively.[12] However, these policy options do not appear to address the fundamental question of what quantified, and verified, public benefits are delivered by the business with the highest payments. With enhanced conditionality it may be argued that such businesses should be expected to delivery climate change and biodiversity outcomes that match their payments. For example, the highest 10% of *the 1- Region AFHA* recipients would need to deliver 43% of the overall burden of climate change mitigation and biodiversity outcomes for the sector.

Table 6: Shares of funding for percentile classes per option

Option		Total (£)				Budget Share (%)			
No	Name	Highest 1%	Highest 10%	Higher 50%	Lowest 10%	Highest 1%	Highest 10%	Higher 50%	Lowest 10%
0	Baseline	£41M	£169M	£366M	£1.4M	10%	42%	90%	0.35%
1	1 Region - Flat	£95M	£237M	£373M	£1.2M	24%	58%	92%	0.30%
2	1 Region - AFHA	£39M	£174M	£373M	£1.0M	10%	43%	92%	0.24%
3	1 Region - SLR	£89M	£221M	£384M	£0.5M	22%	55%	95%	0.13%
4	2 Region - Merge R2&R3	£42M	£170M	£365M	£1.5M	10%	42%	90%	0.37%
5	2 Region - Merge R2&R3 add SUSSS	£43M	£174M	£371M	£1.5M	11%	42%	90%	0.37%
6&7	New 3 region model –grass / crop / rough grazing (plus SUSS)	Same redistribution as Option 4 & 5							

4 Options Interpretation

This section highlights key elements from the Results Summary as a narrative and brings in key findings drawn from the three Appendices.

4.1 Option 1 – 1 Region Flat

24. This option represents the "simplest" option, effectively removing the need for differentiation within the payment's region. Yet, this still implies a series of decisions on which land should be included in any scheme. The option has the smallest number of businesses that gain (assuming that for 2-Region Options 'no-change' businesses are included in the gain class) and the largest number of

[11] Previous options considered enhanced payments for the first 56 ha as UK average business size.

[12] For example, as part of the 2016 Areas of Natural Constraints and subsequent LFASS options appraisals.

businesses facing losses. The redistribution is substantial (£308M versus a budget of £405M) and there is more redistribution between regions, farm types and size classes than within. The biggest gains are for: Highland region; Specialist Sheep and Sheep and Cattle businesses; and businesses over 500 ha (note that even for businesses between 250 and 500 ha there is a net loss of funding). The option greatly increases the funds allocated to the Highest 1% from 10% to 24%.

25. It can be concluded that while a single region system can be specified and analysed, the gains from simplification through removal of regions may be offset by the need for other measures that ensure the scheme meets its objectives. Furthermore, a single region also limits the flexibility of the scheme, losing the ability to geographically target funding to those areas where, pragmatically, the need for change in land management practice is greatest - or where the land has the maximum potential to deliver the technical efficiency, climate change and biodiversity benefits sought.

4.2 Option 2 – 1 Region Active Farmed ha

26. This option limits payments to 1.7 M ha of land but in doing so still manages to deliver 9,403 'gain' businesses with 6,678 'losing'. The option is moderately redistributive at a headline level, with £119M gross redistribution - mostly occurring within the regions or farm types. There is strong redistribution within farm types, especially those where there are substantial ranges of intensity of production such as, specialist sheep, combined sheep and cattle and specialist cattle - with more heavily stocked businesses benefiting most. It is also worth noting that there is substantial net redistribution (£17.8M) in favour of larger businesses (>250 ha) and with a net reduction of £9.6M net those businesses with <50 ha.

27. Despite the redistribution noted above, the *1 Region - AFHA* option results in a very similar distribution of support for payment percentile groups (Highest 1%, etc.), albeit the businesses included within the groups change substantially in favour of these with higher stocking rates.

28. The *1 Region - AFHA* option is an improvement over the *1 Region - Flat* option, but many of the potential benefits of are accrued at the expense of considerable increase in administrative complexity. This relates to establishing numbers and types of livestock present and defining "**grazed land**" actually used, rather than all the "**grazing land**" at their disposal. Such calculations need, minimally, to be made at holding level, otherwise business level calculations have the potential to generate windfall payments for land on which stock are never present.

29. The presence of an arbitrary threshold (0.8 LU/has) for stocking rates makes the option more likely (unless based on historical livestock numbers) to encourage

management decisions that seek to increase payments rather than those that are most appropriate to the deliver the mix market and non-market benefits desired. The option could see increasing stocking rates where the current stocking rate is under 0.8 LU/ha and carrying capacity allows. Where stocking rates are above 0.8 LU/ha then there is an incentive to increase the land at a business' disposal to increase payments regardless of the need for that land as part of the management regime.

30. The 1 Region – AFHA option by reducing payment rates for more lightly stocked land does not recognise that land may be legitimately and appropriately stocked at rates far lower than 0.8 LU/ha and that the land so managed may be delivering significant public value in terms of conservation of biodiversity. The question for such land is why then is its payment being scaled back?

31. The potential for some *de facto* recoupling of decoupled income support payments, without additional conditions embedded in this option has been highlighted as having potential WTO Green-box compliance issues.

4.3 Option 3 – 1 Region Standard Labour Requirement

32. In some ways this is the most radical of the Options being considered since it moves away from an area-based regional payment mechanism and instead proposed the use of estimates of labour input. Since actual labour input is unknown, the option uses the Standard Labour Requirement (SLR) estimated from the mix of agricultural activities present on the business[13].

33. The SLR option results in relatively few 'gain' (4,998) and large numbers of 'loss' (12,191) businesses, reflecting the change in the basis of allocation from land to labour. Redistribution was the second largest of the all the options considered (£242M of £405M) with great contrast in the types and extent of (net) redistributions, with size class at only £19M compared to £153M for farm types. The SLR option sees a radical increase in payments for some labour intensive farm types – such as Horticulture, Dairy and Granivores, with biggest losses witnessed in Specialist Cattle and Specialist Cereals. Note that for size class the low net change values hides very substantial but compensating redistributions within size classes. As implemented the *1 Region - SLR* option greatly concentrates funding with 55% of funding going to the Highest 10%.

[13] If implemented, it would be essential to check that the SLR calculations are appropriately calibrated and that all the activities beyond those associated with productivist agriculture are adequately represented in the SLR estimates per business.

34. It is worth noting that this implementation of an SLR-based option is the simplest possible using SLR and is thus like the *1 Region - Flat* option for area-based payments. It is likely that a much more sophisticated implementation based on SLR may be possible and might mitigate some of the undesirable features. It is also possible that the *1 Region - SLR* option was intended only as a basis for some of the budget being considered here (the share is undefined), perhaps just the "income support" part, with the remining funds to be allocated on a different basis. Clarification of intent and further analysis may be needed.

35. The increased support, even if only for the income support element, for labour intensive businesses could see some loss of conditionality-based leverage for other businesses. Further consideration of how this might affect changes to wider land management and the effectiveness of an SLR based scheme in delivering climate change and biodiversity objectives is needed.

36. Since an SLR-based allocation of funds has had much less study than area-based systems, it will be essential to consider possible unintended consequences. These would include the issues generated for sectors and regions with reduced funding and between sector spill-over effects. It will also be necessary to consider how increased funding would be deployed and how enhanced conditionality would be implemented (e.g. for horticulture businesses) to ensure they can contribute to the delivery of climate change and biodiversity objectives in line with the level of funding allocated.

4.4 Option 4 – 2 Region Merge BPS Region 2 and Region3

37. This option is a modest modification to the existing 3-Region model with the most substantial impacts being seen in the change in payment rates for Region 2 from £42/ha to £24/ha or £27/ha if the budget for VCS SUSS is added. There are limited numbers of businesses in which 'gains' occur (2,892) and these are concentrated in Highland and Western Isles with most being Specialist Sheep businesses and smaller numbers of Cattle and Sheep and Specialist Cattle businesses. In terms of size classes there are most 'gains' in the <50ha size class but comparable counts of gains in all size classes. There is a substantial population of businesses with no change (6,652). Gross redistribution is modest at £31M with between region (net) redistribution only accounting for 50% of the redistribution (£16M of £31M). The mapping in Appendix I – Change in Payment Maps is clear in showing the contrast between loss in areas dominated by Region 2 and gain in those where Region 3 was predominant, as would be expected.

4.5 Option 5 – 2 Region Merge BPS Region 2 and Region 3 add SUSSS budget

38. With only a change of £7M relative to Option 4 this option is distinguished only by the reduction in redistribution (£27M vs £31M) occasioned by increasing the rate of payment for the combined Region 2 and Region 3 to £27/ha from £24/ha. Despite the increase in payment rate, it is worth noting that the removal of SUSS does mean marginally more business are in the 'loss' category.

4.6 Options 6 & 7 – 3 Region Merge BPS Region 2 and Region 3 - Split Region 1 (without and adding SUSSS)

39. With no differential in support rates for the crop (R1a) and grass (R1b) regions created by splitting existing R1 then the outcomes are identical to Options 4 and 5. The attraction for this option is that it is likely that conditionality options may align themselves better to unified rough grazing plus differentiated permanent grassland and rotational cropland than to unifed crop and grassland plus differentiated rough grazing. Such an approach would enable conditionality options to be weighted based on these new regions, to better reflect national priorities and the opportunity costs of compliance based on relative land use intensity. A further conditionality benefit could be that recipients may be forced to undertake conditional actions on each of their businesses support 'regions' – thereby reducing the risk of conditionality only being undertaken on rough grazing and grassland areas.

40. Such delimitation of regions would further mean that rough grazing regions are dealt with equitably by moving away from historic production links. It is recognised that there may need to be capping on larger extensive rough grazing businesses (with savings recycled to increase overall rough grazing support).

41. A further potential benefit of these new regions could be in (re)allocation of coupled support budgets (e.g. a coupled protein crop payment could be funded out of the rotational cropping regional envelope).

5 Change in budget

42. In addition to changing the basis on which funding is distributed a supplementary analysis was undertaken to add in the consequences of a change in budget. The change in budget scenario analysesed was a 50% cut with a £203M budget.

43. The payment rates for the options are a function of budget divided by area or sum of FTEs, so budget cuts change payment rates in a simple directly proportional

way, there being no complications of thresholds, capping or degressivity in the options analysed to date. The rates for each option shown in Table 7.

Table 7: Budgets, payment rates per region and paid area per Option for 50% of assumed budgets

50% Budget Options			Payment Rates (£/ha)			Paid Area
No	Name	Budget	R1	R2	R3	(M ha)
0	50%-Baseline	£405M	£106	£21	£6	3.8
1	50% 1 Region - Flat	£405M	£53			3.8
2	50% 1 Region - AFHA	£405M	£118			1.7
3	50% 1 Region - SLR	£405M	£4,130 per FTE			3.8
4	50% 2 Region - Merge R2&R3	£405M	£106	£12		3.8
5	50% 2 Region - Merge R2&R3 add SUSS	£412M	£106	£13		3.8
			R1a	R1b	R2/3	
6	New 3 region model – split grass & crop and merge R2&3	£405M	£106`	£106`	£12	3.8
7	Option 6 plus SUSS	£412M	£106`	£106`	£13	3.8

` *Option 6&7 R1 = rotational cropland R2= permanent grass R3= rough grazing*

44. Despite the magnitude of the budget reduction there are businesses that are still classified as gaining versus their 2019 payments – see Table 8. This occurs for area based payment in those businesses with larger areas of Region 2 and Region 3 land that sees uplifts from £42/ha and £12/ha to £53/ha under *1 Region – Flat* or £118/ha under *1 Region – AFHA*. For *1-Region SLR* there can be signiciant gains even with budget reductions since busineses may have been receiving limited payments under area based BPS and with large FTE's have substantial gains even at 50% of the budget.

Table 8: Counts of businesses classified by the nature of change per Option

Option		Business Counts					
No	Name	All	Gain	Loss	No Change	Excluded	Not BPS
0	50%-Baseline	**19,292**	0	17,416	0	0	1,876
1	50% 1 Region - Flat	**19,292**	2,740	14,676	0	0	1,876
2	50% 1 Region - AFHA	**19,292**	1,133	14,948	0	1,647	1,564
3	50% 1 Region - SLR	**19,292**	1,251	15,938	0	227	1,876
4	50% 2 Region - Merge R2&R3	**19,292**	287	17,129	0	0	1,876
5	50% 2 Region - Merge R2&R3 add SUSSS	**19,292**	269	17,171	0	0	1,852
6&7	New 3 region model – split grass & crop and merge R2&3 (plus SUSS)	Same redistribution as Option 4 & 5					

Appendix I – Change in Payment Maps

45. The maps in this section show the change in payment rate expressed in pounds per hectare (£/Ha) against the baseline (2019 BPS + Greening + FDRI payments) for each scenario. In each case the business level payments have been calculated and distributed to field level using the BPS claimed area[14] to generate a rate per hectare. A standardised colour scheme and classification enables comparisons to be drawn between the scenarios. Grey areas (in Scotland) are those fields registered in LPIS (Land Parcel Identification System) which do not attract a current payment. Any remaining white areas lie beyond LPIS coverage.

[14] For some businesses, the BPS claimed area is substantially less than the declared land use area. In some cases, this arises legitimately due to a lower number of entitlements held than eligible area against which to activate those entitlements. In other businesses the difference between the BPS claimed area and the land use area is very large and is believed to be likely due to anomalies in the raw data. The effect of this is to inflate the calculated baseline payment rate per hectare. In the change maps this results in large negative values.

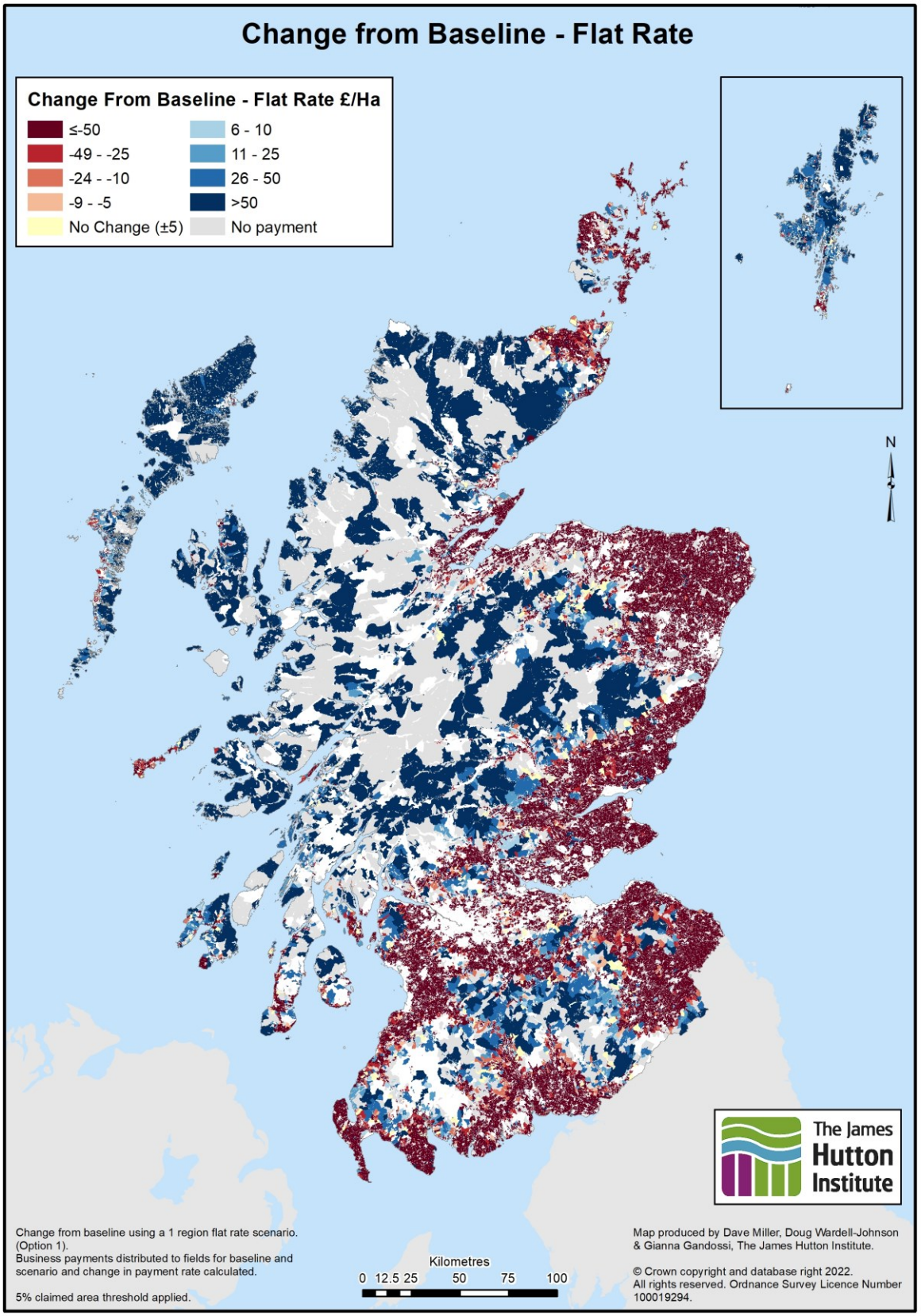


Figure 3: Change (£/Ha) from Baseline – 1 Region - Flat Rate (Option 1)

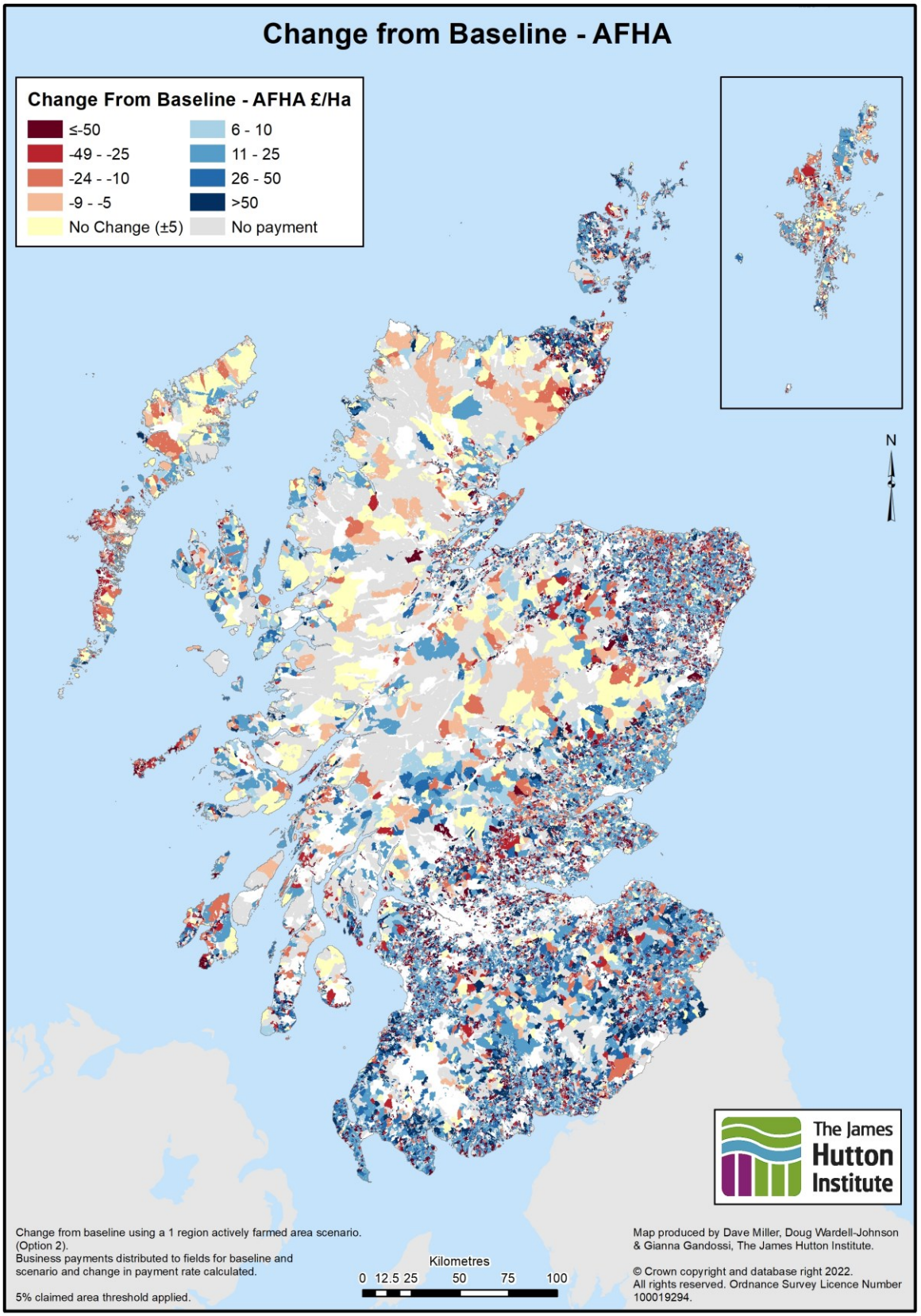


Figure 4: Change (£/Ha) from Baseline – 1 Region – AFHA (Option2)

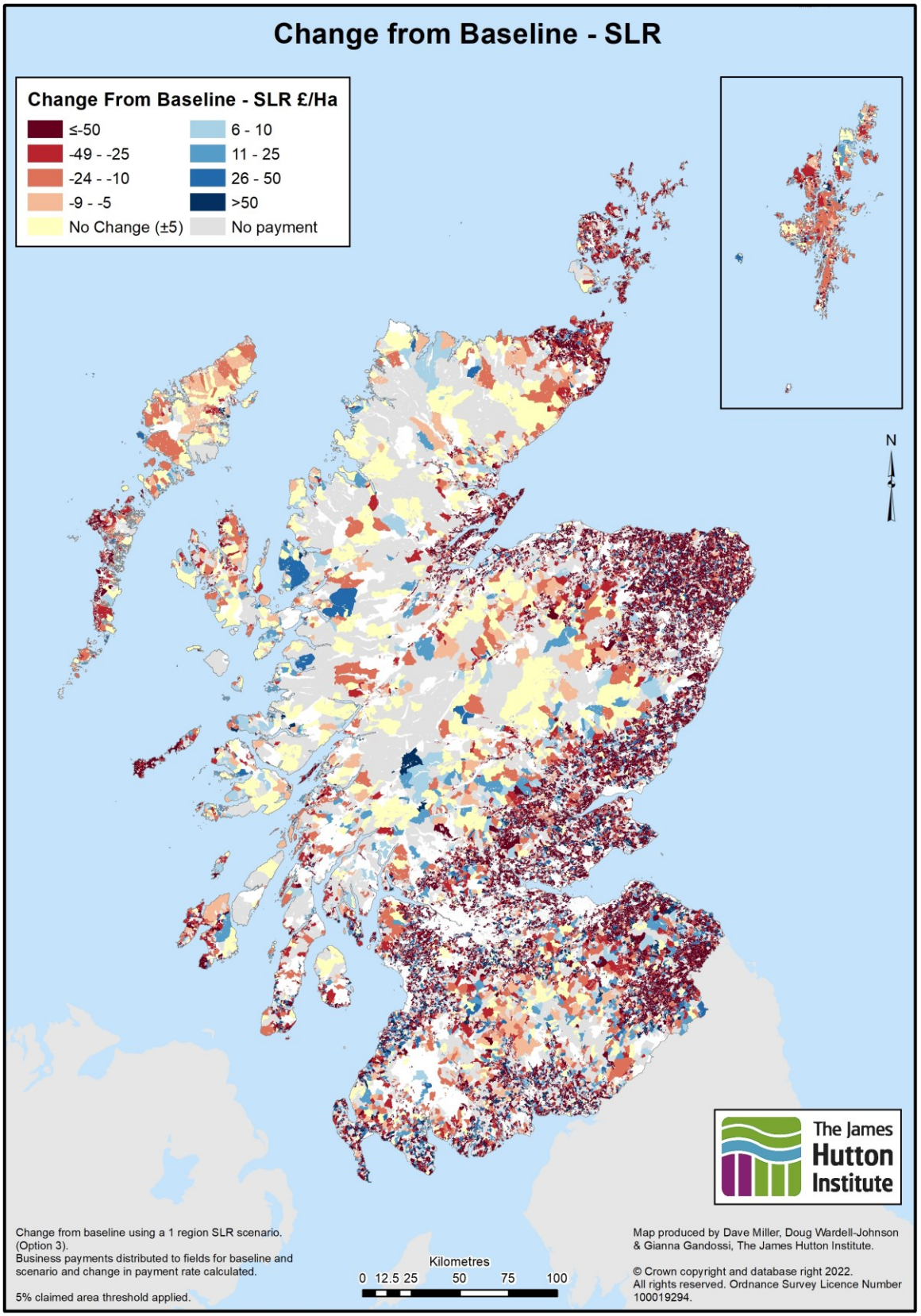


Figure 5: Change (£/Ha) from Baseline – 1 Region - SLR (Option 3)

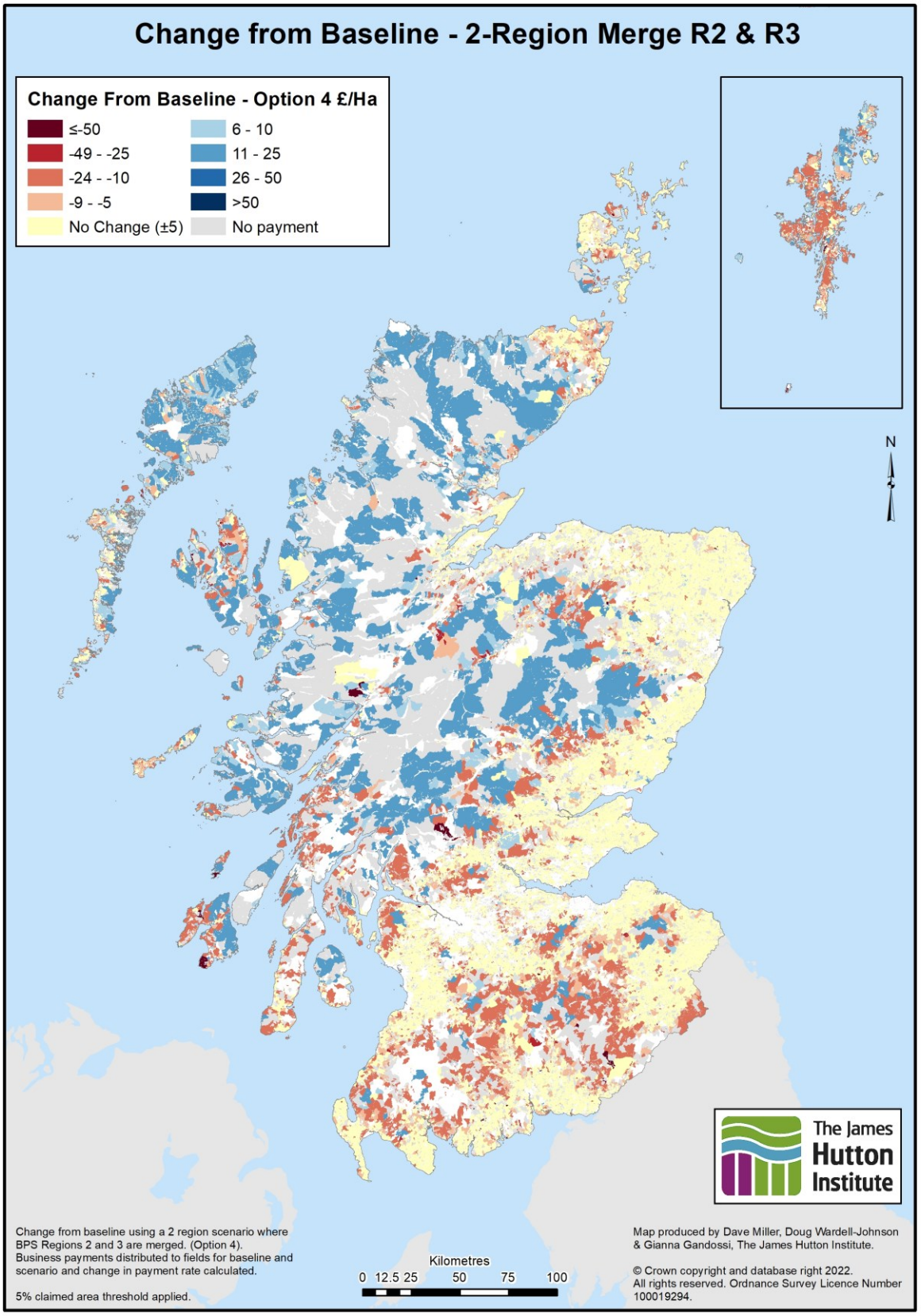


Figure 6: Change (£/Ha) from Baseline – 2 Region – Merge Region 2 and Region 3 (Option 4)

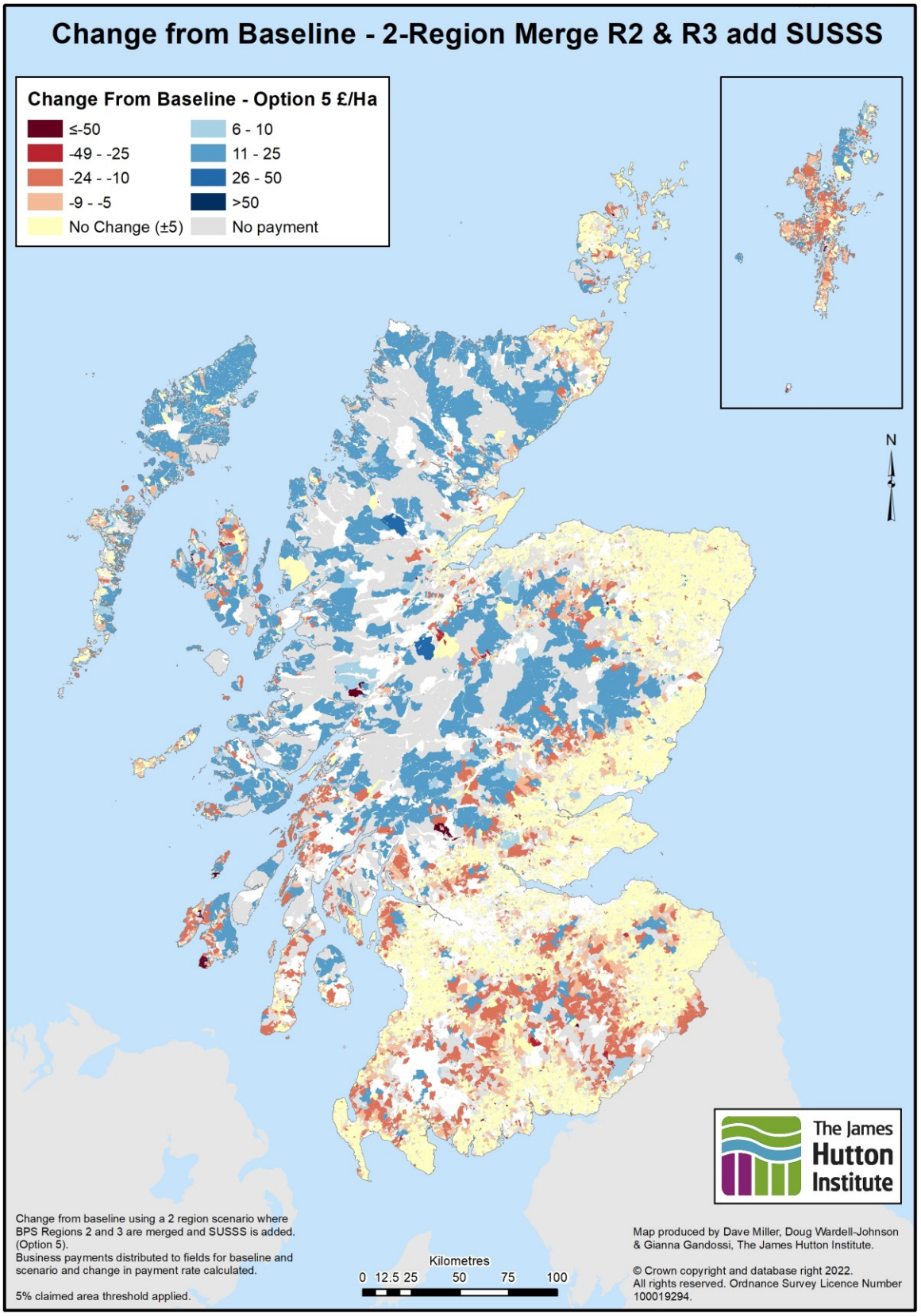


Figure 7: Change (£/Ha) from Baseline – 2 Region – Merge Region 2 and Region 3 add SUSSS to budget (Option 5)

