

Land Type Farm Level Scenarios



A comparison of three different implementations of the Land Type Farm Level model with variations in payment rates.

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Background and Summary of Outcomes

The CAP modelling work (Nov 2012 – Apr 2013) included a 3 zone Land Type model (Arable with Temporary Grassland, Permanent Grassland, and Rough Grazing) as one basis of setting regions. Following a meeting of the Future CAP Stakeholders Group it was agreed that a two region Land Type regionalisation should also be considered. The 2 region Land Type model combines Arable, Temporary Grassland, and Permanent Grassland (and associated IACS crop codes) into one region while Rough Grazing (and associated IACS crop codes) remains in a separate class. This 2 region Land Type model has been implemented using two different payment rates for the Rough Grazing class (10€/per ha and 27€/per ha). This document outlines the consequences for each of these scenarios in terms of farm type, region, and farm size consistent with the presentations of outputs seen in previous work.

For the two region model the key finding is the significant sensitivity of outcomes to changes in the rate set for the Rough Grazing (RGR) land type region. This is true for sector, geographical region and business size. Overall redistribution decreases with the lower rate of payment for RGR land type (10€/ha). Regionally, however, this moves Highland from a net 12 M€ increase to a net -1.4€M reduction and from largest gains to third largest losses.

Higher payments to the RGR land type tend (via the reductions to the other region rates) to reduce payments to sectors that rely on other land types. For example Specialist Beef (SDA) sees greater net losses with higher payments to the RGR land type (though this change is not substantial compared to the within sector redistribution). For Specialist Beef (SDA) it is worth noting that the three region land type scenario using the higher rate for the RGR land type (27€/ha) is one of only two scenarios that resulted in a net positive balance of redistribution. This means that the effects of the 27€/ha rate for the RGR land type is offset by the production weighting (podium) in the three region option. This means that both the choice of numbers of regions and their parameterisations need to be considered together.

The results from this analysis highlight that outcomes are sensitive to the parameterisation of region-budget scenarios. In particular the decisions on the payment rates for the RGR land type (and by analogy the rates for the LCA 6.1 and above classes) are important because other parameters depend directly on these. Since there are also dependencies between Phase 2 modelling and the Phase 1 results, it is desirable to more tightly define the parameterisations of the underpinning Phase 1 regions and budget calculations so that the Phase 2 analyses can be more robust in their conclusions.

