AN AHDB PAPER ON THE IMPACT OF CHANGES IN COUPLED PAYMENTS TO THE UK CATTLE AND SHEEP SECTORS

Executive Summary

This paper, from the Agriculture and Horticulture Development Board (AHDB), examines the impact on the beef and sheep sector of possible different levels of coupled payments which could be employed in the cattle and sheep sectors of selected EU Member States (MS) under CAP reform. It follows the release of draft legislative proposals for CAP direct payments from 2014 by the EU Commission on 12 October 2011 which stated that MS could link a proportion of their direct payments to production levels – so-called "recoupling" of direct payments - under certain circumstances[1]. The amount of coupled support that producers in the UK or other MS receive[2] has the potential to affect profit margins received by UK cattle and sheep farmers either directly through changes in revenue or indirectly through changes in trade levels.

The implications from the analysis in the paper[3] for the UK cattle and sheep farmer are as follows:-

- Under Scenario 1[4], where coupled payment levels across EU MS stay unchanged from their 2010 levels, UK farmers face negative margins[5] in both cattle and sheep production. In addition, some of the UK farm systems considered show some of the highest losses of all systems examined. The implication of this to the UK market could be pressure on production levels in the domestic beef and sheepmeat industries, unless market prices remain at the high levels seen in 2011. The result could be a reduction in export prospects and substitution by imported products from other major suppliers.

- Under Scenario 2, direct payments are fully decoupled from production in the cattle and sheep sectors in all EU MS. As the UK sectors are already fully decoupled, there is no direct impact on the

1 MS can recouple of proportion of their total direct payment budget, to the extent necessary to maintain production levels only, where sectors or regions face difficulties and are particularly important for economic, social and/or environmental reasons.

2 It has been assumed throughout that MS have access to the same type of beef and sheep production subsidies, with the same maximum values, as has been the case since 2003.

3 The paper uses farm level data to show the impact of changes in coupled payment levels on returns from production of a set of typical farms across Europe in 2010. All other factors that affect the returns to production are assumed to be unchanged throughout.

4 The scenarios considered are chosen for comparison purposes only and are not based on official views of the MS governments involved. The level of coupled payments employed in a sector will be agreed between the relevant MS and the EU Commission.

5 This paper considers benchmarked costs and revenues. It considers the full economic costs a business may face – e.g. it inputs a value of family labour used and rented equivalent for owned land. Actual cash costs should be lower and this may affect how a farm reacts to changes in coupled payment levels and explain why it may stay in business even if it is theoretically not covering full economic costs.

revenue and net margin of UK beef and sheep producers. However, due to decoupling elsewhere, the difference in net margins between the UK and other MS reduces and the relative position of the UK improves a little. The implication to the UK market could be a small reduction in pressure on production levels, a potential minor fall in imports and potentially slightly more export opportunities for UK producers to fill supply gaps created in other MS. These could potentially improve the profitability of UK producers.

- Scenario 3 considers the situation where direct payments in the cattle and sheep sectors of all EU MS investigated are fully coupled with production[6]. The revenue of UK cattle and sheep farms increases but some farming systems are still shown to be making negative margins. As a result of partially coupled support in some MS existing in 2010 for cow-calf and finishing enterprises, full coupling in all MS reduces the gap in net margins between UK beef producers and producers in other MS. For sheep, as all MS were fully de-coupled in 2010, fully recoupling these farms would produce no change to the relative UK position compared to other MS. Hence, for both the beef and sheep sector, the implications for the UK market of full recoupling are hence very similar to those from Scenario 2.

- Scenario 4, considers the situation where some MS maintain, or increase, their levels of coupled support, while others remain fully decoupled. The scenario is based on the possible decisions made by policy makers in each of the MS. While Scenarios 2 and 3 can be viewed as extreme changes from the status quo, this scenario could be viewed as a much more likely description of the future than those scenarios. Under Scenario 4, the revenues and margins of UK farm systems remains unchanged from Scenario 1 since UK direct payments remain fully decoupled. However, the difference in net margins between UK farming systems and those of other MS rises due to increases in coupled payment levels in those other MS. The implication of this is even more pressure on UK production levels than in Scenario 1, a potential larger decrease in UK export potential and a possible greater increase in the amount of imported products that could enter the domestic market. These factors could put further pressure on the profitability of UK producers unless market prices remain at the high level seen in 2011.

[6] Full recoupling allows producers in all MS investigated to benefit from 100% of the maximum allowance for coupled payments as described in Appendix 1.