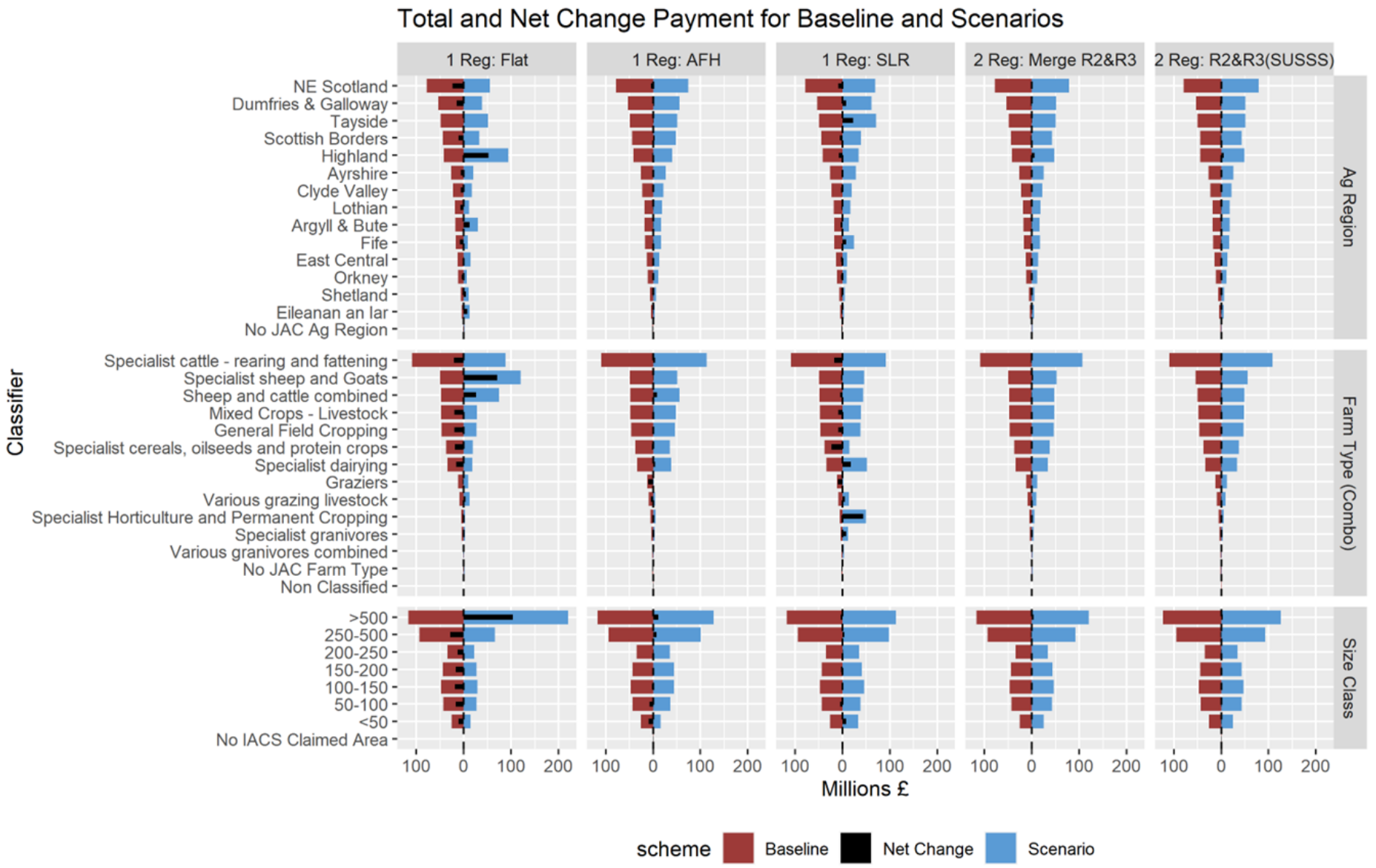
Appendix II – Option Comparison Charts

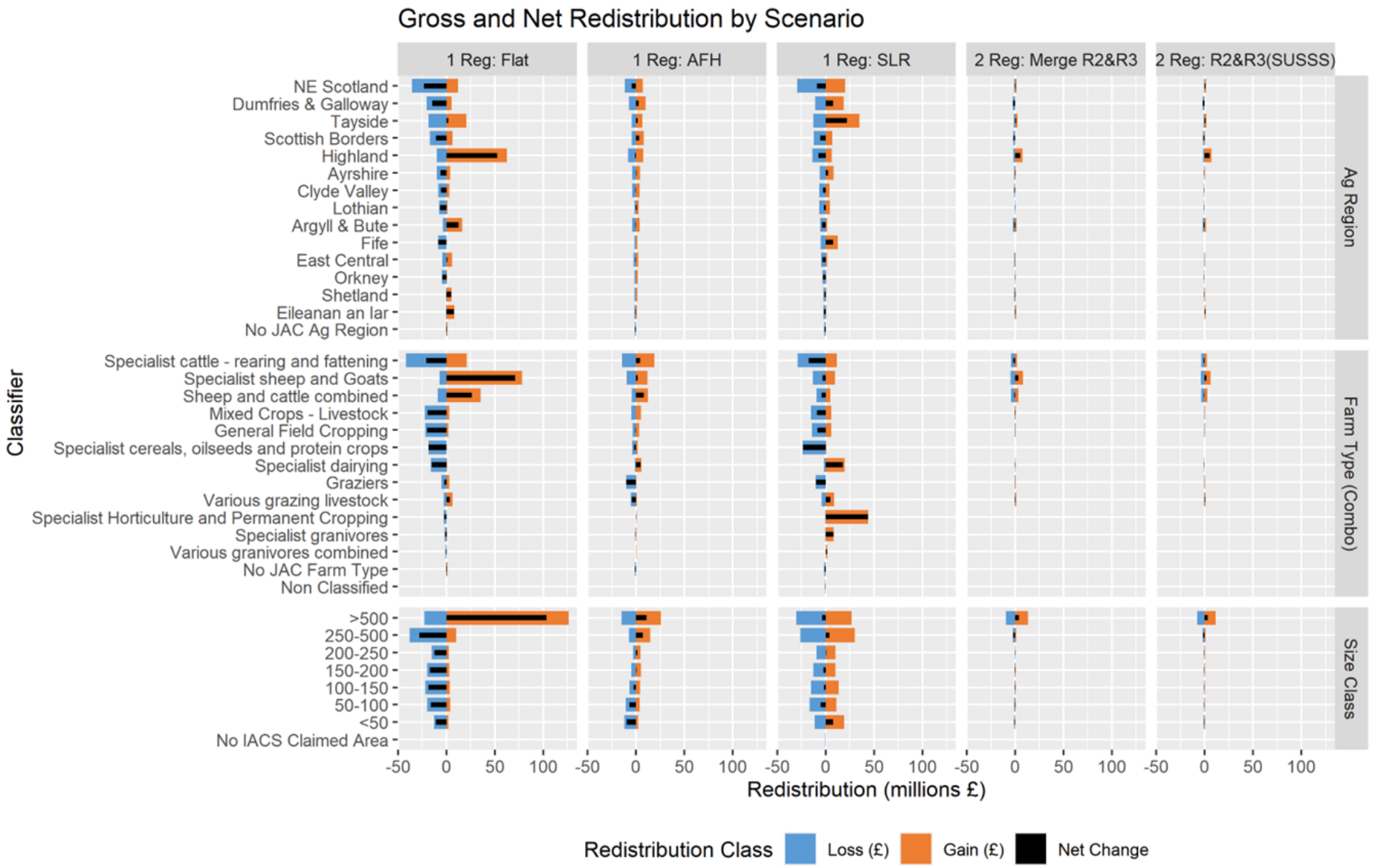
46. This section provides charts intended to support the comparison between options using the Agricultural Region, Farm Type and Size classifications. Three charts are included:

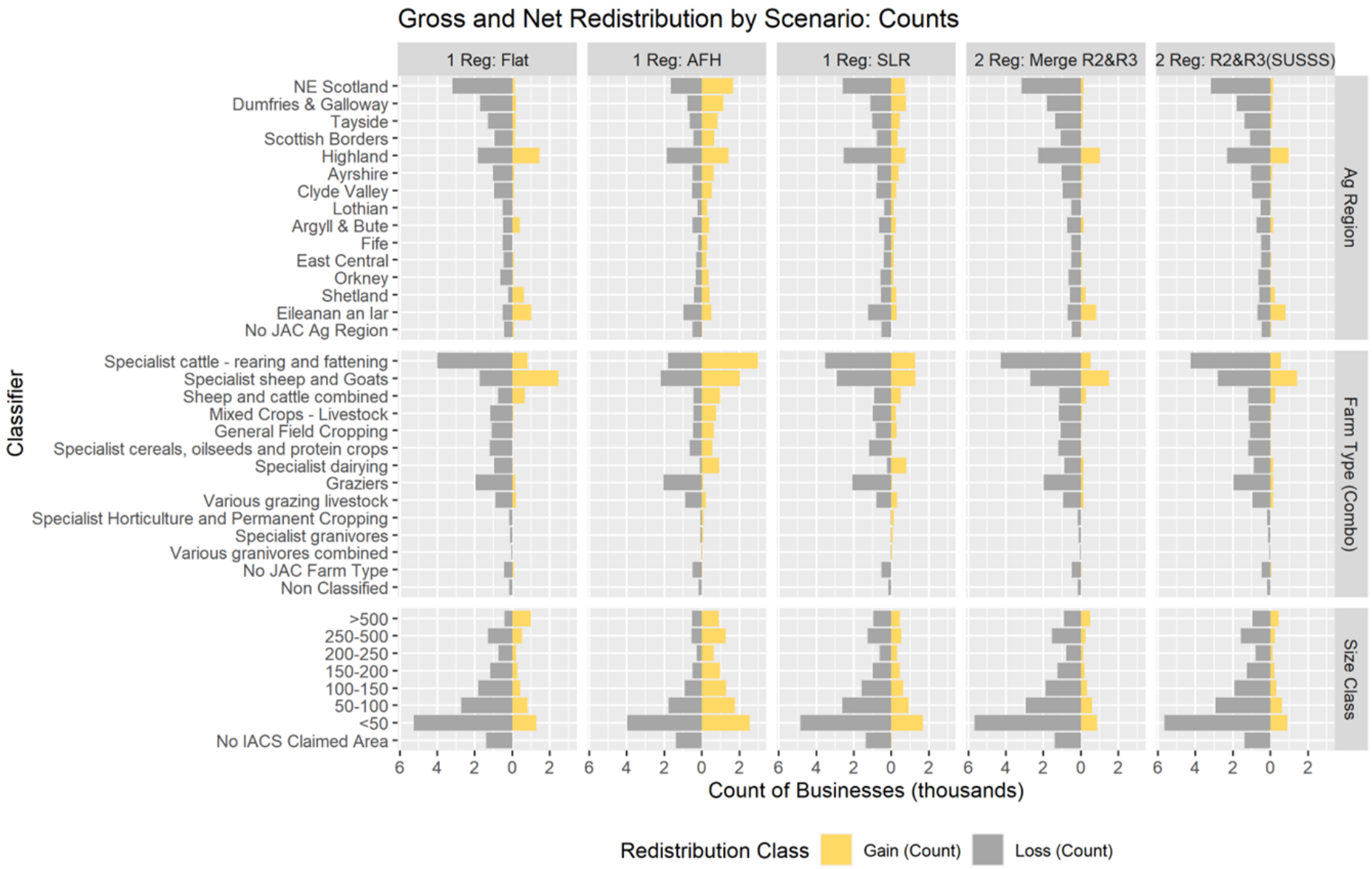
    a) **Baseline and Options Total Payments and Net Change** - in this chart any asymmetry between the Baseline and the Options bars for each combination of Option and classifier highlights where the Option has resulted in a substantial change in the distribution of BPS funds. The net change bars are also a flag for where the Options have led to significant change between any of the classifiers.

    b) **Redistribution** – this chart allows comparison between Options in terms of the amount of redistribution both as gains and losses and as net change.

    c) **Business Counts** – this chart presents the distributions of gain and loss businesses of each of the classifiers and Options allowing comparison between Options in terms of the population of businesses affected.


Total and Net Change Payment for Baseline and Scenarios
1 Reg: Flat
1 Reg: AFH
1 Reg: SLR
2 Reg: Merge R2&R3
2 Reg: R2&R3(SUSSS)
Ag Region
NE Scotland
Dumfries & Galloway
Tayside
Scottish Borders
Highland
Ayrshire
Clyde Valley
Lothian
Argyll & Bute
Fife
East Central
Orkney
Shetland
Eileanan an Iar
No JAC Ag Region
Farm Type (Combo)
Specialist cattle - rearing and fattening
Specialist sheep and Goats
Sheep and cattle combined
Mixed Crops - Livestock
General Field Cropping
Specialist cereals, oilseeds and protein crops
Specialist dairying
Graziers
Various grazing livestock
Specialist Horticulture and Permanent Cropping
Specialist granivores
Various granivores combined
No JAC Farm Type
Non Classified
Size Class
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Classifier
100
0
100
200
Millions £
scheme
Baseline
Net Change
Scenario


Gross and Net Redistribution by Scenario
1 Reg: Flat
1 Reg: AFH
1 Reg: SLR
2 Reg: Merge R2&R3
2 Reg: R2&R3(SUSSS)
Ag Region
NE Scotland
Dumfries & Galloway
Tayside
Scottish Borders
Highland
Ayrshire
Clyde Valley
Lothian
Argyll & Bute
Fife
East Central
Orkney
Shetland
Eileanan an Iar
No JAC Ag Region
Farm Type (Combo)
Specialist cattle - rearing and fattening
Specialist sheep and Goats
Sheep and cattle combined
Mixed Crops - Livestock
General Field Cropping
Specialist cereals, oilseeds and protein crops
Specialist dairying
Graziers
Various grazing livestock
Specialist Horticulture and Permanent Cropping
Specialist granivores
Various granivores combined
No JAC Farm Type
Non Classified
Size Class
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Classifier
-50
0
50
100
Redistribution (millions £)
Redistribution Class
Loss (£)
Gain (£)
Net Change


Gross and Net Redistribution by Scenario: Counts
1 Reg: Flat
1 Reg: AFH
1 Reg: SLR
2 Reg: Merge R2&R3
2 Reg: R2&R3(SUSSS)
Ag Region
NE Scotland
Dumfries & Galloway
Tayside
Scottish Borders
Highland
Ayrshire
Clyde Valley
Lothian
Argyll & Bute
Fife
East Central
Orkney
Shetland
Eileanan an Iar
No JAC Ag Region
Farm Type (Combo)
Specialist cattle - rearing and fattening
Specialist sheep and Goats
Sheep and cattle combined
Mixed Crops - Livestock
General Field Cropping
Specialist cereals, oilseeds and protein crops
Specialist dairying
Graziers
Various grazing livestock
Specialist Horticulture and Permanent Cropping
Specialist granivores
Various granivores combined
No JAC Farm Type
Non Classified
Size Class
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Classifier
6 4 2 0 2
Count of Businesses (thousands)
Redistribution Class
Gain (Count)
Loss (Count)

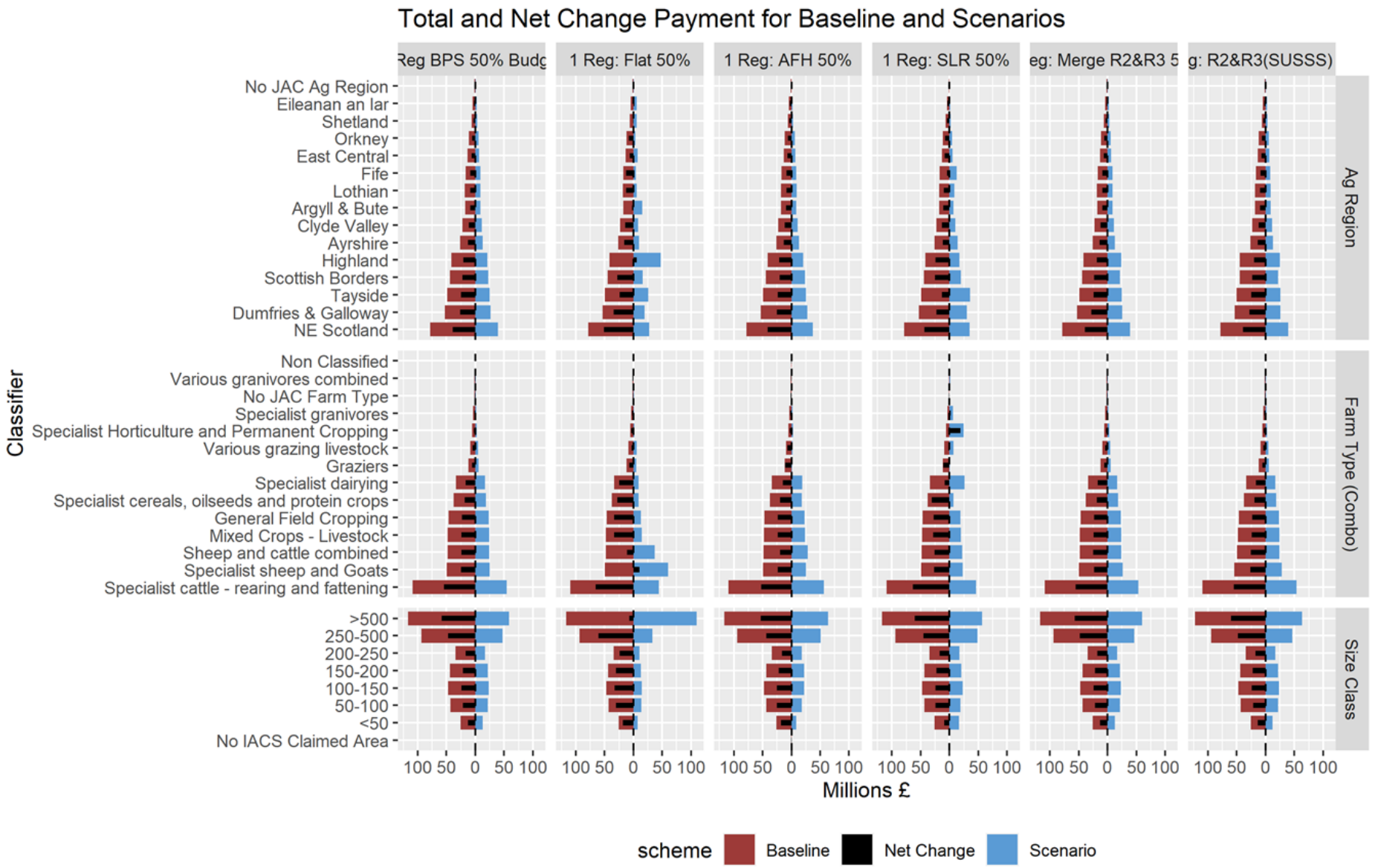
Appendix III – 50% Budget Comparison Charts

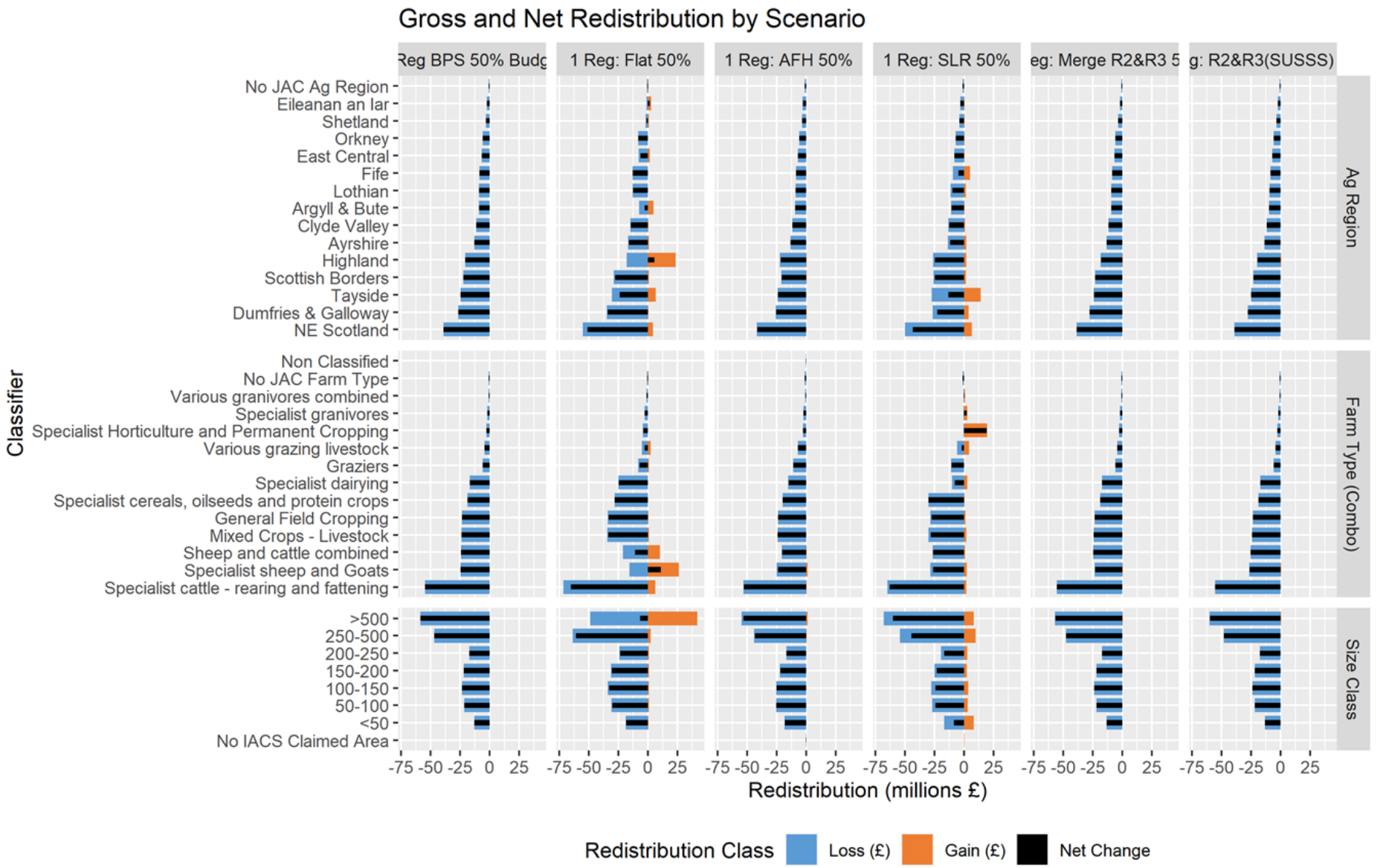
47. This section provides charts that provide comparison of the baseline (100% budget) with each of the regionalistation options using only 50% of the budget. The charts illustrate the budget + option change from the baselinbe by Agricultural Region, Farm Type and Size classifications. Three charts are included:

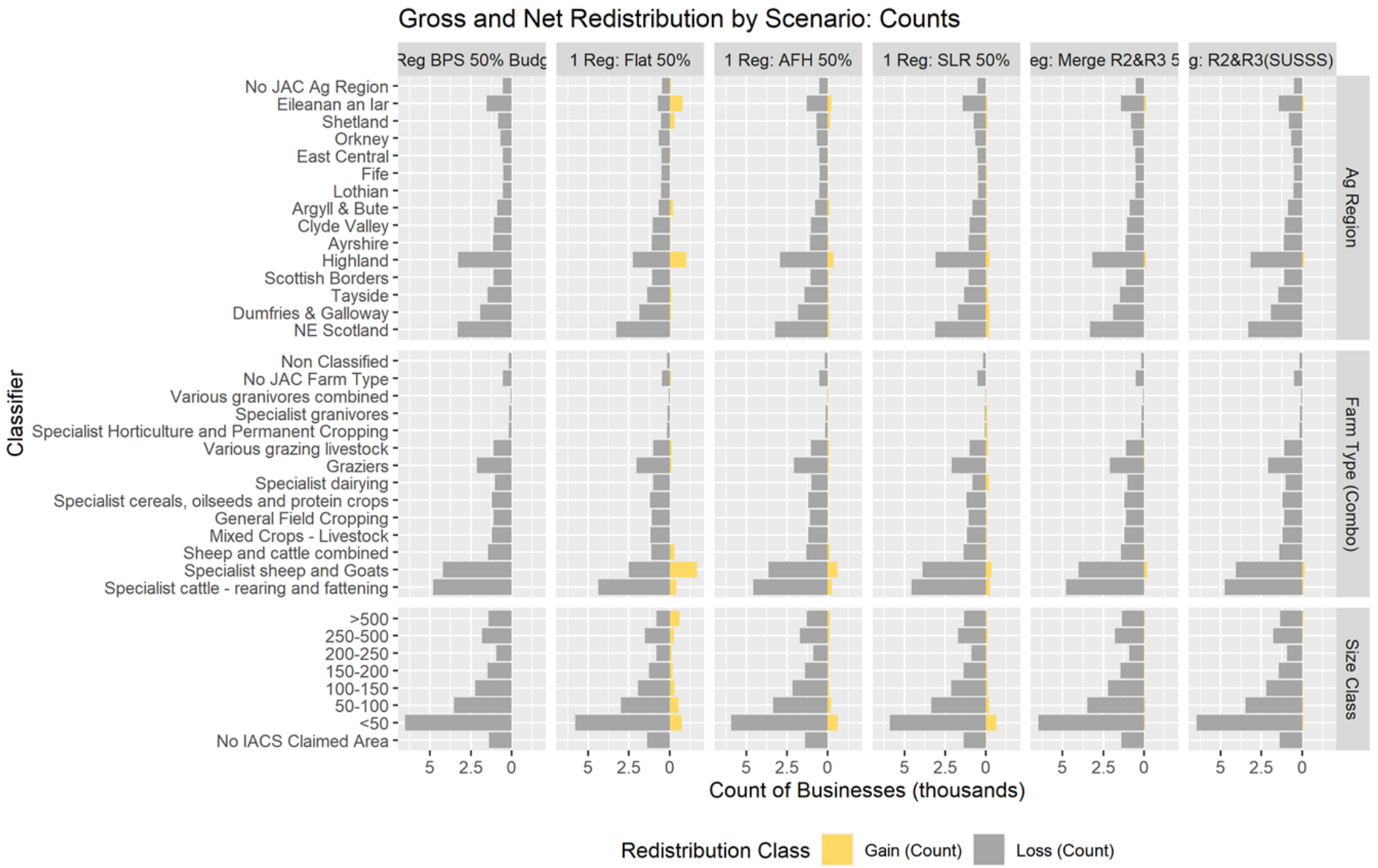
    a) **Baseline and Options Total Payments and Net Change** - in this chart any asymmetry between the Baseline and the Options bars for each highlights where the Option has resulted in a substantial change in the distribution of BPS funds. The net change bars are also a flag for where the Options + 50% Budget have led to significant change between any of the classifiers.

    b) **Redistribution** – this chart allows comparison between Options in terms of the amount of redistribution both as gains and losses and as net change from the 100% Budghet baseline scenario

    c) **Business Counts** – this chart presents the numbers of businesses that gain and lose from each of the Optiond + 50% Budget. The chart demonstrates how the different scenarios affect redistribution from the 100% budget baseline.


Total and Net Change Payment for Baseline and Scenarios
Reg BPS 50% Budg
1 Reg: Flat 50%
1 Reg: AFH 50%
1 Reg: SLR 50%
eg: Merge R2&R3 5
g: R2&R3(SUSSS)
Ag Region
No JAC Ag Region
Eileanan an Iar
Shetland
Orkney
East Central
Fife
Lothian
Argyll & Bute
Clyde Valley
Ayrshire
Highland
Scottish Borders
Tayside
Dumfries & Galloway
NE Scotland
Farm Type (Combo)
Non Classified
Various granivores combined
No JAC Farm Type
Specialist granivores
Specialist Horticulture and Permanent Cropping
Various grazing livestock
Graziers
Specialist dairying
Specialist cereals, oilseeds and protein crops
General Field Cropping
Mixed Crops - Livestock
Sheep and cattle combined
Specialist sheep and Goats
Specialist cattle - rearing and fattening
Size Class
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Classifier
100 50 0 50 100
Millions £
scheme
Baseline
Net Change
Scenario


Gross and Net Redistribution by Scenario
Reg BPS 50% Budg
1 Reg: Flat 50%
1 Reg: AFH 50%
1 Reg: SLR 50%
eg: Merge R2&R3 5
g: R2&R3(SUSSS)
Classifier
No JAC Ag Region
Eileanan an Iar
Shetland
Orkney
East Central
Fife
Lothian
Argyll & Bute
Clyde Valley
Ayrshire
Highland
Scottish Borders
Tayside
Dumfries & Galloway
NE Scotland
Non Classified
No JAC Farm Type
Various granivores combined
Specialist granivores
Specialist Horticulture and Permanent Cropping
Various grazing livestock
Graziers
Specialist dairying
Specialist cereals, oilseeds and protein crops
General Field Cropping
Mixed Crops - Livestock
Sheep and cattle combined
Specialist sheep and Goats
Specialist cattle - rearing and fattening
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Ag Region
Farm Type (Combo)
Size Class
-75 -50 -25 0 25
Redistribution (millions £)
Redistribution Class
Loss (£)
Gain (£)
Net Change


Gross and Net Redistribution by Scenario: Counts
Reg BPS 50% Budg
1 Reg: Flat 50%
1 Reg: AFH 50%
1 Reg: SLR 50%
eg: Merge R2&R3 5
g: R2&R3(SUSSS)
Classifier
No JAC Ag Region
Eileanan an Iar
Shetland
Orkney
East Central
Fife
Lothian
Argyll & Bute
Clyde Valley
Ayrshire
Highland
Scottish Borders
Tayside
Dumfries & Galloway
NE Scotland
Ag Region
Non Classified
No JAC Farm Type
Various granivores combined
Specialist granivores
Specialist Horticulture and Permanent Cropping
Various grazing livestock
Graziers
Specialist dairying
Specialist cereals, oilseeds and protein crops
General Field Cropping
Mixed Crops - Livestock
Sheep and cattle combined
Specialist sheep and Goats
Specialist cattle - rearing and fattening
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Size Class
5 2.5 0
Count of Businesses (thousands)
Redistribution Class
Gain (Count)
Loss (Count)

Appendix IV - Detailed Option Analysis Charts

48. This section provides a series of detailed charts for each Option using standard visualisations developed as part of the ARD Stakeholders and ARIOB presentations. They are included in the document for reference and as a basis for further interpretation with SG colleagues.

49. For each Option, the following charts are presented:

    a) Redistribution (£) – Gain, Loss and Net by Agricultural Region, Farm Type, Size Class.

    b) Counts of businesses – Gain and Loss by Agricultural Region, Farm Type, Size Class.

    c) Change in Distribution of payments by Ag Region, Farm Type and Size Class – Baselines and Option, ordered by payments in Option.

    d) Box and whisker plot of payment distribution[15] by Agricultural Region, Farm Type and Size Class.

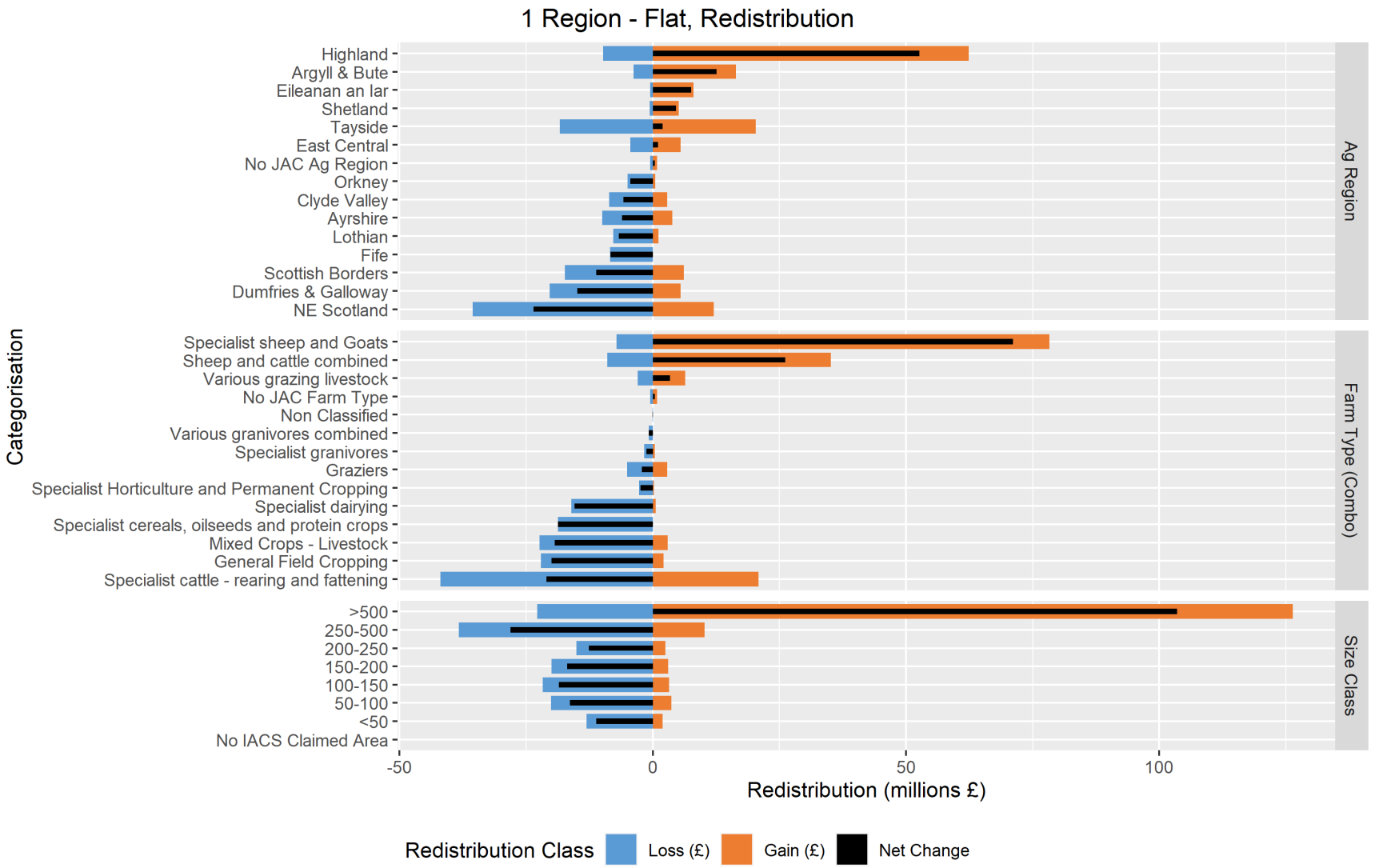
    e) Total payments for percentile groups of businesses, as follows bottom 40%, 40-80%, 80-90%, 90-99% and top 1%.