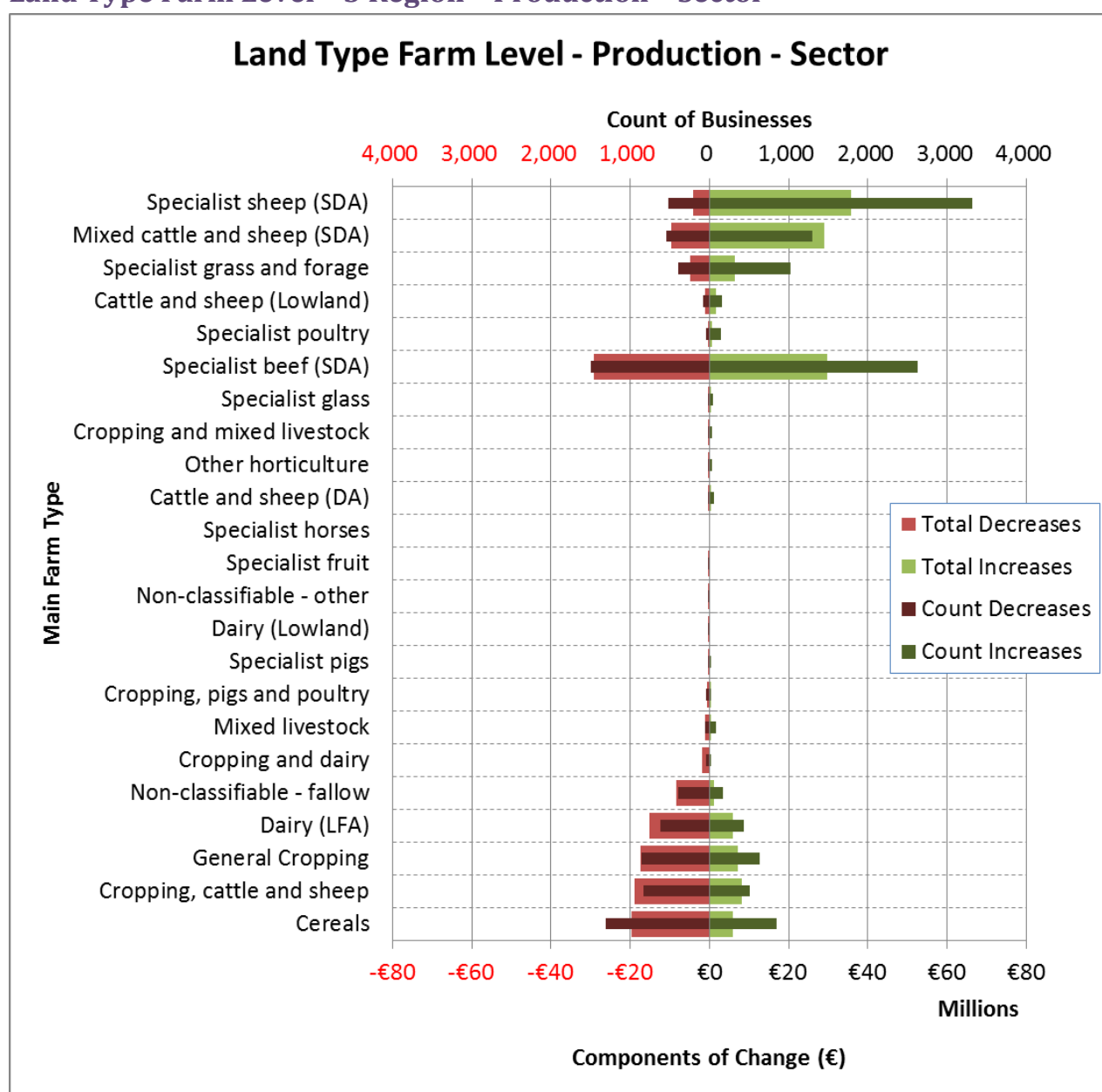
Land Type Farm Level – 3 Region Model

This is the 'original' 3 region Land Type model. In the CAP modelling work this model was implemented with 4 different sets of payment rates as shown in Table 1. The charts in the following subsections show the Production weighting payment rates only.

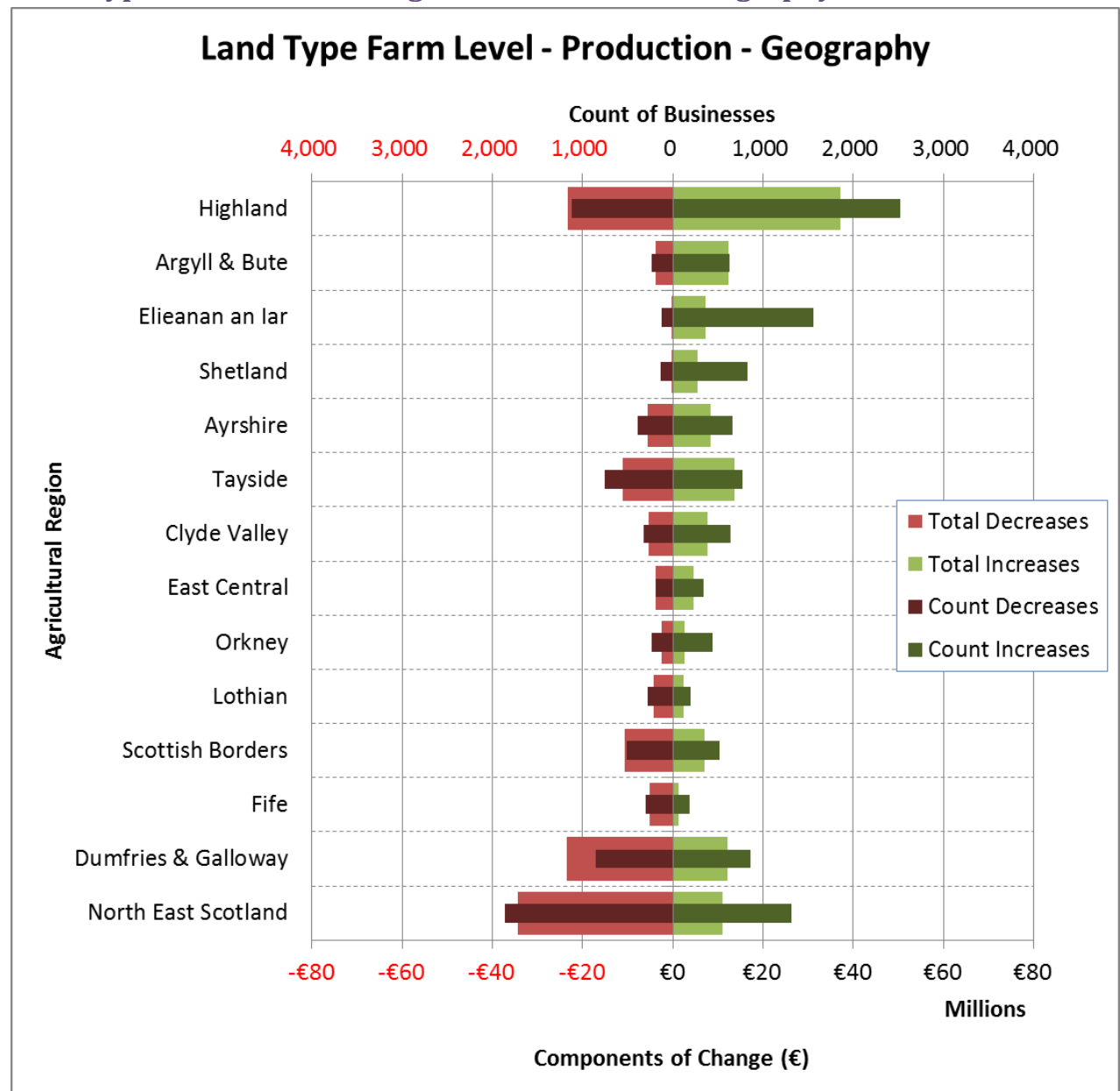
Table 1: Payment rates applied to 3 region Land Type model in CAP modelling work to date

