2014 vs 2019 Pillar 1 and 2 payments comparisons for ARD Stakeholders

Keith Matthews, Dave Miller, Doug Wardell-Johnson, Gianna Gandossi

Presentation for ARD Stakeholders - online, 15 December 2021

The James Hutton Institute

Scope of the work

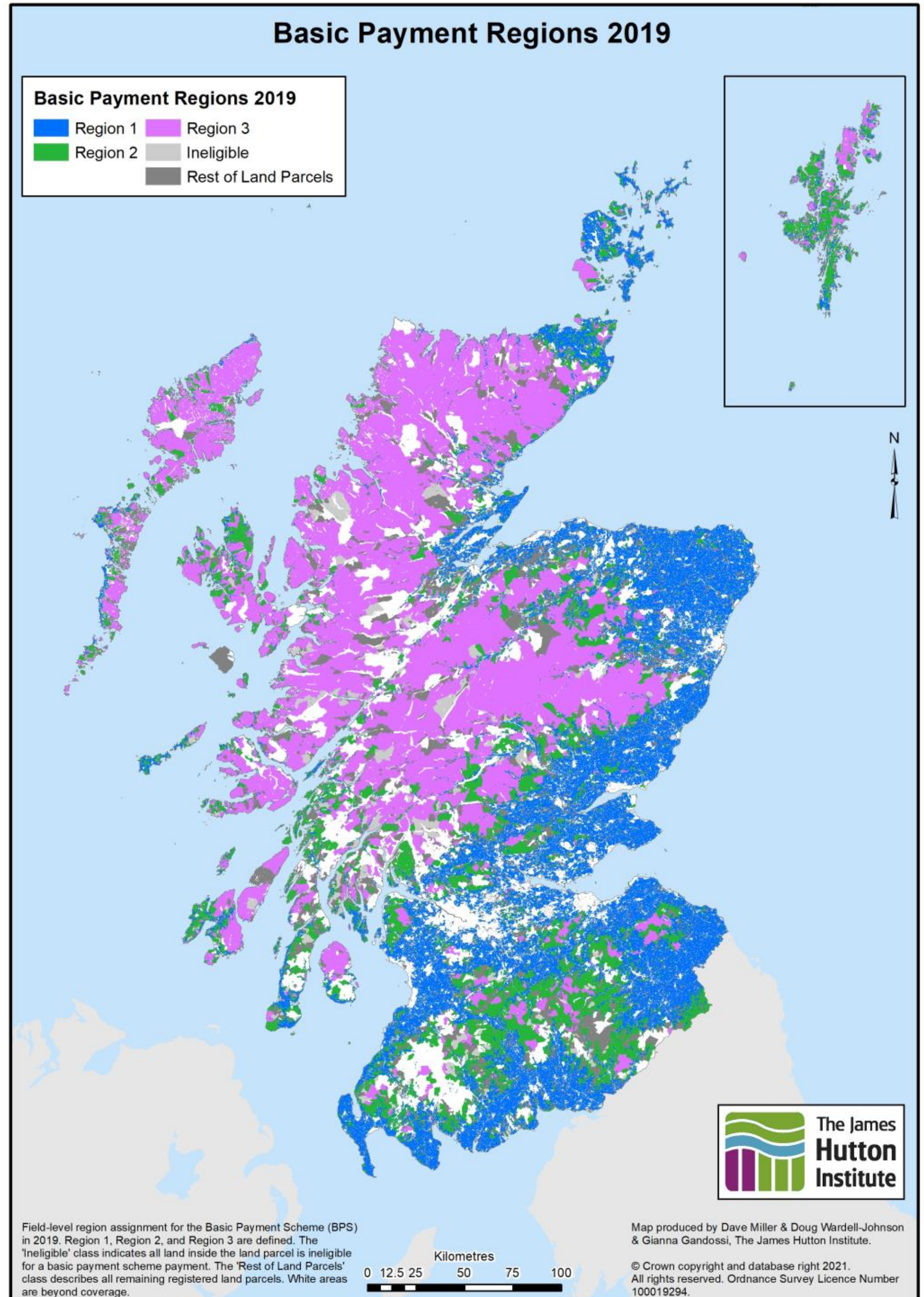
- **Included:**
  - Move from SFPS (historic) to BPS + Greening (area based, regionalised);
  - For VCS the move from SBCS to SSBSS (Mainland and Island) and SUSSS;
  - Adding Pillar 2 – beyond LFASS, previously for Ag Strat Champions.
- **State-of-play** – using 2019 as baseline for future planning.
- **Distributions** – ways to judge qualitative fitness-for-purpose against the intervention logics and policy narratives (geographic and other dimensions).
- **Change** – now comparing payments in 2014 with 2019 (previously, estimated, post internal convergence, 2019 values were used).
- **Other associated phenomena**
  - Distributions of payments relative to other land use phenomena
  - Which land is included, business structures – new, existing, leaving
- **Full analysis** – the complete outputs from which the examples used here are selected.

Caveats

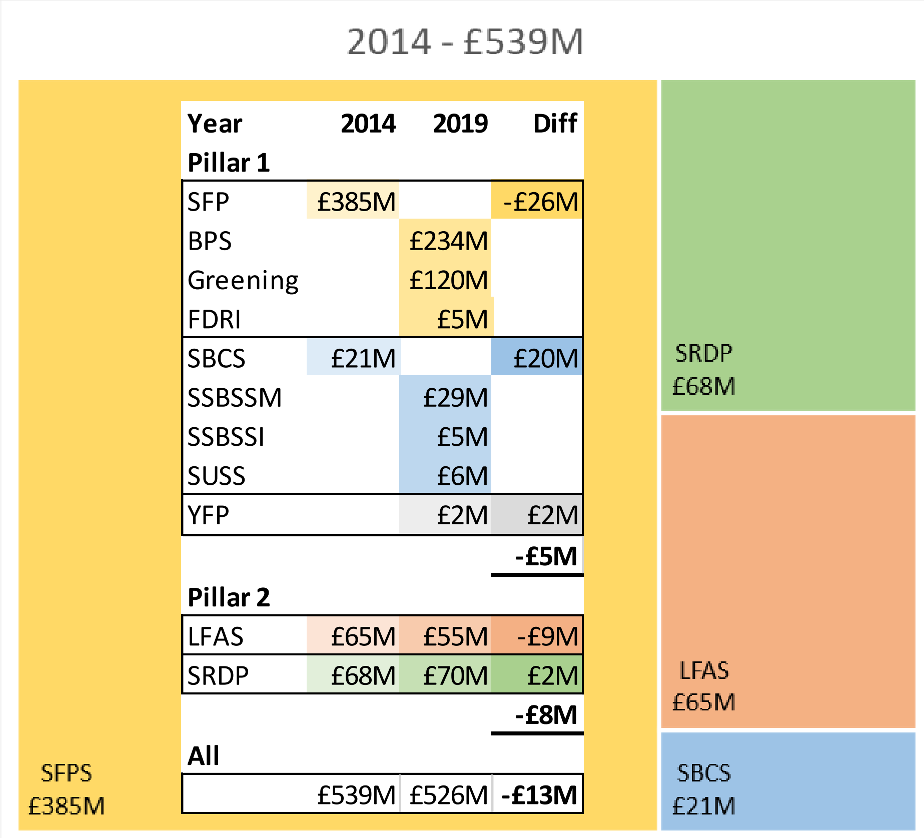
- Exchange Rates:
  - 2014 had a poorer Euro exchange rate (~0.78) vs 2019 (~0.89);
  - Increases the value of the payment values for sterling recipients by ~14% in 2019;
  - Analysis focus on the policy mechanisms – so standardised on 2014 £'s for clearer comparisons.
- External convergence – not included:
  - £160M over 2019 and 2020 by addressing an issue for years 2014-2020;
  - Distributed by via VCS, BPS and upland payments (option to include);
  - Equivalent to a ~£27M per annum uplift, if averaged over the period.
- Pillar 2 specifics:
  - some schemes better averaged over time (AECS, RP, FGS, LMO);
  - where all years not yet available then 2019 used;
  - others need specific years – e.g., LFASS 2019 at 80%.
- Issues with business populations
  - 2014 has a less complete linkage to the JAC for determining farm type, ag region and other details. Some non-farm businesses.

Payment regions

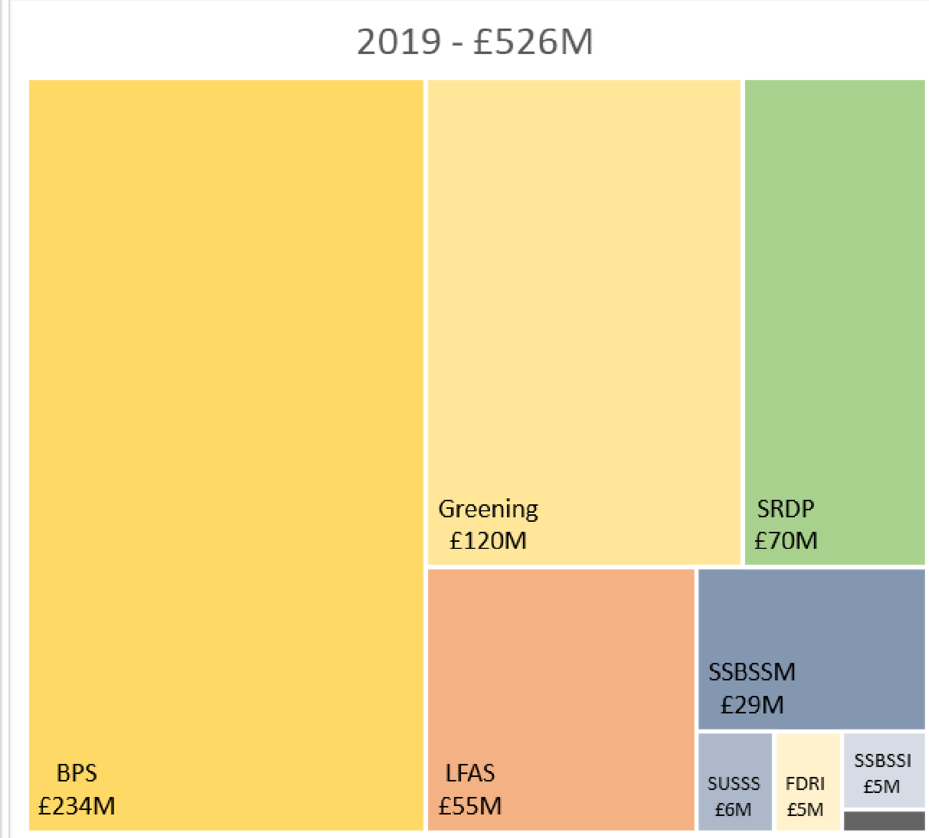
- The key geography of the payment system
  - Land use and LFA grazing category
- Exceptions
  - VCS (headage)
  - LFASS (disadvantage, fragility and historic headage)
  - Other Pillar 2 (opportunity and competitive)



Headline Values and Scheme Mix

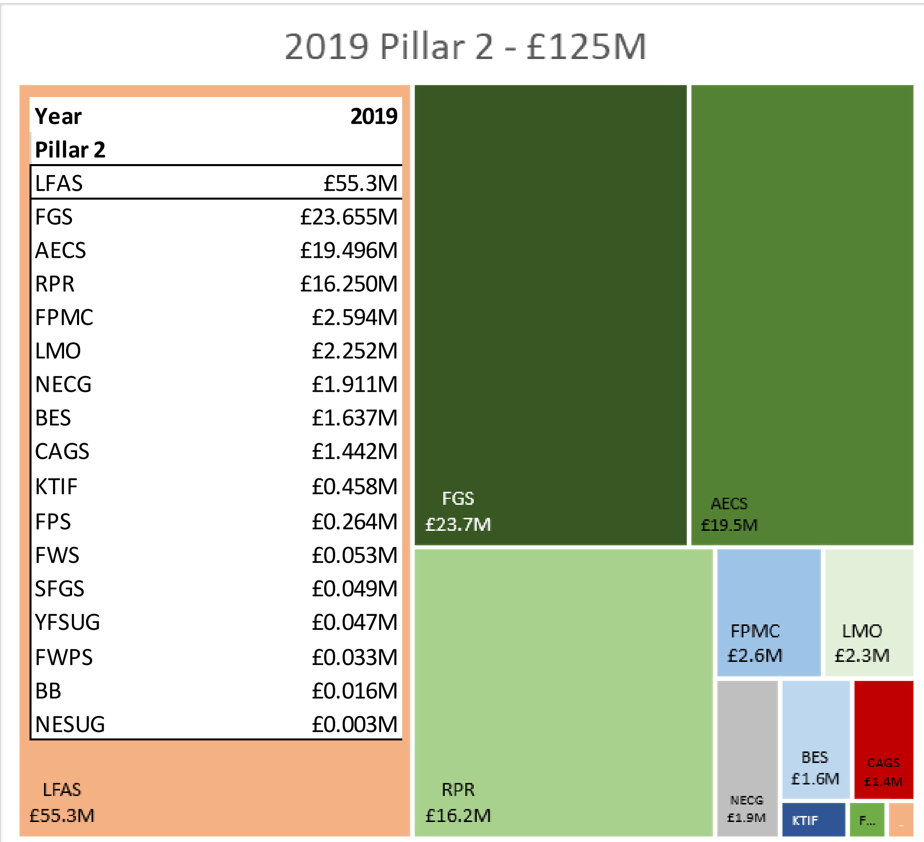


Year	2014	2019	Diff
Pillar 1			
SFP	£385M		-£26M
BPS		£234M	
Greening		£120M	
FDRI		£5M	
SBCS	£21M		£20M
SSBSSM		£29M	
SSBSSI		£5M	
SUSS		£6M	
YFP		£2M	£2M
			-£5M
Pillar 2			
LFAS	£65M	£55M	-£9M
SRDP	£68M	£70M	£2M
			-£8M
All			
	£539M	£526M	**-£13M**