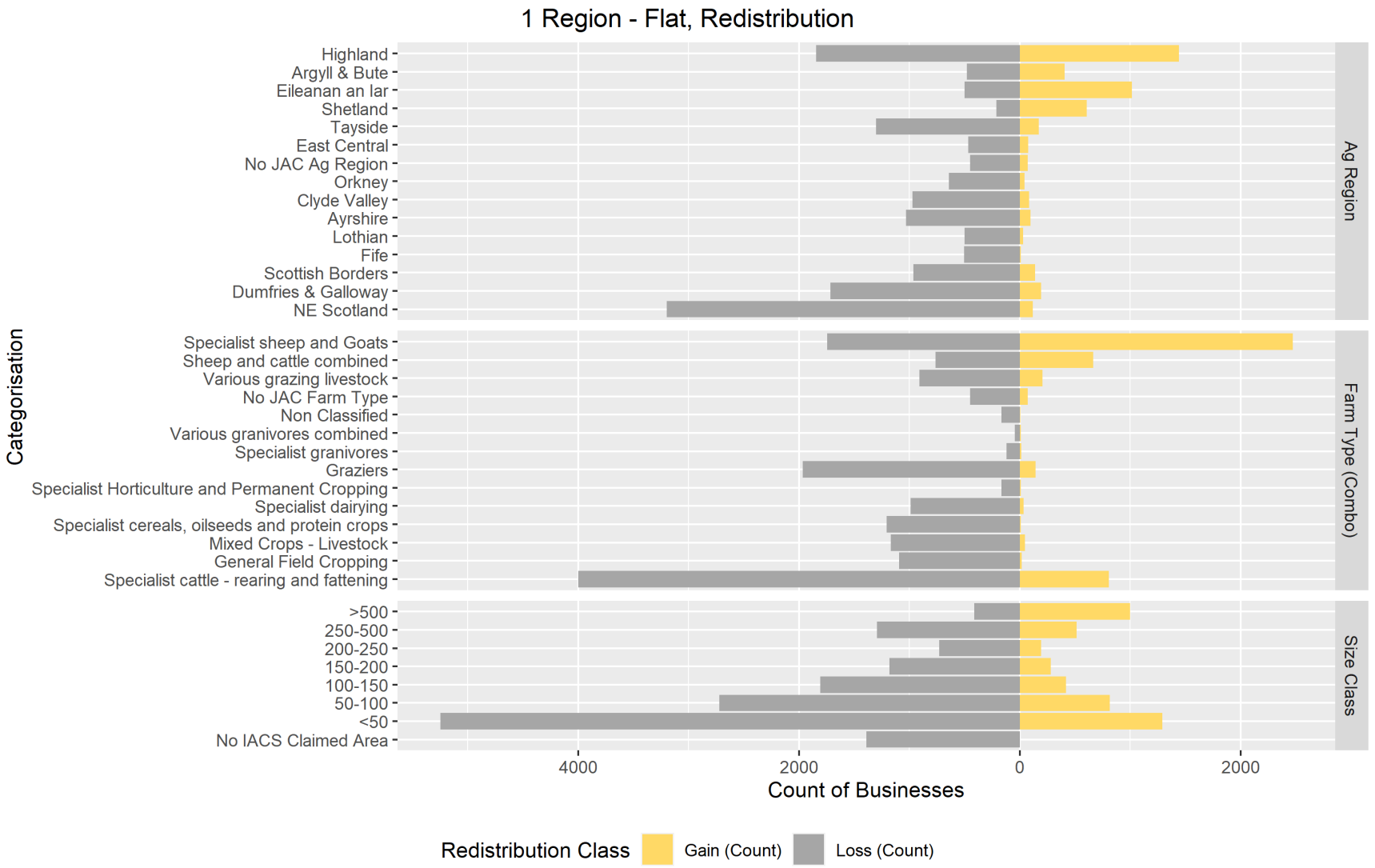
    f) Plots of totals payments per percentile groups for Agricultural Region, Farm Type, and Size Class. Presented as

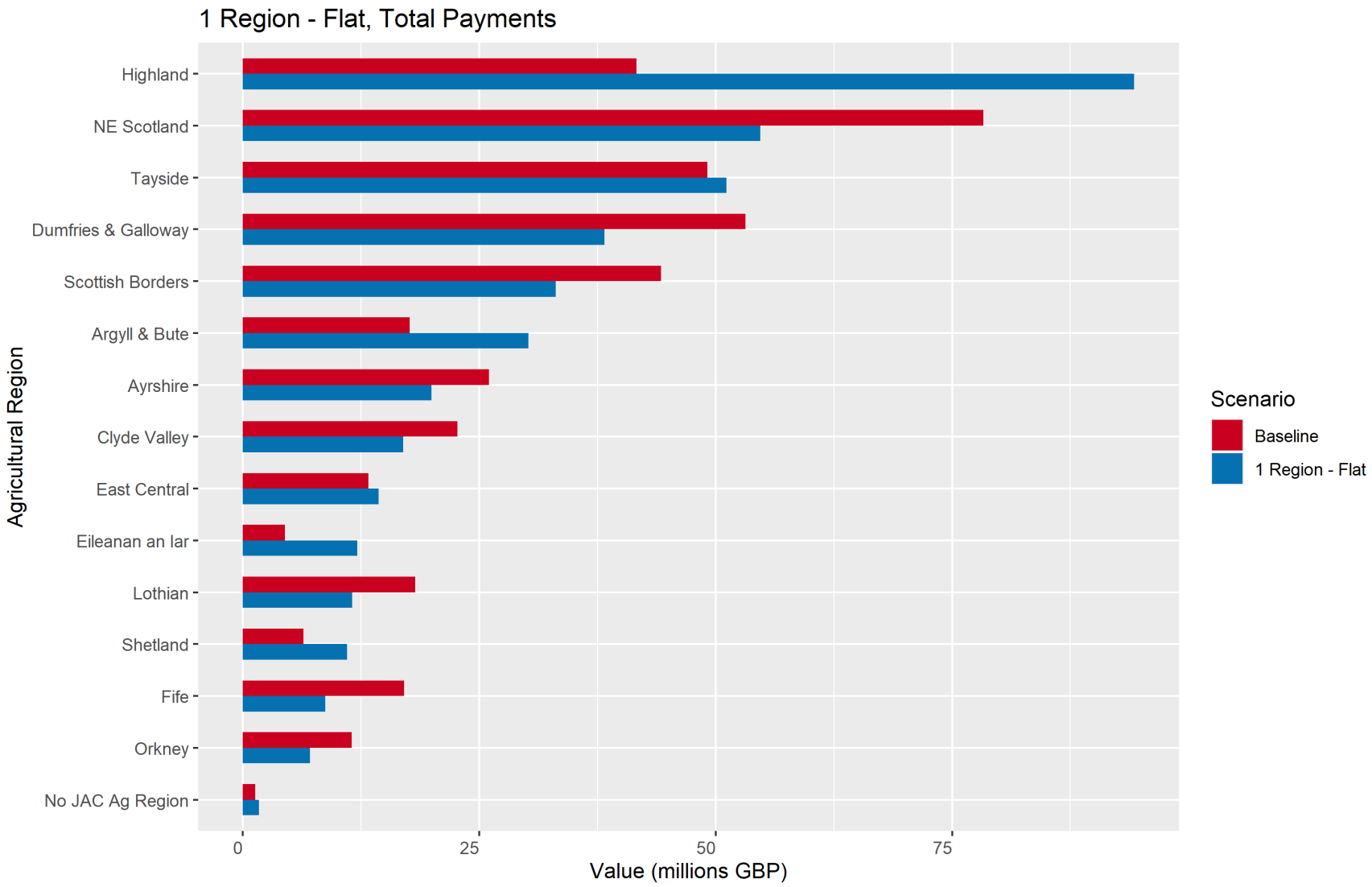
        - total payments per class of, and
        - percentage of the total payments per class on the same basis.

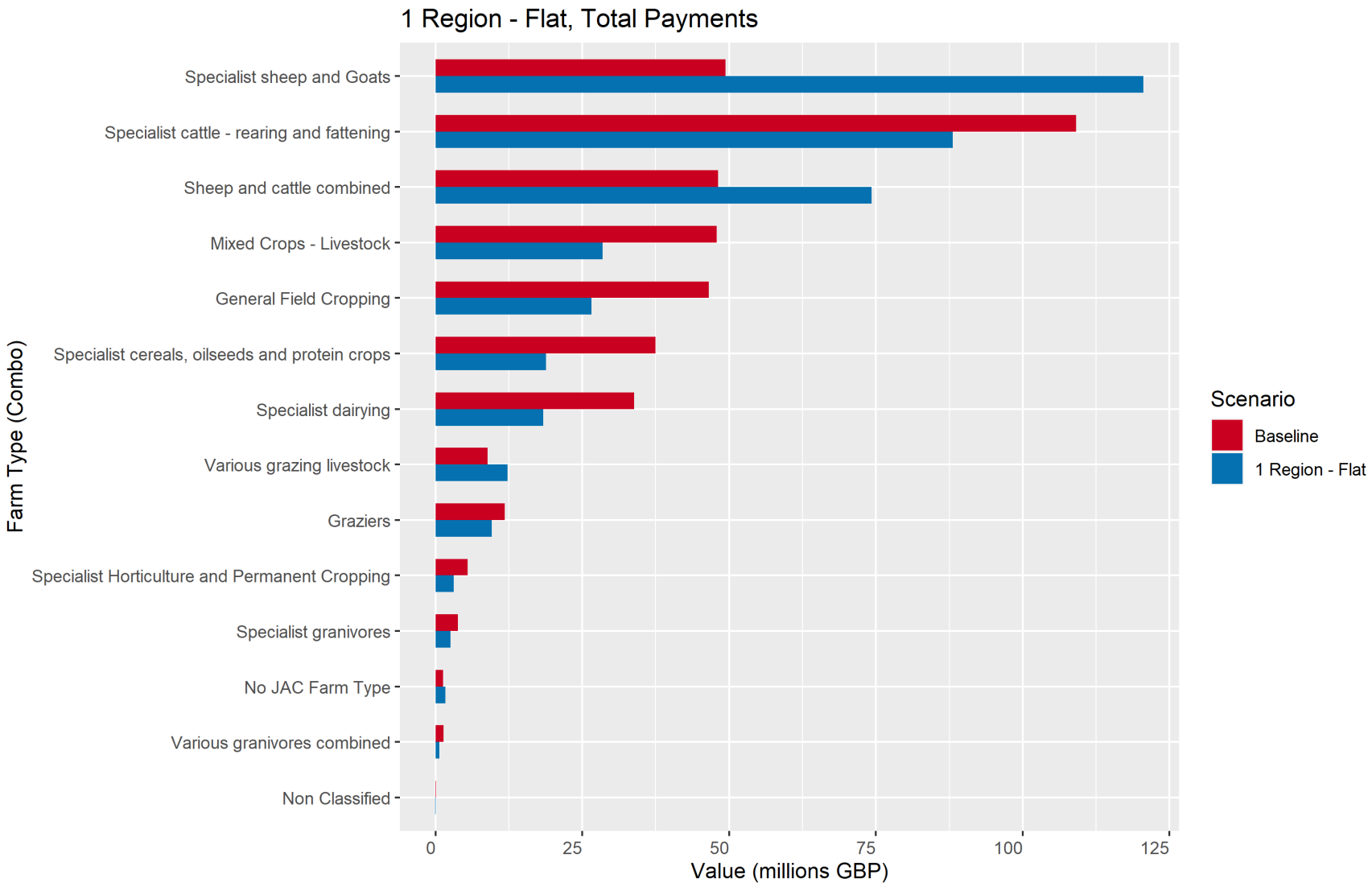
    The former allows comparison of both the mix of payment percentiles and the total amount per class and the latter makes comparisons of the mix of percentiles easier.

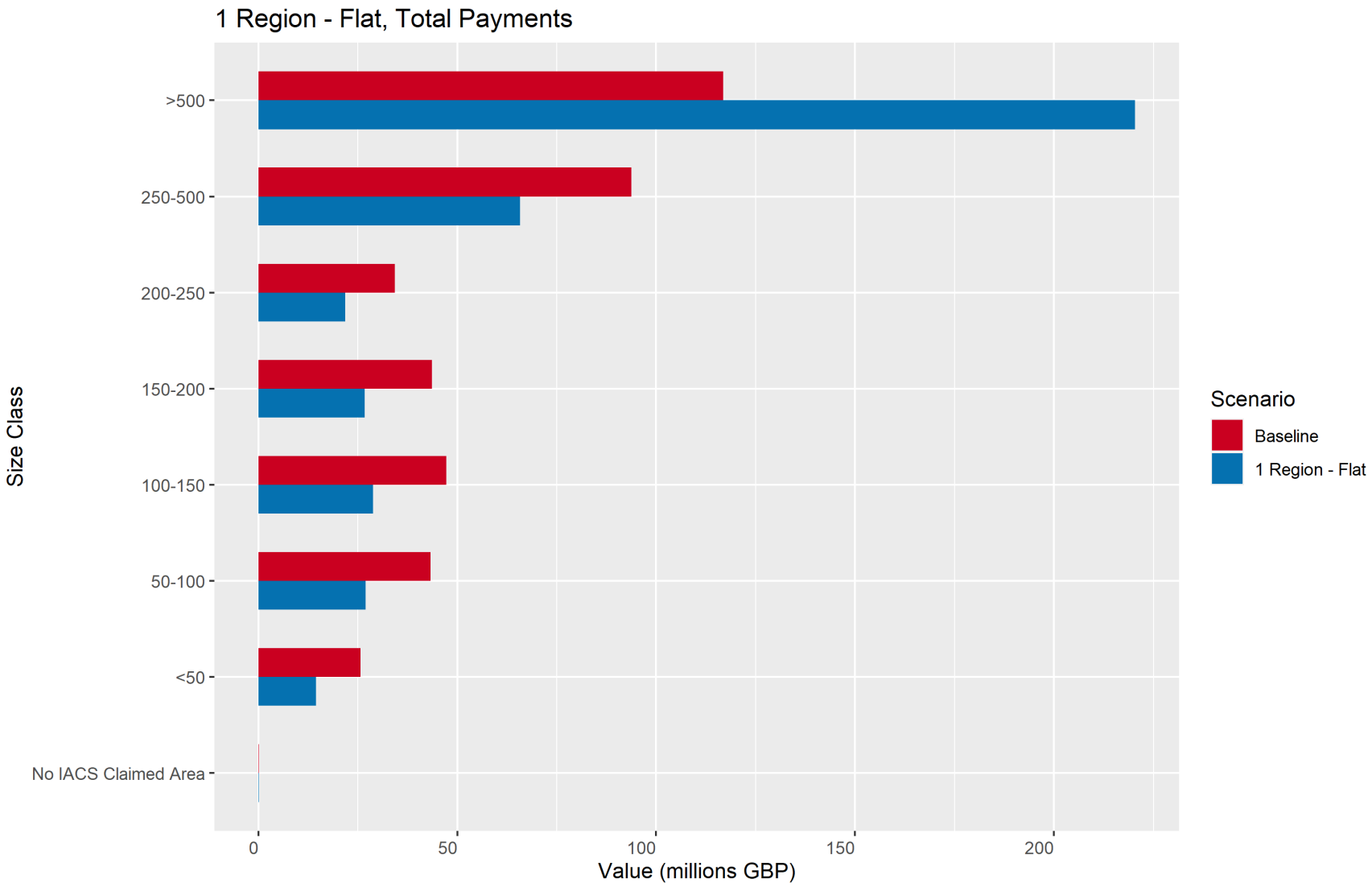
[15] Centre bar is median (50th percentile), boxes at 25th and 75th so 50% of payments, the whiskers at 10th and 90th percentile so 80% of the range. The numbers are the counts of businesses per class.

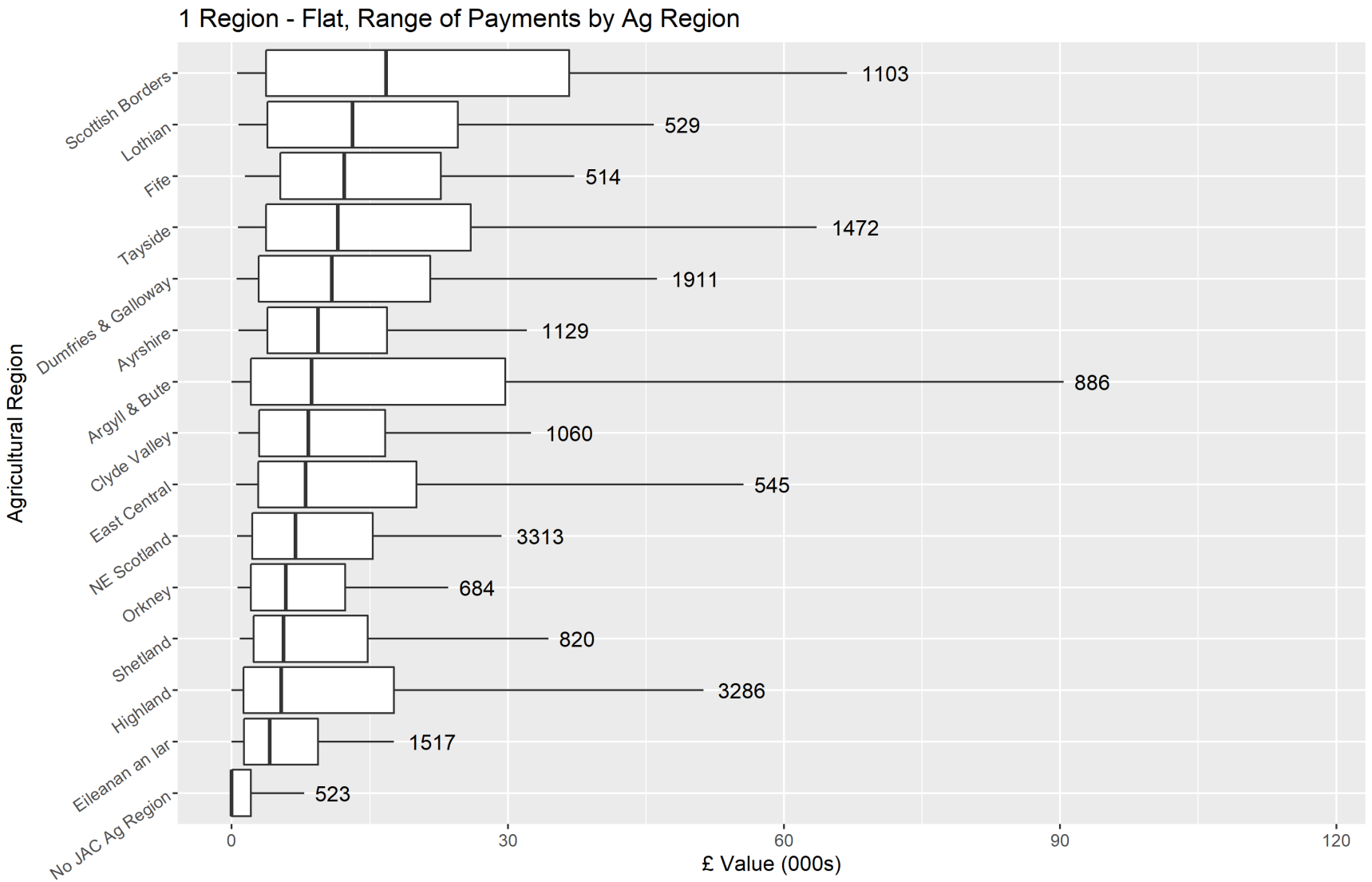

1 Region - Flat, Redistribution
Highland
Argyll & Bute
Eileanan an Iar
Shetland
Tayside
East Central
No JAC Ag Region
Orkney
Clyde Valley
Ayrshire
Lothian
Fife
Scottish Borders
Dumfries & Galloway
NE Scotland
Ag Region
Specialist sheep and Goats
Sheep and cattle combined
Various grazing livestock
No JAC Farm Type
Non Classified
Various granivores combined
Specialist granivores
Graziers
Specialist Horticulture and Permanent Cropping
Specialist dairying
Specialist cereals, oilseeds and protein crops
Mixed Crops - Livestock
General Field Cropping
Specialist cattle - rearing and fattening
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Size Class
Categorisation
-50
0
50
100
Redistribution (millions £)
Redistribution Class
Loss (£)
Gain (£)
Net Change

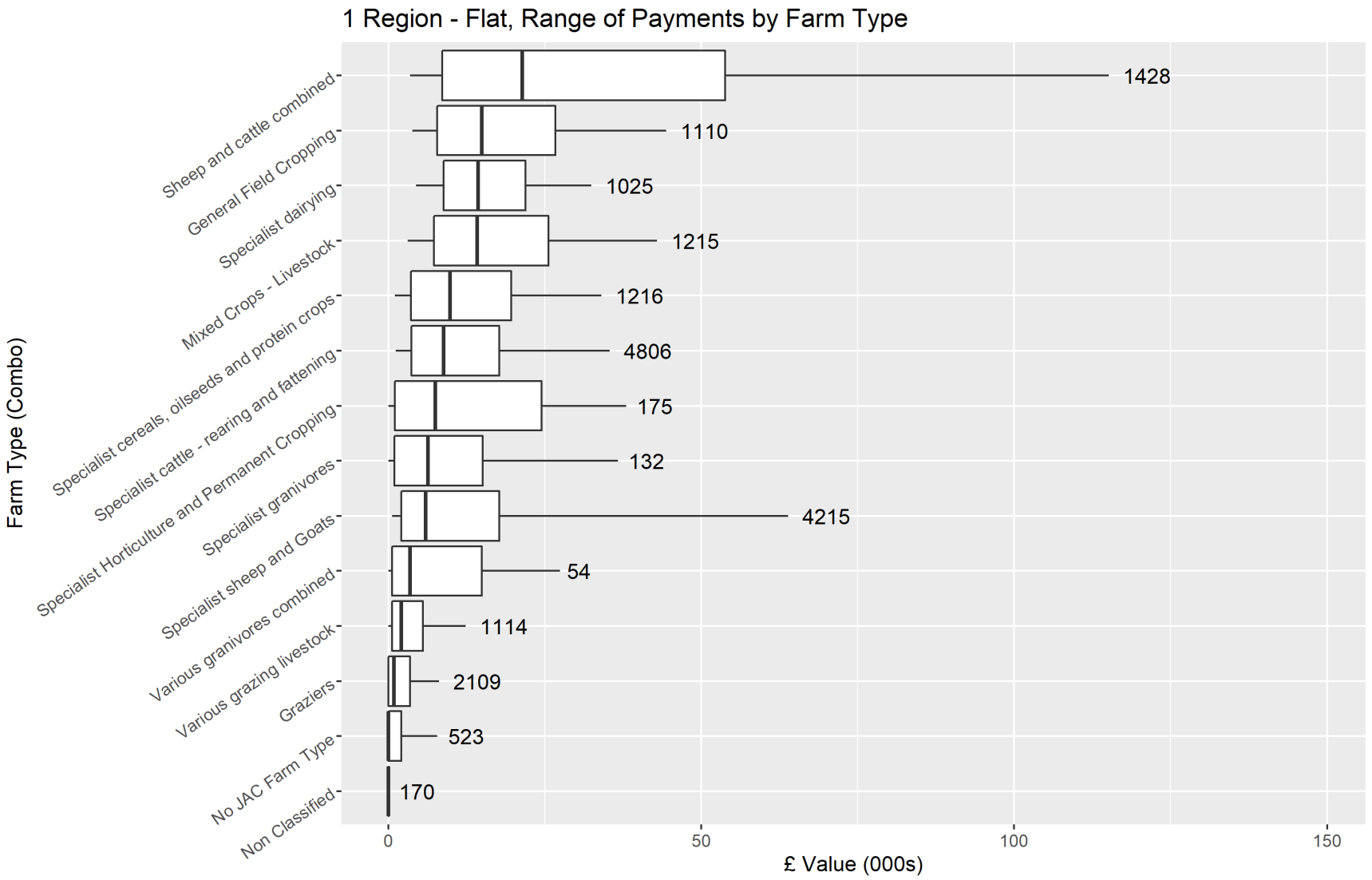

1 Region - Flat, Redistribution
Highland
Argyll & Bute
Eileanan an Iar
Shetland
Tayside
East Central
No JAC Ag Region
Orkney
Clyde Valley
Ayrshire
Lothian
Fife
Scottish Borders
Dumfries & Galloway
NE Scotland
Ag Region
Specialist sheep and Goats
Sheep and cattle combined
Various grazing livestock
No JAC Farm Type
Non Classified
Various granivores combined
Specialist granivores
Graziers
Specialist Horticulture and Permanent Cropping
Specialist dairying
Specialist cereals, oilseeds and protein crops
Mixed Crops - Livestock
General Field Cropping
Specialist cattle - rearing and fattening
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Size Class
Categorisation
4000
2000
0
2000
Count of Businesses
Redistribution Class
Gain (Count)
Loss (Count)

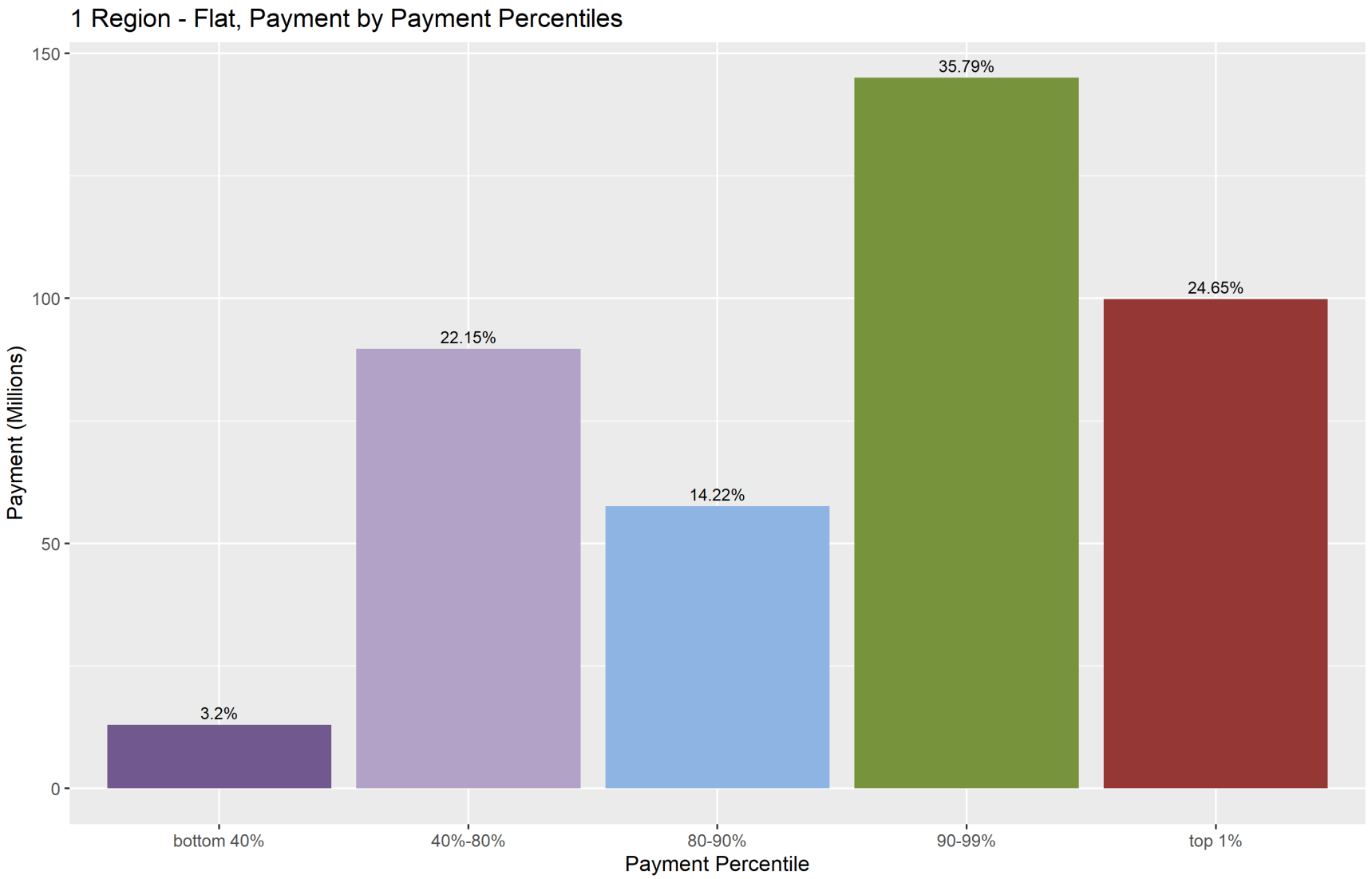

1 Region - Flat, Total Payments
Highland
NE Scotland
Tayside
Dumfries & Galloway
Scottish Borders
Argyll & Bute
Ayrshire
Clyde Valley
East Central
Eileanan an Iar
Lothian
Shetland
Fife
Orkney
No JAC Ag Region
Agricultural Region
0
25
50
75
Value (millions GBP)
Scenario
Baseline
1 Region - Flat

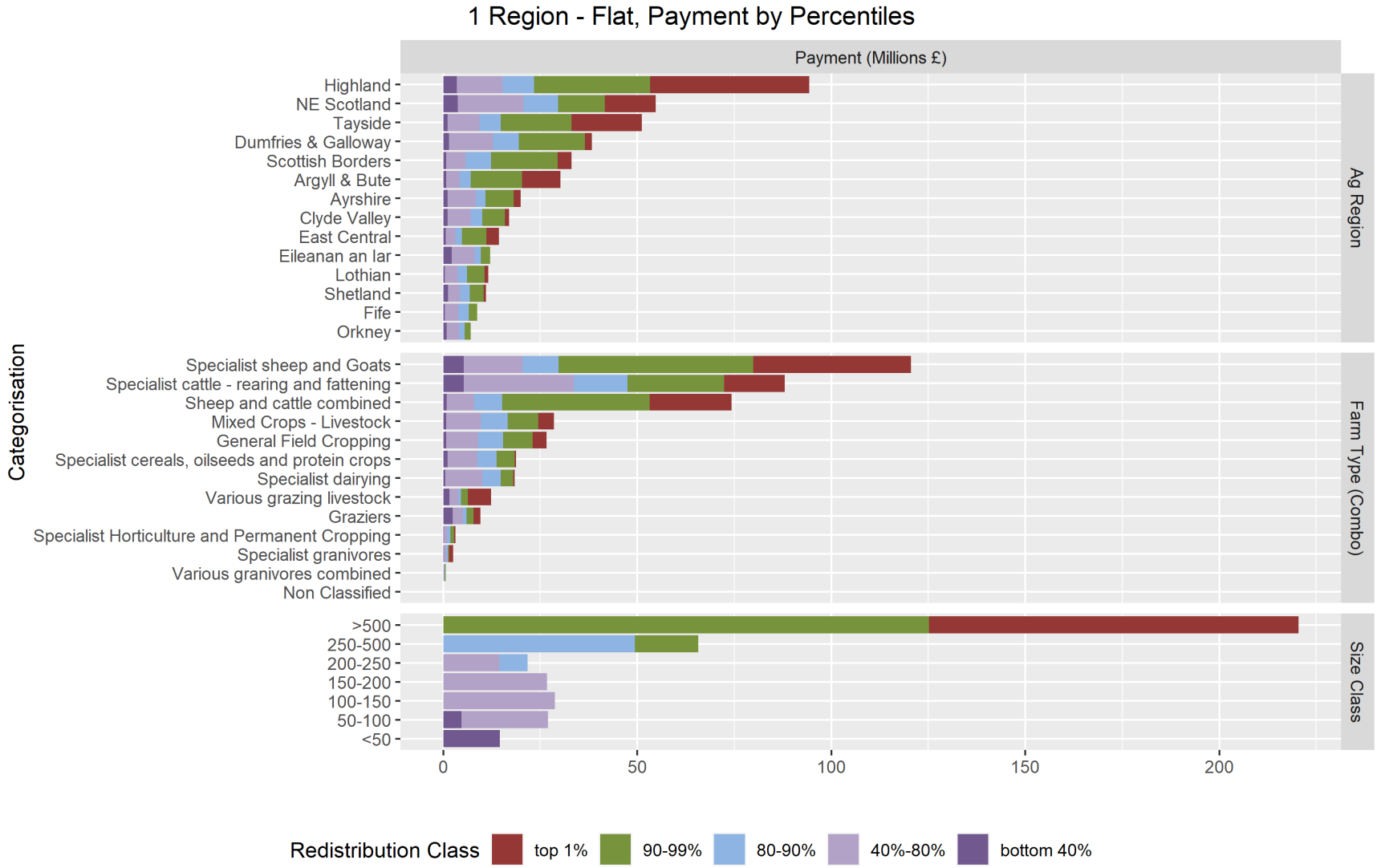

1 Region - Flat, Total Payments
Specialist sheep and Goats
Specialist cattle - rearing and fattening
Sheep and cattle combined
Mixed Crops - Livestock
General Field Cropping
Specialist cereals, oilseeds and protein crops
Specialist dairying
Various grazing livestock
Graziers
Specialist Horticulture and Permanent Cropping
Specialist granivores
No JAC Farm Type
Various granivores combined
Non Classified
Farm Type (Combo)
0
25
50
75
100
125
Value (millions GBP)
Scenario
Baseline
1 Region - Flat

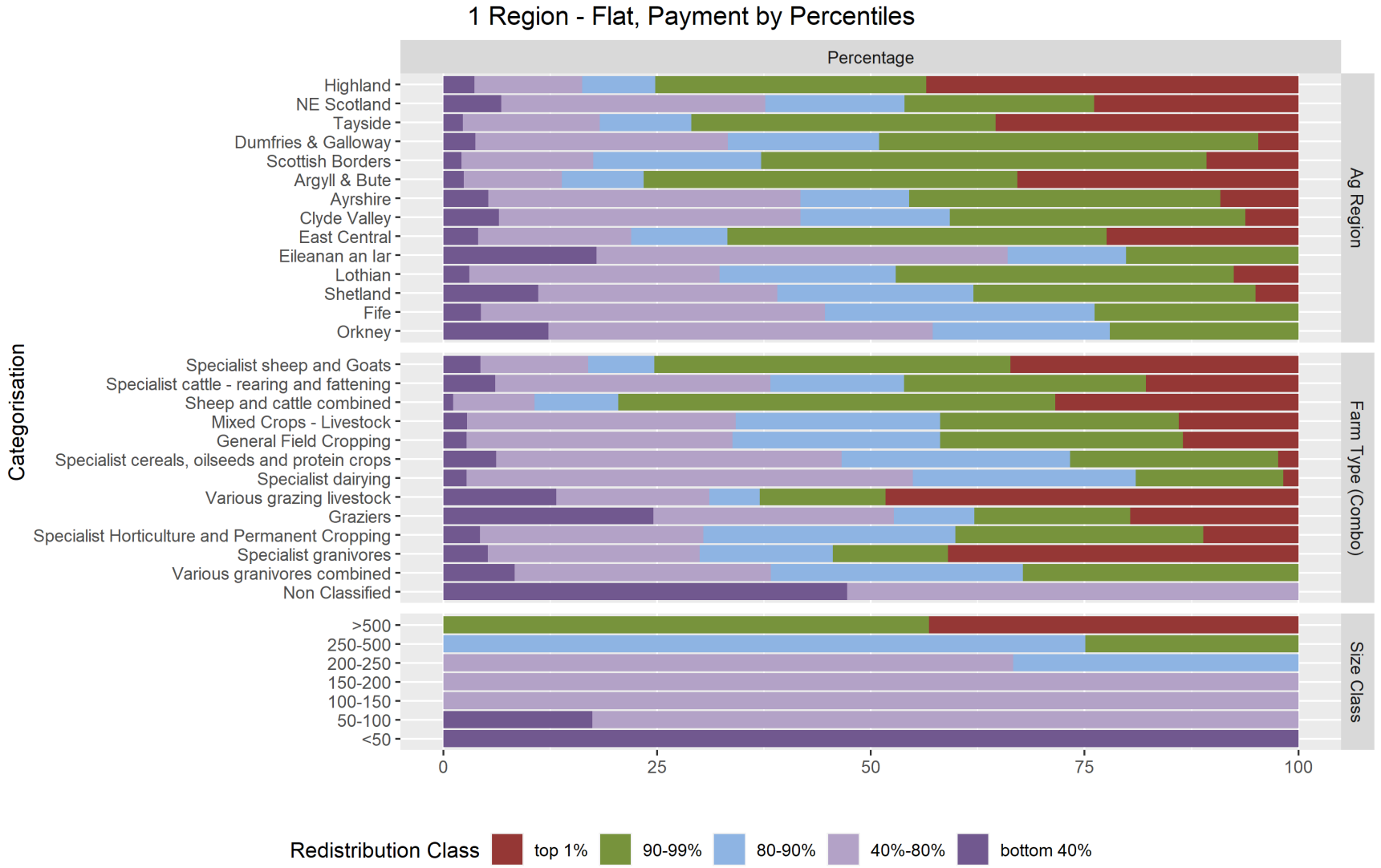

1 Region - Flat, Total Payments
Size Class
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
0
50
100
150
200
Value (millions GBP)
Scenario
Baseline
1 Region - Flat