Region	Historic	Economic	Production	Environmental
Arable (incl. TGRS)	€319.16	€387.54	€291.85	€307.97
Permanent Grassland	€204.70	€208.39	€350.33	€196.52
Rough Grazing	€64.72	€38.20	€27.00	€68.31
Total Redistribution	€298m	€258m	€267m	€313m

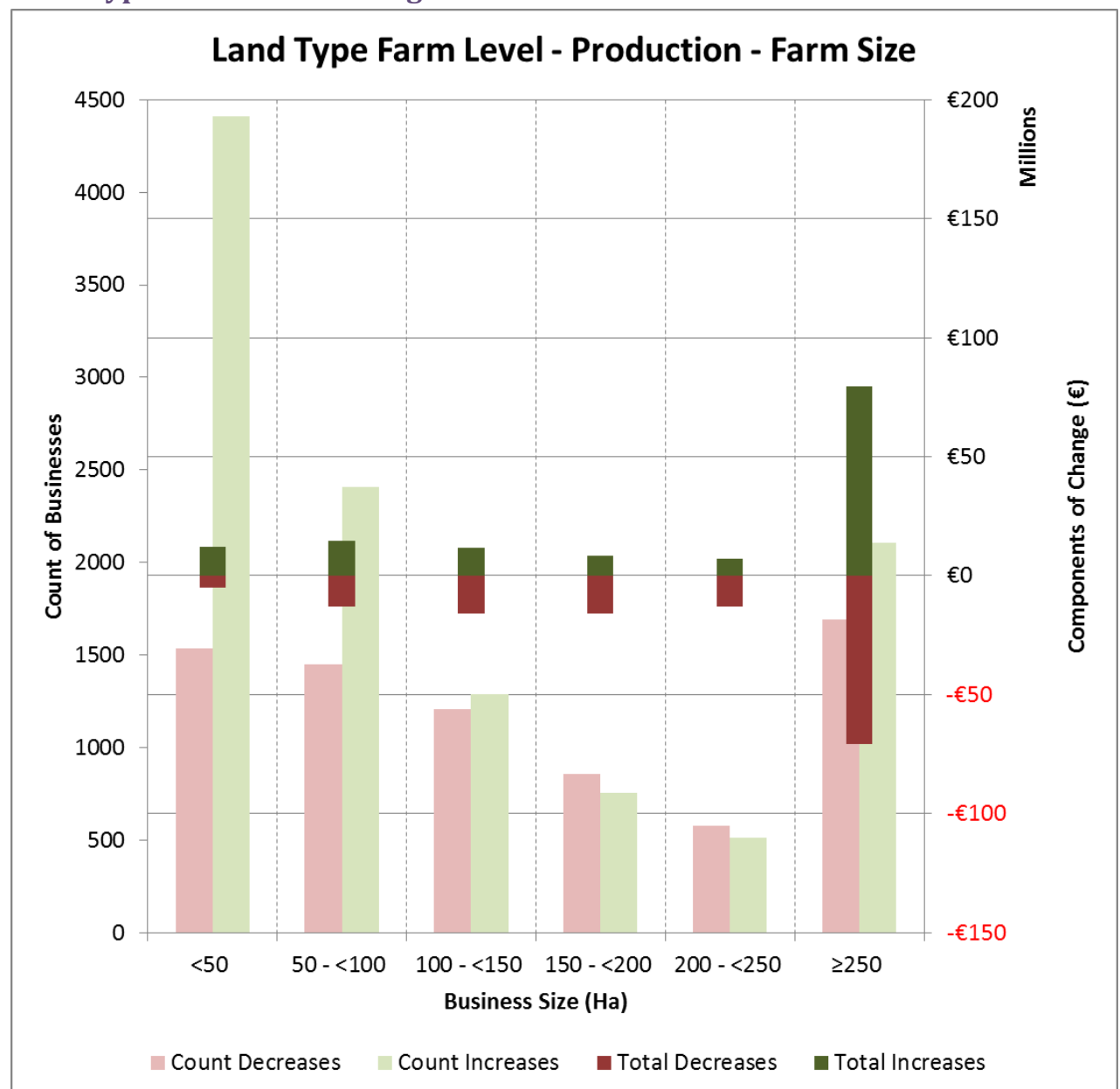
Land Type Farm Level – 3 Region – Production – Sector