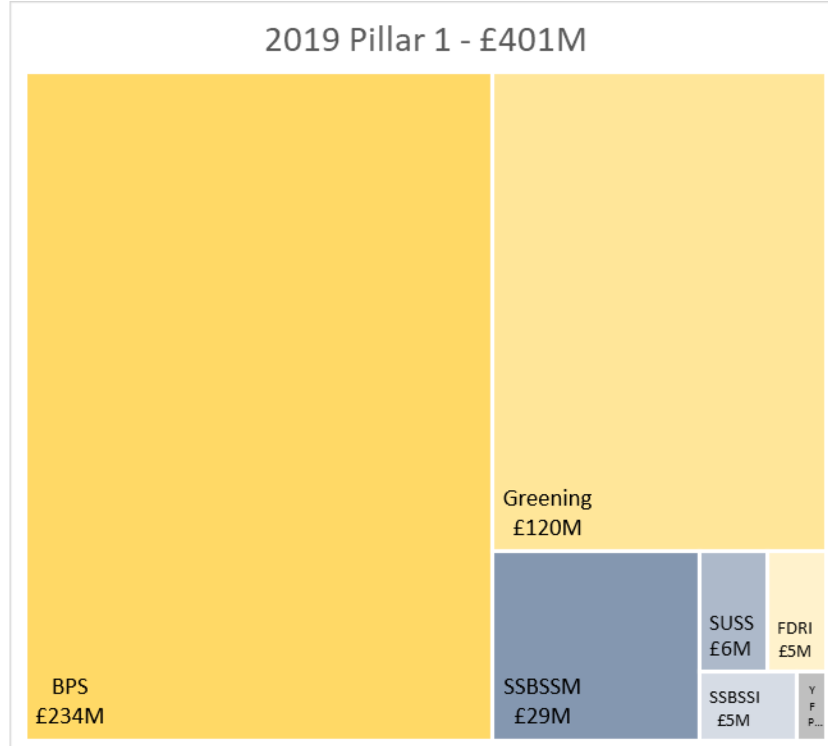


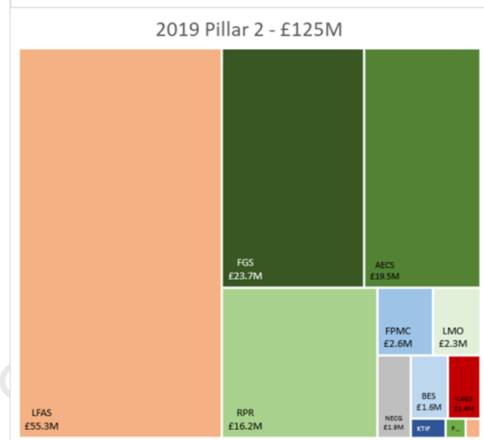
Without adjusting for exchange rates – total spend for 2019 is £569M

Pillar 2 detail, Pillar balance



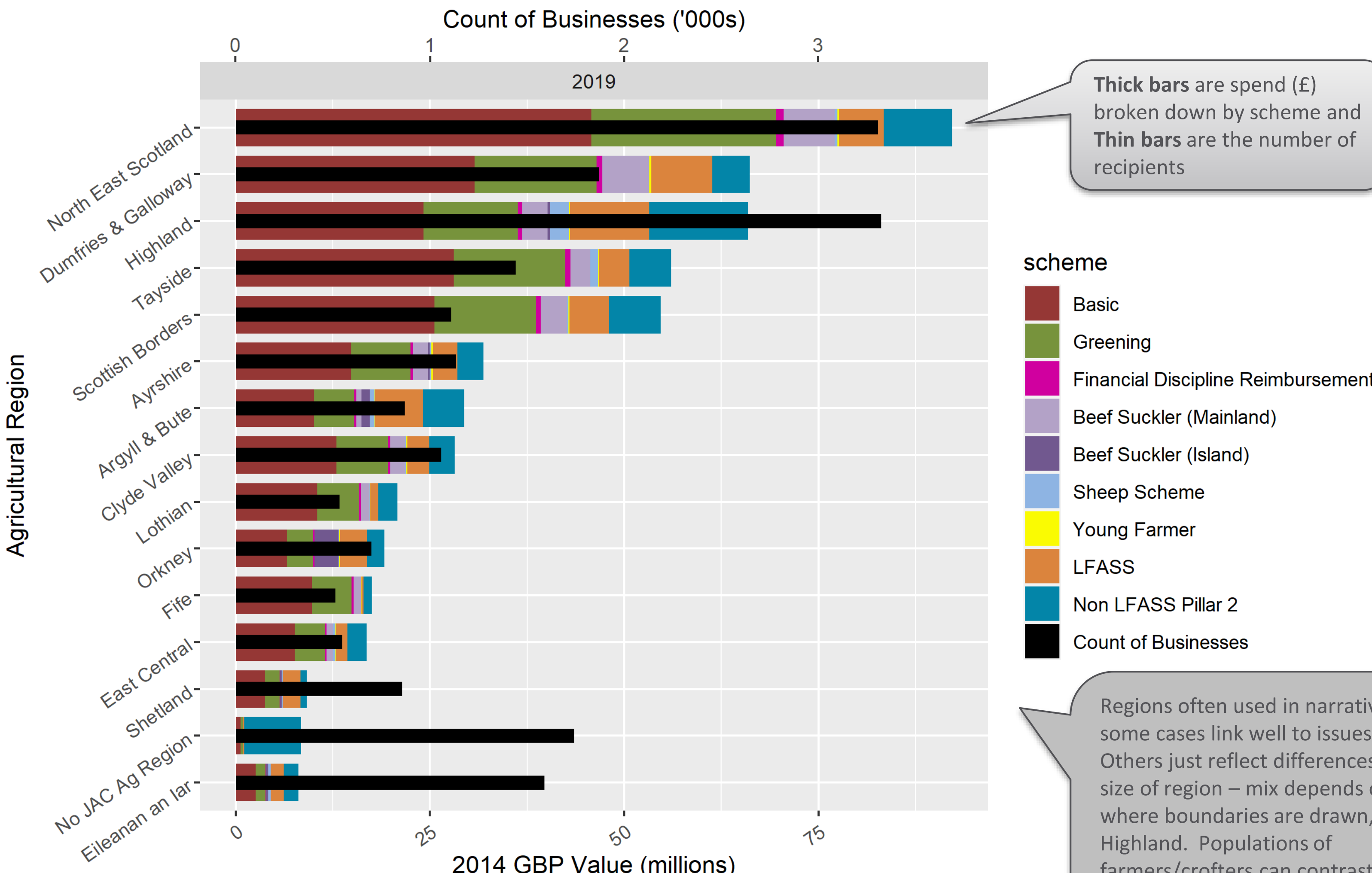
Year	2019
Pillar 2	
LFAS	£55.3M
FGS	£23.655M
AECS	£19.496M
RPR	£16.250M
FPMC	£2.594M
LMO	£2.252M
NECG	£1.911M
BES	£1.637M
CAGS	£1.442M
KTIF	£0.458M
FPS	£0.264M
FWS	£0.053M
SFGS	£0.049M
YFSUG	£0.047M
FWPS	£0.033M
BB	£0.016M
NESUG	£0.003M





Pillar 2 – in 2019 is 23% of all spend.
Ag-Env £38M – 7%
Small, New, Young, Croft - £3m – 1%
Business Dev £5M - 1%
Woodlands £24M – 5%
LFA £55M – 11%

Support Payments – Ag Region - 2019



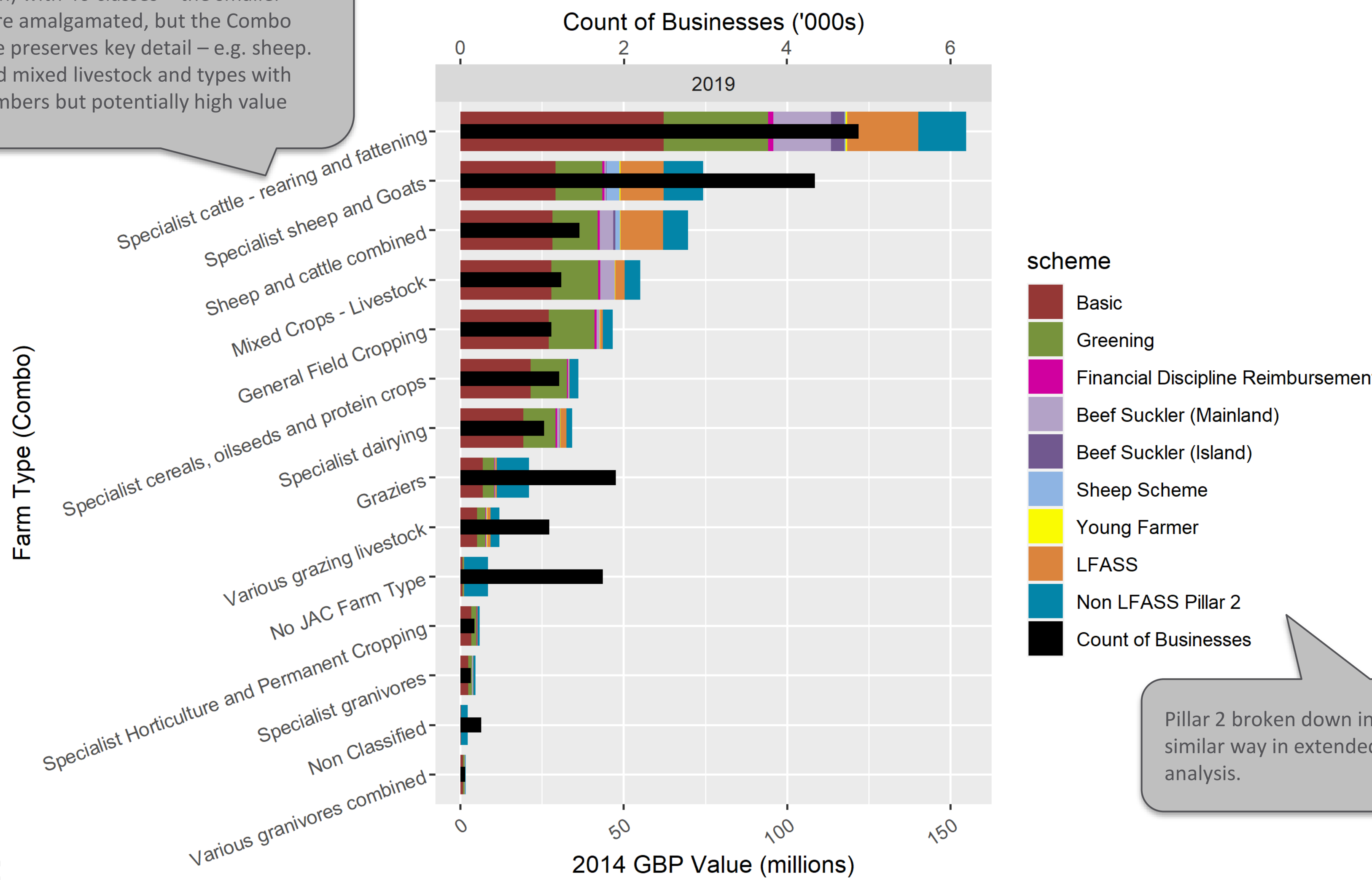
Thick bars are spend (£) broken down by scheme and **Thin bars** are the number of recipients

Regions often used in narratives – some cases link well to issues. Others just reflect differences in size of region – mix depends on where boundaries are drawn, e.g., Highland. Populations of farmers/crofters can contrast within regions.

All financial amounts unless noted are in 2014 GBP (£) adjusted only for exchange rates.