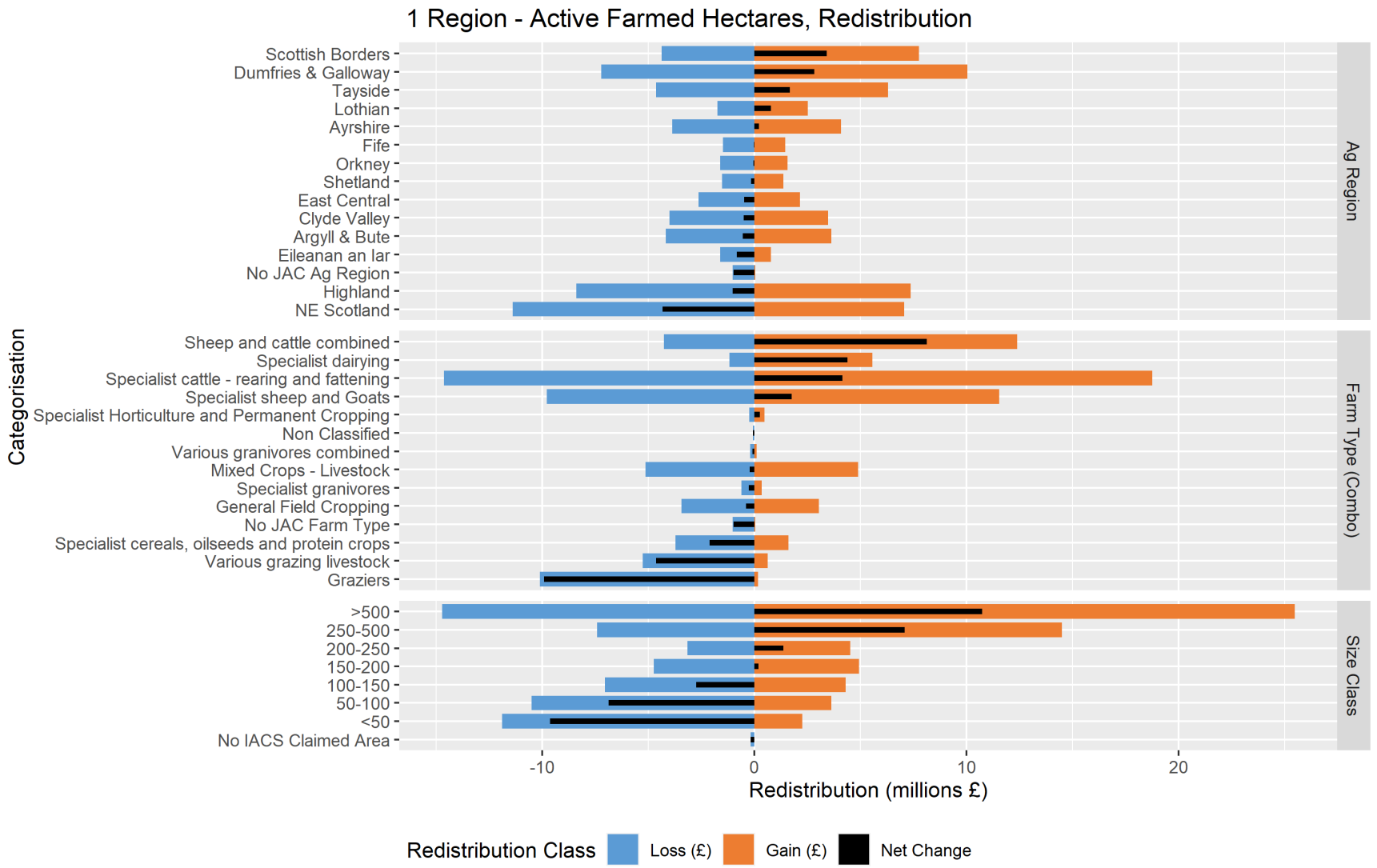

1 Region - Flat, Range of Payments by Ag Region
Agricultural Region
Scottish Borders
Lothian
Fife
Tayside
Dumfries & Galloway
Ayrshire
Argyll & Bute
Clyde Valley
East Central
NE Scotland
Orkney
Shetland
Highland
Eileanan an Iar
No JAC Ag Region
1103
529
514
1472
1911
1129
886
1060
545
3313
684
820
3286
1517
523
0
30
60
90
120
£ Value (000s)

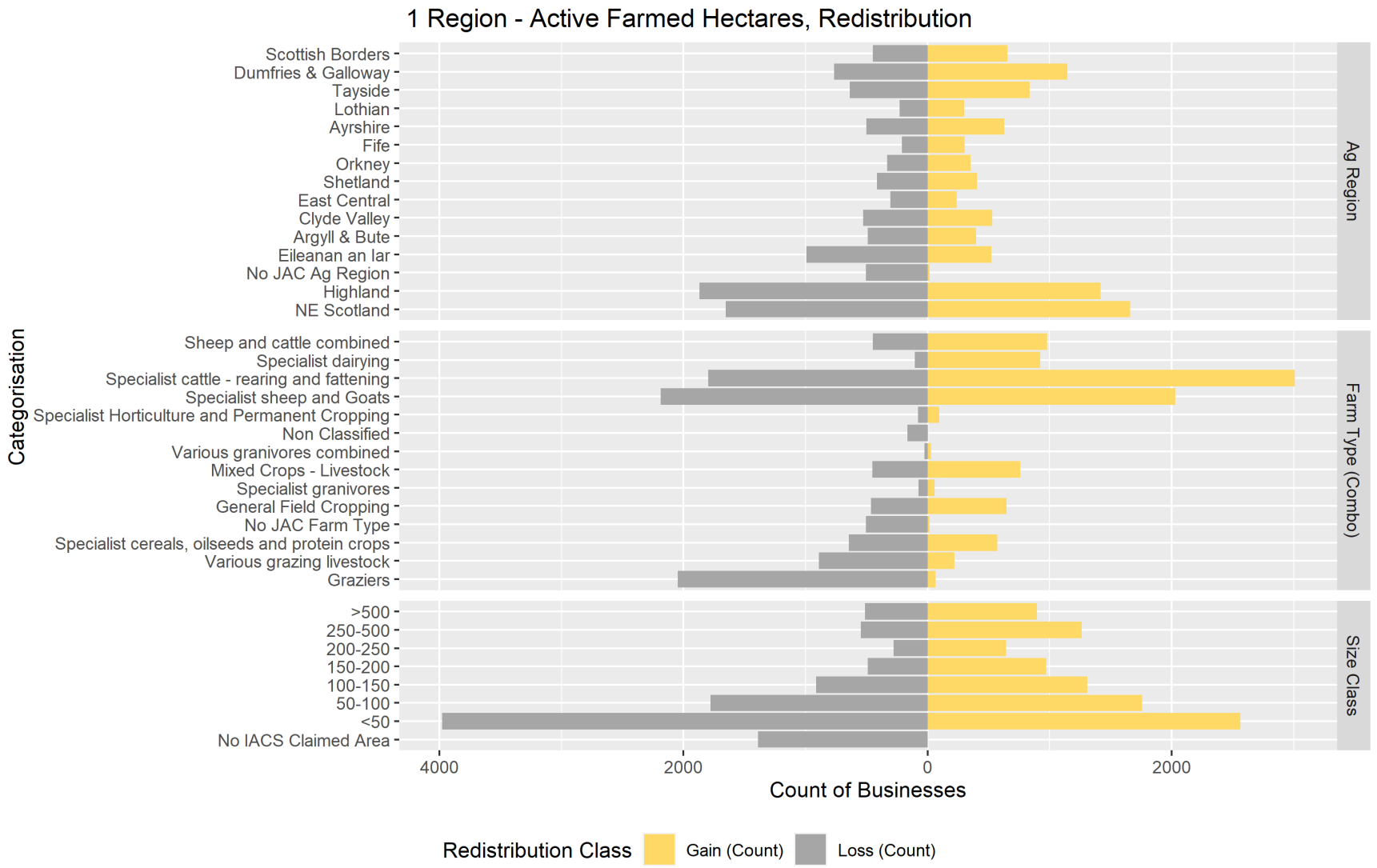

1 Region - Flat, Range of Payments by Farm Type
Farm Type (Combo)
Sheep and cattle combined
General Field Cropping
Specialist dairying
Mixed Crops - Livestock
Specialist cereals, oilseeds and protein crops
Specialist cattle - rearing and fattening
Specialist Horticulture and Permanent Cropping
Specialist granivores
Specialist sheep and Goats
Various granivores combined
Various grazing livestock
Graziers
No JAC Farm Type
Non Classified
1428
1110
1025
1215
1216
4806
175
132
4215
54
1114
2109
523
170
0
50
100
150
£ Value (000s)

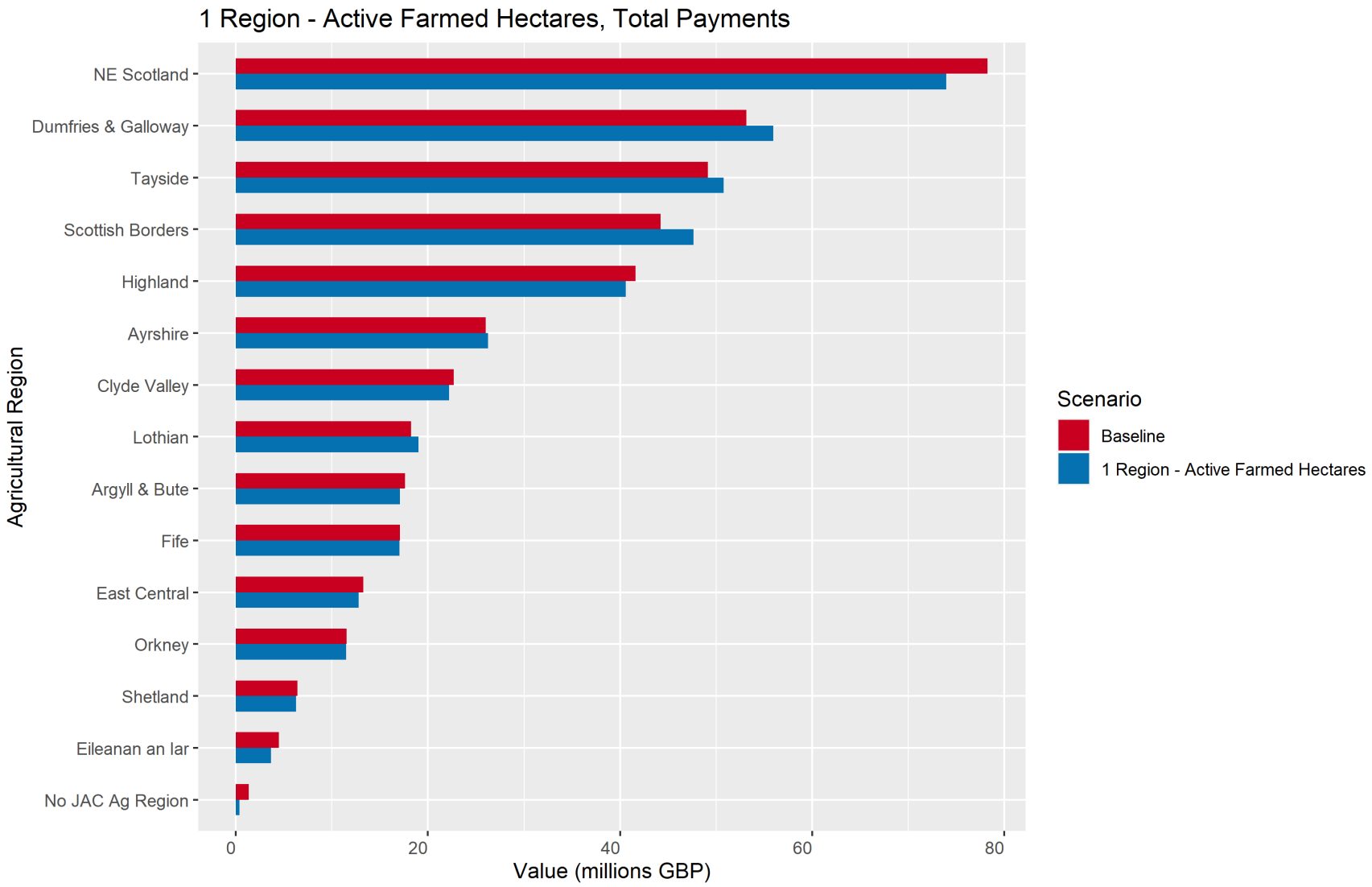

1 Region - Flat, Payment by Payment Percentiles
Payment (Millions)
150
100
50
0
3.2%
22.15%
14.22%
35.79%
24.65%
bottom 40%
40%-80%
80-90%
90-99%
top 1%
Payment Percentile

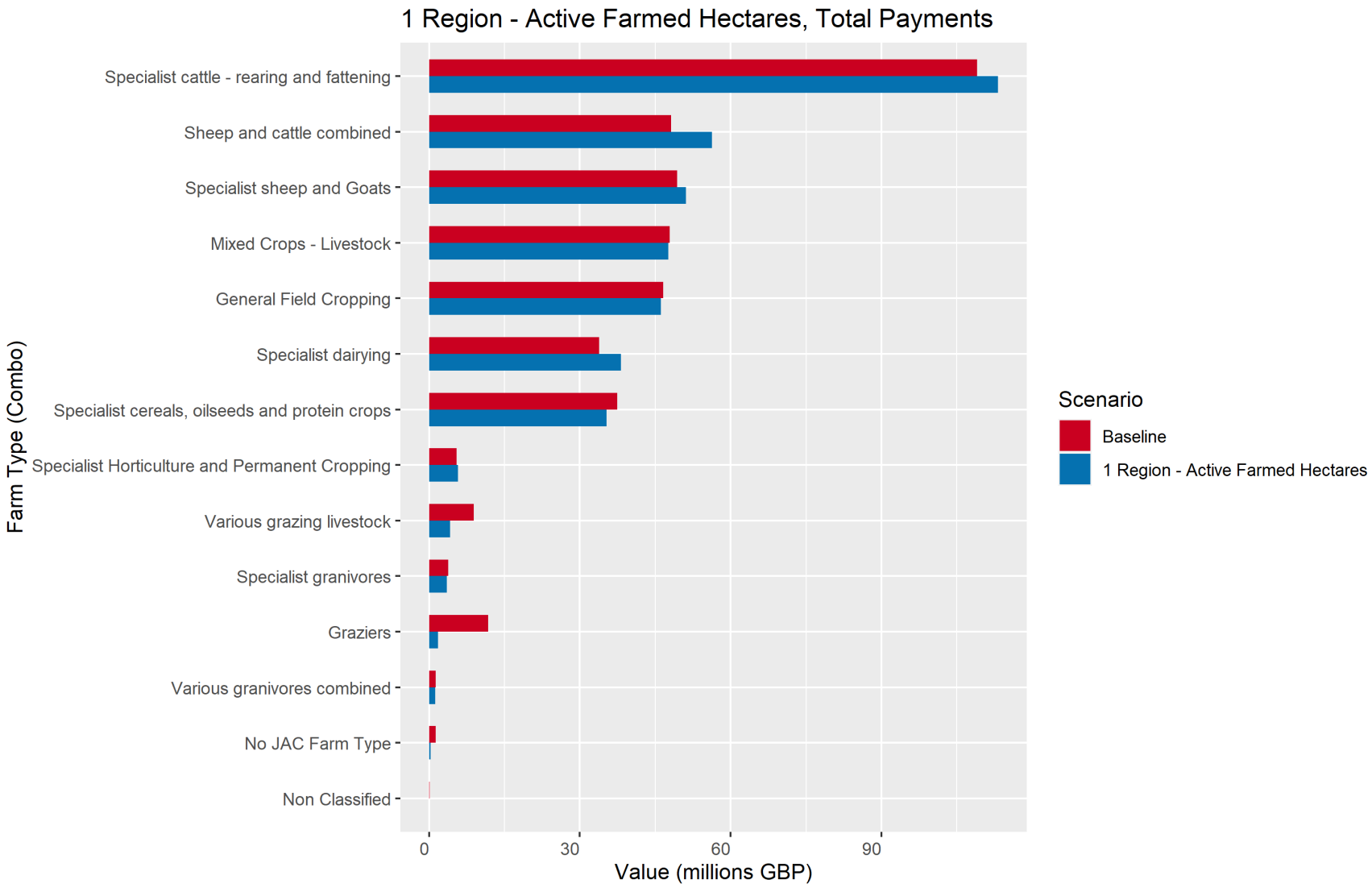

1 Region - Flat, Payment by Percentiles
Payment (Millions £)
Highland
NE Scotland
Tayside
Dumfries & Galloway
Scottish Borders
Argyll & Bute
Ayrshire
Clyde Valley
East Central
Eileanan an Iar
Lothian
Shetland
Fife
Orkney
Specialist sheep and Goats
Specialist cattle - rearing and fattening
Sheep and cattle combined
Mixed Crops - Livestock
General Field Cropping
Specialist cereals, oilseeds and protein crops
Specialist dairying
Various grazing livestock
Graziers
Specialist Horticulture and Permanent Cropping
Specialist granivores
Various granivores combined
Non Classified
>500
250-500
200-250
150-200
100-150
50-100
<50
0
50
100
150
200
Ag Region
Farm Type (Combo)
Size Class
Categorisation
Redistribution Class
top 1%
90-99%
80-90%
40%-80%
bottom 40%

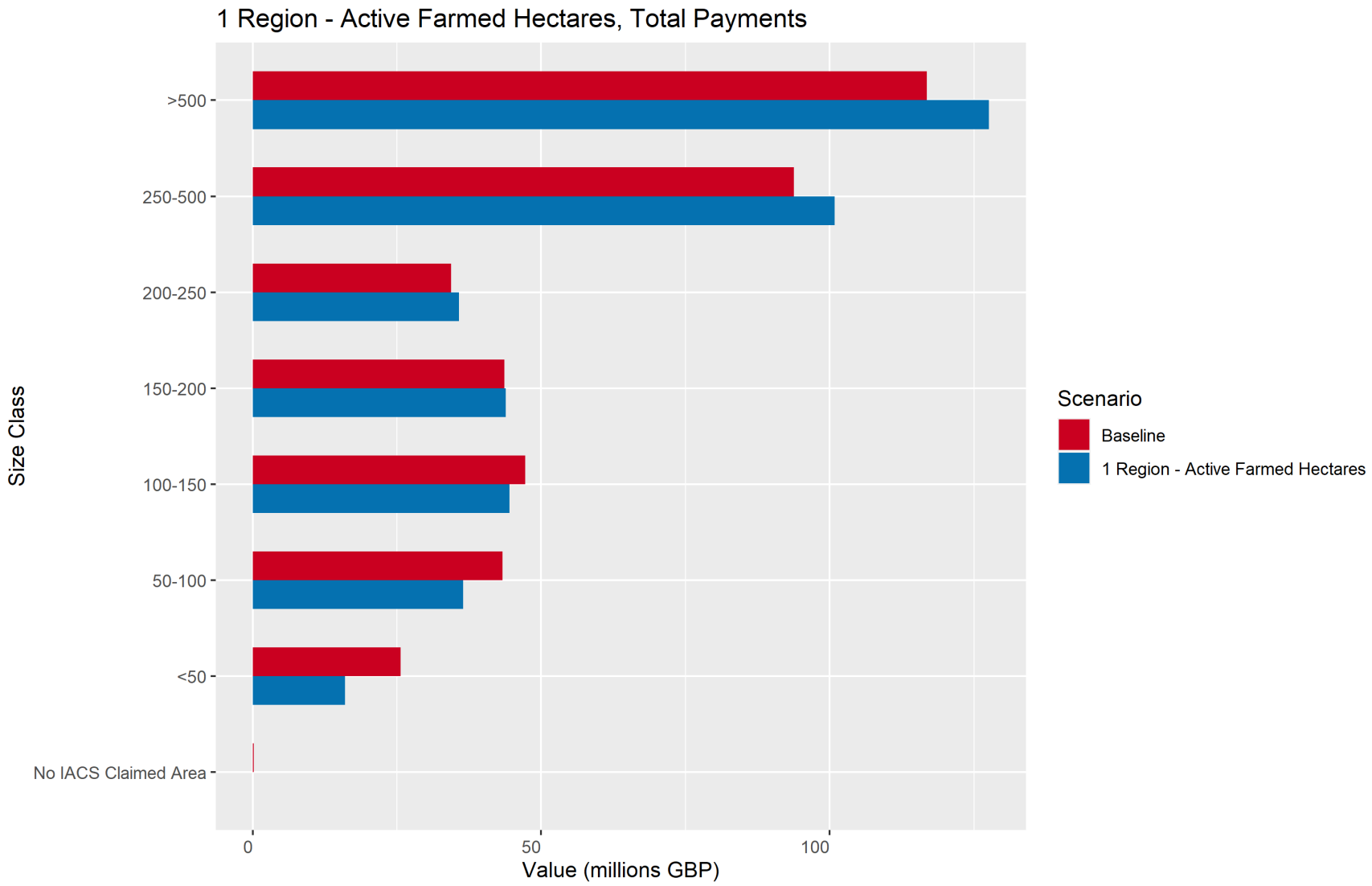

1 Region - Flat, Payment by Percentiles
Percentage
Categorisation
Highland
NE Scotland
Tayside
Dumfries & Galloway
Scottish Borders
Argyll & Bute
Ayrshire
Clyde Valley
East Central
Eileanan an Iar
Lothian
Shetland
Fife
Orkney
Ag Region
Specialist sheep and Goats
Specialist cattle - rearing and fattening
Sheep and cattle combined
Mixed Crops - Livestock
General Field Cropping
Specialist cereals, oilseeds and protein crops
Specialist dairying
Various grazing livestock
Graziers
Specialist Horticulture and Permanent Cropping
Specialist granivores
Various granivores combined
Non Classified
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
Size Class
0
25
50
75
100
Redistribution Class
top 1%
90-99%
80-90%
40%-80%
bottom 40%

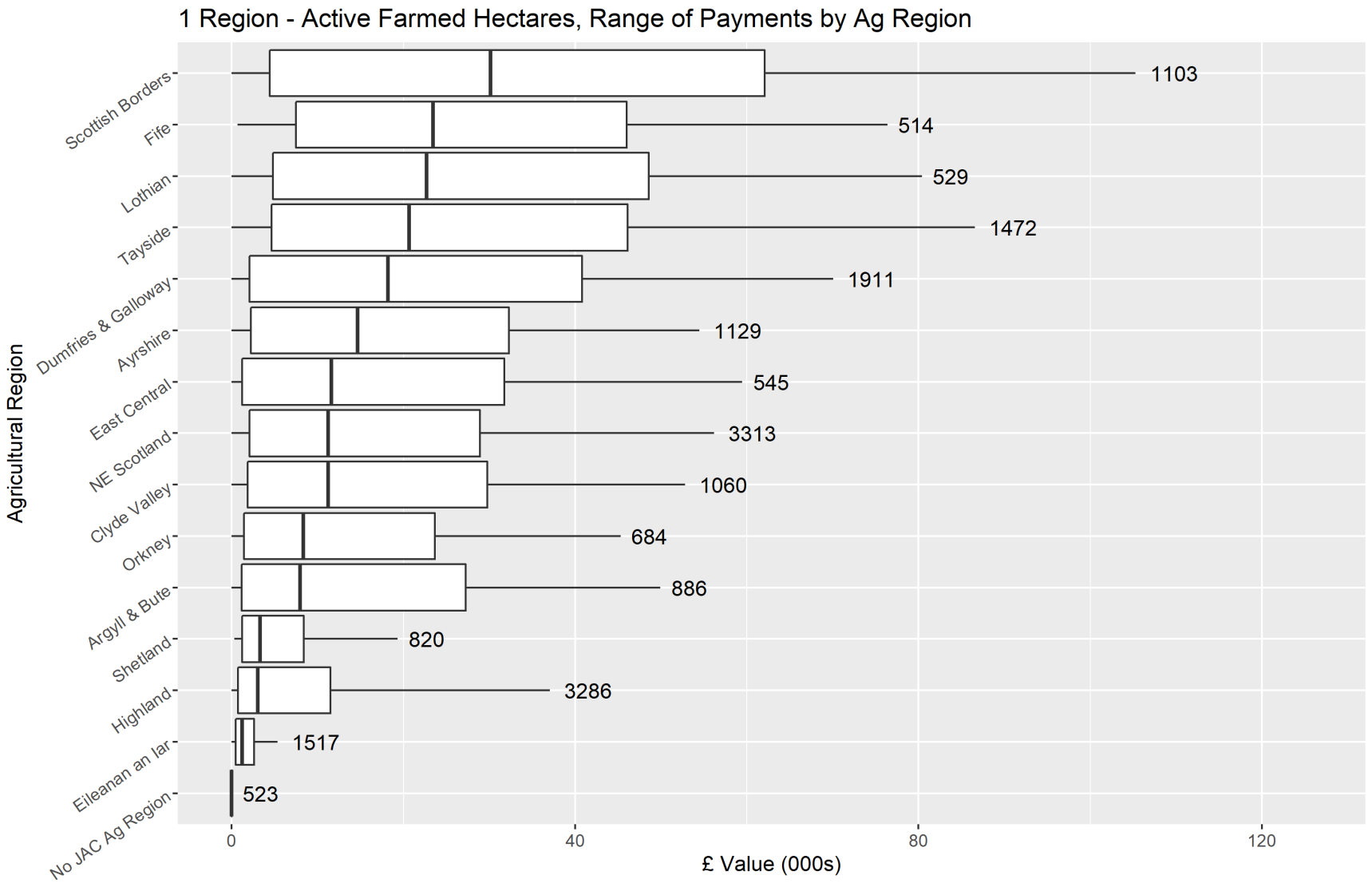

1 Region - Active Farmed Hectares, Redistribution
Scottish Borders
Dumfries & Galloway
Tayside
Lothian
Ayrshire
Fife
Orkney
Shetland
East Central
Clyde Valley
Argyll & Bute
Eileanan an Iar
No JAC Ag Region
Highland
NE Scotland
Ag Region
Sheep and cattle combined
Specialist dairying
Specialist cattle - rearing and fattening
Specialist sheep and Goats
Specialist Horticulture and Permanent Cropping
Non Classified
Various granivores combined
Mixed Crops - Livestock
Specialist granivores
General Field Cropping
No JAC Farm Type
Specialist cereals, oilseeds and protein crops
Various grazing livestock
Graziers
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Size Class
Categorisation
-10
0
10
20
Redistribution (millions £)
Redistribution Class
Loss (£)
Gain (£)
Net Change

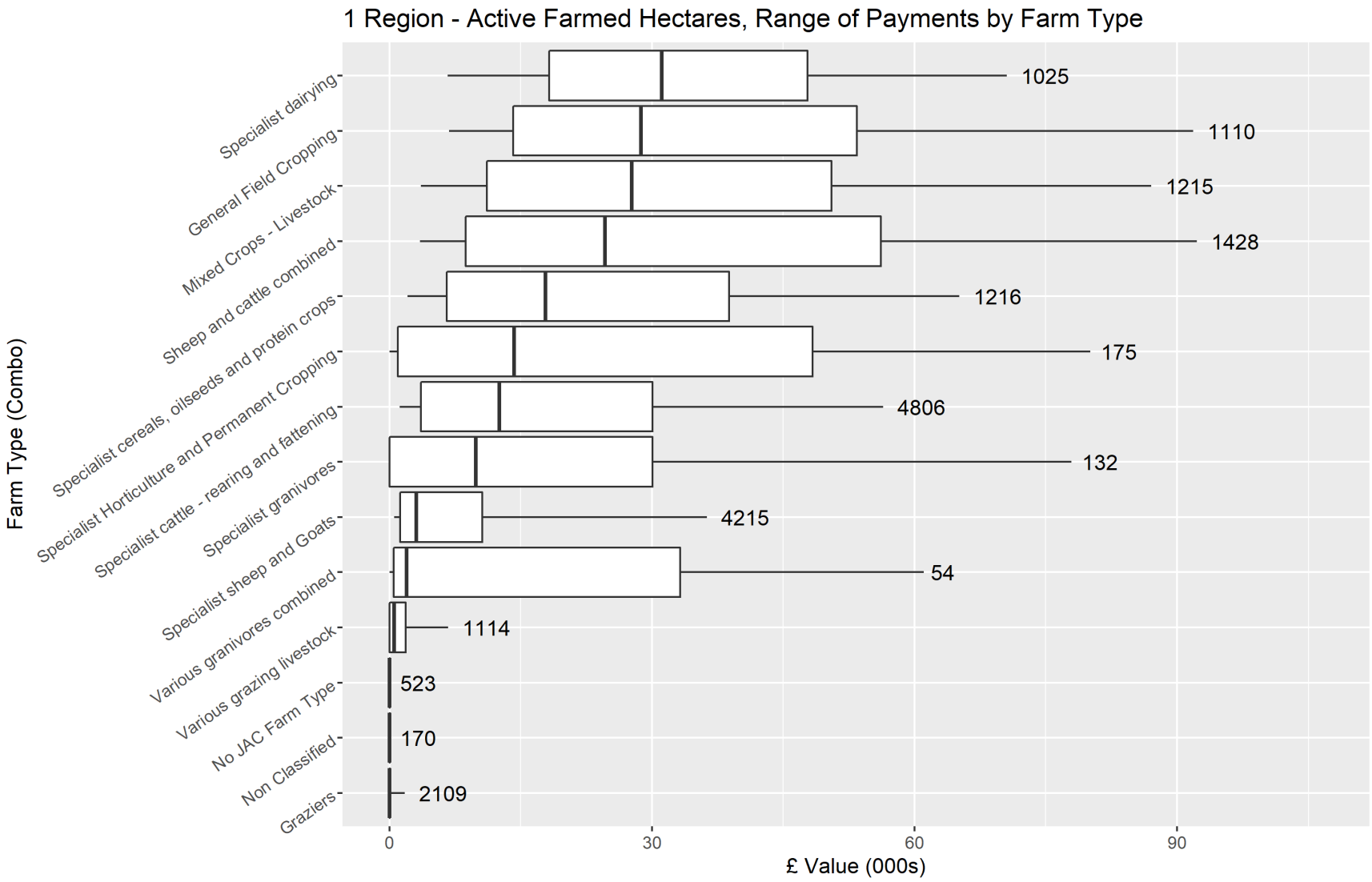

1 Region - Active Farmed Hectares, Redistribution
Scottish Borders
Dumfries & Galloway
Tayside
Lothian
Ayrshire
Fife
Orkney
Shetland
East Central
Clyde Valley
Argyll & Bute
Eileanan an Iar
No JAC Ag Region
Highland
NE Scotland
Ag Region
Sheep and cattle combined
Specialist dairying
Specialist cattle - rearing and fattening
Specialist sheep and Goats
Specialist Horticulture and Permanent Cropping
Non Classified
Various granivores combined
Mixed Crops - Livestock
Specialist granivores
General Field Cropping
No JAC Farm Type
Specialist cereals, oilseeds and protein crops
Various grazing livestock
Graziers
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Size Class
Categorisation
4000
2000
0
2000
Count of Businesses
Redistribution Class
Gain (Count)
Loss (Count)

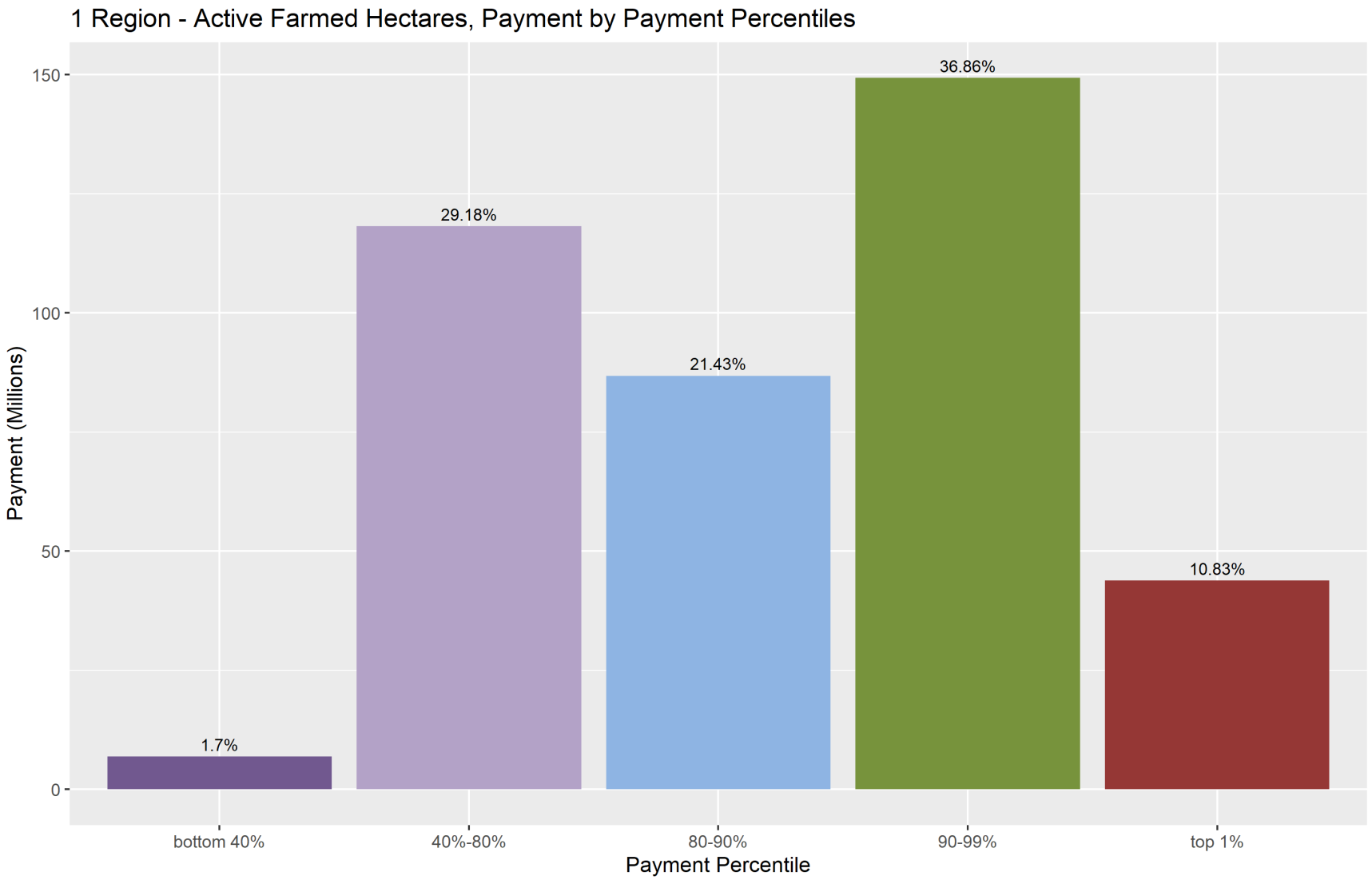

1 Region - Active Farmed Hectares, Total Payments
NE Scotland
Dumfries & Galloway
Tayside
Scottish Borders
Highland
Ayrshire
Clyde Valley
Lothian
Argyll & Bute
Fife
East Central
Orkney
Shetland
Eileanan an Iar
No JAC Ag Region
Agricultural Region
0
20
40
60
80
Value (millions GBP)
Scenario
Baseline
1 Region - Active Farmed Hectares