Land Type Farm Level – 3 Region – Production – Geography



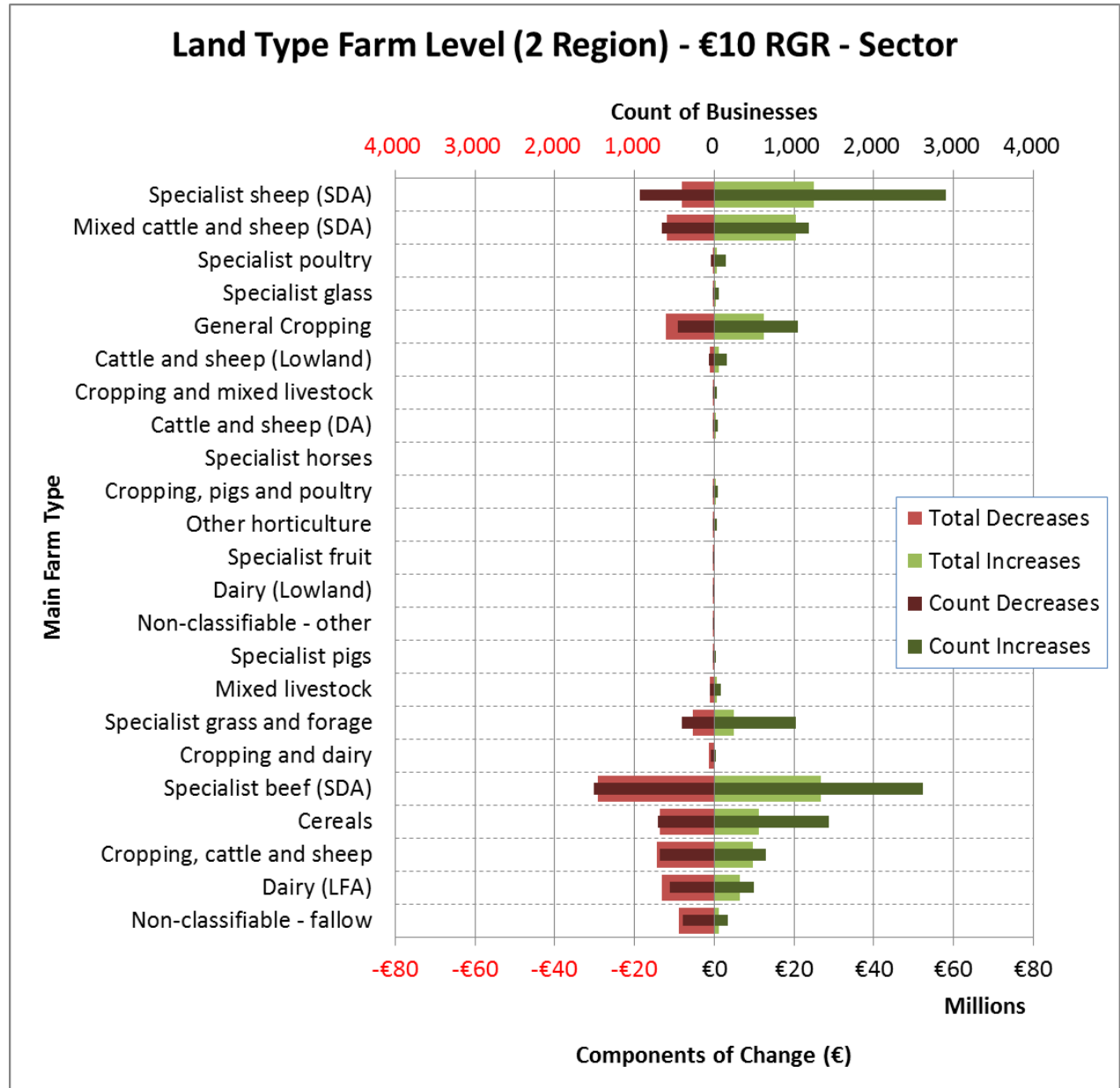
Land Type Farm Level – 3 Region – Production – Farm Size