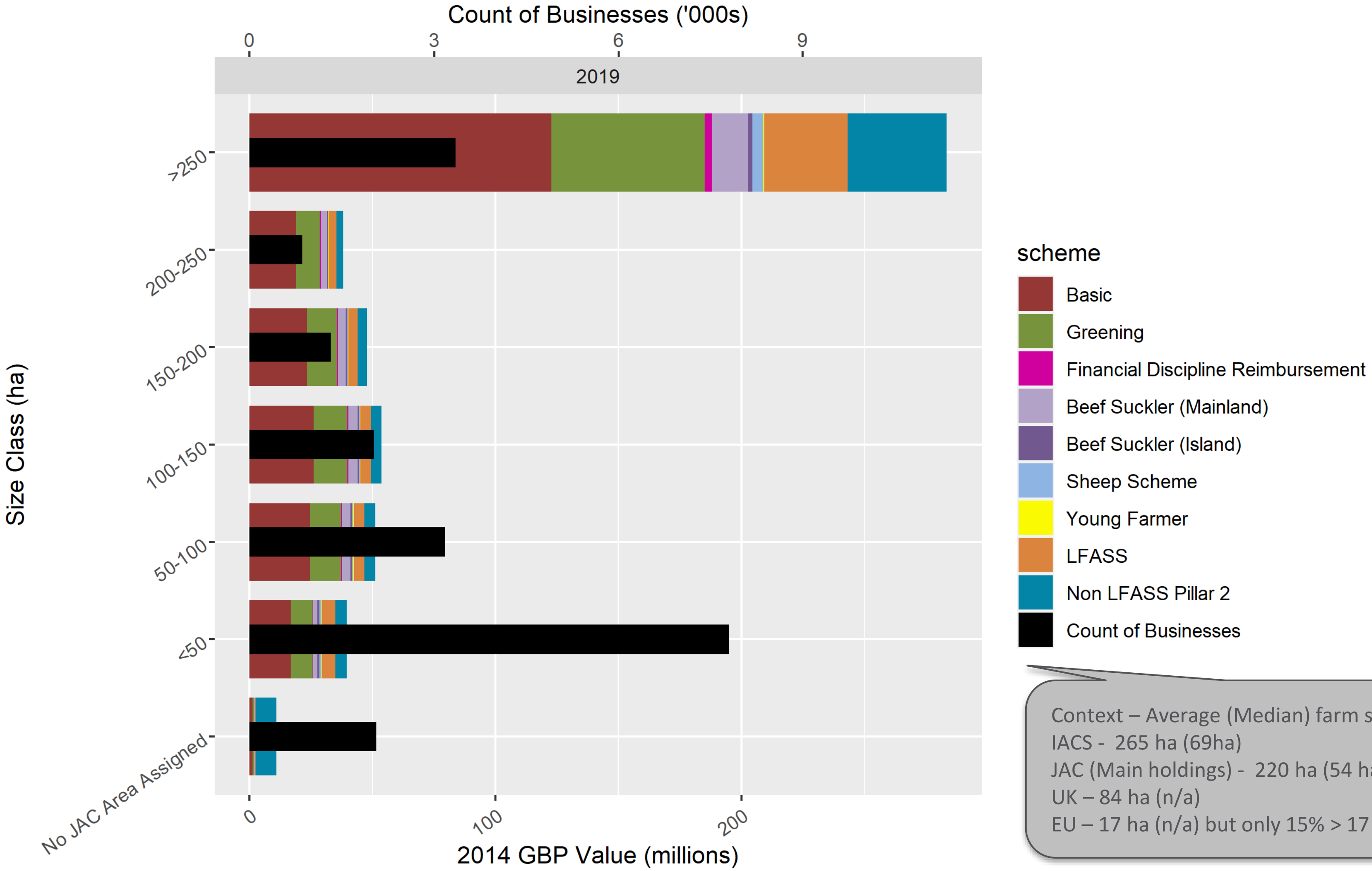
Support Payments – Farm Type - 2019

Farm Type here is based on the JAC farm type (High) with 46 classes – the smaller classes are amalgamated, but the Combo farm type preserves key detail – e.g. sheep. cattle and mixed livestock and types with small numbers but potentially high value crops.



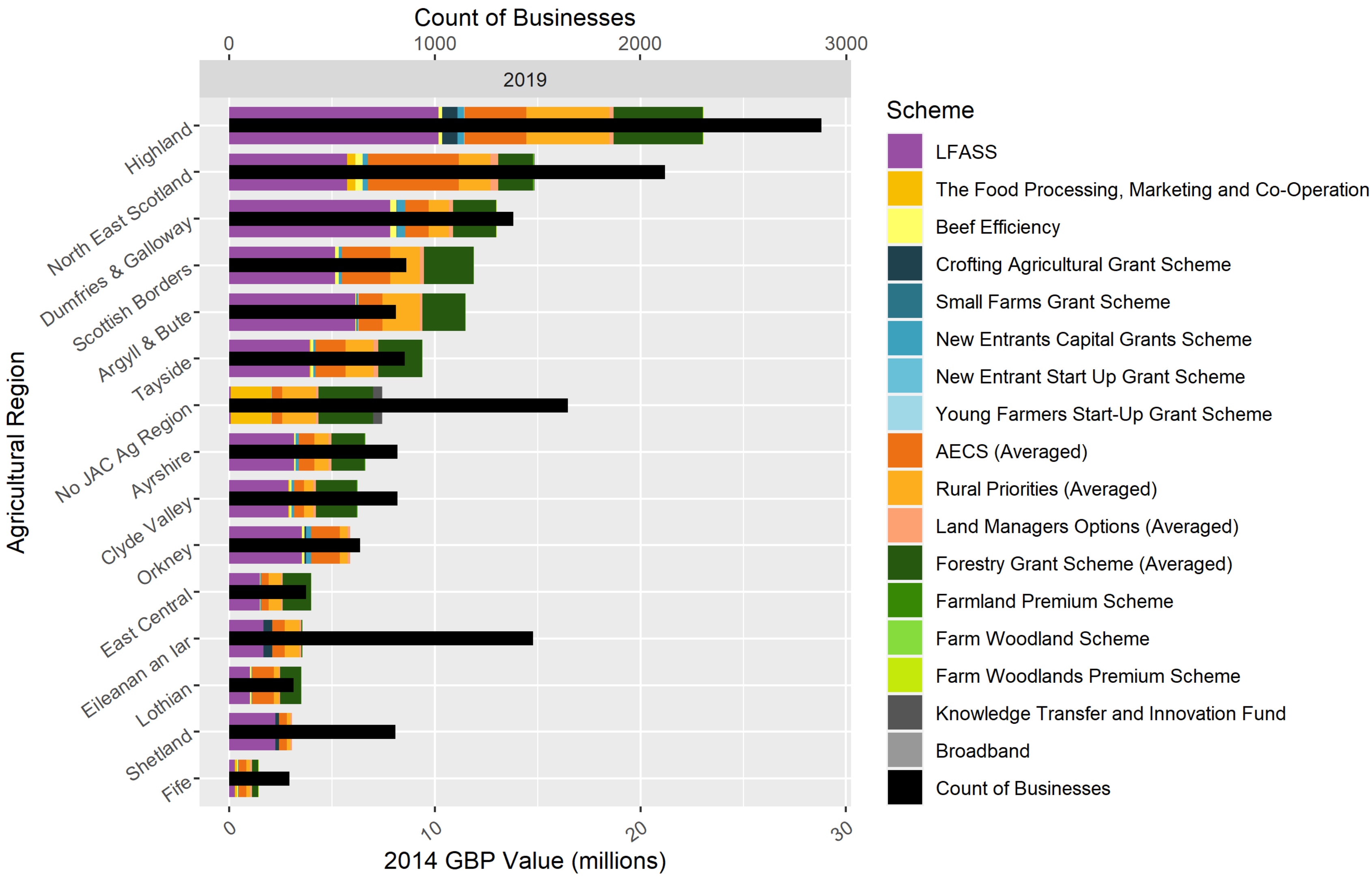
Pillar 2 broken down in similar way in extended analysis.

Support Payments – Size Class - 2019



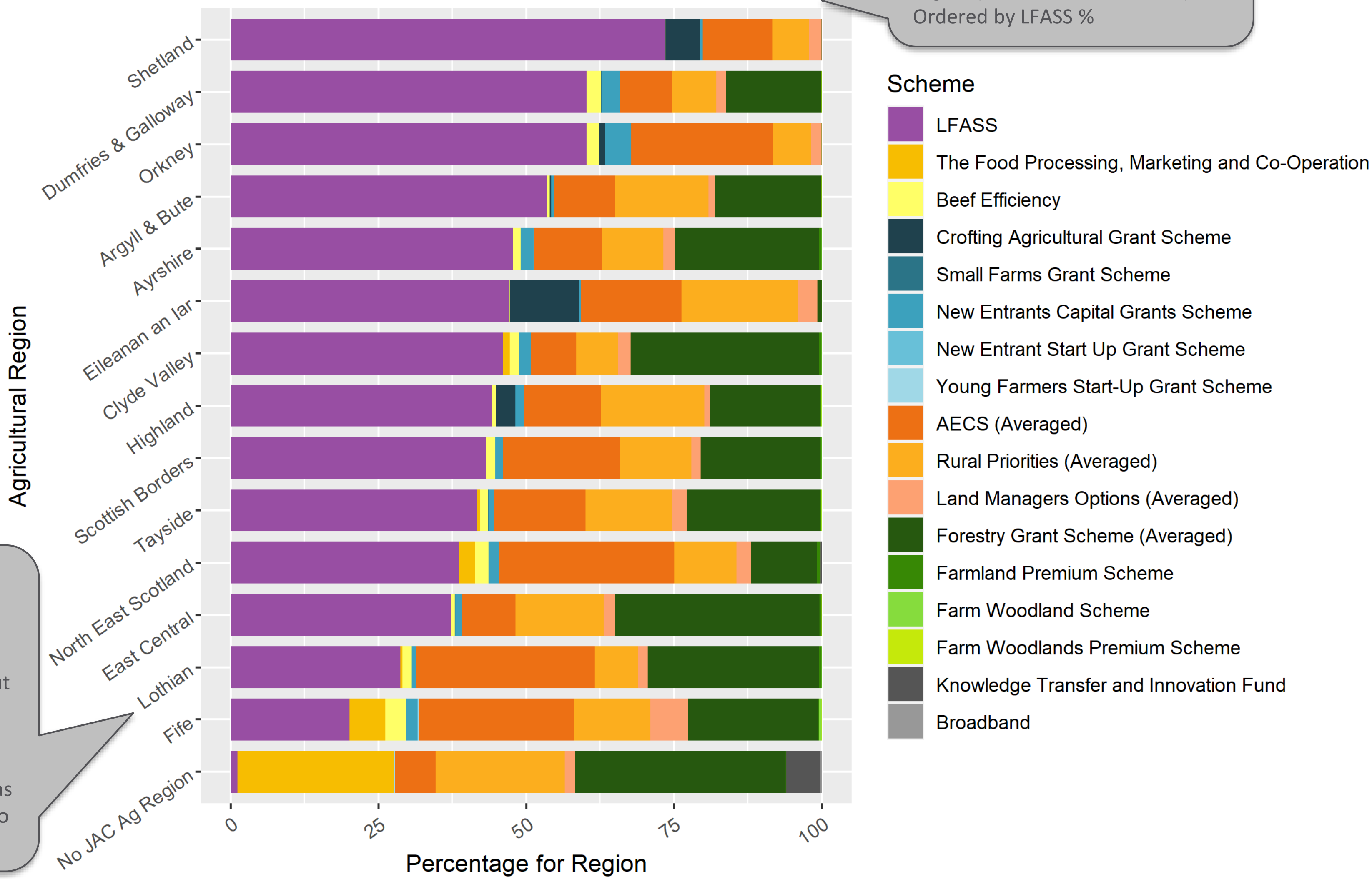
Context – Average (Median) farm sizes
IACS - 265 ha (69ha)
JAC (Main holdings) - 220 ha (54 ha)
UK – 84 ha (n/a)
EU – 17 ha (n/a) but only 15% > 17 ha

P2 – Ag Region


Count of Businesses
0
1000
2000
3000
2019
Highland
North East Scotland
Dumfries & Galloway
Scottish Borders
Argyll & Bute
Tayside
No JAC Ag Region
Ayrshire
Clyde Valley
Orkney
East Central
Eileanan an Iar
Lothian
Shetland
Fife
Agricultural Region
0
10
20
30
2014 GBP Value (millions)
Scheme
LFASS
The Food Processing, Marketing and Co-Operation
Beef Efficiency
Crofting Agricultural Grant Scheme
Small Farms Grant Scheme
New Entrants Capital Grants Scheme
New Entrant Start Up Grant Scheme
Young Farmers Start-Up Grant Scheme
AECS (Averaged)
Rural Priorities (Averaged)
Land Managers Options (Averaged)
Forestry Grant Scheme (Averaged)
Farmland Premium Scheme
Farm Woodland Scheme
Farm Woodlands Premium Scheme
Knowledge Transfer and Innovation Fund
Broadband
Count of Businesses

P2 – Ag Region %

To compare the mix of P2 schemes between regions – used percentage of total P2 spend per region (normalisation of areas). Ordered by LFASS %