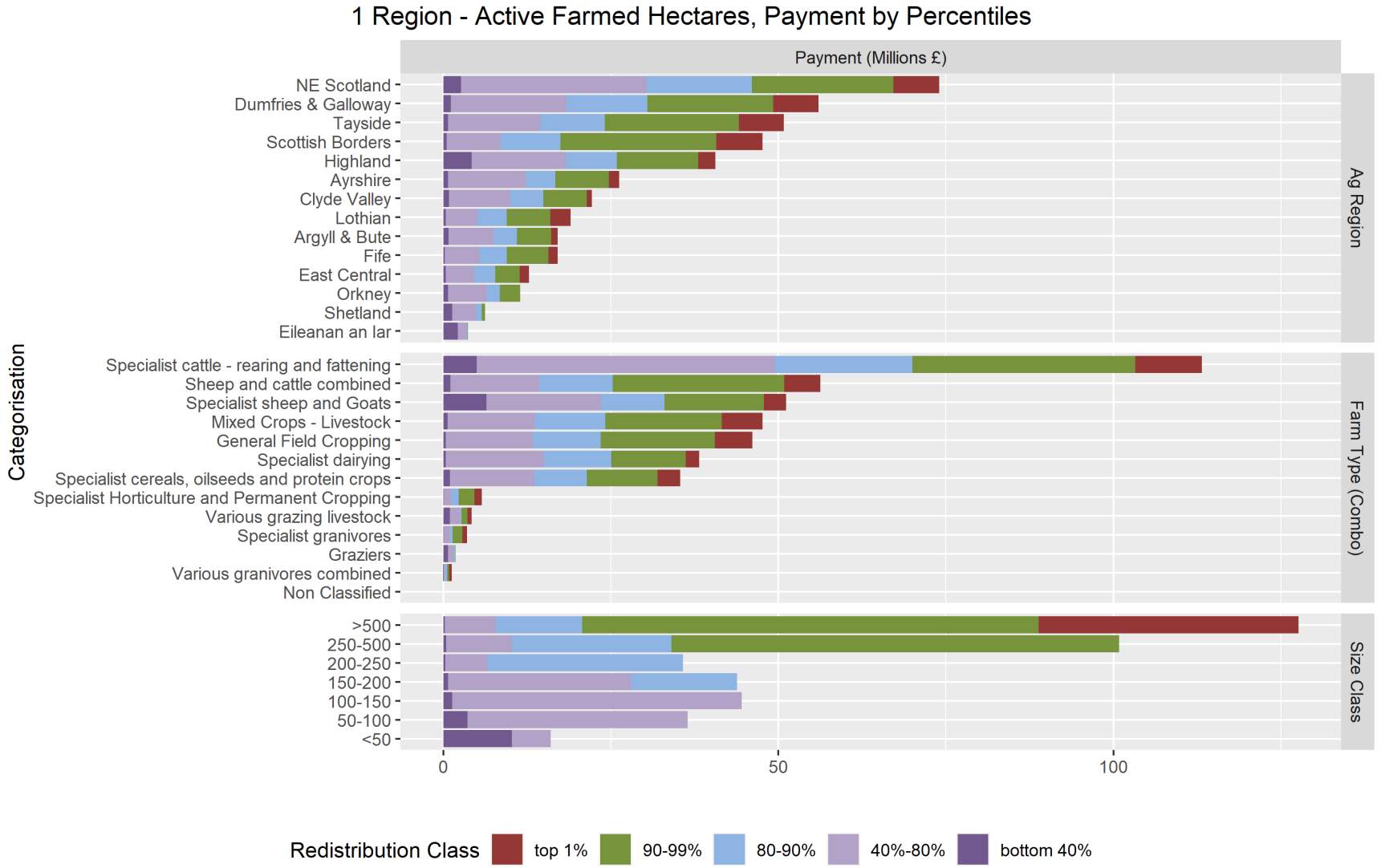

1 Region - Active Farmed Hectares, Total Payments
Specialist cattle - rearing and fattening
Sheep and cattle combined
Specialist sheep and Goats
Mixed Crops - Livestock
General Field Cropping
Specialist dairying
Specialist cereals, oilseeds and protein crops
Specialist Horticulture and Permanent Cropping
Various grazing livestock
Specialist granivores
Graziers
Various granivores combined
No JAC Farm Type
Non Classified
Farm Type (Combo)
0
30
60
90
Value (millions GBP)
Scenario
Baseline
1 Region - Active Farmed Hectares

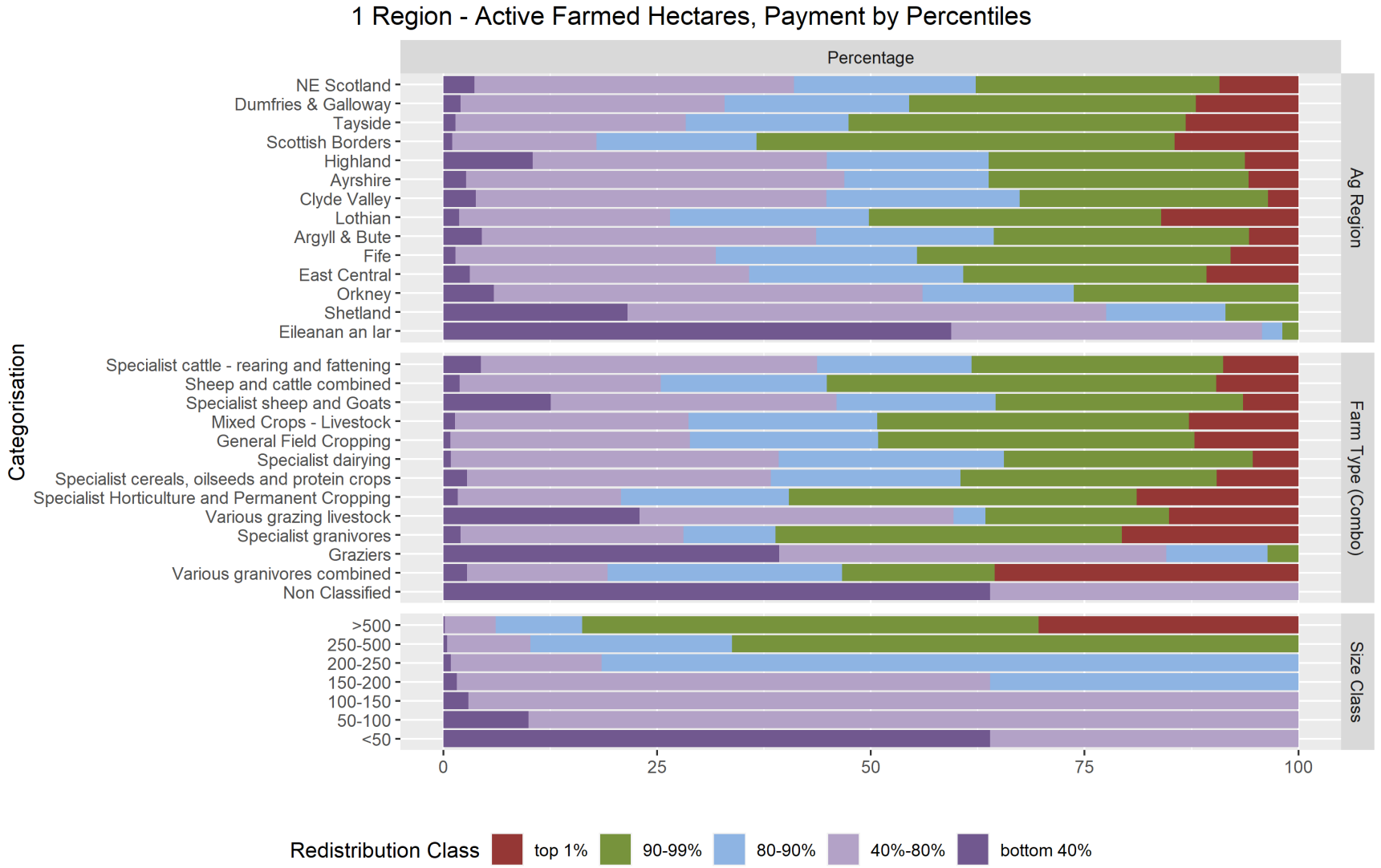

1 Region - Active Farmed Hectares, Total Payments
Size Class
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
0
50
100
Value (millions GBP)
Scenario
Baseline
1 Region - Active Farmed Hectares

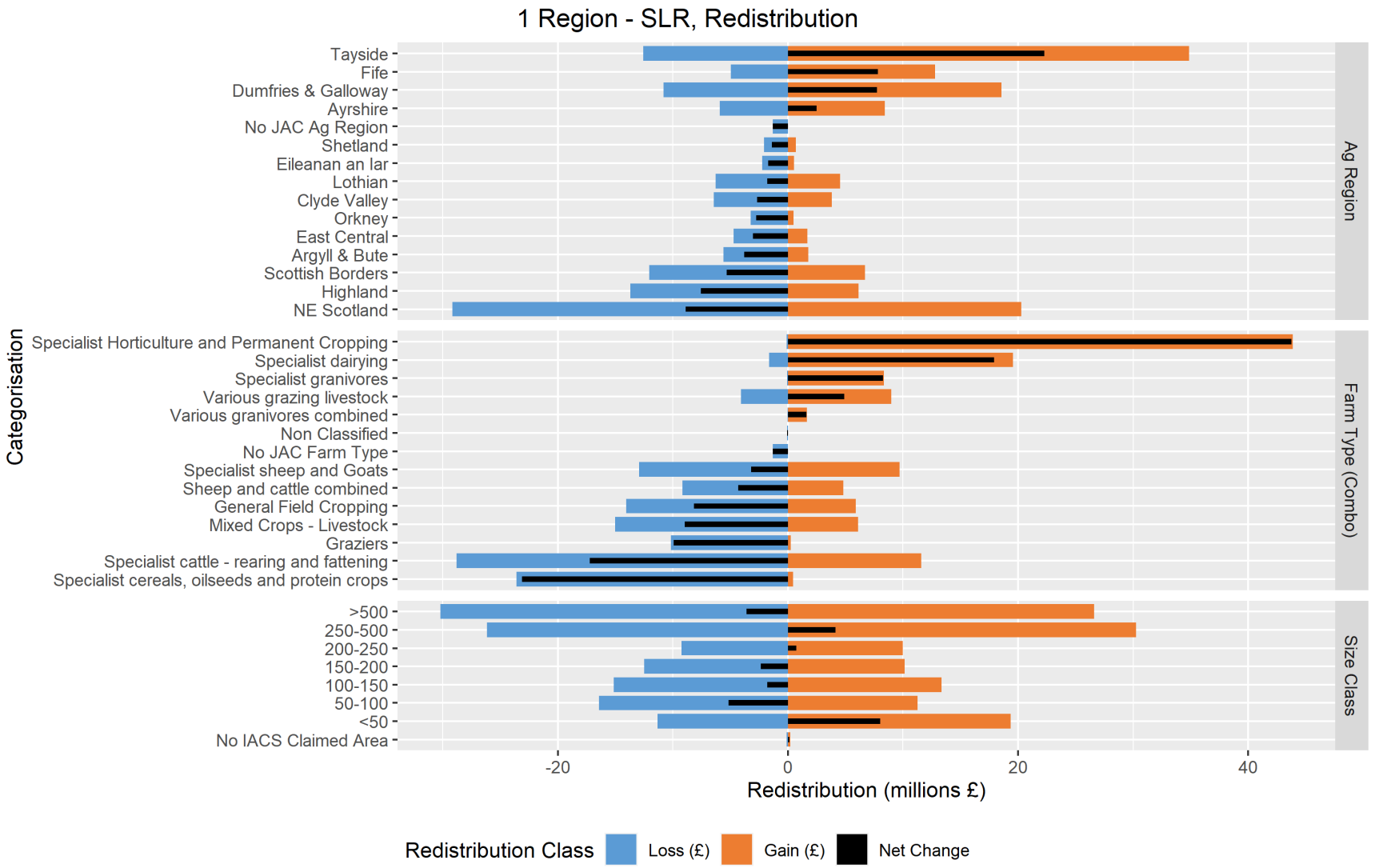

1 Region - Active Farmed Hectares, Range of Payments by Ag Region
Agricultural Region
Scottish Borders
Fife
Lothian
Tayside
Dumfries & Galloway
Ayrshire
East Central
NE Scotland
Clyde Valley
Orkney
Argyll & Bute
Shetland
Highland
Eileanan an Iar
No JAC Ag Region
1103
514
529
1472
1911
1129
545
3313
1060
684
886
820
3286
1517
523
0
40
80
120
£ Value (000s)

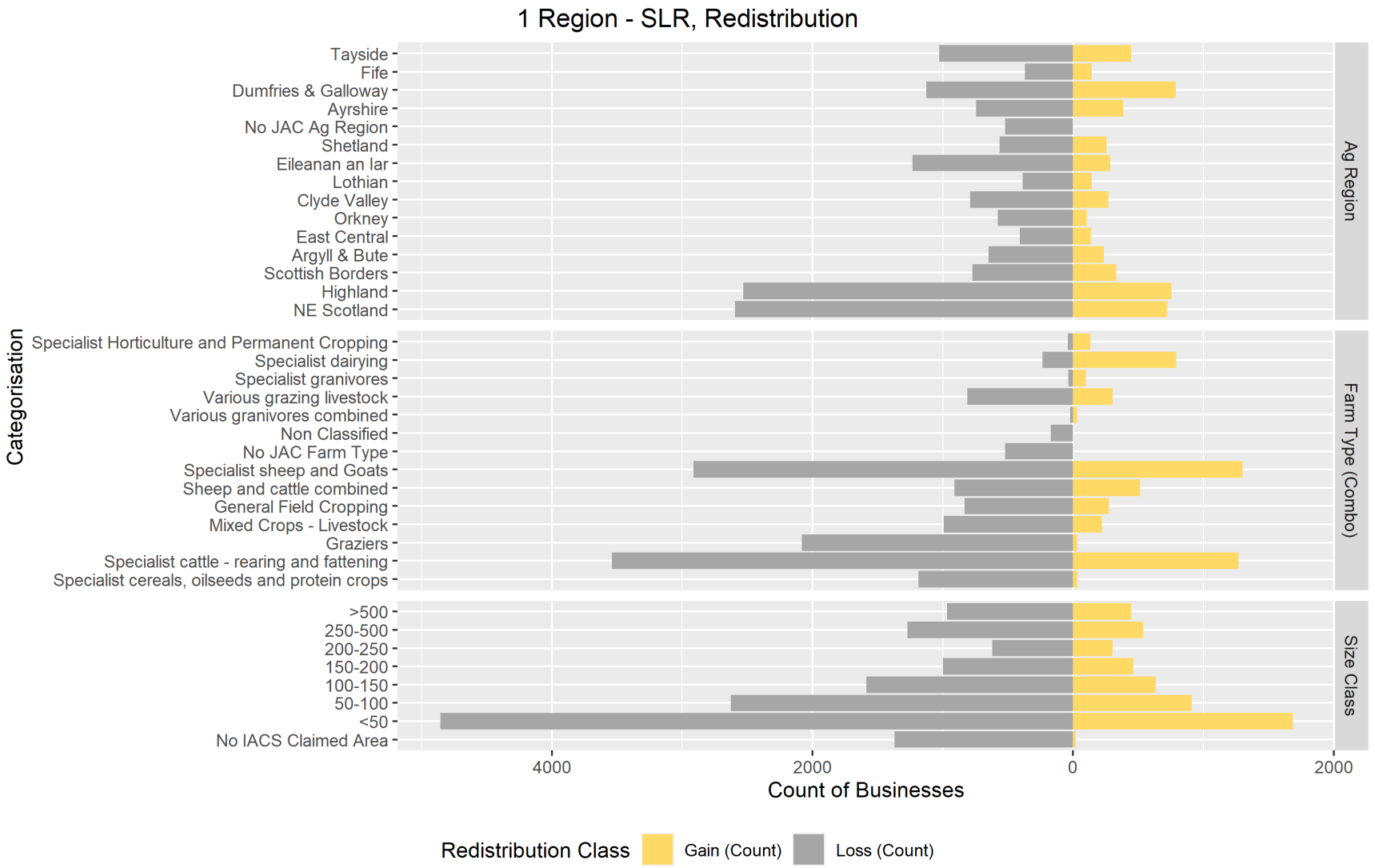

1 Region - Active Farmed Hectares, Range of Payments by Farm Type
Farm Type (Combo)
Specialist dairying
General Field Cropping
Mixed Crops - Livestock
Sheep and cattle combined
Specialist cereals, oilseeds and protein crops
Specialist Horticulture and Permanent Cropping
Specialist cattle - rearing and fattening
Specialist granivores
Specialist sheep and Goats
Various granivores combined
Various grazing livestock
No JAC Farm Type
Non Classified
Graziers
1025
1110
1215
1428
1216
175
4806
132
4215
54
1114
523
170
2109
0
30
60
90
£ Value (000s)

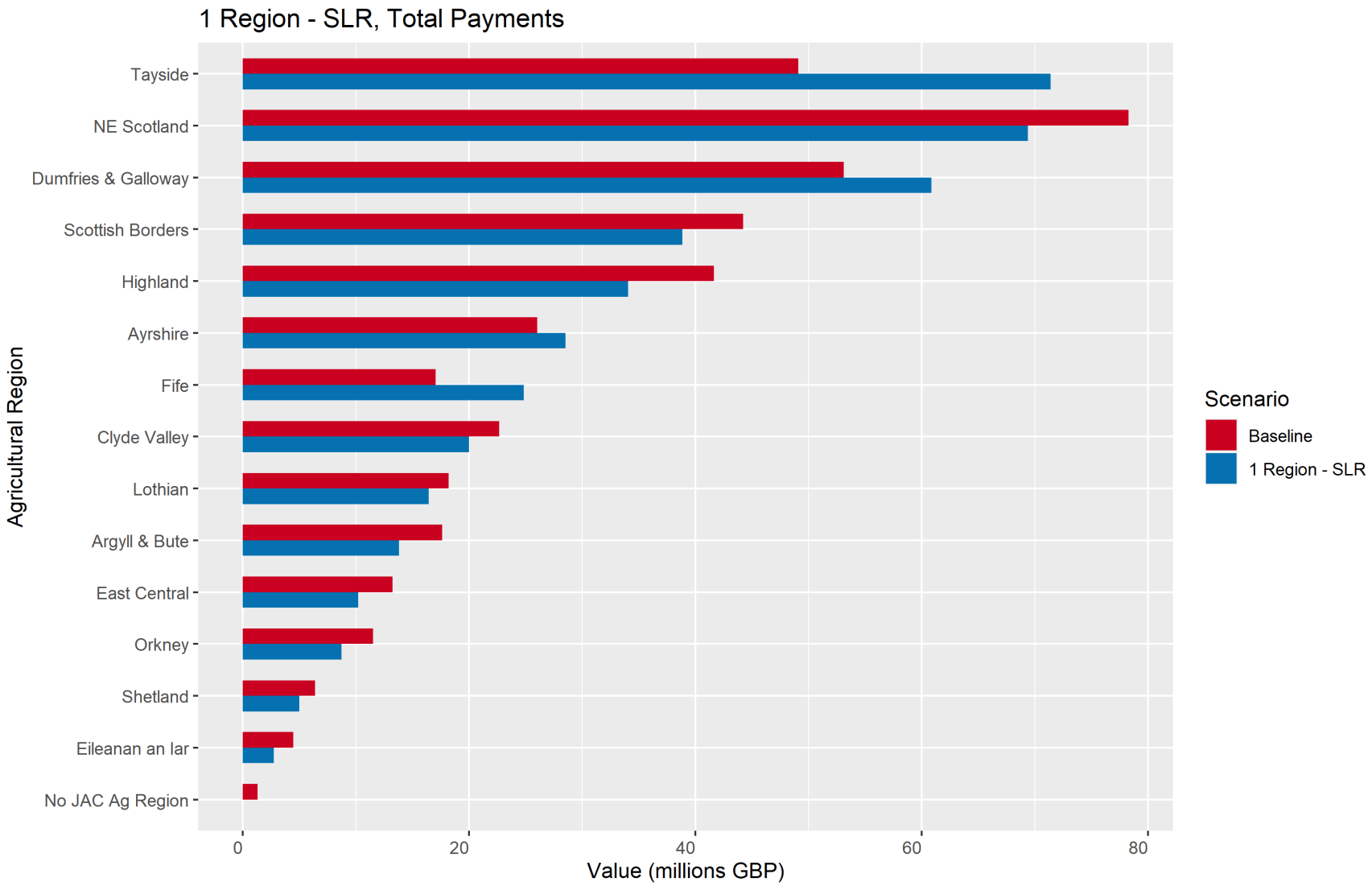

1 Region - Active Farmed Hectares, Payment by Payment Percentiles
Payment (Millions)
150
100
50
0
1.7%
29.18%
21.43%
36.86%
10.83%
bottom 40%
40%-80%
80-90%
90-99%
top 1%
Payment Percentile

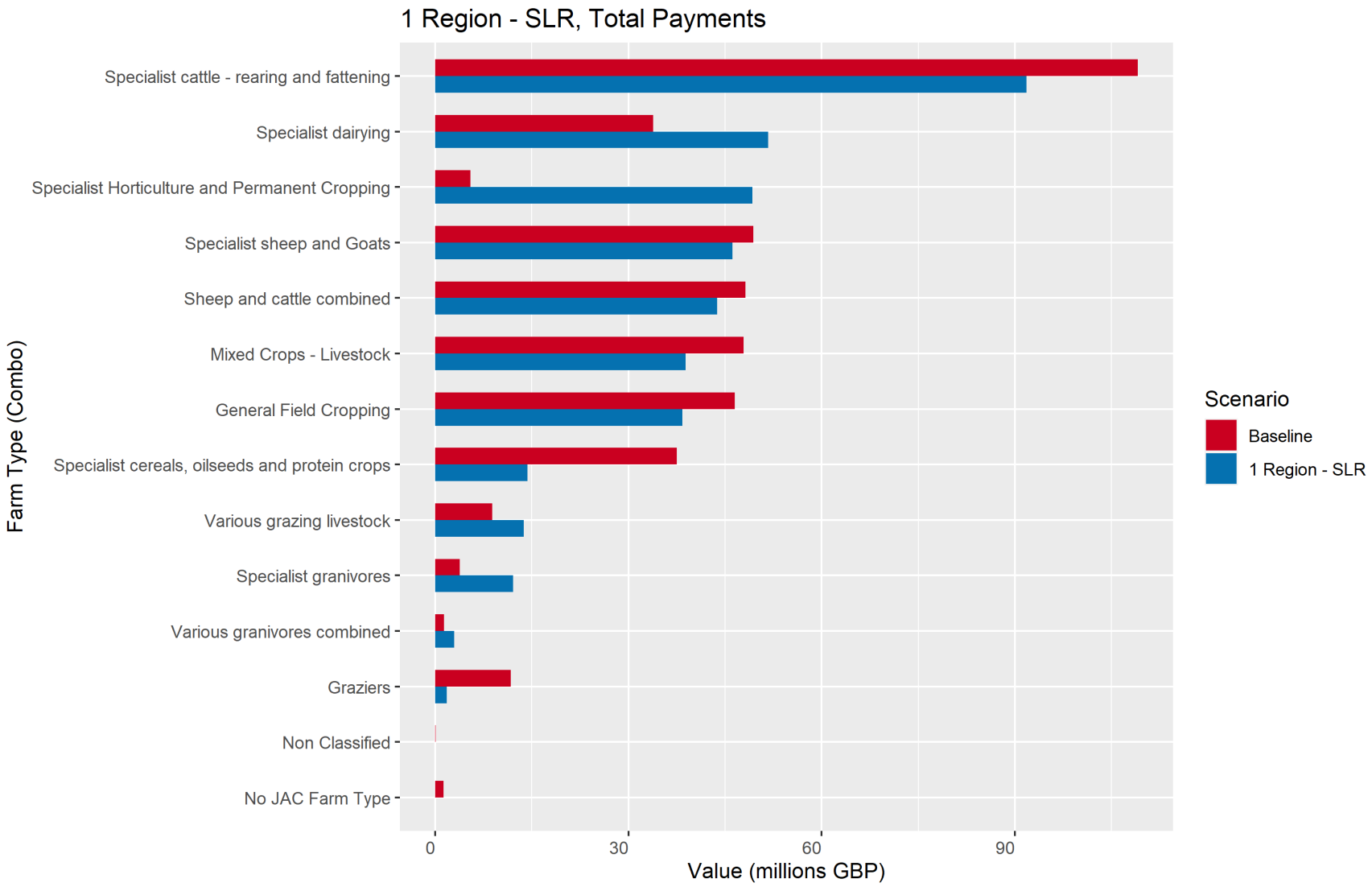

1 Region - Active Farmed Hectares, Payment by Percentiles
Payment (Millions £)
Categorisation
NE Scotland
Dumfries & Galloway
Tayside
Scottish Borders
Highland
Ayrshire
Clyde Valley
Lothian
Argyll & Bute
Fife
East Central
Orkney
Shetland
Eileanan an Iar
Specialist cattle - rearing and fattening
Sheep and cattle combined
Specialist sheep and Goats
Mixed Crops - Livestock
General Field Cropping
Specialist dairying
Specialist cereals, oilseeds and protein crops
Specialist Horticulture and Permanent Cropping
Various grazing livestock
Specialist granivores
Graziers
Various granivores combined
Non Classified
>500
250-500
200-250
150-200
100-150
50-100
<50
0
50
100
Ag Region
Farm Type (Combo)
Size Class
Redistribution Class
top 1%
90-99%
80-90%
40%-80%
bottom 40%

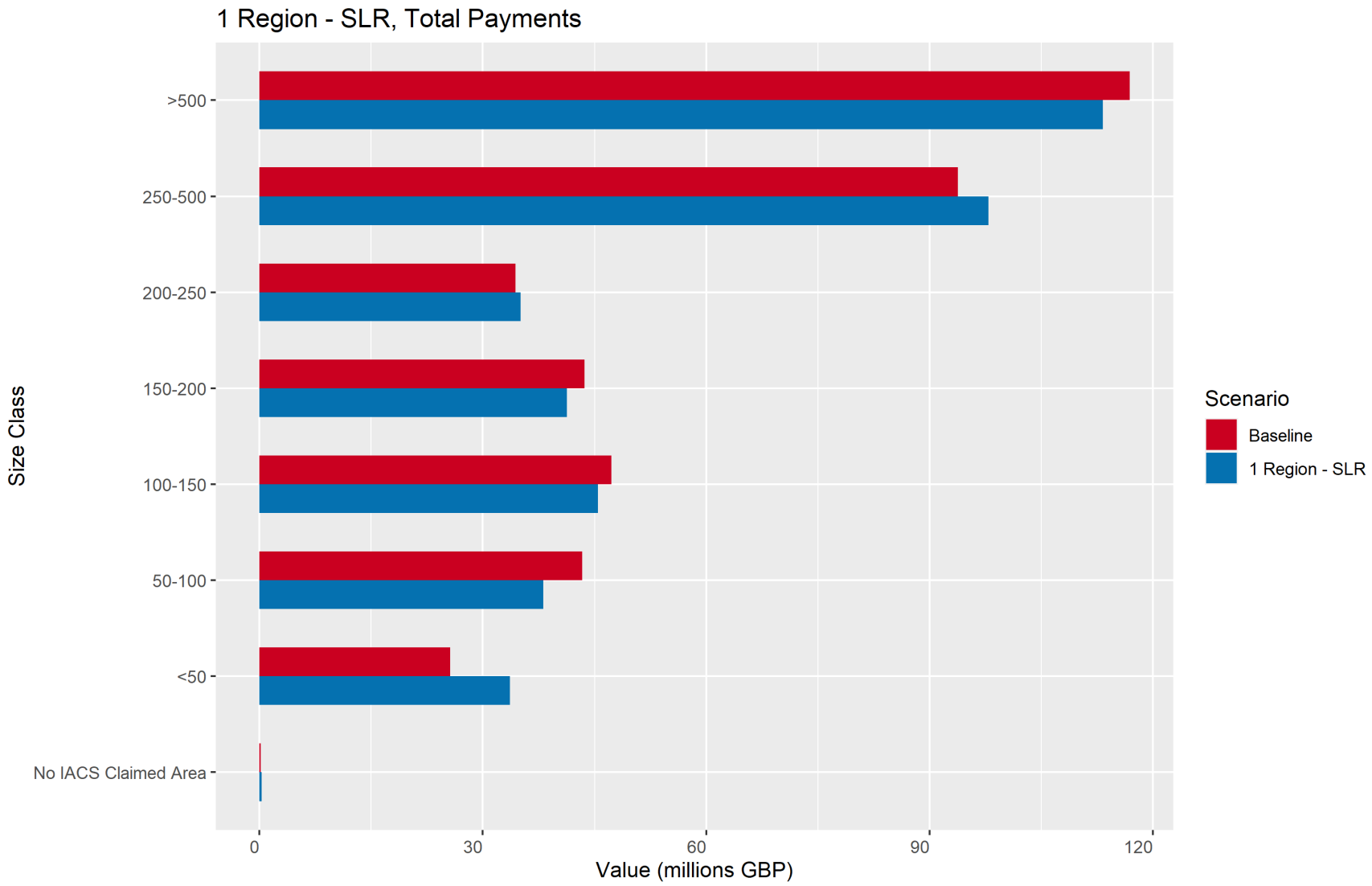

1 Region - Active Farmed Hectares, Payment by Percentiles
Percentage
Categorisation
NE Scotland
Dumfries & Galloway
Tayside
Scottish Borders
Highland
Ayrshire
Clyde Valley
Lothian
Argyll & Bute
Fife
East Central
Orkney
Shetland
Eileanan an Iar
Ag Region
Specialist cattle - rearing and fattening
Sheep and cattle combined
Specialist sheep and Goats
Mixed Crops - Livestock
General Field Cropping
Specialist dairying
Specialist cereals, oilseeds and protein crops
Specialist Horticulture and Permanent Cropping
Various grazing livestock
Specialist granivores
Graziers
Various granivores combined
Non Classified
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
Size Class
0
25
50
75
100
Redistribution Class
top 1%
90-99%
80-90%
40%-80%
bottom 40%

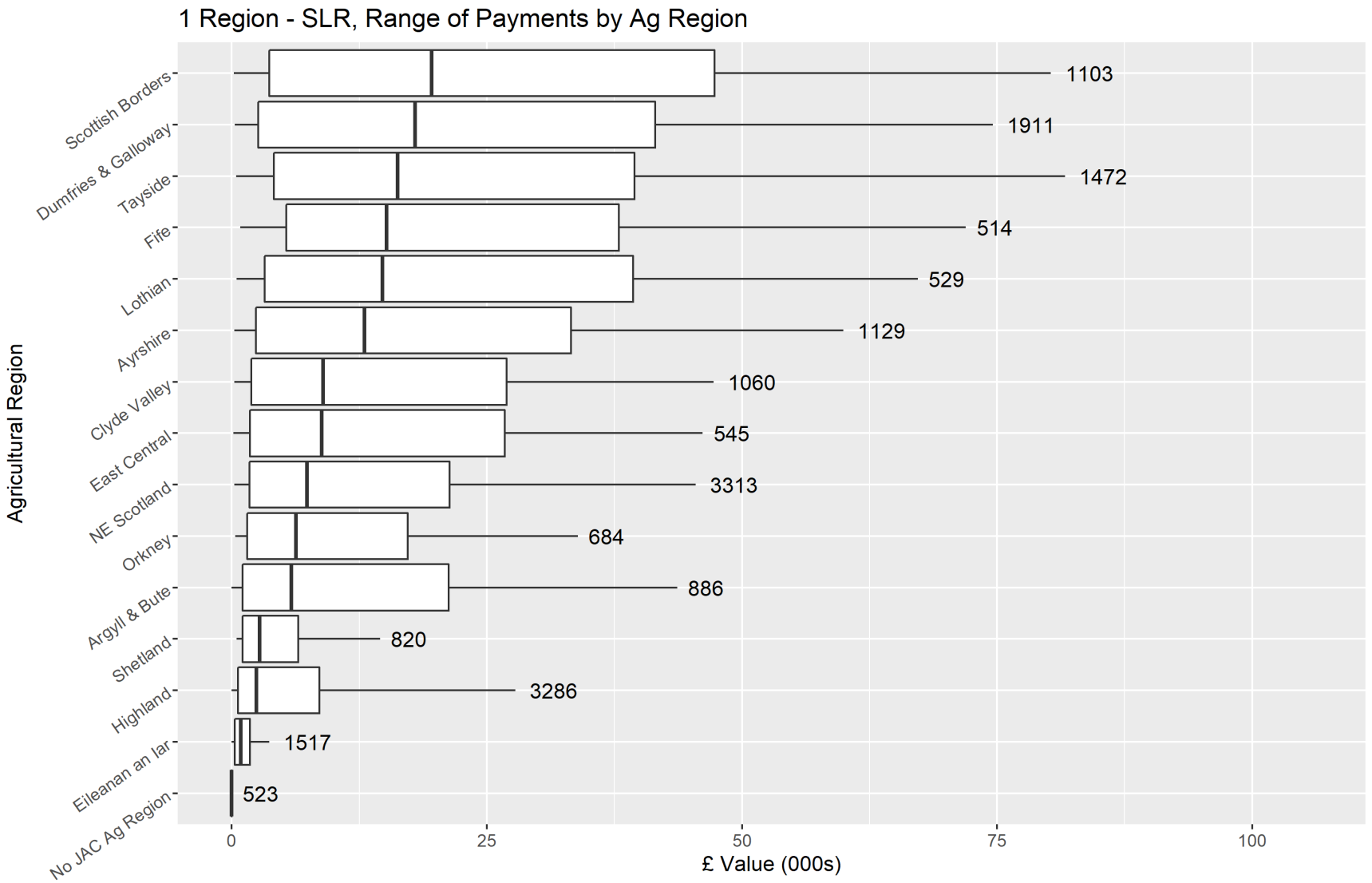

1 Region - SLR, Redistribution
Tayside
Fife
Dumfries & Galloway
Ayrshire
No JAC Ag Region
Shetland
Eileanan an Iar
Lothian
Clyde Valley
Orkney
East Central
Argyll & Bute
Scottish Borders
Highland
NE Scotland
Ag Region
Specialist Horticulture and Permanent Cropping
Specialist dairying
Specialist granivores
Various grazing livestock
Various granivores combined
Non Classified
No JAC Farm Type
Specialist sheep and Goats
Sheep and cattle combined
General Field Cropping
Mixed Crops - Livestock
Graziers
Specialist cattle - rearing and fattening
Specialist cereals, oilseeds and protein crops
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Size Class
Categorisation
-20
0
20
40
Redistribution (millions £)
Redistribution Class
Loss (£)
Gain (£)
Net Change