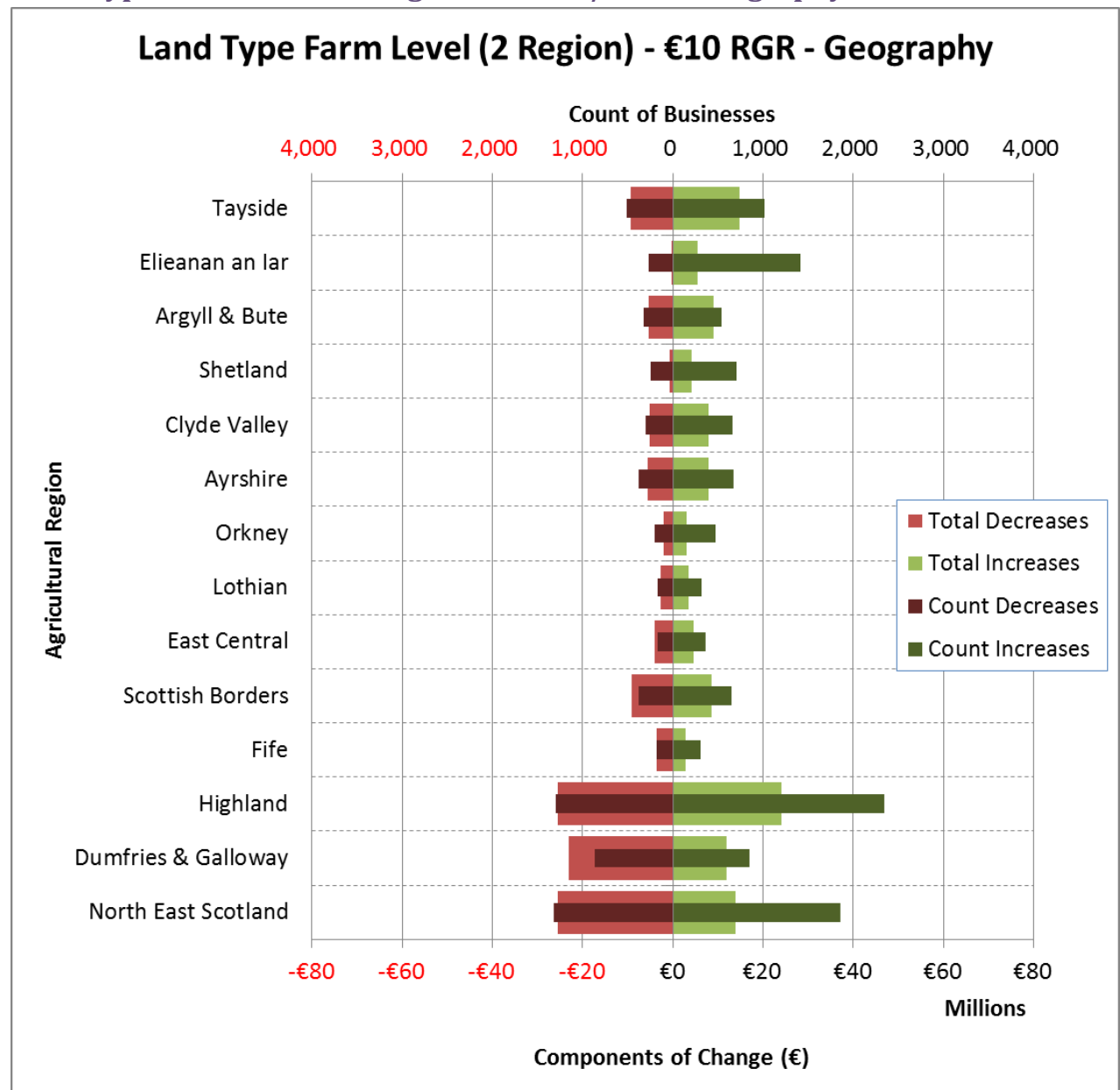
Land Type Farm Level – 2 Region Model – €10Ha