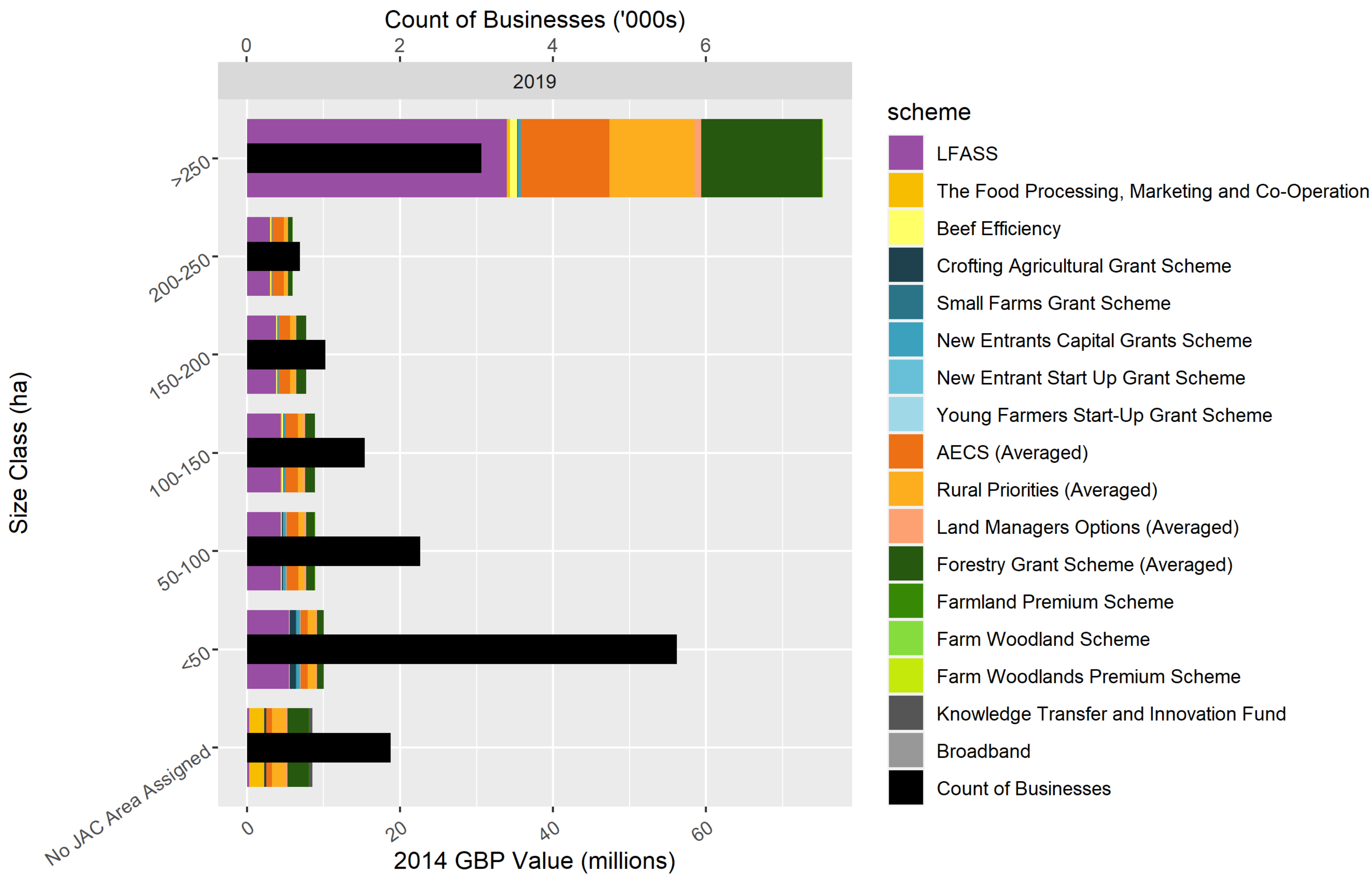


Contrasting example – Lothian low total spend in P2 (slide 11) but large percentage of the spend is AECS and FGS as low exposure to LFASS.

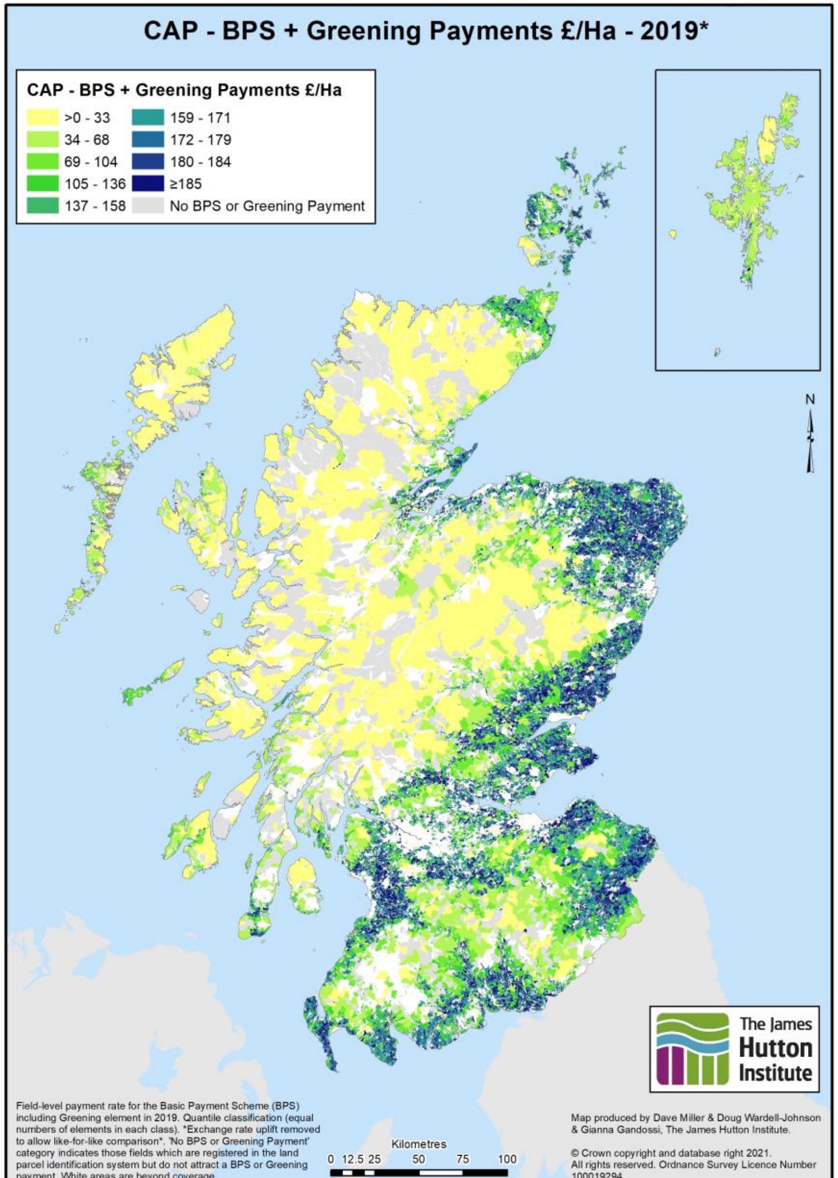
P2 – Farm Type

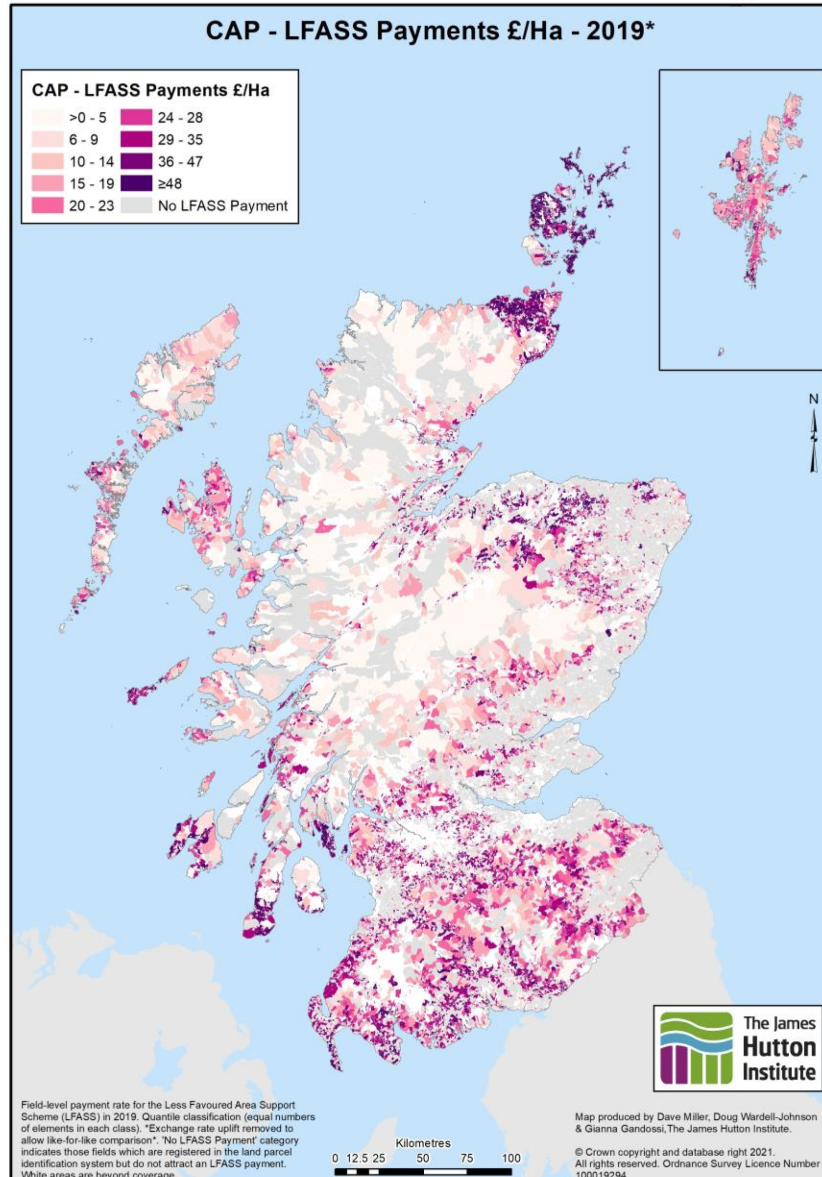
Count of Businesses
0
1000
2000
3000
4000
2019
Agricultural Region
Specialist cattle - rearing and fattening
Specialist sheep and Goats
Sheep and cattle combined
Graziers
Mixed Crops - Livestock
No JAC Farm Type
Various grazing livestock
General Field Cropping
Specialist dairying
Specialist cereals, oilseeds and protein crops
Non Classified
Specialist granivores
Specialist Horticulture and Permanent Cropping
Various granivores combined
0
10
20
30
40
2014 GBP Value (millions)
scheme
LFASS
The Food Processing, Marketing and Co-Operation
Beef Efficiency
Crofting Agricultural Grant Scheme
Small Farms Grant Scheme
New Entrants Capital Grants Scheme
New Entrant Start Up Grant Scheme
Young Farmers Start-Up Grant Scheme
AECS (Averaged)
Rural Priorities (Averaged)
Land Managers Options (Averaged)
Forestry Grant Scheme (Averaged)
Farmland Premium Scheme
Farm Woodland Scheme
Farm Woodlands Premium Scheme
Knowledge Transfer and Innovation Fund
Broadband
Count of Businesses