Aim and scope of paper

The EU Commission's draft legal proposals on the Common Agricultural Policy (CAP) after 2013 were published on 12 October 2011[7]. They suggest that there could be an opportunity for Member States (MS) to "recouple" a certain percentage of their direct payment budget. Coupled payments are those where the amount of subsidy received is dependent on production levels. Support of this kind can only apply in sectors or regions which '*undergo certain difficulties, and are particularly important for economic and/or social and/or environmental reasons*'. Support should only be provided to an extent that it maintains current production levels in those regions[8]. Beef, veal, sheepmeat and goatmeat are included in those sectors potentially eligible for coupled support.

This paper, with a target audience of the UK beef and sheep sectors, aims to identify the potential impact on the UK of changes to coupled payments in the cattle and sheep sectors in other MS[9]. The paper considers different scenarios in which changes to coupled subsidies are made to the 2010 status quo. Changes in coupled payment levels are not based on the official views of any governments and are presented for comparison purposes only. It has been assumed throughout that MS have access to the same type of beef and sheep production subsidies, with the same maximum values, as has been the case since 2003.

For each scenario, other aspects that could affect net margins are assumed unchanged. These include changes in input costs or interest rates, for example. It is recognised that changes to the Less-Favoured Area scheme (now known as Areas of Natural Constraint (ANC) scheme) and the switch from historic to regional payments in Scotland and Wales could also both have an impact on payment levels received by UK cattle and sheep farmers. Use of Articles 68 to 72[10] to provide decoupled specific support by some MS could also affect the relative UK position. However, the scope of this version of the paper is limited to considering coupled payments only[11]. It is intended to provide an analysis of the new ANC scheme in a future version of this paper[12]. Conditions in the dairy sector are also not considered in the analysis but it recognised that these also could influence the quantity of cattle for finishing.

Methodology

The analysis presented in this paper mainly uses data collected by *agri benchmark*[13] for typical cattle and sheep farms found in key MS (excluding Ireland)[14]. *agri benchmark* data is provided on a per 100kg basis.

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7 It should be noted that there is a considerable period to go in the CAP negotiations and the proposals are subject to change.

8 While support is designed to be limited to this level, production is seen to increase in some of the scenarios investigated in this analysis. This shows the potential implication of providing producer support levels that are too high.

9 Specifically, the paper examines typical cattle and sheep enterprises located in the UK, Ireland, France, Spain, Germany, Poland and Italy. Together, these states accounted for almost 80% of beef and veal production and 65% of sheep and goat meat in the EU in 2010 according to Eurostat.

10 These articles allow MS to retain up to 10% of their national ceiling for direct payments to provide support to specific sectors.

11 An analysis of the contribution to farm revenue from decoupled payments is, however, included as part of the analysis of the overall farm, found in Appendices 2-5.

12 See Appendix 6 and Appendix 7 for more on these areas.

13 http://www.agribenchmark.org/

The data is based on benchmarked costs and returns to production, reflecting the economic performance of typical farms found in each MS in 2010[15]. A short description of each farm is available in Appendix 8.

Information on Irish production systems is provided by *Teagasc*. Unfortunately, due to data restrictions and differences in measurement (*Teagasc* data is instead provided on a per-animal basis), it was not possible to directly compare net margins for Irish farms against MS included in the *agri benchmark* dataset. As such, the Irish farms are analysed alongside English farms, as presented in the EBLEX 2010 Business Pointers[16].

The paper considers benchmarked costs and revenues. It considers the full economic costs a business may face – e.g. it inputs a value of family labour used and rented equivalent for owned land. Actual cash costs should be lower and this may affect how a farm reacts to changes in coupled payment levels and explain why it may stay in business even if it is theoretically not covering full economic costs.

The scenarios investigated and paper structure

Four payment level scenarios are considered in this paper. They are set out below.

Scenario 1 - Under this "status quo" scenario, it is assumed that no changes are made to the level of coupled payments that MS utilised in 2010. The payments used in 2010 are set out in the table below:

MS	France	Spain
Suckler subsidy	**75%** of maximum payment per head	**100%** of maximum payment per head
Special male bovine subsidy	**0%** of maximum payment per head	**0%** of maximum payment per head
Slaughter subsidy	**0%** of maximum payment per head	**40%** of maximum payment per head for adults, 100% of maximum payment per head for calves
Ewe subsidy[17]	**0%** of maximum payment per head	**0%** of maximum payment per head

Scenario 2 - This "full decoupling" scenario examines the implications of full decoupling of direct payments in all MS considered.