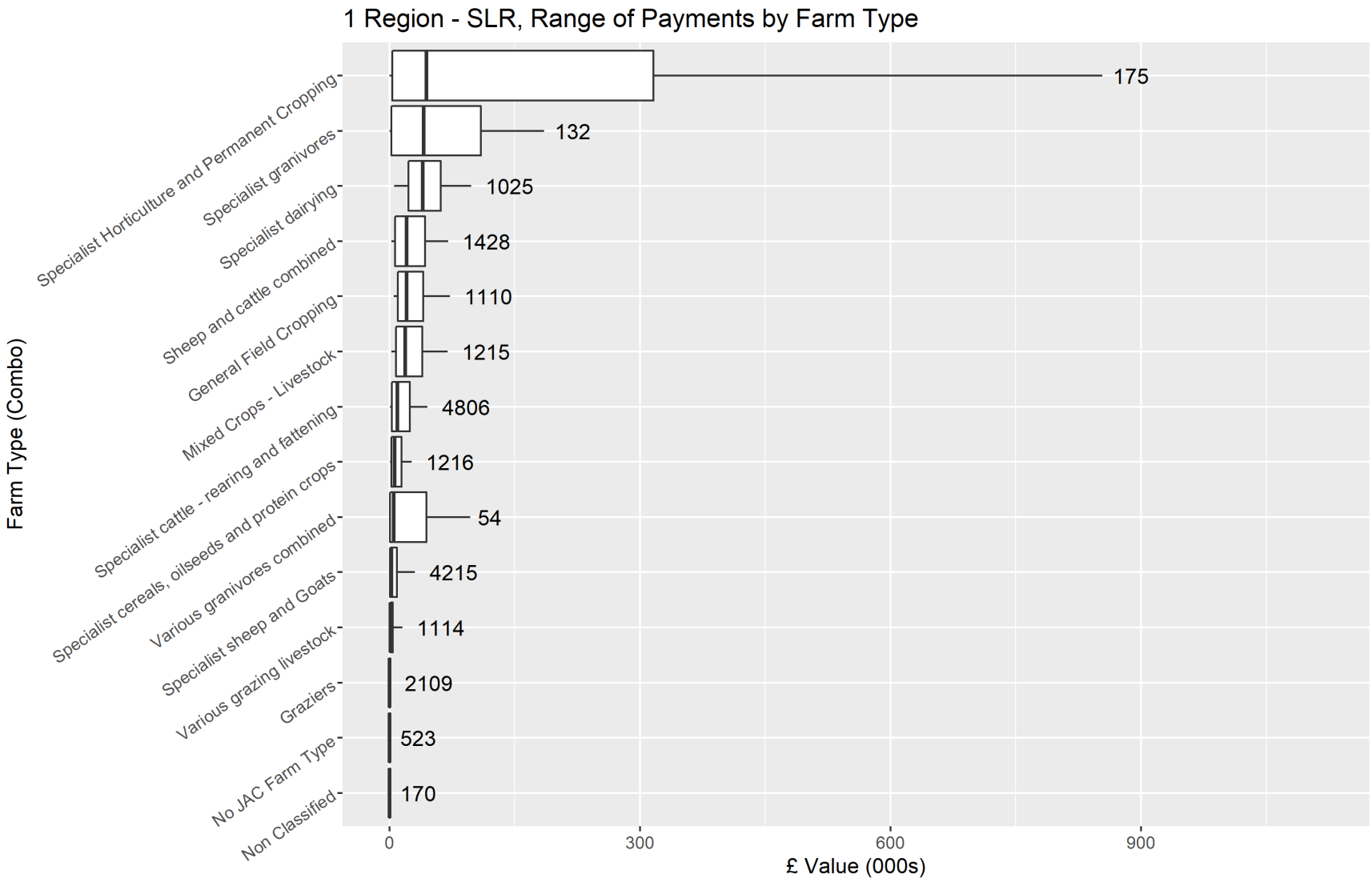

1 Region - SLR, Redistribution
Tayside
Fife
Dumfries & Galloway
Ayrshire
No JAC Ag Region
Shetland
Eileanan an Iar
Lothian
Clyde Valley
Orkney
East Central
Argyll & Bute
Scottish Borders
Highland
NE Scotland
Ag Region
Specialist Horticulture and Permanent Cropping
Specialist dairying
Specialist granivores
Various grazing livestock
Various granivores combined
Non Classified
No JAC Farm Type
Specialist sheep and Goats
Sheep and cattle combined
General Field Cropping
Mixed Crops - Livestock
Graziers
Specialist cattle - rearing and fattening
Specialist cereals, oilseeds and protein crops
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Size Class
Categorisation
4000
2000
0
2000
Count of Businesses
Redistribution Class
Gain (Count)
Loss (Count)

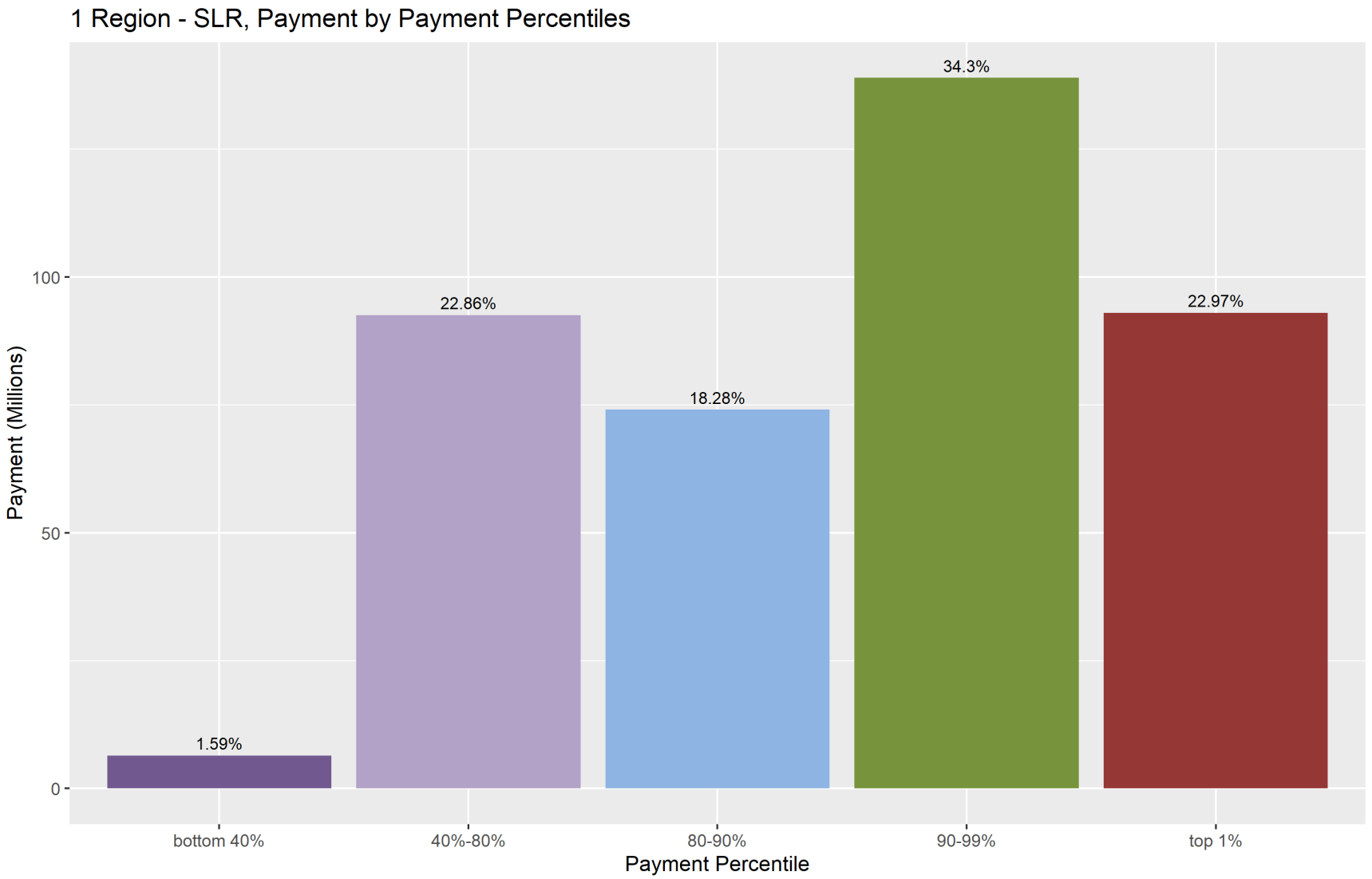

1 Region - SLR, Total Payments
Tayside
NE Scotland
Dumfries & Galloway
Scottish Borders
Highland
Ayrshire
Fife
Clyde Valley
Lothian
Argyll & Bute
East Central
Orkney
Shetland
Eileanan an Iar
No JAC Ag Region
Agricultural Region
0
20
40
60
80
Value (millions GBP)
Scenario
Baseline
1 Region - SLR

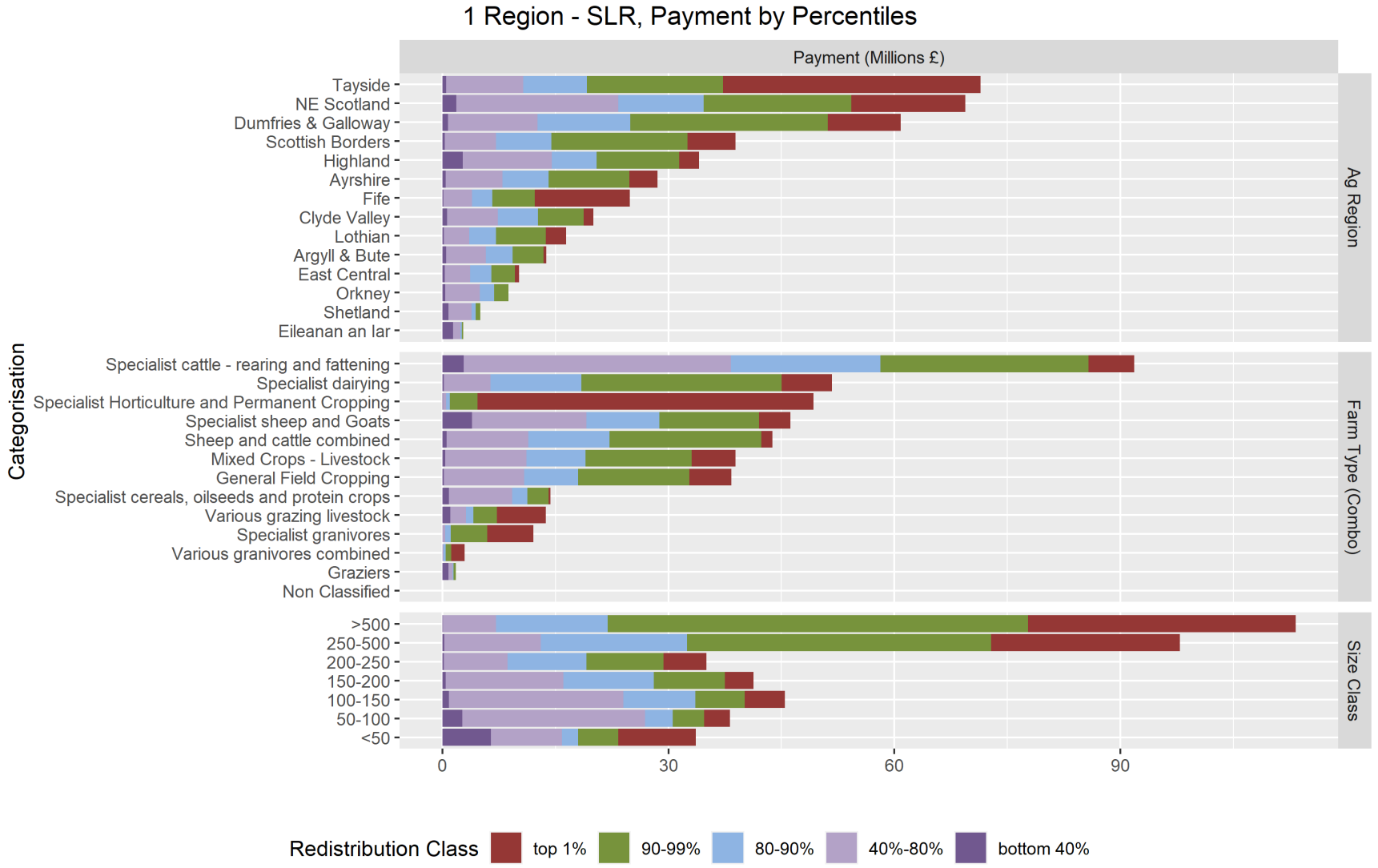

1 Region - SLR, Total Payments
Specialist cattle - rearing and fattening
Specialist dairying
Specialist Horticulture and Permanent Cropping
Specialist sheep and Goats
Sheep and cattle combined
Mixed Crops - Livestock
General Field Cropping
Specialist cereals, oilseeds and protein crops
Various grazing livestock
Specialist granivores
Various granivores combined
Graziers
Non Classified
No JAC Farm Type
Farm Type (Combo)
0
30
60
90
Value (millions GBP)
Scenario
Baseline
1 Region - SLR

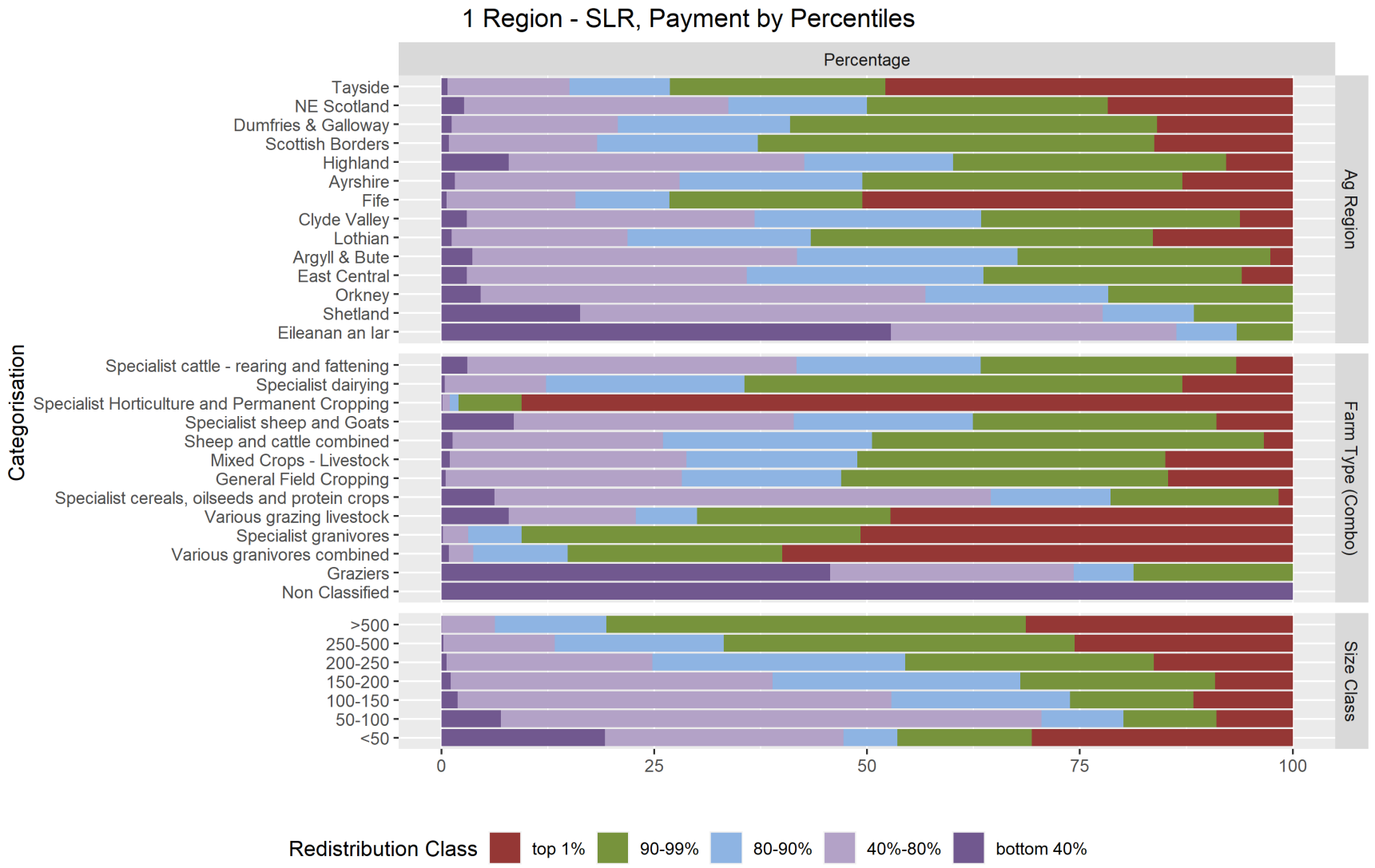

1 Region - SLR, Total Payments
Size Class
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
0
30
60
90
120
Value (millions GBP)
Scenario
Baseline
1 Region - SLR

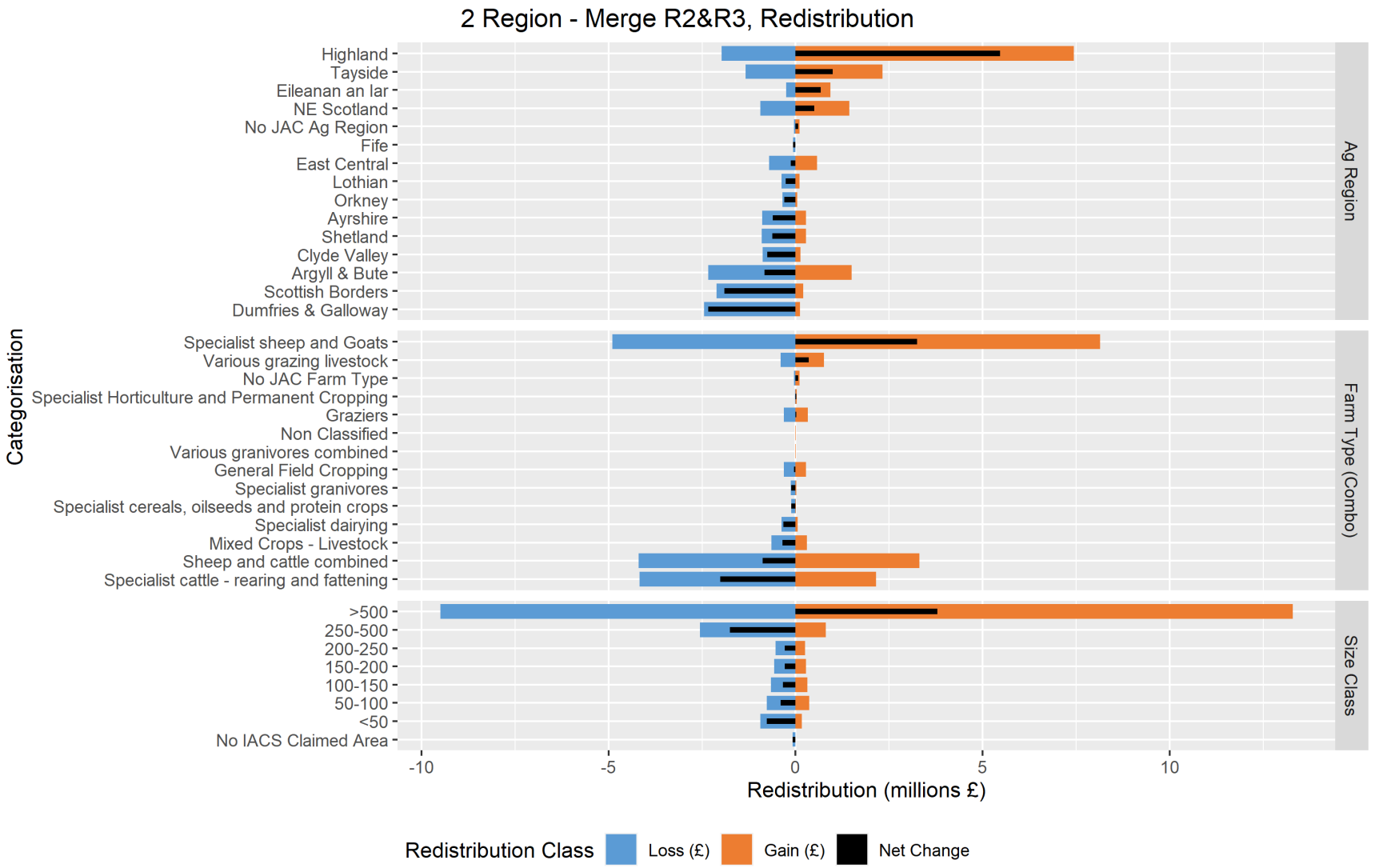

1 Region - SLR, Range of Payments by Ag Region
Agricultural Region
Scottish Borders
Dumfries & Galloway
Tayside
Fife
Lothian
Ayrshire
Clyde Valley
East Central
NE Scotland
Orkney
Argyll & Bute
Shetland
Highland
Eileanan an Iar
No JAC Ag Region
1103
1911
1472
514
529
1129
1060
545
3313
684
886
820
3286
1517
523
0
25
50
75
100
£ Value (000s)

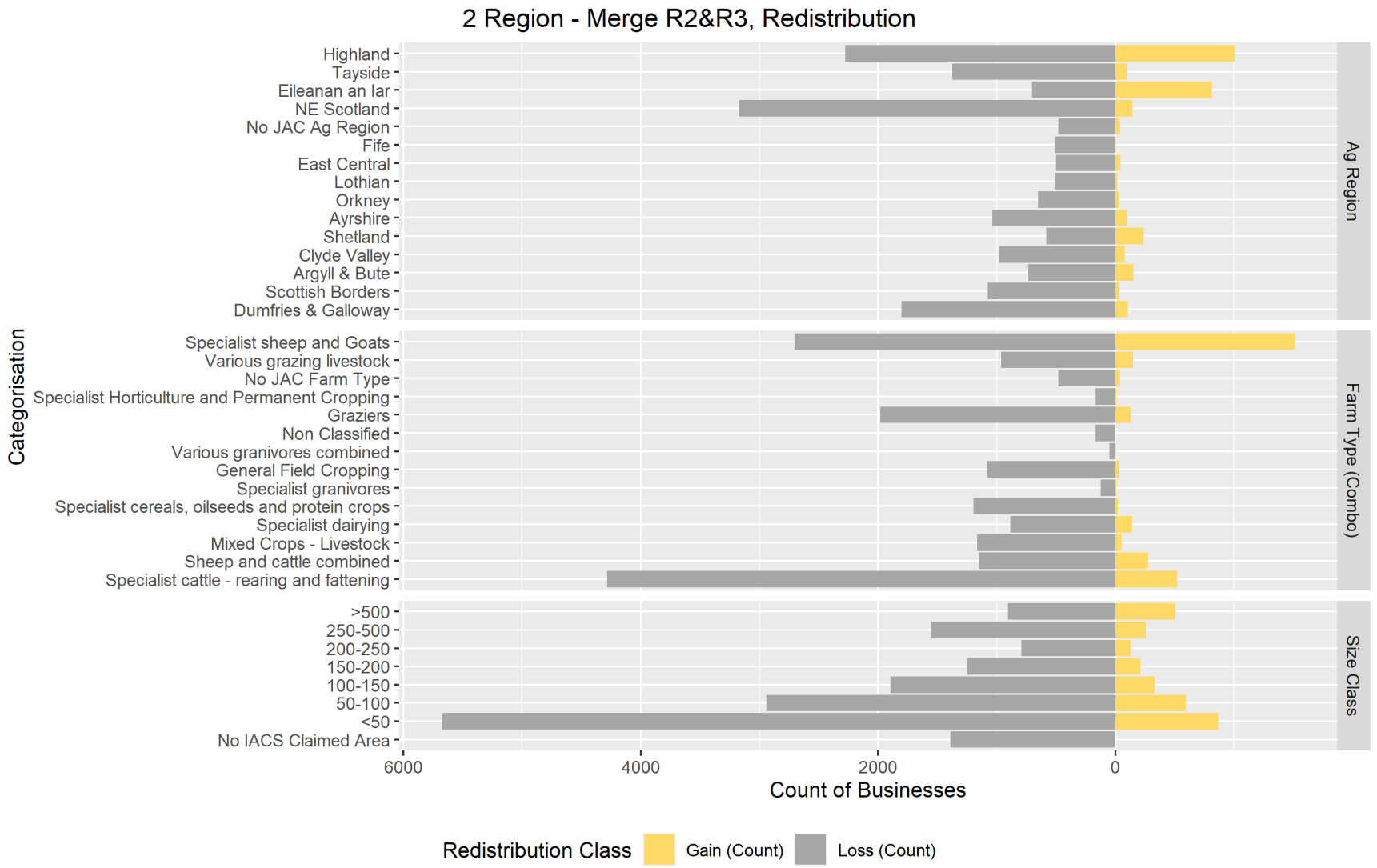

1 Region - SLR, Range of Payments by Farm Type
Farm Type (Combo)
Specialist Horticulture and Permanent Cropping
Specialist granivores
Specialist dairying
Sheep and cattle combined
General Field Cropping
Mixed Crops - Livestock
Specialist cattle - rearing and fattening
Specialist cereals, oilseeds and protein crops
Various granivores combined
Specialist sheep and Goats
Various grazing livestock
Graziers
No JAC Farm Type
Non Classified
175
132
1025
1428
1110
1215
4806
1216
54
4215
1114
2109
523
170
0
300
600
900
£ Value (000s)

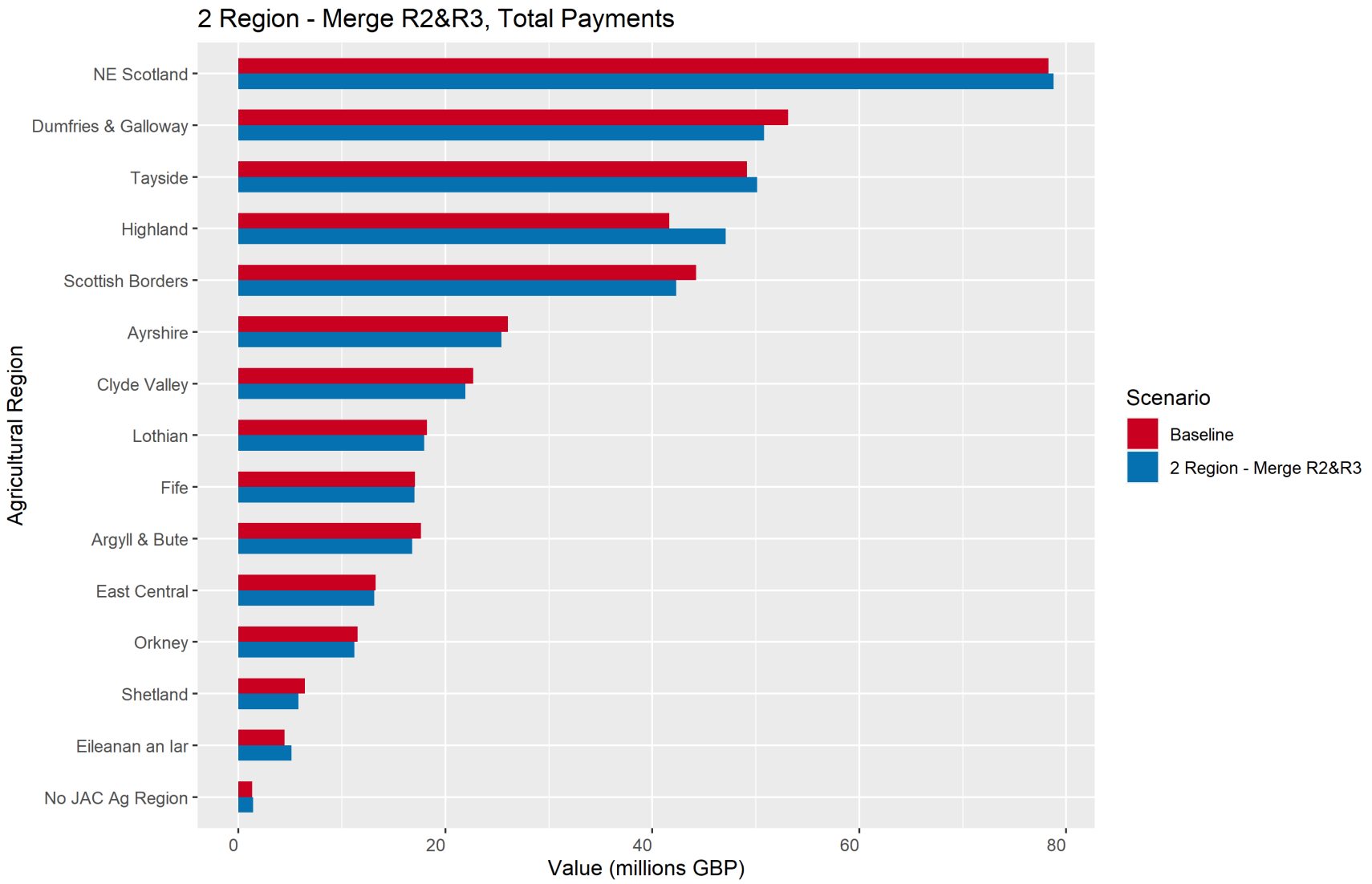

1 Region - SLR, Payment by Payment Percentiles
Payment (Millions)
100
50
0
1.59%
22.86%
18.28%
34.3%
22.97%
bottom 40%
40%-80%
80-90%
90-99%
top 1%
Payment Percentile

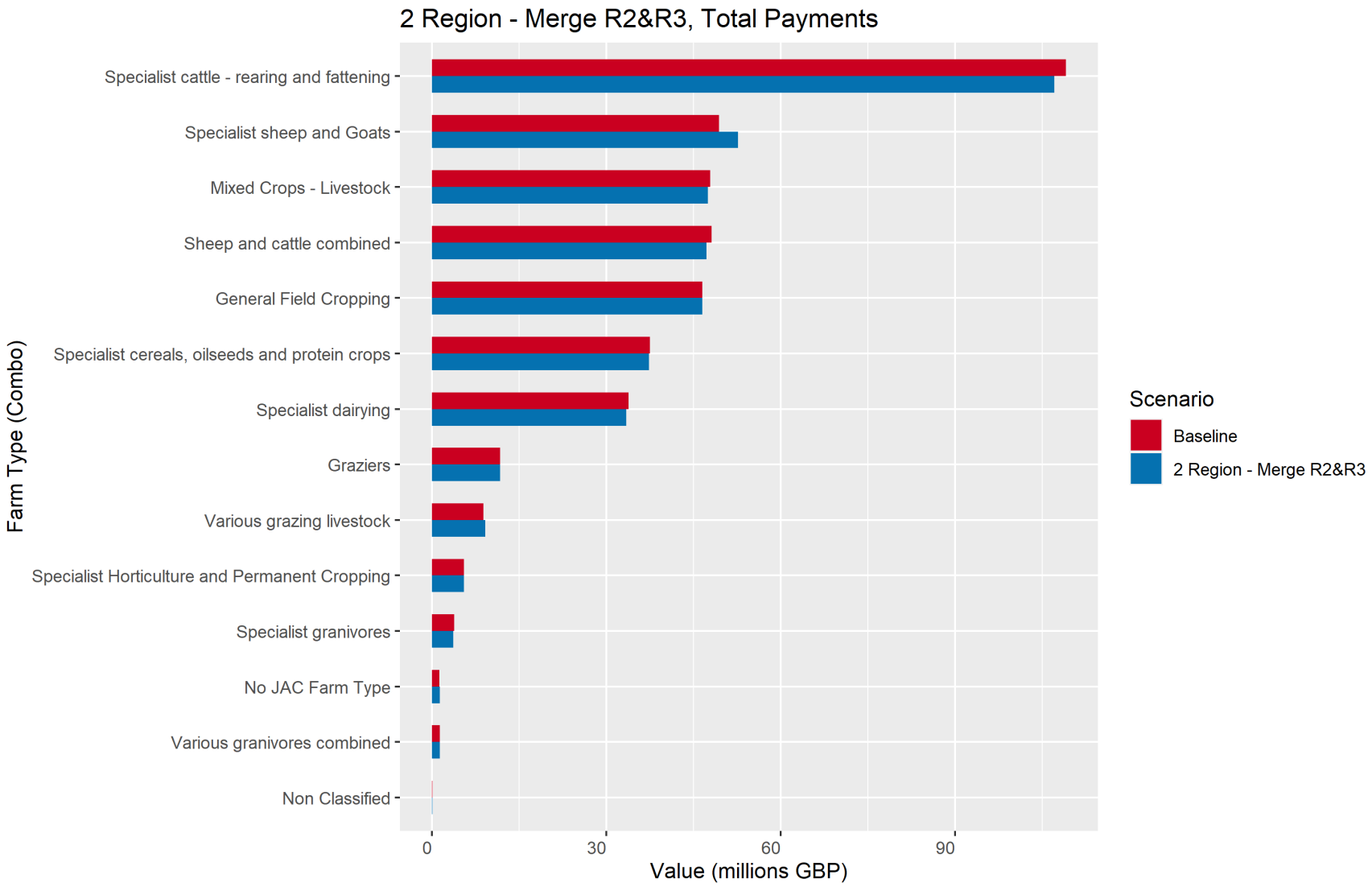

1 Region - SLR, Payment by Percentiles
Payment (Millions £)
Tayside
NE Scotland
Dumfries & Galloway
Scottish Borders
Highland
Ayrshire
Fife
Clyde Valley
Lothian
Argyll & Bute
East Central
Orkney
Shetland
Eileanan an Iar
Ag Region
Specialist cattle - rearing and fattening
Specialist dairying
Specialist Horticulture and Permanent Cropping
Specialist sheep and Goats
Sheep and cattle combined
Mixed Crops - Livestock
General Field Cropping
Specialist cereals, oilseeds and protein crops
Various grazing livestock
Specialist granivores
Various granivores combined
Graziers
Non Classified
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
Size Class
Categorisation
0
30
60
90
Redistribution Class
top 1%
90-99%
80-90%
40%-80%
bottom 40%

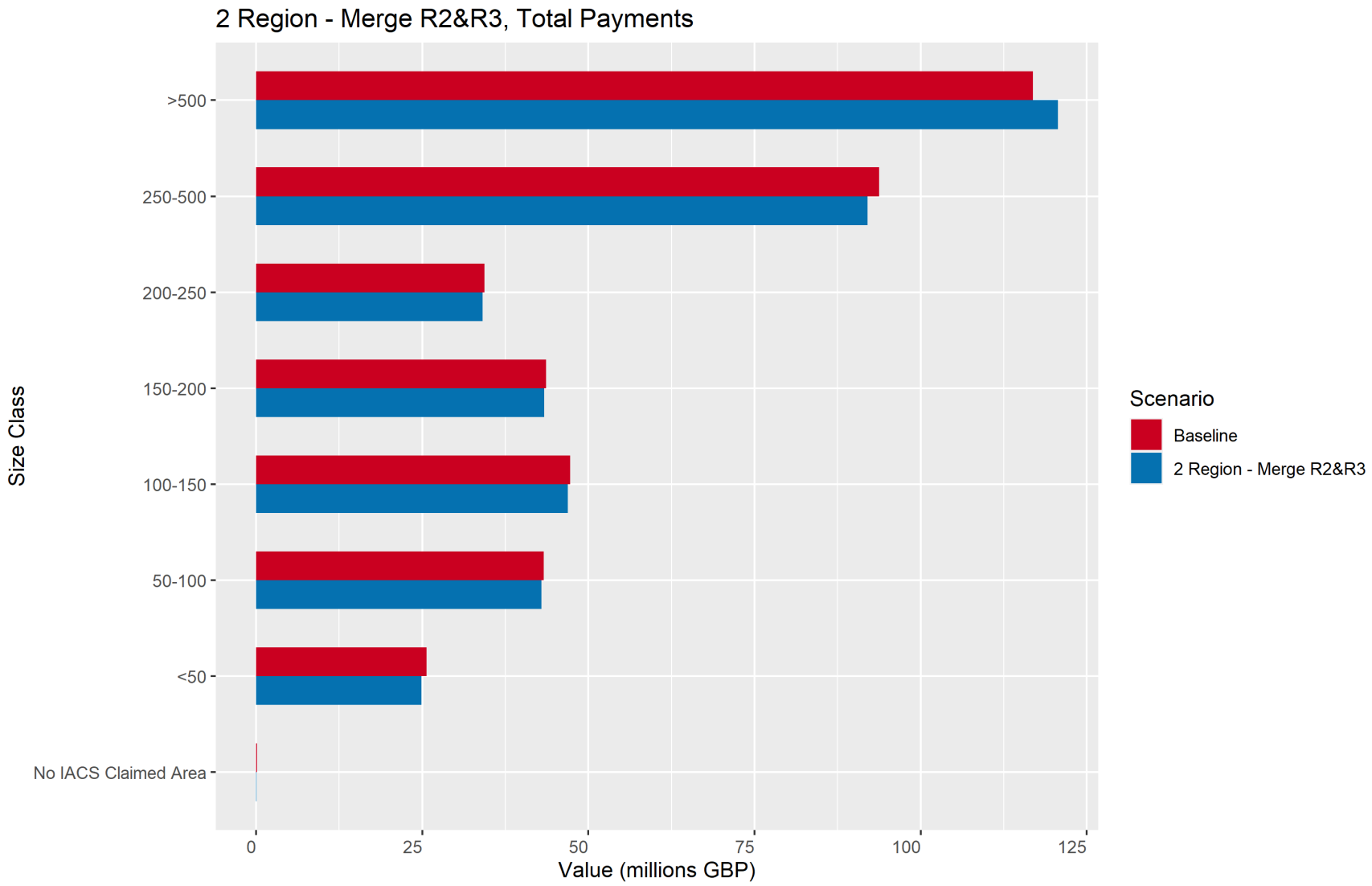

1 Region - SLR, Payment by Percentiles
Percentage
Categorisation
Tayside
NE Scotland
Dumfries & Galloway
Scottish Borders
Highland
Ayrshire
Fife
Clyde Valley
Lothian
Argyll & Bute
East Central
Orkney
Shetland
Eileanan an Iar
Ag Region
Specialist cattle - rearing and fattening
Specialist dairying
Specialist Horticulture and Permanent Cropping
Specialist sheep and Goats
Sheep and cattle combined
Mixed Crops - Livestock
General Field Cropping
Specialist cereals, oilseeds and protein crops
Various grazing livestock
Specialist granivores
Various granivores combined
Graziers
Non Classified
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
Size Class
0
25
50
75
100
Redistribution Class
top 1%
90-99%
80-90%
40%-80%
bottom 40%