P2 – Size Class

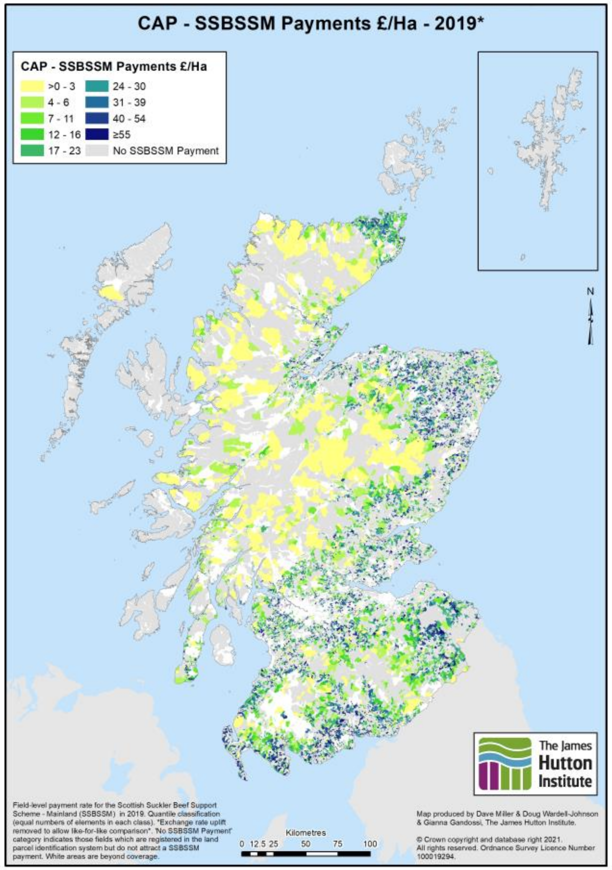


Spatial distributions





VCS maps


CAP - SSBSSM Payments £/Ha - 2019*
CAP - SSBSSM Payments £/Ha
>0 - 3
4 - 6
7 - 11
12 - 16
17 - 23
24 - 30
31 - 39
40 - 54
≥55
No SSBSSM Payment
N
Field-level payment rate for the Scottish Suckler Beef Support Scheme - Mainland (SSBSSM) in 2019. Quantile classification (equal numbers of elements in each class). *Exchange rate uplift removed to allow like-for-like comparison*. 'No SSBSSM Payment' category indicates those fields which are registered in the land parcel identification system but do not attract a SSBSSM payment. White areas are beyond coverage.
Kilometres
0 12.5 25 50 75 100
Map produced by Dave Miller & Doug Wardell-Johnson & Gianna Gandossi, The James Hutton Institute.
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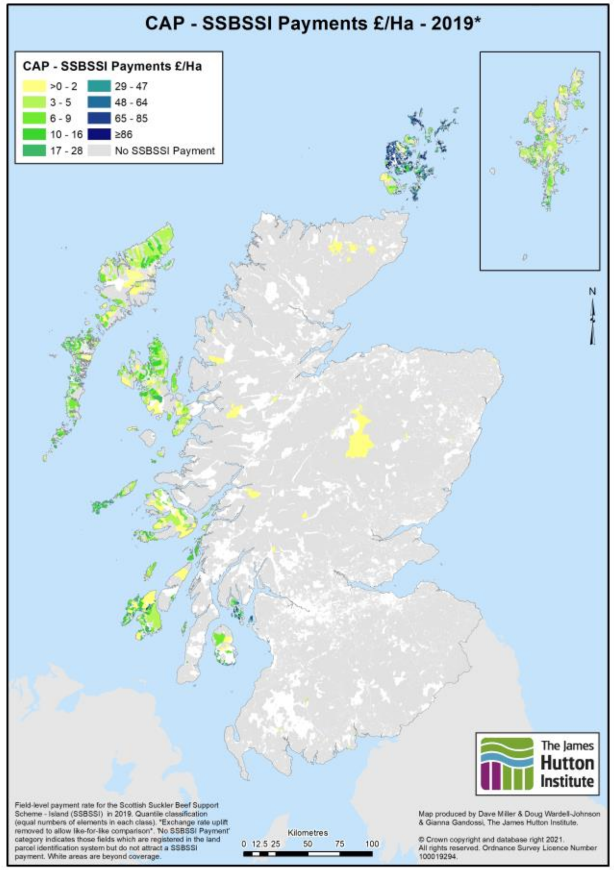
CAP - SSBSSI Payments £/Ha - 2019*
CAP - SSBSSI Payments £/Ha
>0 - 2
3 - 5
6 - 9
10 - 16
17 - 28
29 - 47
48 - 64
65 - 85
≥86
No SSBSSI Payment
N
Field-level payment rate for the Scottish Suckler Beef Support Scheme - Island (SSBSSI) in 2019. Quantile classification (equal numbers of elements in each class). *Exchange rate uplift removed to allow like-for-like comparison*. 'No SSBSSI Payment' category indicates those fields which are registered in the land parcel identification system but do not attract a SSBSSI payment. White areas are beyond coverage.
Kilometres
0 12.5 25 50 75 100
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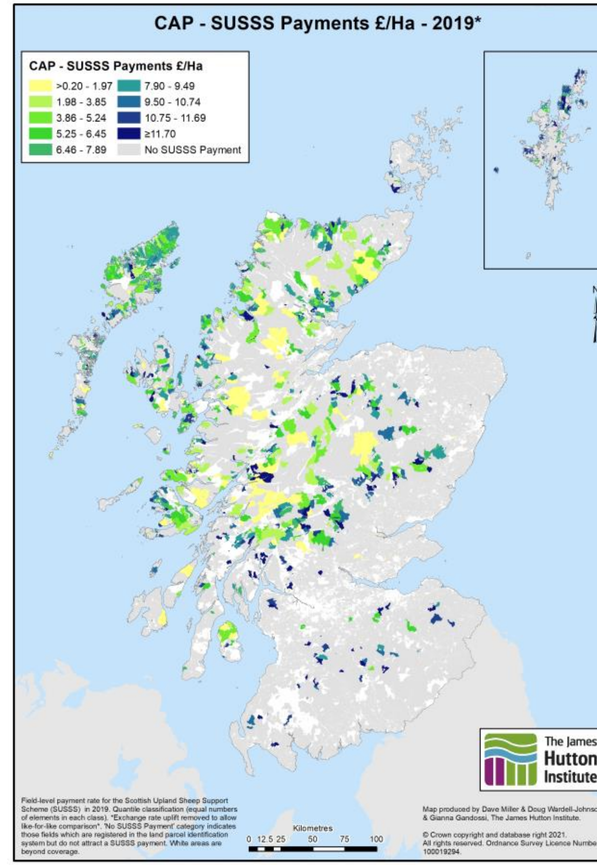
CAP - SUSSS Payments £/Ha - 2019*
CAP - SUSSS Payments £/Ha
>0.20 - 1.97
1.98 - 3.85
3.86 - 5.24
5.25 - 6.45
6.46 - 7.89
7.90 - 9.49
9.50 - 10.74
10.75 - 11.69
≥11.70
No SUSSS Payment
N
Field-level payment rate for the Scottish Upland Sheep Support Scheme (SUSSS) in 2019. Quantile classification (equal numbers of elements in each class). *Exchange rate uplift removed to allow like-for-like comparison*. 'No SUSSS Payment' category indicates those fields which are registered in the land parcel identification system but do not attract a SUSSS payment. White areas are beyond coverage.
Kilometres
0 12.5 25 50 75 100
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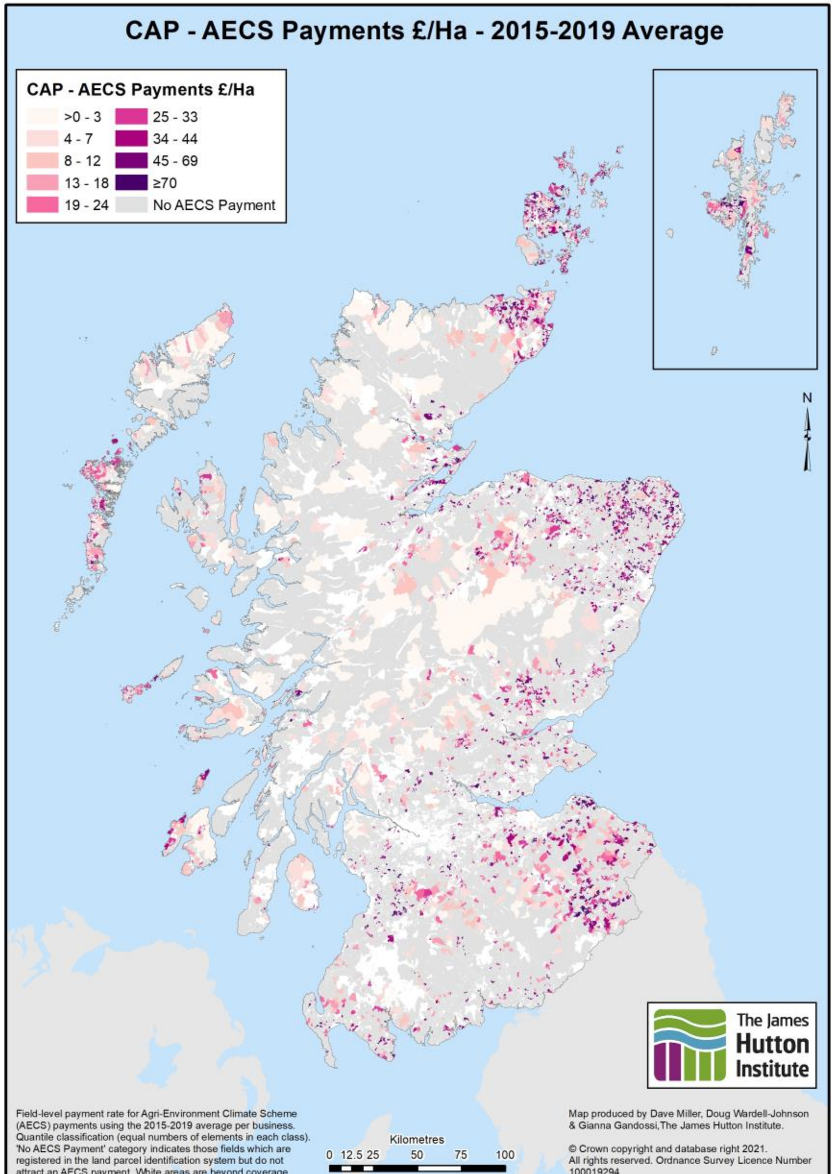
P2 maps


CAP - AECS Payments £/Ha - 2015-2019 Average
CAP - AECS Payments £/Ha
>0 - 3
4 - 7
8 - 12
13 - 18
19 - 24
25 - 33
34 - 44
45 - 69
≥70
No AECS Payment
N
The James Hutton Institute
Field-level payment rate for Agri-Environment Climate Scheme (AECS) payments using the 2015-2019 average per business. Quantile classification (equal numbers of elements in each class). 'No AECS Payment' category indicates those fields which are registered in the land parcel identification system but do not attract an AECS payment. White areas are beyond coverage.
Kilometres
0 12.5 25 50 75 100
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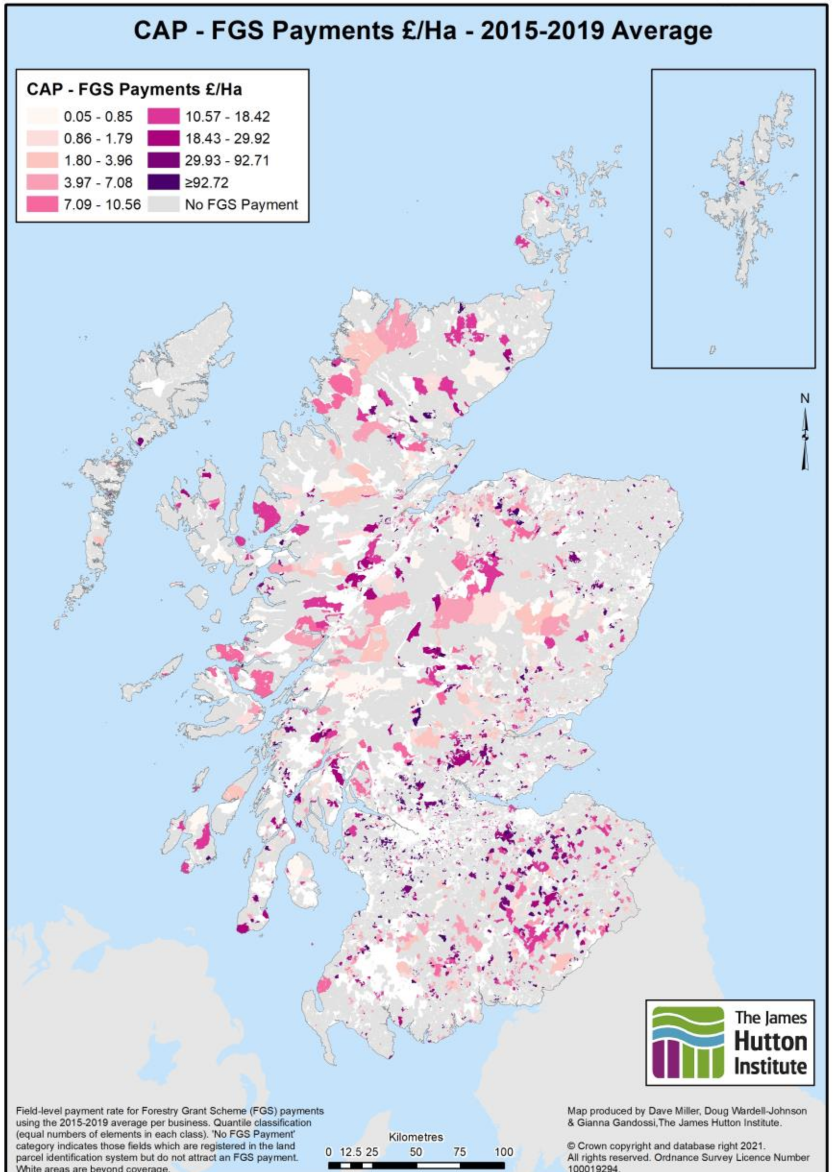
CAP - FGS Payments £/Ha - 2015-2019 Average
CAP - FGS Payments £/Ha
0.05 - 0.85
0.86 - 1.79
1.80 - 3.96
3.97 - 7.08
7.09 - 10.56
10.57 - 18.42
18.43 - 29.92
29.93 - 92.71
≥92.72
No FGS Payment
N
The James Hutton Institute
Field-level payment rate for Forestry Grant Scheme (FGS) payments using the 2015-2019 average per business. Quantile classification (equal numbers of elements in each class). 'No FGS Payment' category indicates those fields which are registered in the land parcel identification system but do not attract an FGS payment. White areas are beyond coverage.
Kilometres
0 12.5 25 50 75 100
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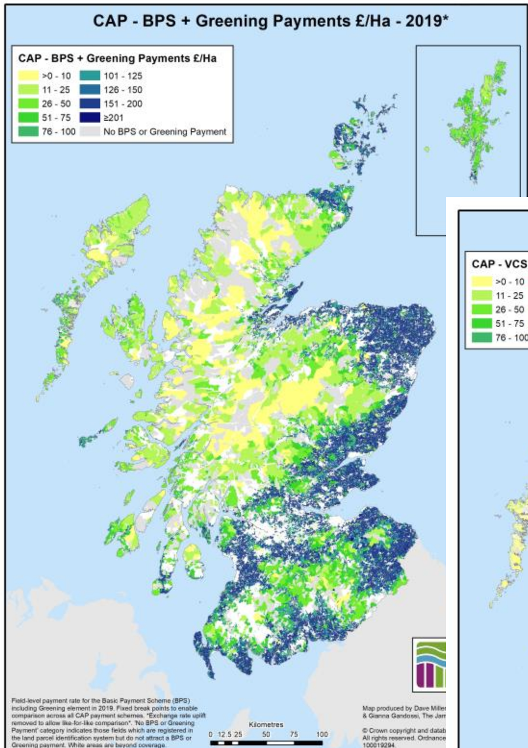
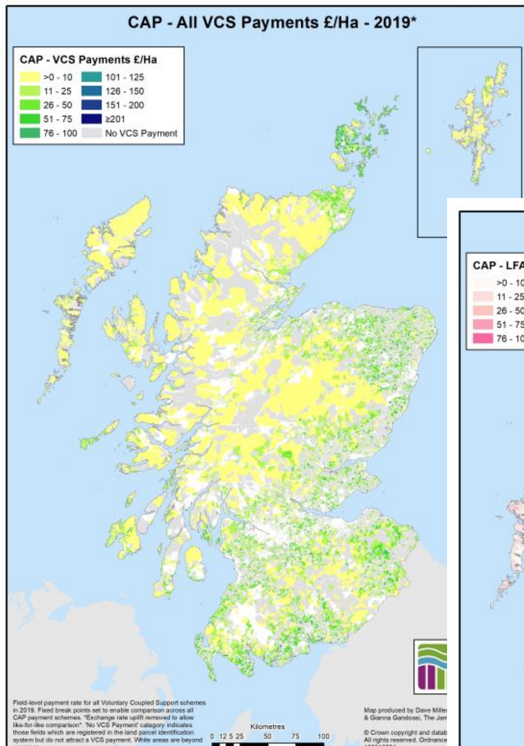
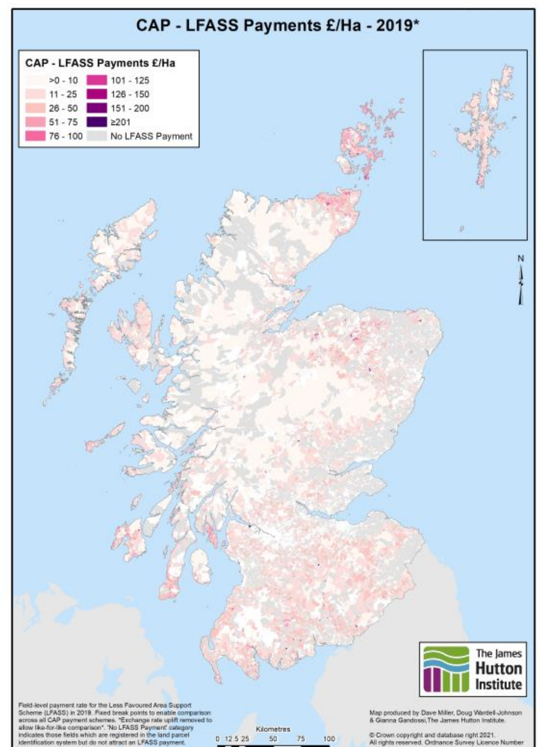
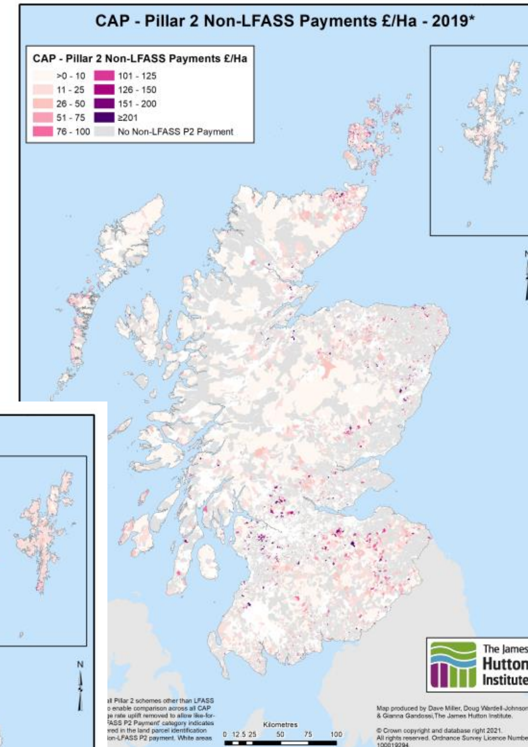
Comparing spend - maps