This is the 2 region Land Type model with the payment rate for the Rough Grazing class set at €10 per hectare. This means the payment rate for the Arable/PGRS/TGRS region becomes €346.43 per hectare. Total redistribution with this set of regions and payment rates is €244m.

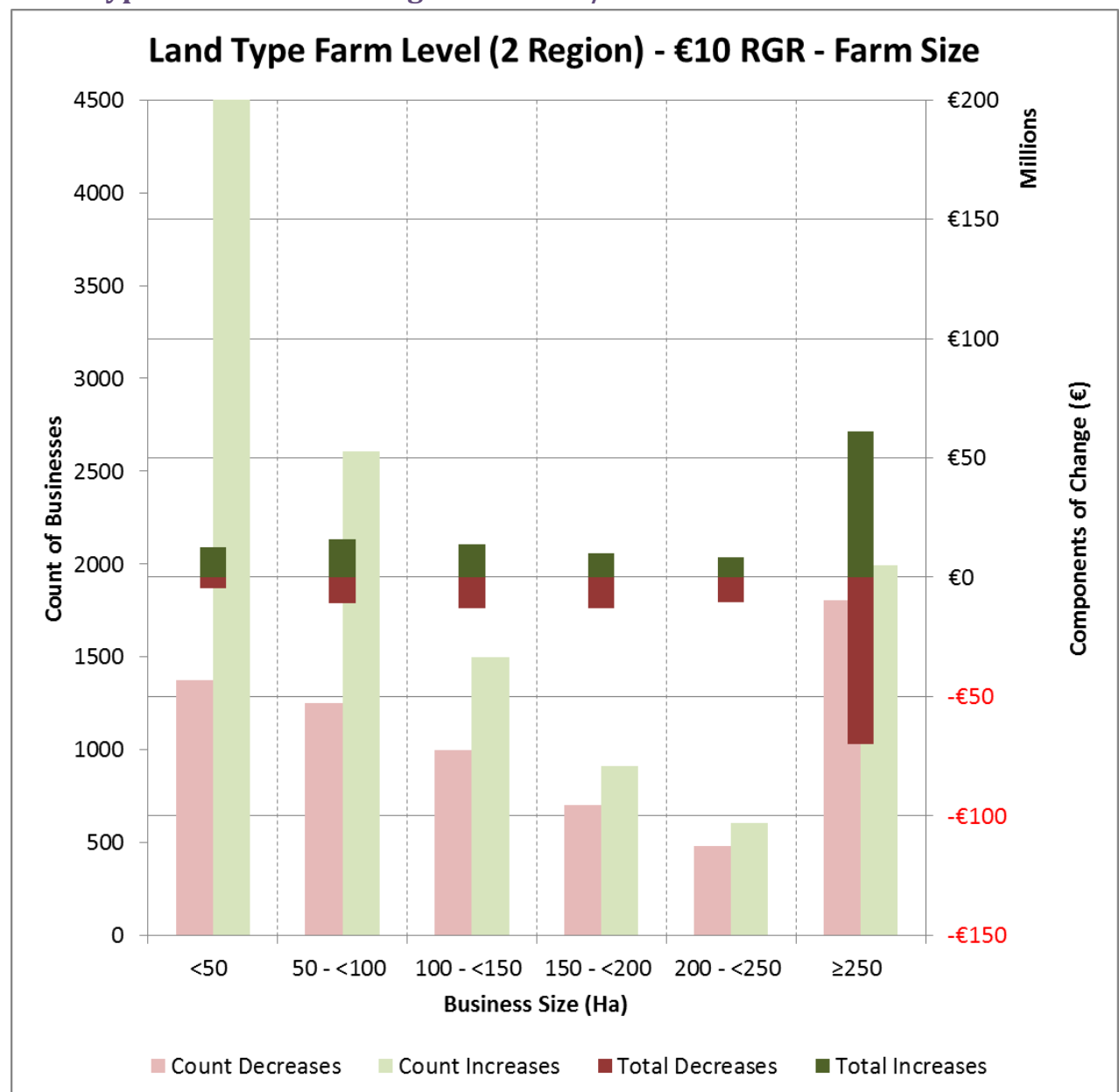
Land Type Farm Level – 2 Region – €10Ha/RGR – Sector