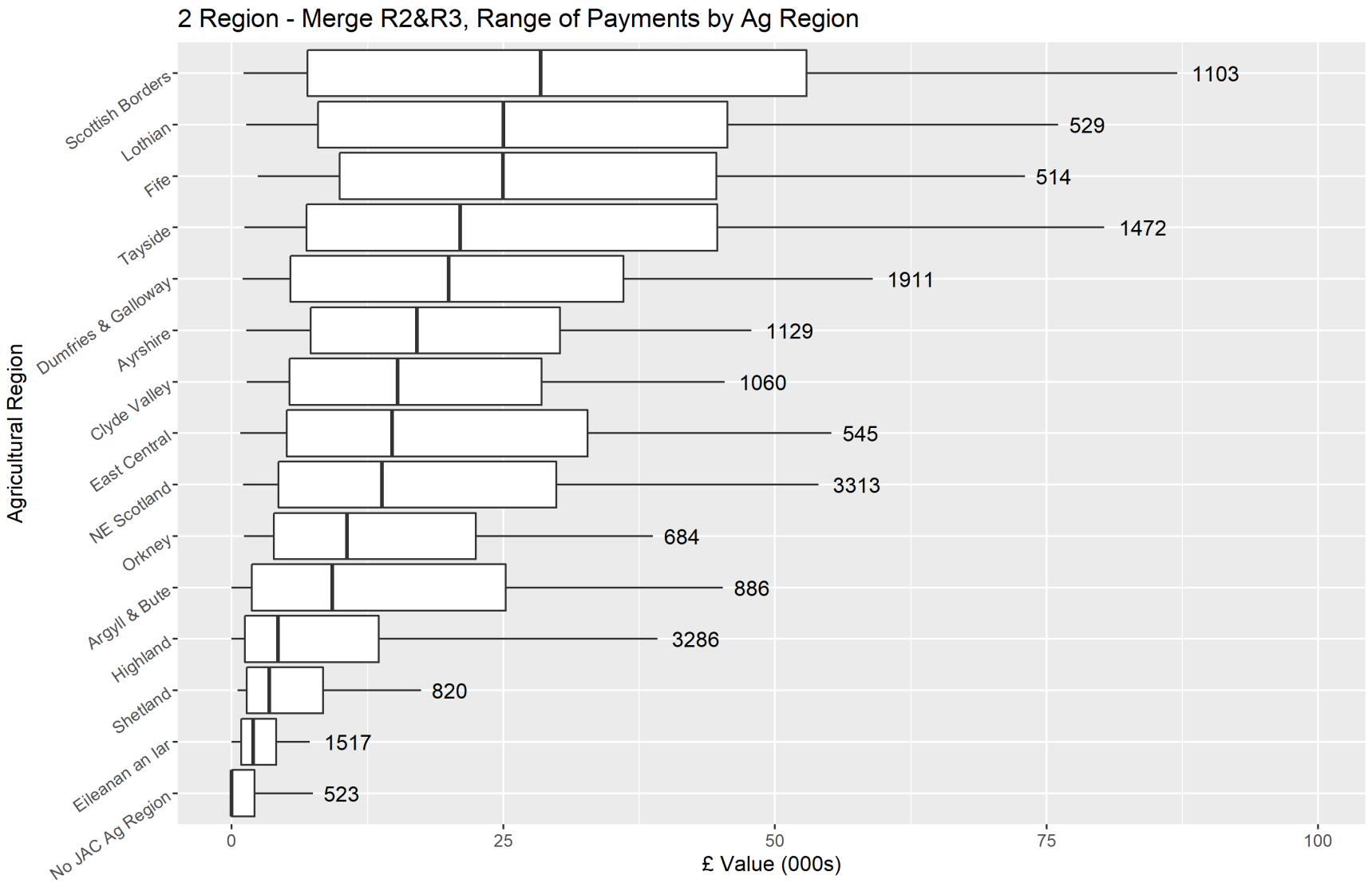

2 Region - Merge R2&R3, Redistribution
Highland
Tayside
Eileanan an Iar
NE Scotland
No JAC Ag Region
Fife
East Central
Lothian
Orkney
Ayrshire
Shetland
Clyde Valley
Argyll & Bute
Scottish Borders
Dumfries & Galloway
Ag Region
Specialist sheep and Goats
Various grazing livestock
No JAC Farm Type
Specialist Horticulture and Permanent Cropping
Graziers
Non Classified
Various granivores combined
General Field Cropping
Specialist granivores
Specialist cereals, oilseeds and protein crops
Specialist dairying
Mixed Crops - Livestock
Sheep and cattle combined
Specialist cattle - rearing and fattening
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Size Class
Categorisation
-10
-5
0
5
10
Redistribution (millions £)
Redistribution Class
Loss (£)
Gain (£)
Net Change

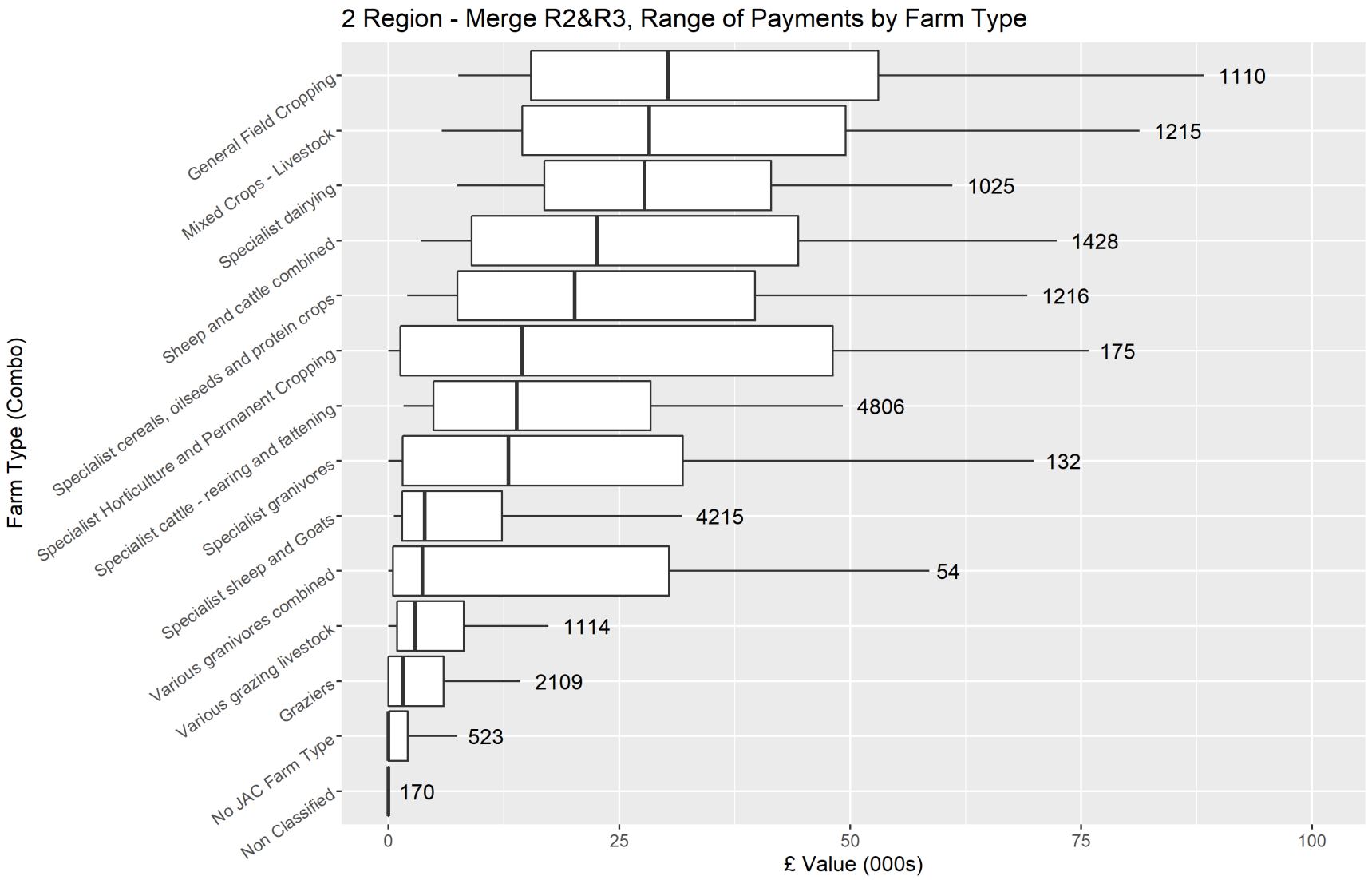

2 Region - Merge R2&R3, Redistribution
Highland
Tayside
Eileanan an Iar
NE Scotland
No JAC Ag Region
Fife
East Central
Lothian
Orkney
Ayrshire
Shetland
Clyde Valley
Argyll & Bute
Scottish Borders
Dumfries & Galloway
Ag Region
Specialist sheep and Goats
Various grazing livestock
No JAC Farm Type
Specialist Horticulture and Permanent Cropping
Graziers
Non Classified
Various granivores combined
General Field Cropping
Specialist granivores
Specialist cereals, oilseeds and protein crops
Specialist dairying
Mixed Crops - Livestock
Sheep and cattle combined
Specialist cattle - rearing and fattening
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Size Class
Categorisation
6000
4000
2000
0
Count of Businesses
Redistribution Class
Gain (Count)
Loss (Count)

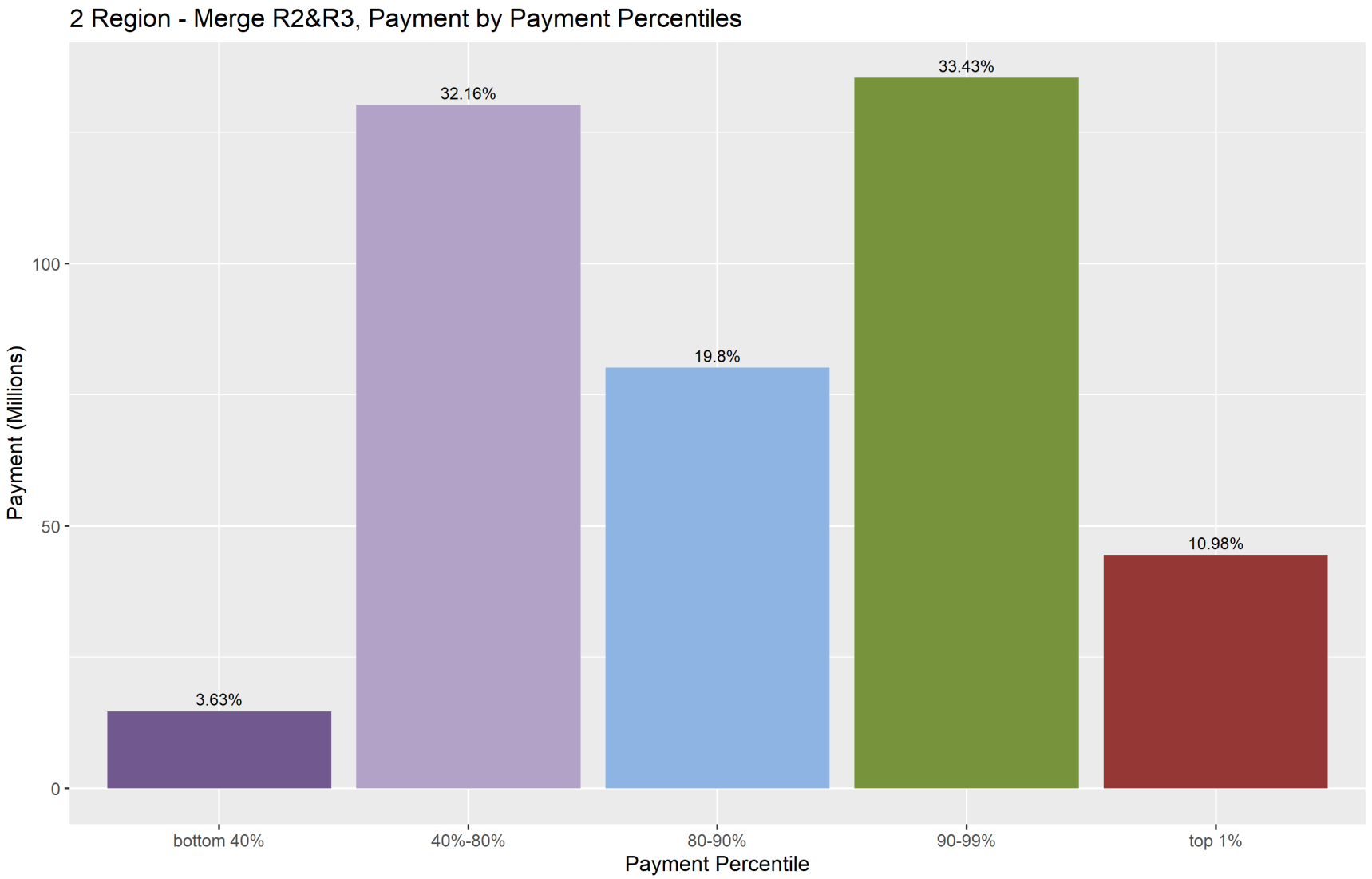

2 Region - Merge R2&R3, Total Payments
NE Scotland
Dumfries & Galloway
Tayside
Highland
Scottish Borders
Ayrshire
Clyde Valley
Lothian
Fife
Argyll & Bute
East Central
Orkney
Shetland
Eileanan an Iar
No JAC Ag Region
Agricultural Region
0
20
40
60
80
Value (millions GBP)
Scenario
Baseline
2 Region - Merge R2&R3

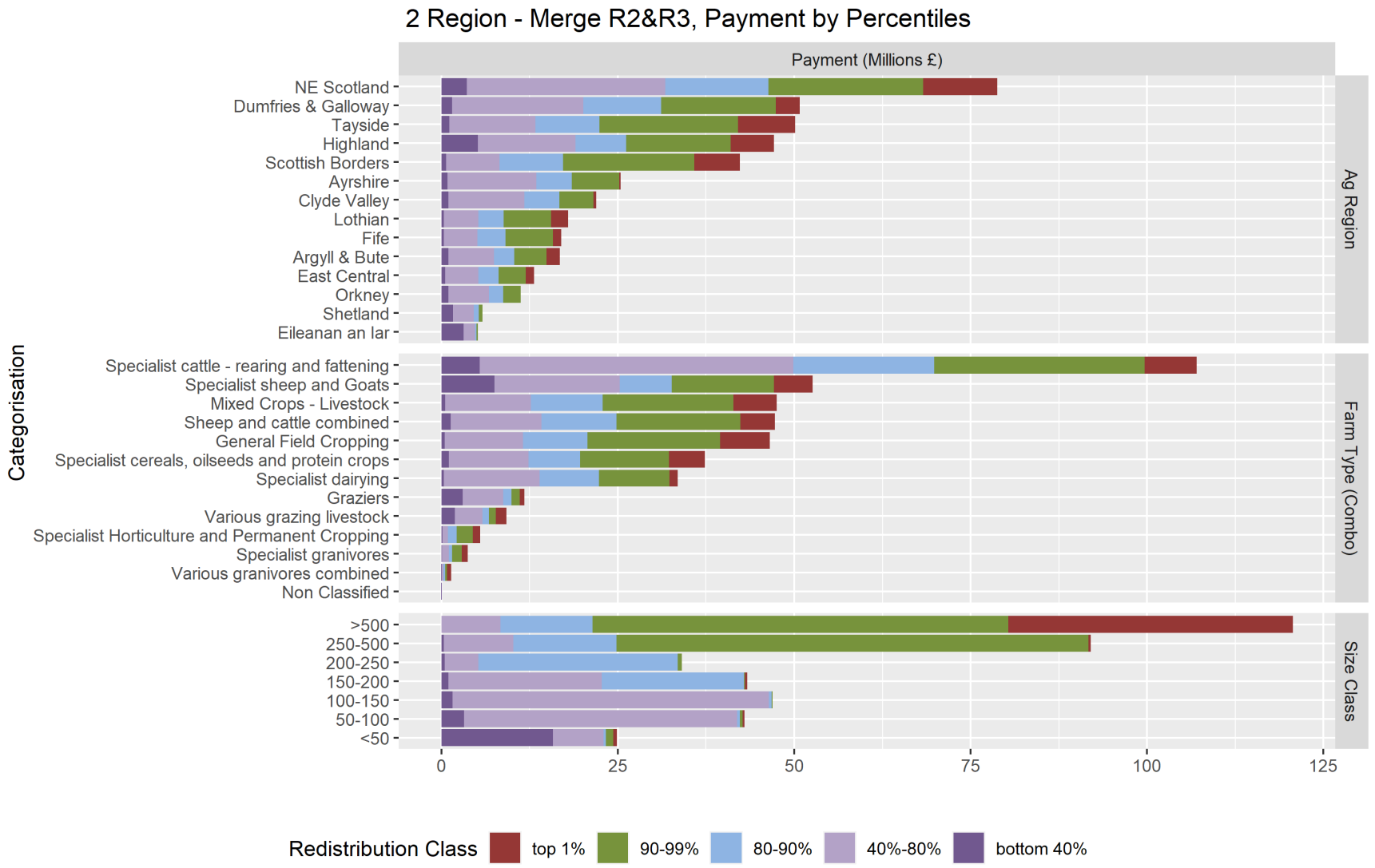

2 Region - Merge R2&R3, Total Payments
Specialist cattle - rearing and fattening
Specialist sheep and Goats
Mixed Crops - Livestock
Sheep and cattle combined
General Field Cropping
Specialist cereals, oilseeds and protein crops
Specialist dairying
Graziers
Various grazing livestock
Specialist Horticulture and Permanent Cropping
Specialist granivores
No JAC Farm Type
Various granivores combined
Non Classified
Farm Type (Combo)
0
30
60
90
Value (millions GBP)
Scenario
Baseline
2 Region - Merge R2&R3

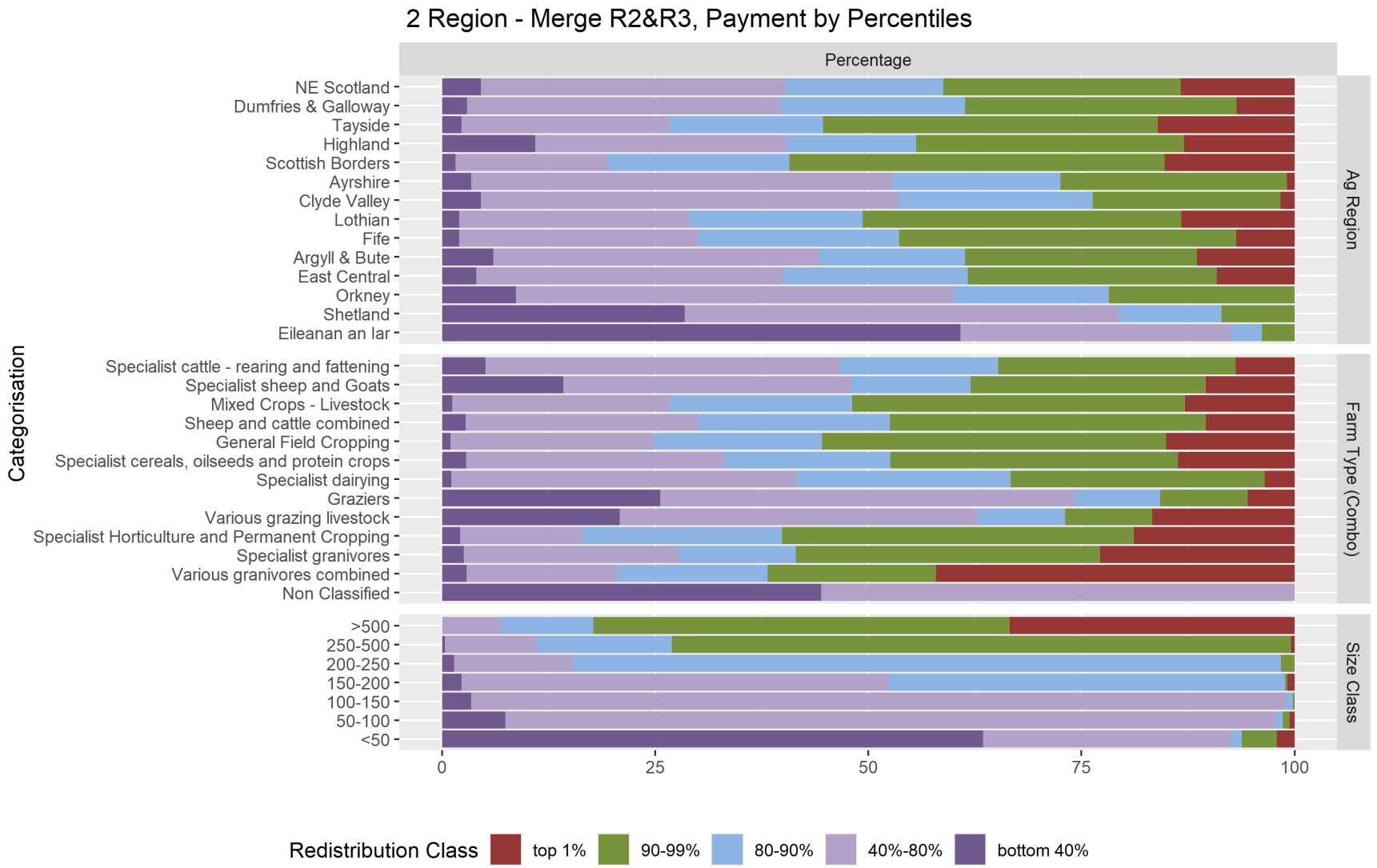

2 Region - Merge R2&R3, Total Payments
Size Class
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
0
25
50
75
100
125
Value (millions GBP)
Scenario
Baseline
2 Region - Merge R2&R3

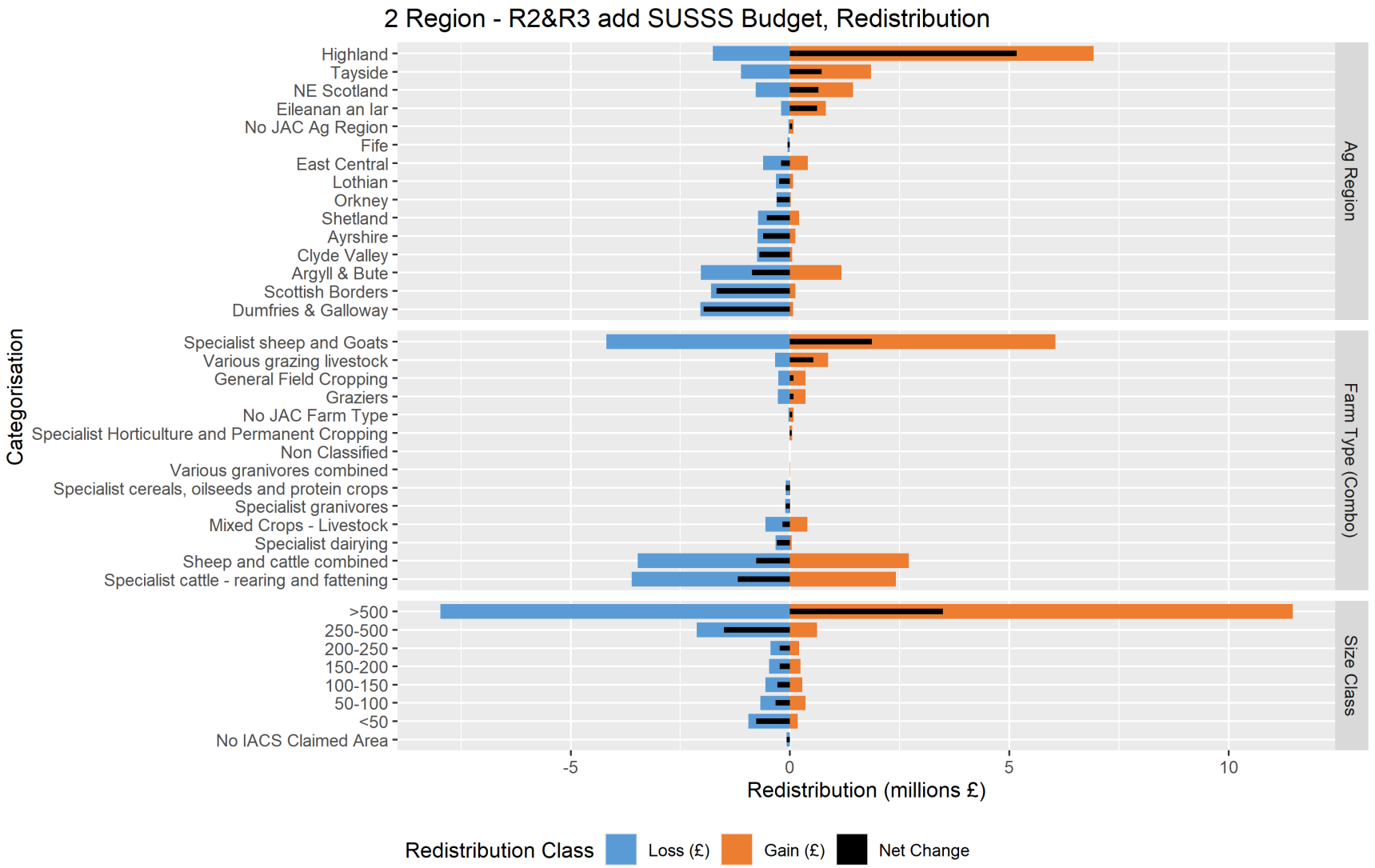

2 Region - Merge R2&R3, Range of Payments by Ag Region
Agricultural Region
Scottish Borders
Lothian
Fife
Tayside
Dumfries & Galloway
Ayrshire
Clyde Valley
East Central
NE Scotland
Orkney
Argyll & Bute
Highland
Shetland
Eileanan an Iar
No JAC Ag Region
1103
529
514
1472
1911
1129
1060
545
3313
684
886
3286
820
1517
523
0
25
50
75
100
£ Value (000s)

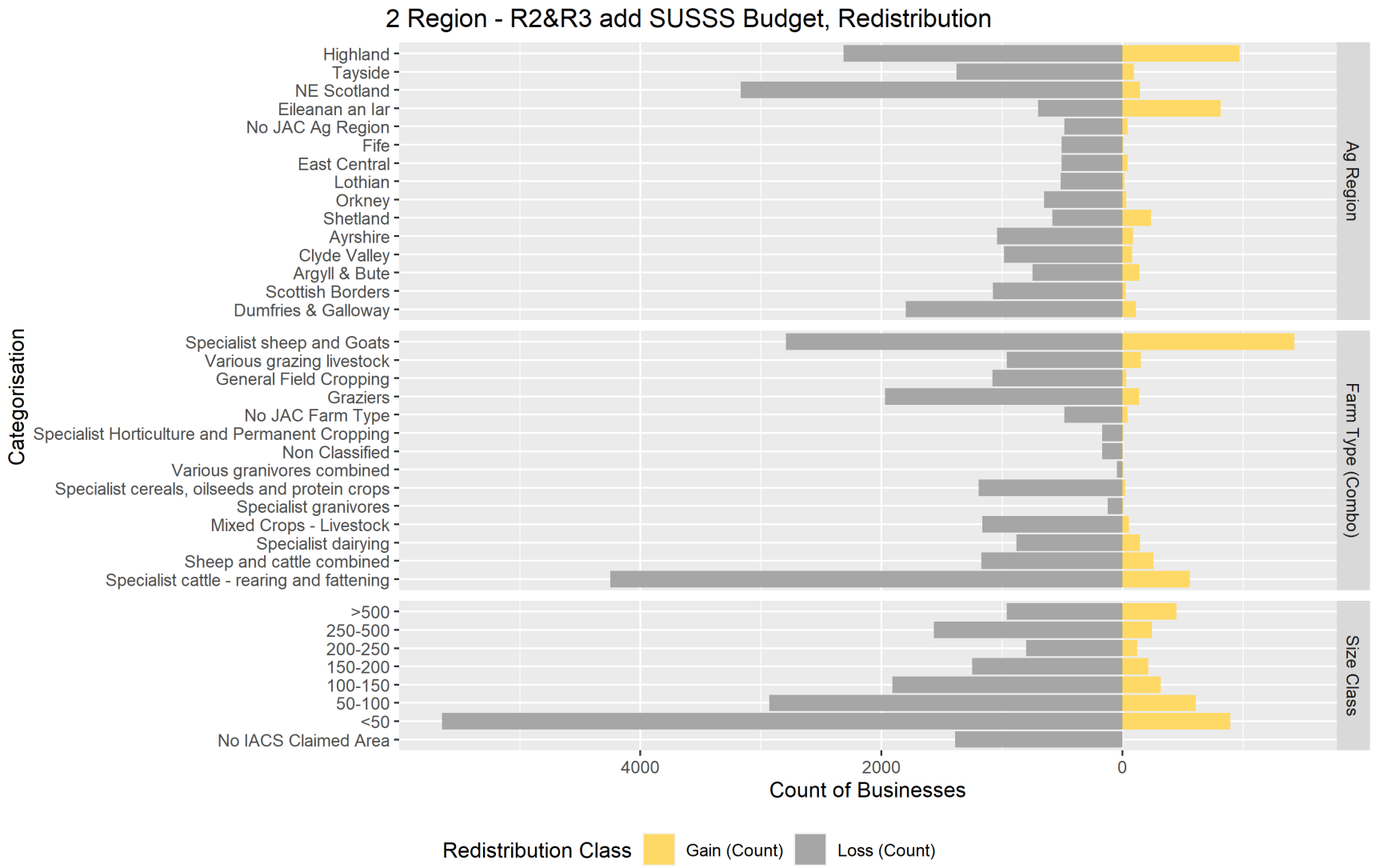

2 Region - Merge R2&R3, Range of Payments by Farm Type
Farm Type (Combo)
General Field Cropping
Mixed Crops - Livestock
Specialist dairying
Sheep and cattle combined
Specialist cereals, oilseeds and protein crops
Specialist Horticulture and Permanent Cropping
Specialist cattle - rearing and fattening
Specialist granivores
Specialist sheep and Goats
Various granivores combined
Various grazing livestock
Graziers
No JAC Farm Type
Non Classified
1110
1215
1025
1428
1216
175
4806
132
4215
54
1114
2109
523
170
0
25
50
75
100
£ Value (000s)

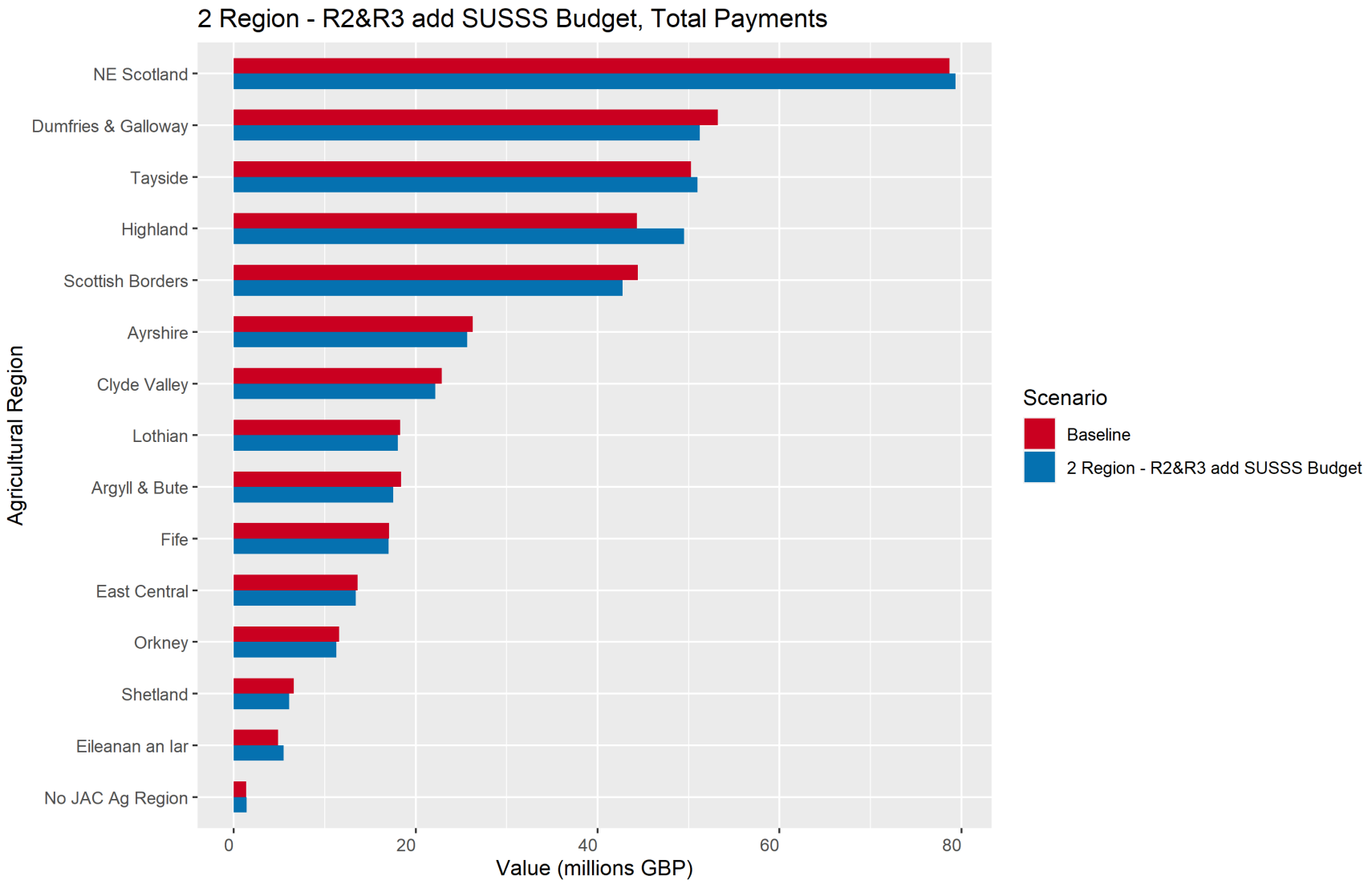

2 Region - Merge R2&R3, Payment by Payment Percentiles
Payment (Millions)
100
50
0
3.63%
32.16%
19.8%
33.43%
10.98%
bottom 40%
40%-80%
80-90%
90-99%
top 1%
Payment Percentile