Range of Payments (P1) – Farm Type

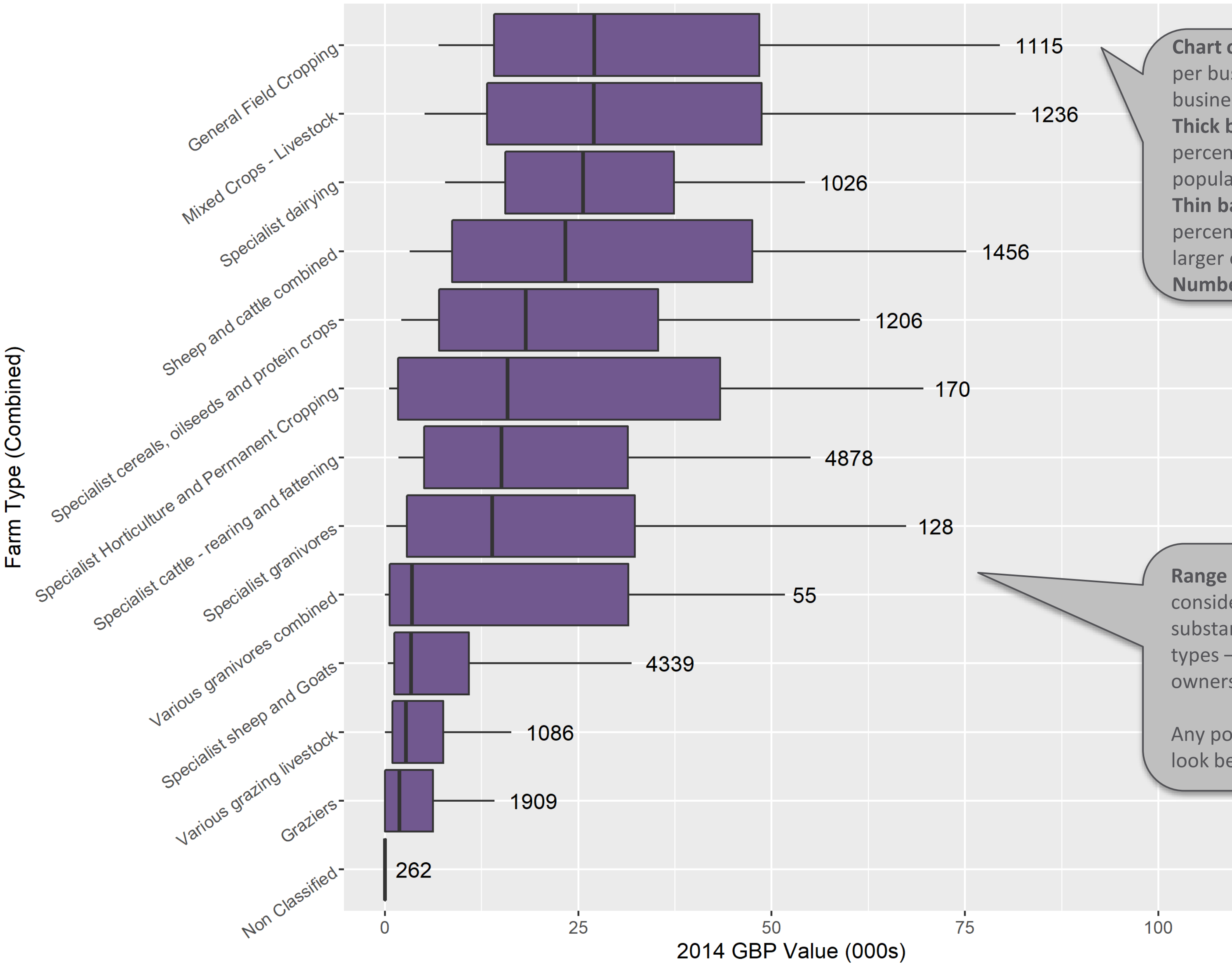
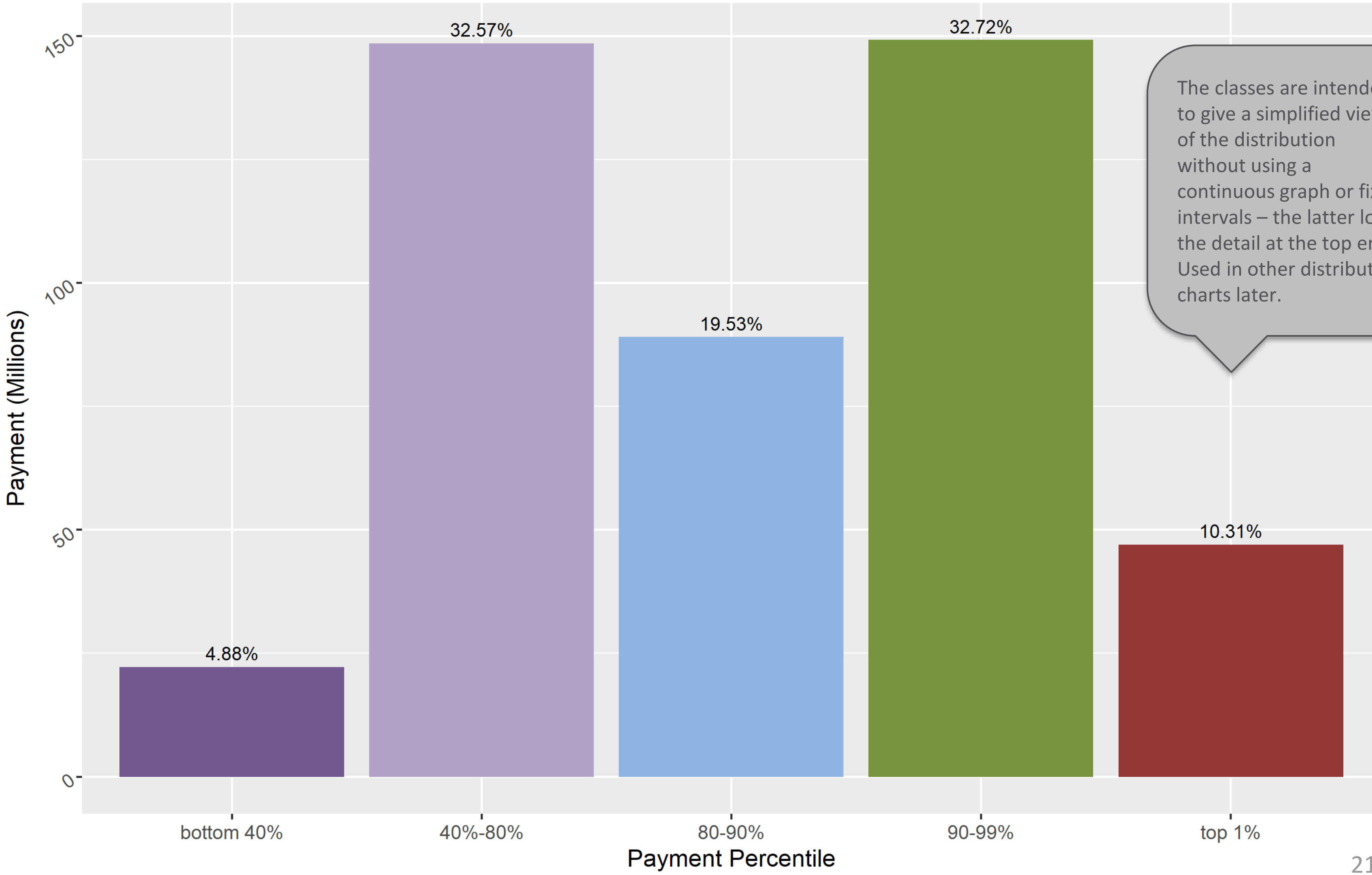


Chart ordered by median payment per business. Numbers of businesses noted.
Thick bars are between 25 and 75th percentiles so 50% of the population.
Thin bars are at 10th and 90th percentiles – so payments can be larger or smaller than this.
Numbers are counts of businesses.

Range of payments in all types is considerable. There are some substantial differences between types – reflecting biophysical and ownership/tenure differences.

Any policy consideration needs to look beyond “averages”.

Distribution of payments - national



The classes are intended to give a simplified view of the distribution without using a continuous graph or fixed intervals – the latter lose the detail at the top end. Used in other distribution charts later.