Land Type Farm Level – 2 Region – €10Ha/RGR – Geography



Land Type Farm Level - 2 Region - €10Ha/RGR - Farm Size

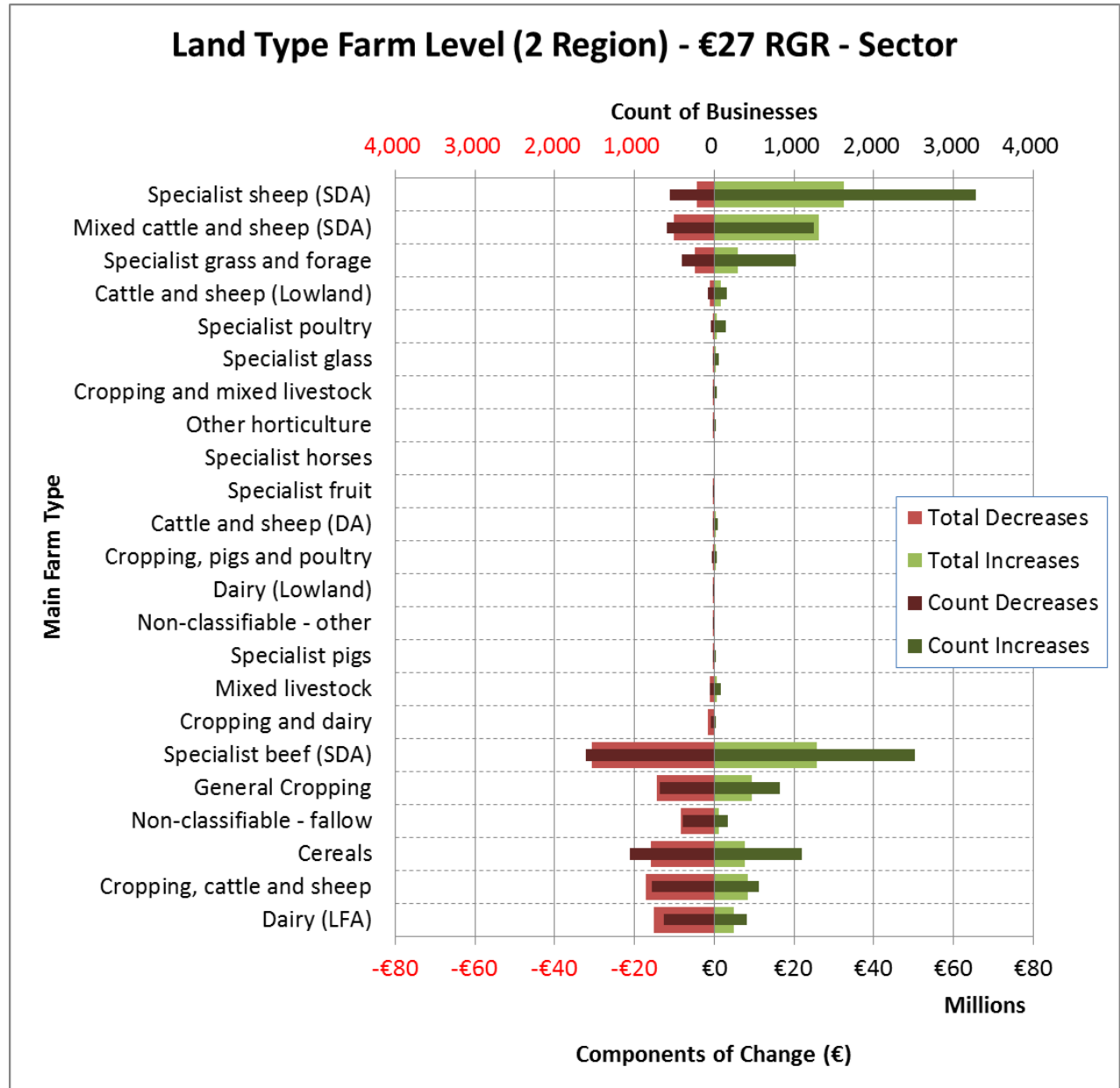


NB Count of Increases in businesses <50ha in size is 4,572.