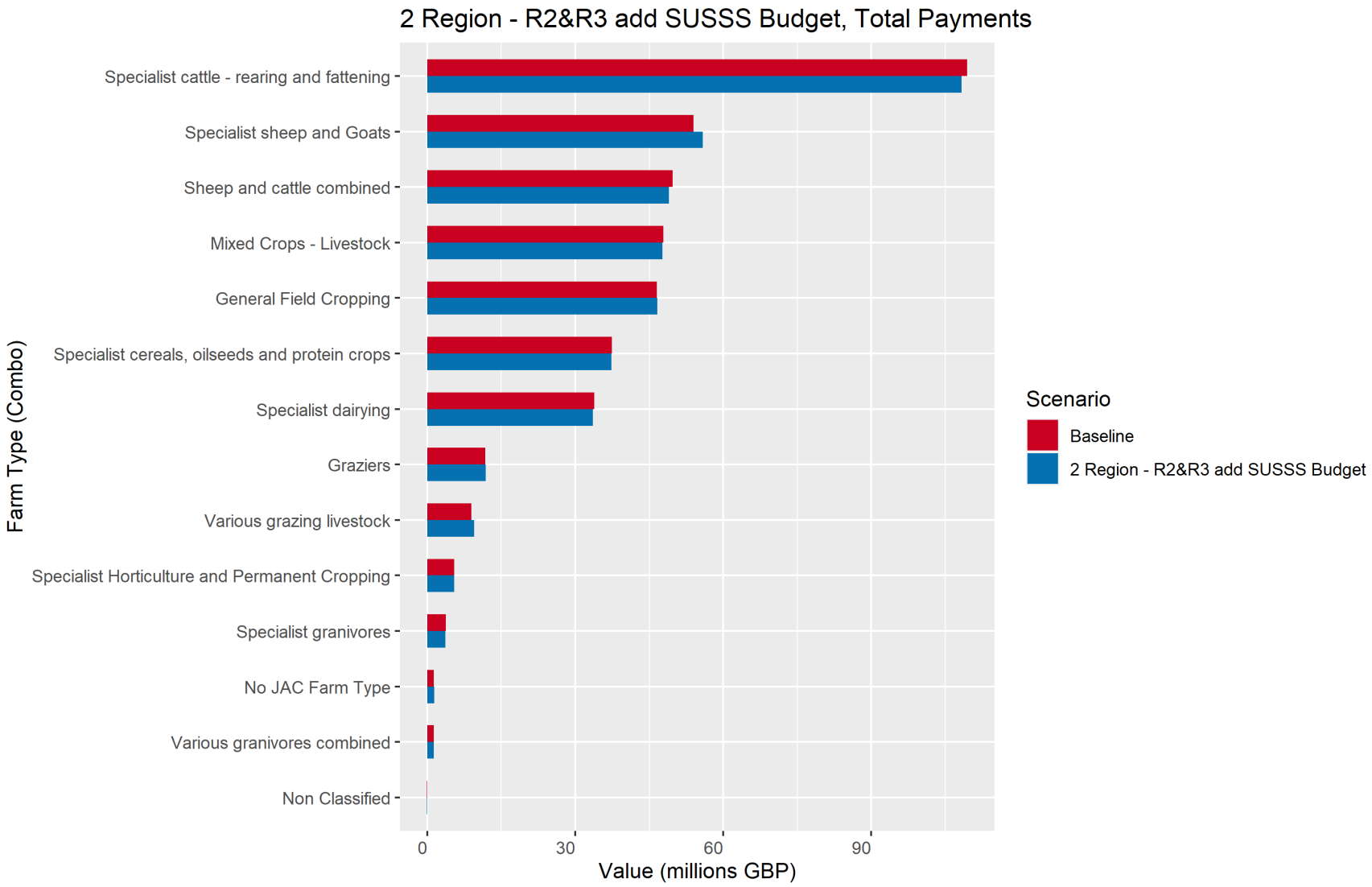

2 Region - Merge R2&R3, Payment by Percentiles
Payment (Millions £)
Categorisation
NE Scotland
Dumfries & Galloway
Tayside
Highland
Scottish Borders
Ayrshire
Clyde Valley
Lothian
Fife
Argyll & Bute
East Central
Orkney
Shetland
Eileanan an Iar
Specialist cattle - rearing and fattening
Specialist sheep and Goats
Mixed Crops - Livestock
Sheep and cattle combined
General Field Cropping
Specialist cereals, oilseeds and protein crops
Specialist dairying
Graziers
Various grazing livestock
Specialist Horticulture and Permanent Cropping
Specialist granivores
Various granivores combined
Non Classified
>500
250-500
200-250
150-200
100-150
50-100
<50
0
25
50
75
100
125
Ag Region
Farm Type (Combo)
Size Class
Redistribution Class
top 1%
90-99%
80-90%
40%-80%
bottom 40%

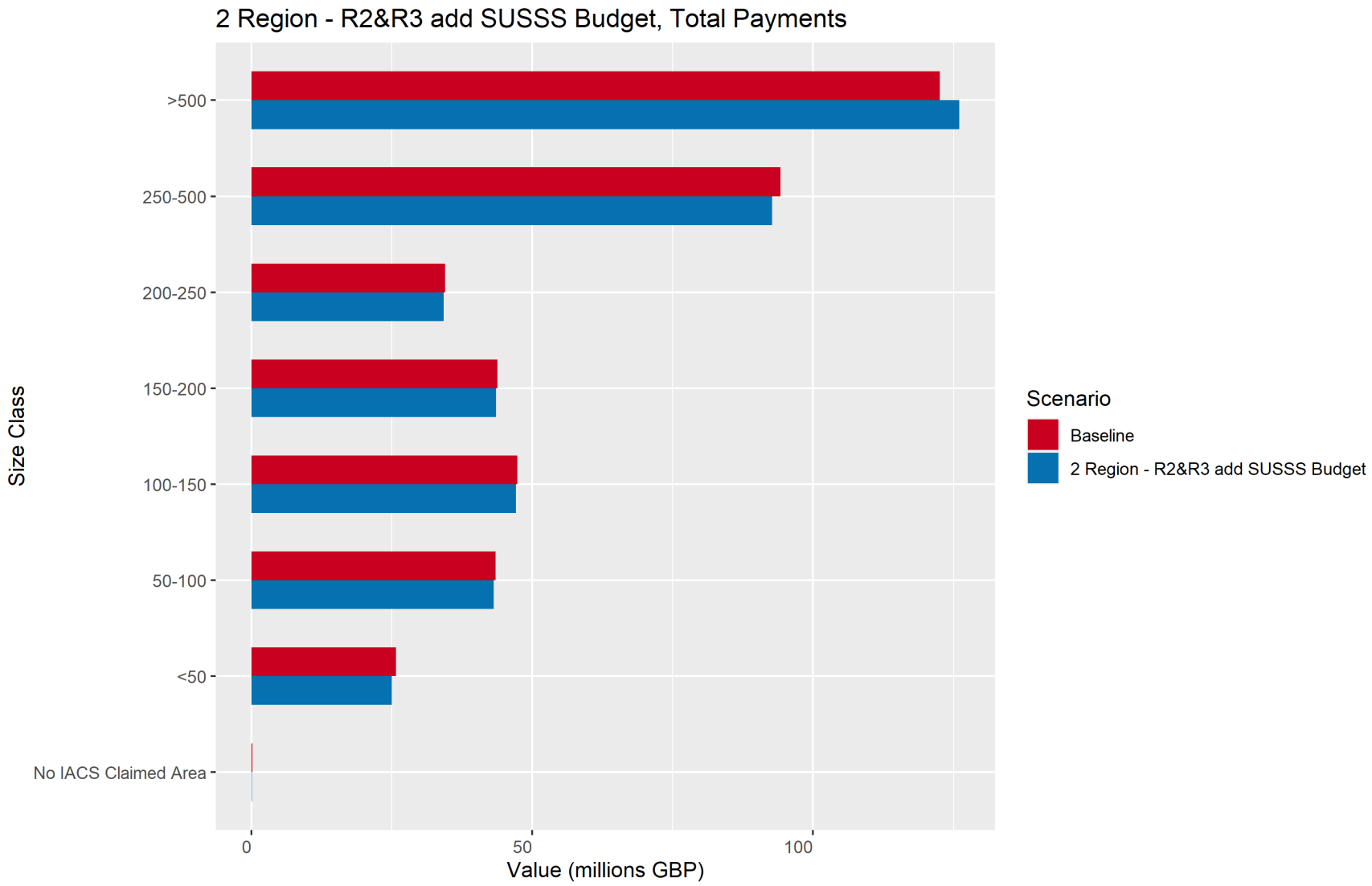

2 Region - Merge R2&R3, Payment by Percentiles
Percentage
Categorisation
NE Scotland
Dumfries & Galloway
Tayside
Highland
Scottish Borders
Ayrshire
Clyde Valley
Lothian
Fife
Argyll & Bute
East Central
Orkney
Shetland
Eileanan an Iar
Ag Region
Specialist cattle - rearing and fattening
Specialist sheep and Goats
Mixed Crops - Livestock
Sheep and cattle combined
General Field Cropping
Specialist cereals, oilseeds and protein crops
Specialist dairying
Graziers
Various grazing livestock
Specialist Horticulture and Permanent Cropping
Specialist granivores
Various granivores combined
Non Classified
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
Size Class
0
25
50
75
100
Redistribution Class
top 1%
90-99%
80-90%
40%-80%
bottom 40%

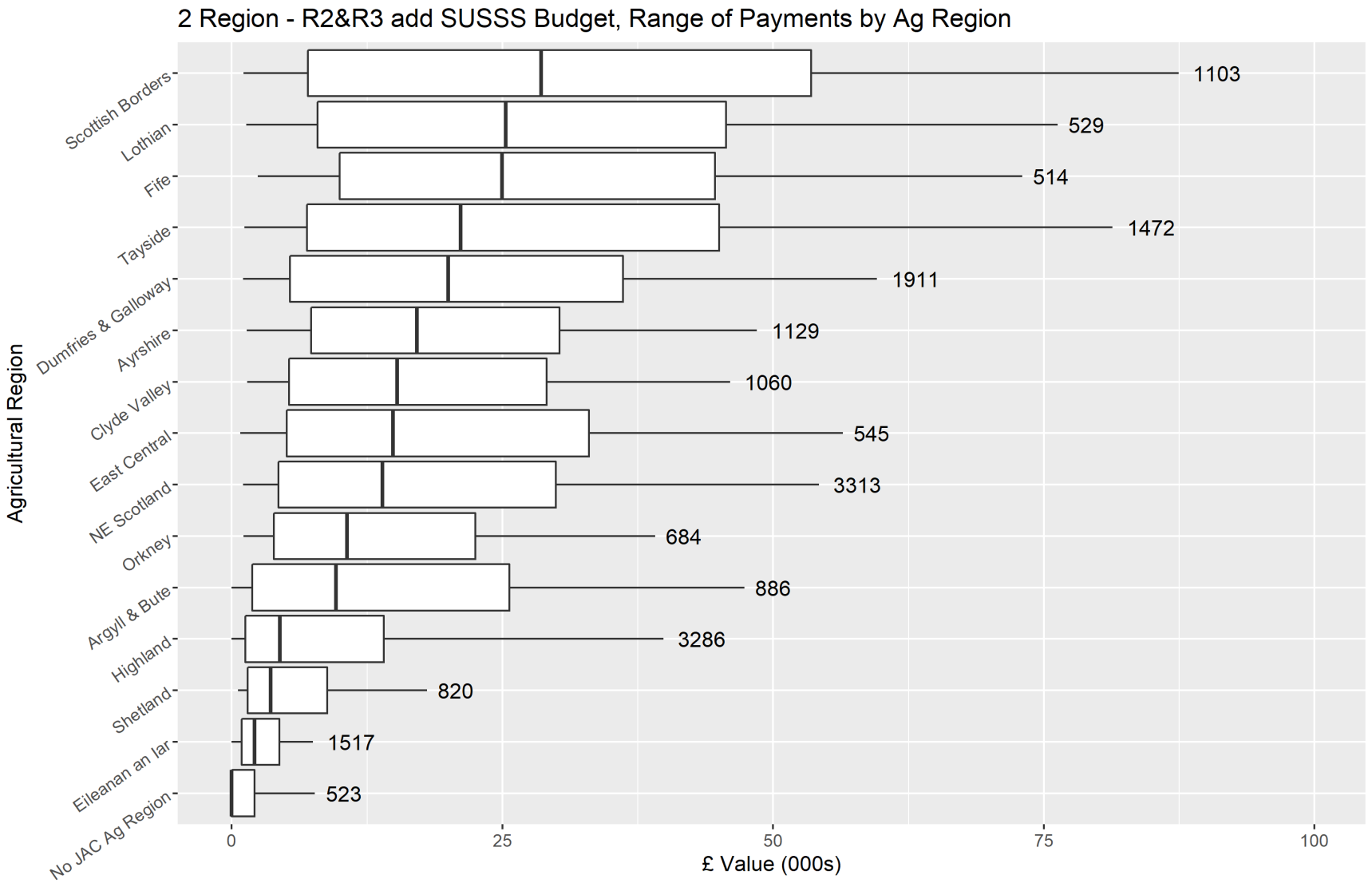

2 Region - R2&R3 add SUSSS Budget, Redistribution
Highland
Tayside
NE Scotland
Eileanan an Iar
No JAC Ag Region
Fife
East Central
Lothian
Orkney
Shetland
Ayrshire
Clyde Valley
Argyll & Bute
Scottish Borders
Dumfries & Galloway
Ag Region
Specialist sheep and Goats
Various grazing livestock
General Field Cropping
Graziers
No JAC Farm Type
Specialist Horticulture and Permanent Cropping
Non Classified
Various granivores combined
Specialist cereals, oilseeds and protein crops
Specialist granivores
Mixed Crops - Livestock
Specialist dairying
Sheep and cattle combined
Specialist cattle - rearing and fattening
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Size Class
Categorisation
-5
0
5
10
Redistribution (millions £)
Redistribution Class
Loss (£)
Gain (£)
Net Change

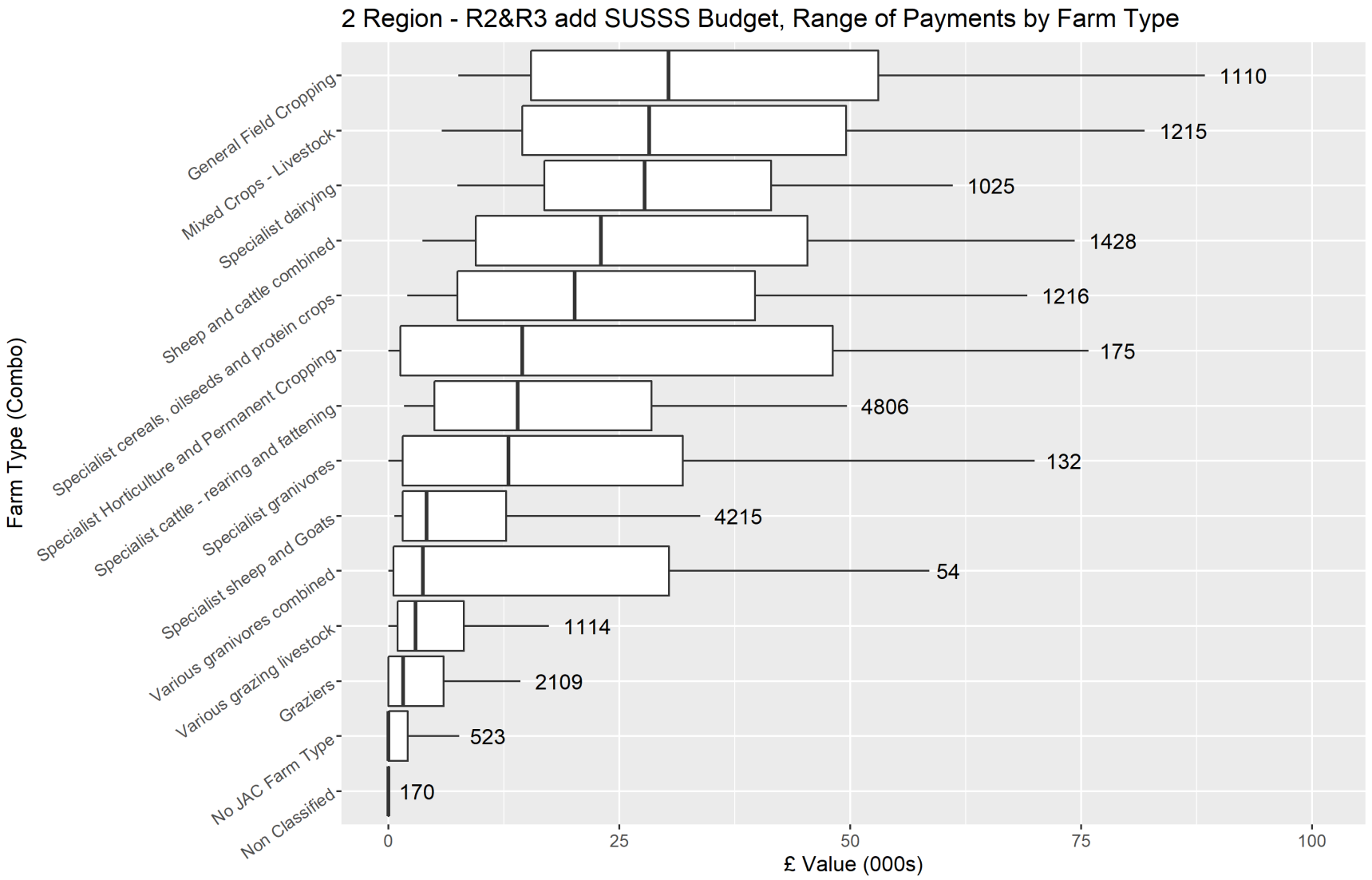

2 Region - R2&R3 add SUSSS Budget, Redistribution
Highland
Tayside
NE Scotland
Eileanan an Iar
No JAC Ag Region
Fife
East Central
Lothian
Orkney
Shetland
Ayrshire
Clyde Valley
Argyll & Bute
Scottish Borders
Dumfries & Galloway
Ag Region
Specialist sheep and Goats
Various grazing livestock
General Field Cropping
Graziers
No JAC Farm Type
Specialist Horticulture and Permanent Cropping
Non Classified
Various granivores combined
Specialist cereals, oilseeds and protein crops
Specialist granivores
Mixed Crops - Livestock
Specialist dairying
Sheep and cattle combined
Specialist cattle - rearing and fattening
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
Size Class
Categorisation
4000
2000
0
Count of Businesses
Redistribution Class
Gain (Count)
Loss (Count)

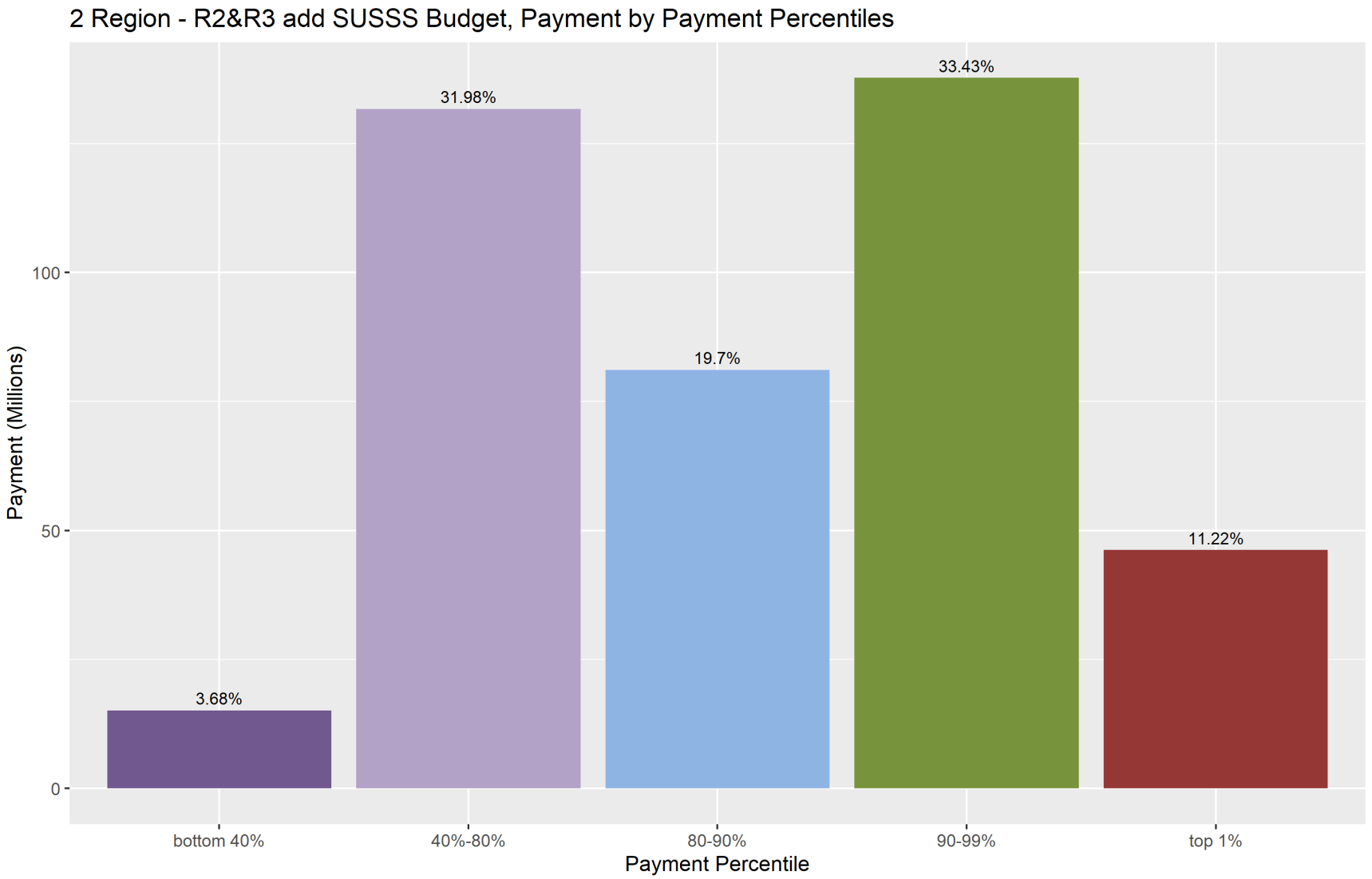

2 Region - R2&R3 add SUSSS Budget, Total Payments
NE Scotland
Dumfries & Galloway
Tayside
Highland
Scottish Borders
Ayrshire
Clyde Valley
Lothian
Argyll & Bute
Fife
East Central
Orkney
Shetland
Eileanan an Iar
No JAC Ag Region
Agricultural Region
0
20
40
60
80
Value (millions GBP)
Scenario
Baseline
2 Region - R2&R3 add SUSSS Budget

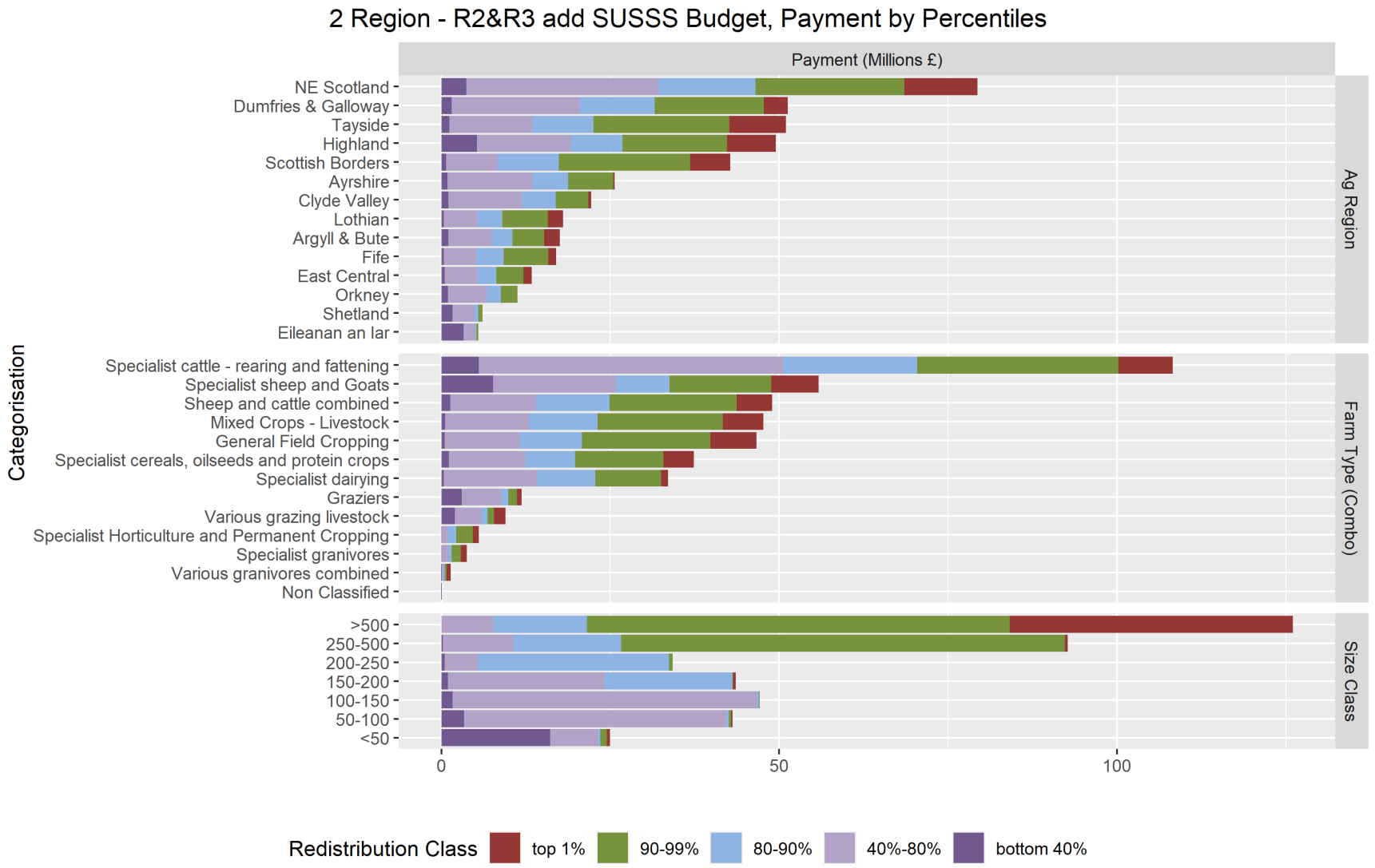

2 Region - R2&R3 add SUSSS Budget, Total Payments
Specialist cattle - rearing and fattening
Specialist sheep and Goats
Sheep and cattle combined
Mixed Crops - Livestock
General Field Cropping
Specialist cereals, oilseeds and protein crops
Specialist dairying
Graziers
Various grazing livestock
Specialist Horticulture and Permanent Cropping
Specialist granivores
No JAC Farm Type
Various granivores combined
Non Classified
Farm Type (Combo)
0
30
60
90
Value (millions GBP)
Scenario
Baseline
2 Region - R2&R3 add SUSSS Budget

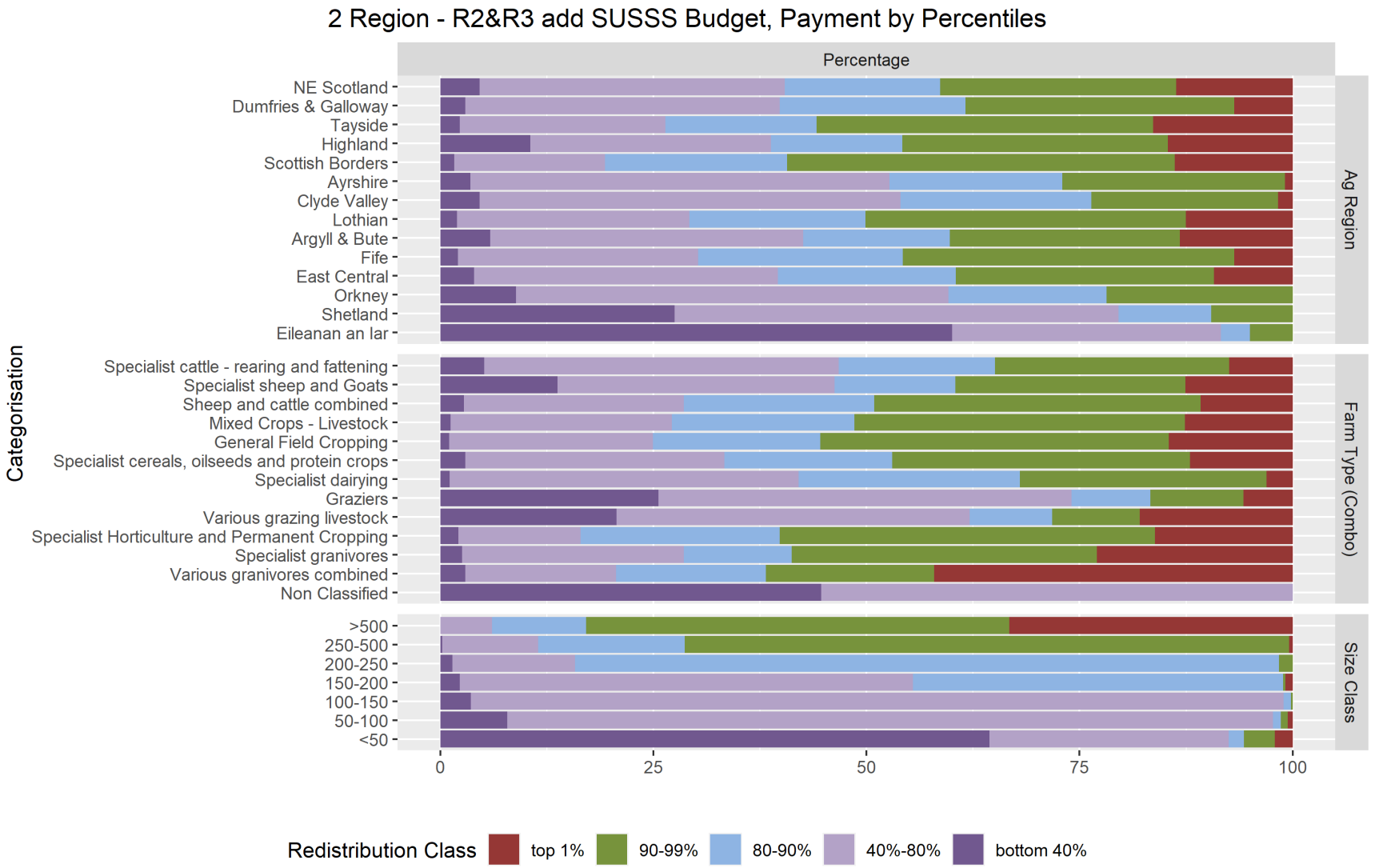

2 Region - R2&R3 add SUSSS Budget, Total Payments
Size Class
>500
250-500
200-250
150-200
100-150
50-100
<50
No IACS Claimed Area
0
50
100
Value (millions GBP)
Scenario
Baseline
2 Region - R2&R3 add SUSSS Budget


2 Region - R2&R3 add SUSSS Budget, Range of Payments by Ag Region
Agricultural Region
Scottish Borders
Lothian
Fife
Tayside
Dumfries & Galloway
Ayrshire
Clyde Valley
East Central
NE Scotland
Orkney
Argyll & Bute
Highland
Shetland
Eileanan an Iar
No JAC Ag Region
1103
529
514
1472
1911
1129
1060
545
3313
684
886
3286
820
1517
523
0
25
50
75
100
£ Value (000s)


2 Region - R2&R3 add SUSSS Budget, Range of Payments by Farm Type
Farm Type (Combo)
General Field Cropping
Mixed Crops - Livestock
Specialist dairying
Sheep and cattle combined
Specialist cereals, oilseeds and protein crops
Specialist Horticulture and Permanent Cropping
Specialist cattle - rearing and fattening
Specialist granivores
Specialist sheep and Goats
Various granivores combined
Various grazing livestock
Graziers
No JAC Farm Type
Non Classified
1110
1215
1025
1428
1216
175
4806
132
4215
54
1114
2109
523
170
0
25
50
75
100
£ Value (000s)


2 Region - R2&R3 add SUSSS Budget, Payment by Payment Percentiles
Payment (Millions)
100
50
0
3.68%
31.98%
19.7%
33.43%
11.22%
bottom 40%
40%-80%
80-90%
90-99%
top 1%
Payment Percentile


2 Region - R2&R3 add SUSSS Budget, Payment by Percentiles
Payment (Millions £)
Categorisation
NE Scotland
Dumfries & Galloway
Tayside
Highland
Scottish Borders
Ayrshire
Clyde Valley
Lothian
Argyll & Bute
Fife
East Central
Orkney
Shetland
Eileanan an Iar
Ag Region
Specialist cattle - rearing and fattening
Specialist sheep and Goats
Sheep and cattle combined
Mixed Crops - Livestock
General Field Cropping
Specialist cereals, oilseeds and protein crops
Specialist dairying
Graziers
Various grazing livestock
Specialist Horticulture and Permanent Cropping
Specialist granivores
Various granivores combined
Non Classified
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
Size Class
0
50
100
Redistribution Class
top 1%
90-99%
80-90%
40%-80%
bottom 40%


2 Region - R2&R3 add SUSSS Budget, Payment by Percentiles
Percentage
Categorisation
NE Scotland
Dumfries & Galloway
Tayside
Highland
Scottish Borders
Ayrshire
Clyde Valley
Lothian
Argyll & Bute
Fife
East Central
Orkney
Shetland
Eileanan an Iar
Ag Region
Specialist cattle - rearing and fattening
Specialist sheep and Goats
Sheep and cattle combined
Mixed Crops - Livestock
General Field Cropping
Specialist cereals, oilseeds and protein crops
Specialist dairying
Graziers
Various grazing livestock
Specialist Horticulture and Permanent Cropping
Specialist granivores
Various granivores combined
Non Classified
Farm Type (Combo)
>500
250-500
200-250
150-200
100-150
50-100
<50
Size Class
0
25
50
75
100
Redistribution Class
top 1%
90-99%
80-90%
40%-80%
bottom 40%

SRUC

The James Hutton Institute

At the heart of the natural economy

This and other documents can be made available in other formats such as large print and/or community languages on request. If you would like a translated copy, please contact the author with the details of the format/language required.