Associations with payments

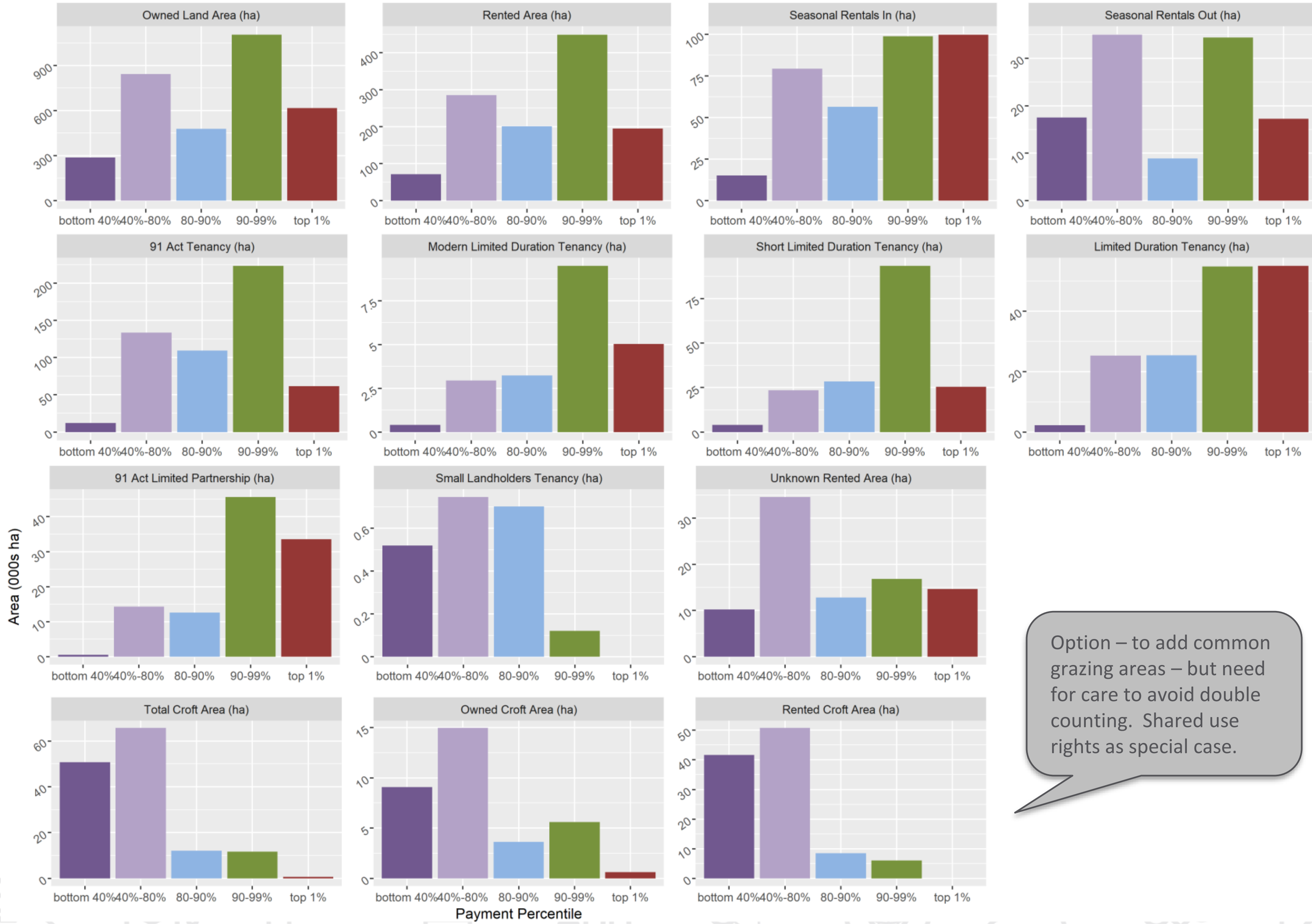
Experimenting with the payments classification and what the mix of resources or outcomes is.

Deliberation comments – strong association with productions/incomes – SO, livestock, SLR (option for actual employment) – but contrast with other metrics.

Other options

- Soil C – potential (actual)
- Measured or modelled environmental indicators

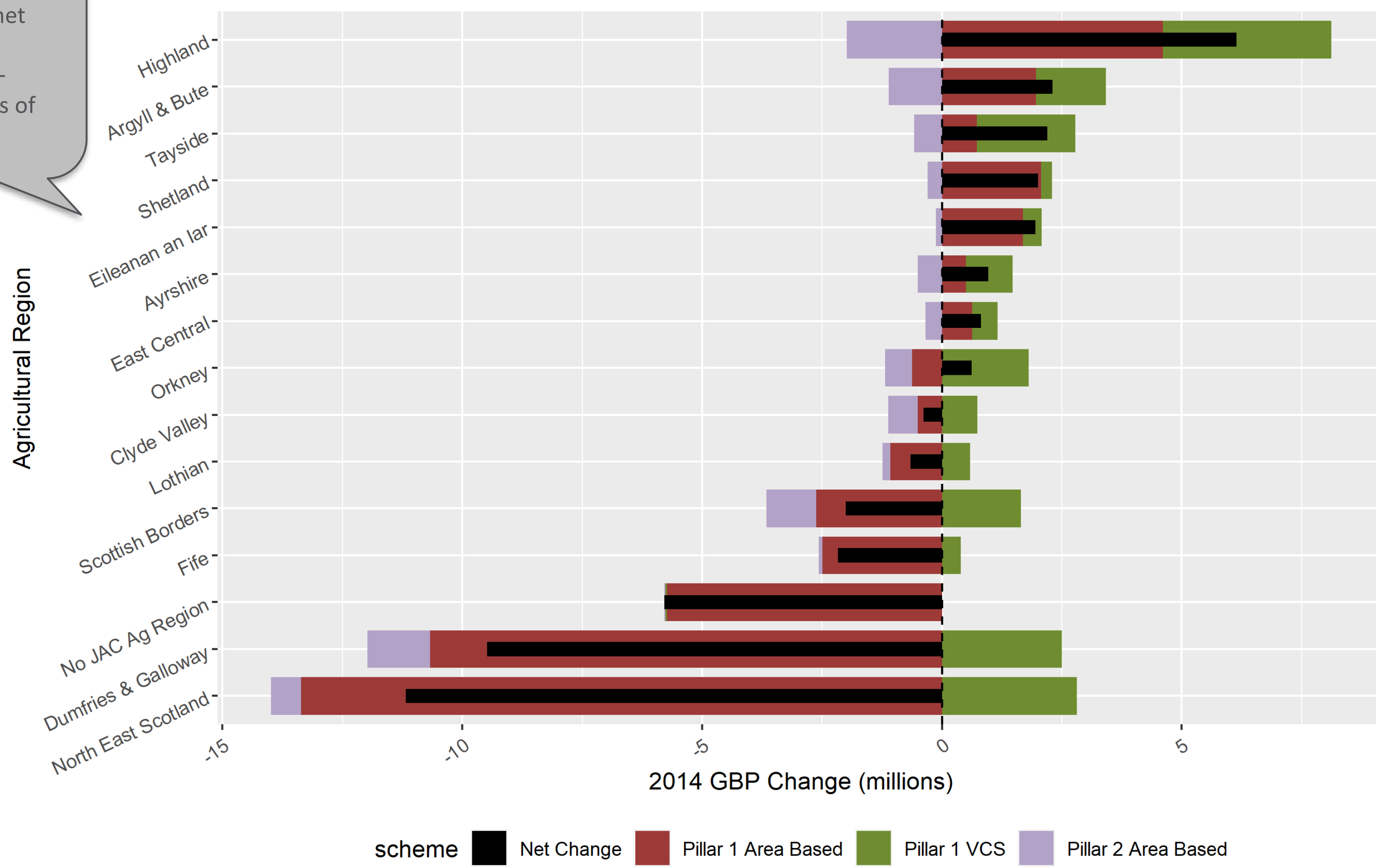
Associations with payments - Tenure



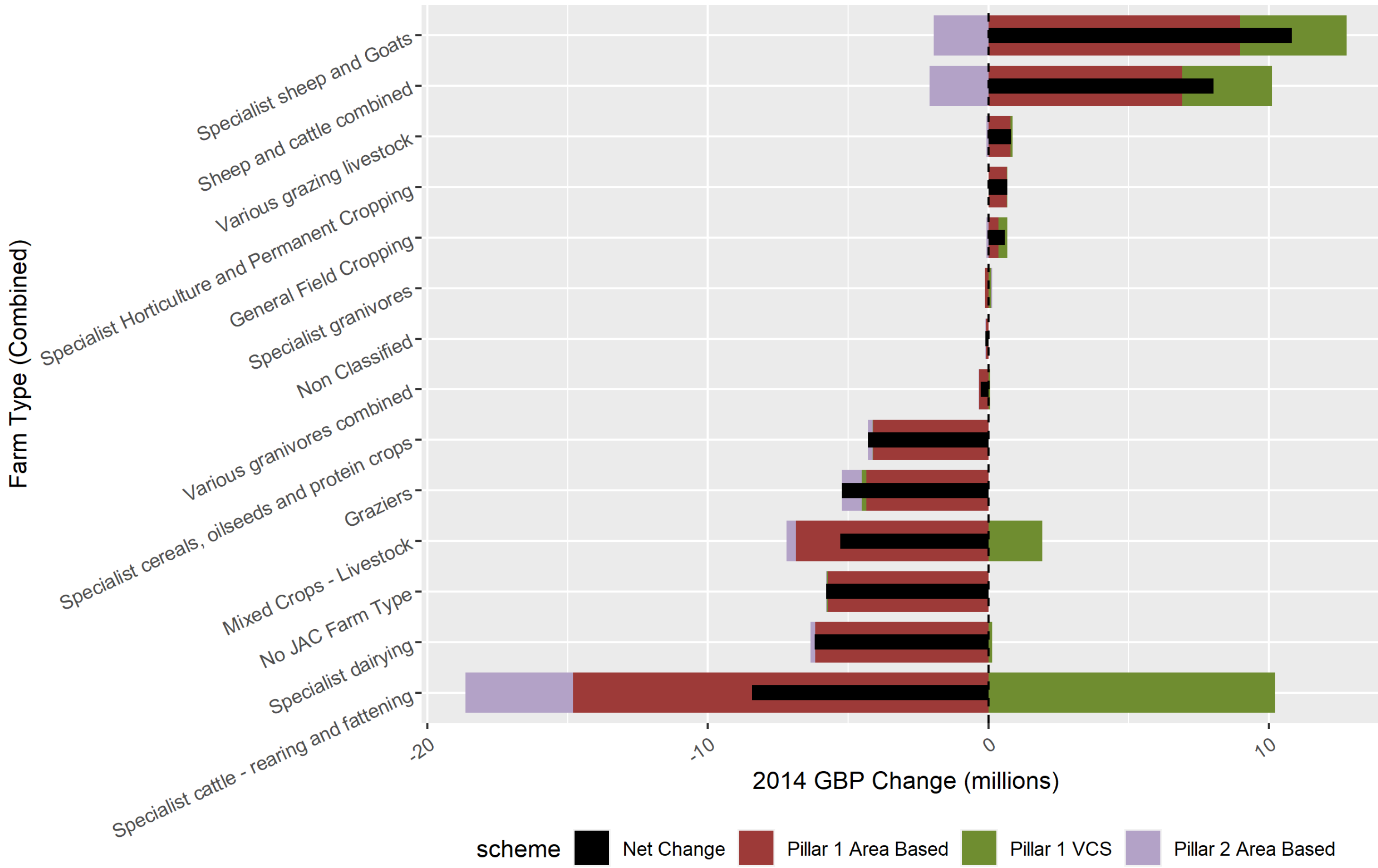
Option – to add common grazing areas – but need for care to avoid double counting. Shared use rights as special case.