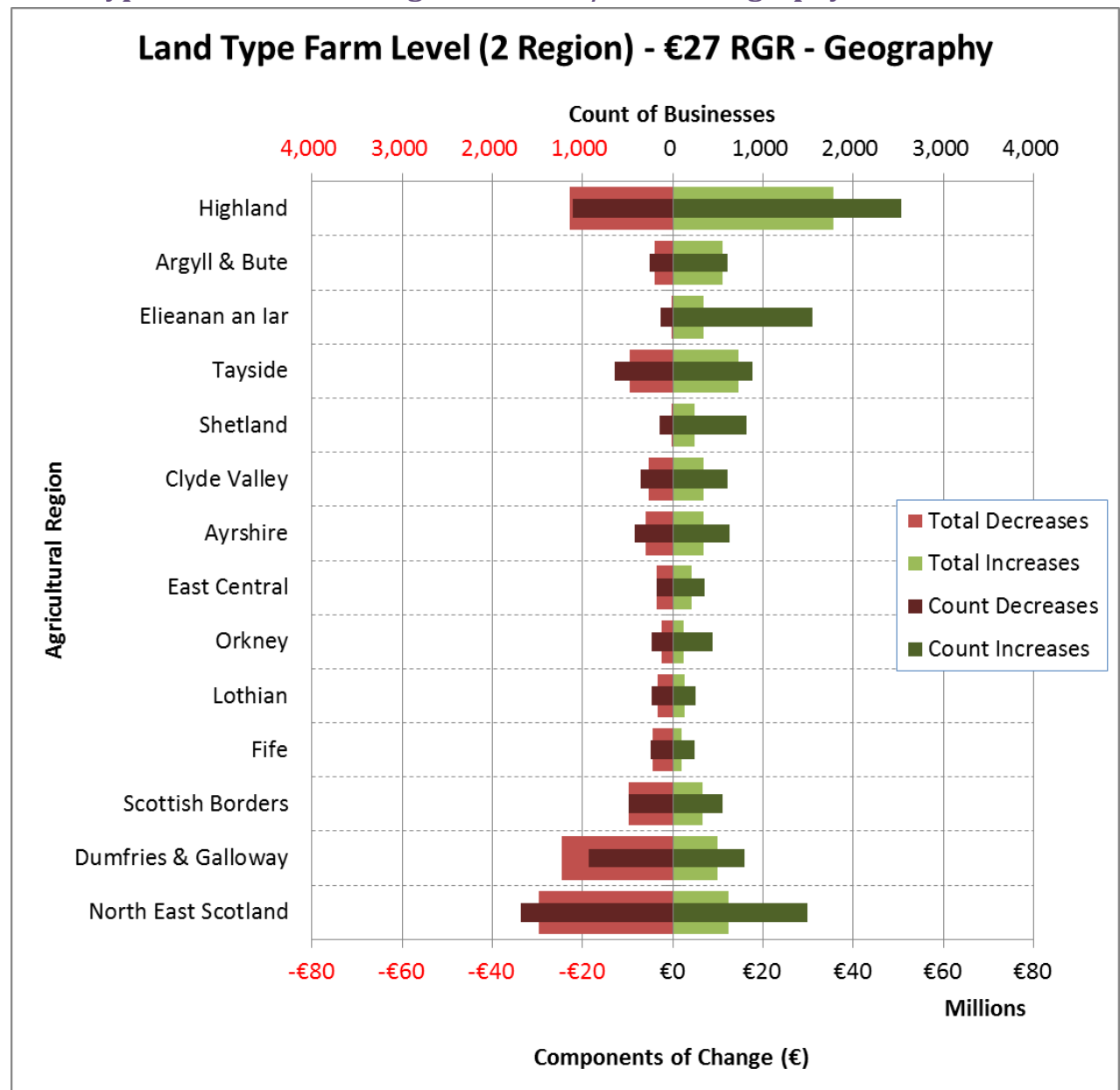
Land Type Farm Level – 2 Region Model – €27Ha

This is the 2 region Land Type model with the payment rate for the Rough Grazing class set at €27 per hectare. This means the payment rate for the Arable/PGRS/TGRS region becomes €319.74 per hectare. Total redistribution with this set of regions and payment rates is €253m.

Land Type Farm Level – 2 Region – €27Ha/RGR – Sector



Land Type Farm Level – 2 Region – €27Ha/RGR – Geography



Land Type Farm Level – 2 Region – €27Ha/RGR – Farm Size