Scenario 3 – This "full recoupling" scenario examines the potential impact of full recoupling of direct payments in all MS considered.

Scenario 4 – This "adjustment" scenario features changes to coupled payment levels from the status quo based on the possible decisions made by policy makers in each of the MS.[18] While Scenarios 2 and 3 can be viewed as extreme changes from the status quo, this scenario could be viewed as a more likely

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14 *agri benchmark data* uses internationally standardised methods to analyse farms, production systems and their profitability.

15 A full discussion of 2010 costs and returns to cattle and sheep production is available in Appendix 9.

16 http://www.eblex.org.uk/returns/businesspointers11.aspx

17 Equivalent to 2009 levels in both France and Spain.

18 The scenario is based on anecdotal evidence collected by AHDB MI. The coupled payment levels implied are not based on official views of any governments and are presented for comparison purposes only.

description of the future than Scenarios 2 and 3, given current knowledge about the views of Member States. For the UK, Germany, Italy, Ireland and Poland, it is assumed that policy makers maintain fully decoupled livestock sectors[19]. For the French and Spanish livestock sectors, it is assumed that both MS increase levels of coupled support[20]. As such the scenario assumes the following coupled payments are put in place:

MS	France	Spain
Suckler subsidy	100% of maximum payment per head	100% of maximum payment per head
Special male bovine subsidy	100% of maximum payment per head	100% of maximum payment per head
Slaughter subsidy	40% of maximum payment per head for adults, 100% of maximum payment per head for calves[21]	75% of maximum payment per head for adults, 100% of maximum payment per head for calves
Ewe subsidy[22]	50% of maximum payment per head	50% of maximum payment per head

These four scenarios are considered for a set of cow-calf, finishing beef and sheep enterprises across Europe. Implications for the overall beef and sheep sector are then set out before concluding comments are made.

[19] This rationale is based on the views and arguments presented during the CAP negotiations by representatives from these MS, all of which have argued for further decoupling of direct payments. It also relates to the bureaucratic and administrative costs involved with re-introducing coupled support for the MS involved.

[20] Both governments have taken defensive views on maintaining coupled support and face domestic pressures to maintain productive agricultural sectors. With rising costs of production, livestock numbers in both countries have fallen in recent years.

[21] Equivalent to 2006 levels.

[22] Equivalent to 2009 levels in both France and Spain.

The relative profitability of Cow-calf enterprises under the four scenarios[23]

Table 1 demonstrates the impact of the four payment level scenarios on a set of cow-calf enterprises considered across Europe.

Scenario 1: Status Quo

Of MS included in this paper, only France and Spain applied coupled payments to the cow-calf production system in 2010[24].

UK cow-calf producers in 2010 received some of the lowest net margins of the MS investigated on a per-100kg basis[25]. Although costs of production are seen lower than some of the other farms, the UK farms achieved some of the lowest market returns of the enterprises investigated. When the English farm is compared to the two Irish farms on a £ per animal basis, the English farm performs better. This seems to be mainly driven by the higher costs of production faced by Irish farms.

Two producers in France and one in Spain were the only farms to record positive net margins from calf rearing. Additional support available through coupled premiums contributed to this, without which calf production on these farms would also have operated at a loss.

Scenario 2: Full Decoupling

As they were the only MS to use coupled payments in 2010, only cow-calf enterprises in France and Spain are affected by the removal of production-linked subsidies. Decoupling reduces the net margins achieved by farms in both countries, with the largest reduction in the Spanish farms since Spain previously had the largest level of coupled support.

The reduction in market returns resulting from full decoupling has the effect that none of the cow-calf enterprises analysed would record positive margins. In the absence of coupled support and even taking into account the reduction in Spanish and French farm margins, UK farms would still receive some of the lowest level of net margins per 100kg liveweight on average[26]. However compared to the status quo, the relative position of UK farms would improve a little as the removal of coupled payments from farms in France and Spain would reduce the difference in net margins compared to UK farms.

Scenario 3: Full Recoupling

For the cow-calf enterprise, it is assumed that both the suckler cow subsidy and special male bovine subsidy are implemented at the full permissible rate. Any slaughter subsidies are also taken into

[23] Note that a discussion on the implications across the four scenarios for the beef sector as a whole are discussed after the finishing enterprises section.