Net Change – Ag Region

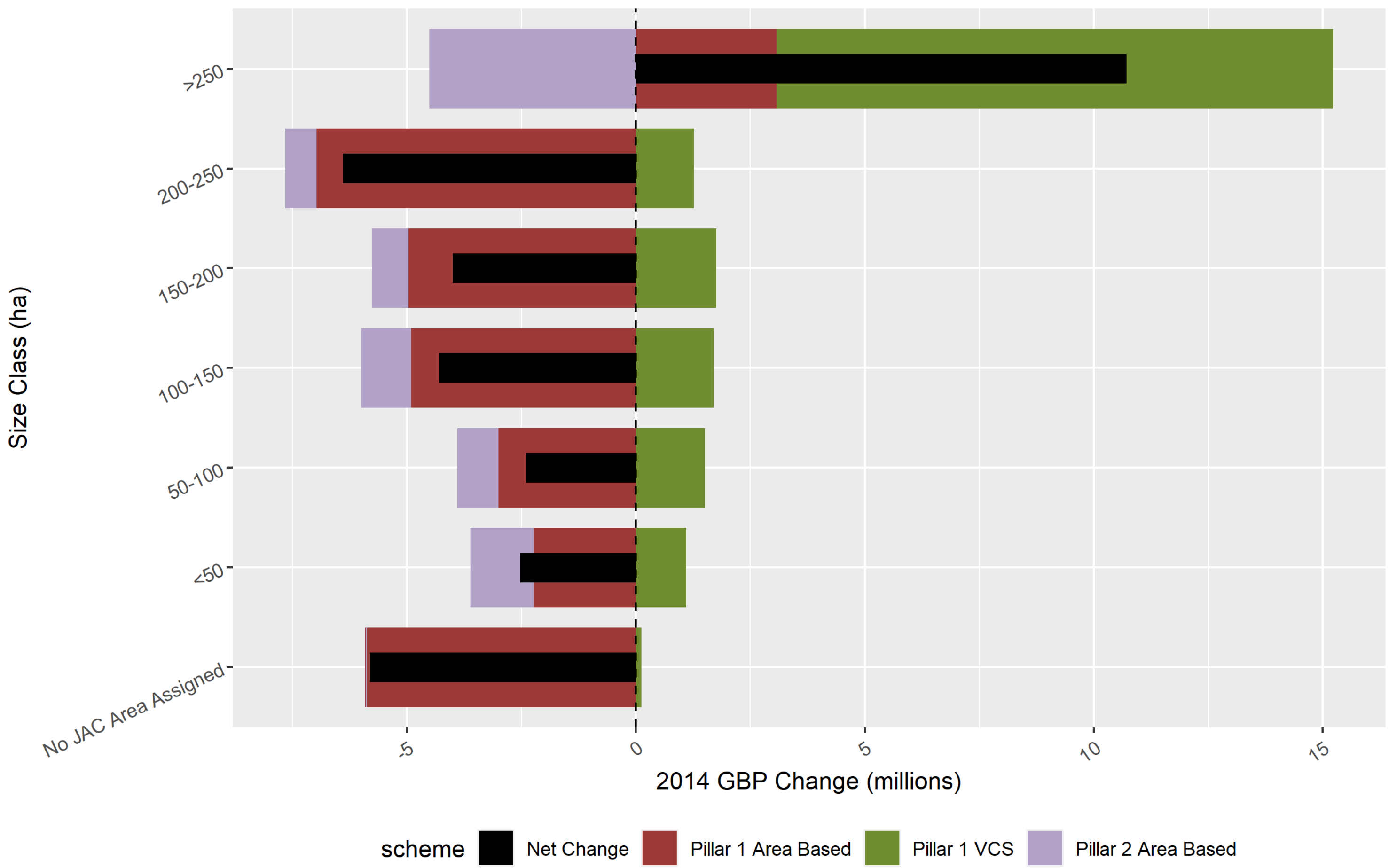
Change – net 2014 to 2019
Thin bar – net change
Thick bars – components of change



Net Change – Farm Type



Net Change – Size



P1 and LFASS 2014-2019 Redistribution - Ag Region

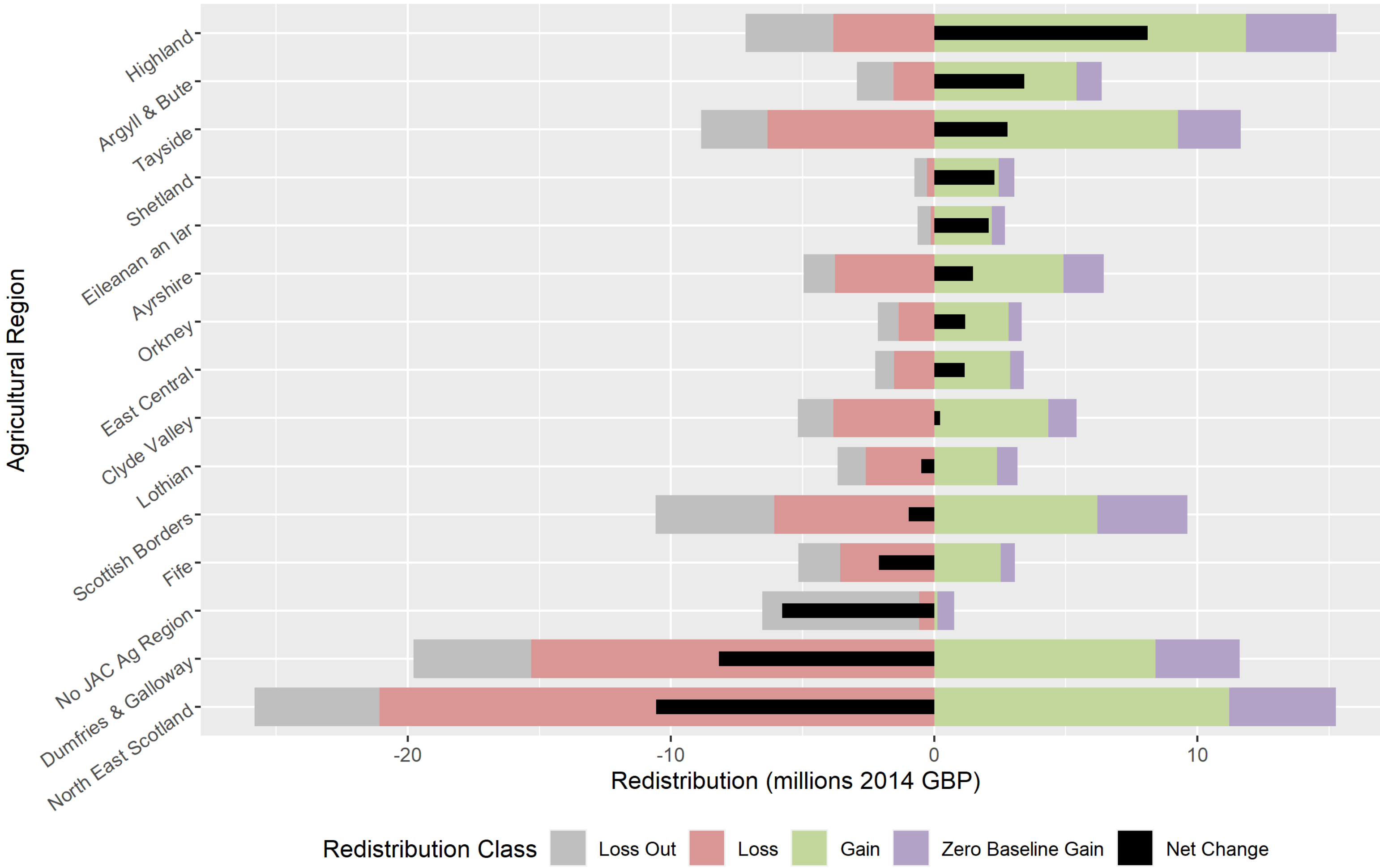
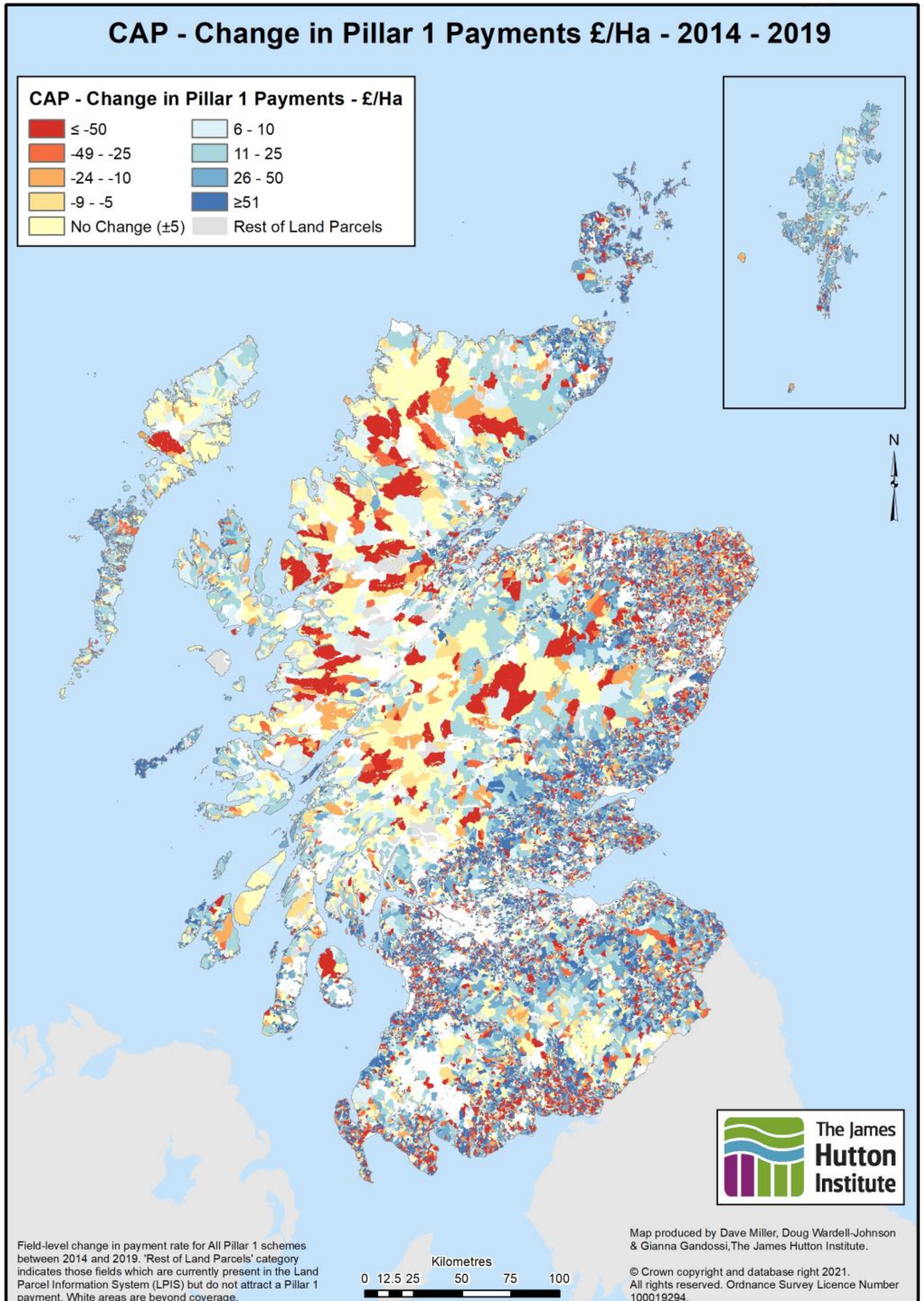


Chart highlights the redistribution within classes – the main effect of move from historic to area based payments.

The Green and Red bars show the sum of gains and losses in payments.

The Grey and Purple bars show businesses that are no longer claiming (Loss Out) or are new claimants (Zero Baseline).

Mapping change



P1 and LFASS 2014-2019 Redistribution - Farm Type

Structural change – regions - %

- Percentage of the regional population of businesses

	Count of businesses that:				
Ag Region	**Left IACS**	**Decreased in area**	**Stayed about the same area**	**Increased in Area**	**Are new IACS business**
Fife	9%	10%	61%	11%	9%
Clyde Valley	8%	9%	60%	9%	12%
Dumfries & Galloway	8%	9%	59%	12%	11%
North East Scotland	9%	9%	59%	11%	12%
Shetland	18%	6%	58%	7%	10%
East Central	10%	9%	57%	10%	14%
Highland	14%	6%	56%	7%	15%
Ayrshire	8%	11%	56%	10%	14%
Argyll & Bute	11%	10%	56%	8%	14%
Scottish Borders	8%	12%	55%	11%	13%
Orkney	14%	8%	55%	13%	10%
Tayside	9%	11%	55%	12%	12%
Eileanan an Iar	22%	2%	54%	5%	12%
Lothian	9%	13%	53%	10%	14%
All Regions	**12%**	**8%**	**57%**	**9%**	**13%**

+/- 5 ha defined as "about the same" – potential to be more sophisticated by including % change in area threshold..

Significance of change?

Businesses gaining or zero baseline:	Commentary on the indicator
have 65% of BPS area;	A measure of the share of land available for use.
are 52% of businesses;	Basic measure of number of entities affected.
have 56% of standard labour requirements;	An alternative measure of activity, potential employment*
generate 52% of standard outputs;	A measure of production activity in terms of cash value of outputs*.
manage 52% of all livestock units.	An alternative measure of activity, livestock specific.

*Need to include “value” of non-market goods – e.g. peatland restored, even if only for employment potential (SLR).

Beyond the ARD stakeholders analysis

- Other relevant research
  - Areas of Natural Constraint
    - Mapping of biophysical constraints
    - Systems of payments – regions, capping, degressivity etc
  - Socio-economic Performance
    - Regional mapping of multiple indices (data zones)
    - New geographies of where rural development may be need to be targeted
  - Peatland extent, conditions and management (burning)
  - Carbon storage from afforestation – online mapping and paper
- Next RESAS Strategic Research Programme – 2022-27 – e.g. projects in the Land Use (C3) and Land Reform (E3) Topics.

Contact – Keith Matthews, The James Hutton Institute, Aberdeen, AB15 8QH,
Tel - +44 (0)1224 395271, Email – keith.matthews@hutton.ac.uk

The full set of slides and map books generated by this analysis available from - https://ics.hutton.ac.uk/research/land-systems-research-team/cap-analysis/

Previous related analyses are also available from the Hutton Land Systems Research Team website - https://ics.hutton.ac.uk/research/land-systems-research-team/

Socio-economic performance (SEP) mapping courtesy of Jon Hopkins.

Further research in the RESAS Strategic Research Programme 2022-27, in the Land Use (C3) and Land Reform (E3) Topics and others across the SRP Themes.

The James Hutton Institute is supported by the Scottish Government's Rural and Environment Science and Analytical Services Division (RESAS)