[24] A 100% suckler cow premium was available to producers in Spain, equal to €200 per cow, while farmers in France were eligible to 75% of the premium, worth €150 per cow. Note that French and Spanish figure are presented in € per 100kg liveweight.

[25] Recall that this paper considers benchmarked costs and revenues. It considers the full economic costs a business may face – e.g. it inputs a value of family labour used and rented equivalent for owned land. Actual cash costs should be lower and this may affect how a farm reacts to changes in coupled payment levels and explain why it may stay in business even if it is theoretically not covering full economic costs.

[26] See footnote 25.

account but due to the nature of the cow-calf enterprise these make up very little of the overall support offered to the enterprise which tends to focus on cattle rearing rather than finishing.

The impact of full recoupling of direct payments would be an improvement in net margins for farms in the UK with two of the UK farms investigated now achieving positive net margins. Additional subsidies paid to the farms in other MS would further boost net margins in these areas also. However since France and Spain had some level of coupled payments before, moving all MS to maximum coupled payment levels reduces the difference in net margins between the UK and those countries. The full recoupling scenario thus sees a small improvement in the relative position of the UK farms investigated.

Scenario 4: Adjustment scenario

Under the adjustment scenario, the UK remains fully decoupled while coupled payment rates in France and Spain increase. French and Spanish cow-calf farms experienced increased margins due to the additional support available through the special male bovine premium and the top-up of the slaughter premium. The net margins gained by Italy, Ireland, Germany and Poland remain unchanged to reflect the fact they stay fully de-coupled in this scenario.

The changes have the effect of increasing the gap in net margins between UK farms and the average of the other farms investigated[27]. The UK farms continue to make a loss in this scenario.

[27] The average does not include Ireland.

Table 1: Costs, Returns and Margins faced by a set of cow-calf farms under the four scenarios

Country	Germany			France			Spain		UK			England	Ireland	
Farm Code[28]	DE-100	DE-1100	DE-1400	FR-80B	FR-80	FR-85	ES-80	ES-150	UK-40	UK-100	UK-105	EN-74	IE-22	IE-32
	(€ per 100kg liveweight)											(£ per head)		
Scenario 1 - Status Quo														
Market returns	245	217	244	187	220	231	172	193	170	161	230	402	455	544
Coupled payments	0	0	0	36	46	48	76	86	0	0	0	0	0	0
Total revenues	245	217	244	223	266	279	248	279	170	161	230	402	455	544
Total costs of production	376	269	310	193	236	311	423	260	188	358	268	671	1226	879
Net margin	**-131**	**-52**	**-66**	**30**	**30**	**-32**	**-175**	**19**	**-18**	**-197**	**-38**	**-269**	**-771**	**-335**
Scenario 2 - Full Decoupling														
Coupled payments	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net margin	**-131**	**-52**	**-66**	**-6**	**-16**	**-80**	**-251**	**-67**	**-18**	**-197**	**-38**	**-269**	**-771**	**-335**
Scenario 3 - Full Recoupling														
Coupled payments	66	57	71	48	62	64	83	95	65	65	55	176	218	264
Net margin	**-65**	**5**	**4**	**42**	**46**	**-16**	**-168**	**28**	**47**	**-132**	**17**	**-93**	**-552**	**-71**
Scenario 4 - Adjustment														
Coupled payments	0	0	0	48	62	64	83	95	0	0	0	0	0	0
Net margin	**-131**	**-52**	**-66**	**42**	**46**	**-16**	**-168**	**28**	**-18**	**-197**	**-38**	**-269**	**-771**	**-335**

Source: AHDB/*agri benchmark*

Source: AHDB/*Teagasc*

[28] A description of the farms relating to the farm codes shown is provided in Appendix 8.

The relative profitability of Beef finishing enterprises under the four scenarios

Table 2 demonstrates the impact of the four payment level scenarios on a set of beef finishing enterprises considered across Europe.

Scenario 1: Status Quo

Spain was the only MS investigated that maintained coupled support for beef finishing in 2010[29]. However, compared to the cow-calf enterprise, the impact from coupled payments is less significant in terms of net margins.

Only three enterprises investigated recorded a positive net margin in 2010[30]. Although one of the Spanish finisher farms investigated was one of these, even that farm still required coupled support to achieve a positive net margin. Finishing enterprises in the UK again received some of the lowest net margin levels on a 100kg basis[31]. Comparison of English and Irish finishing farms on a £ per animal basis shows a similar story. Costs of production on the English farm are comparable to those in Ireland and the difference is instead driven by the lower level of market returns achieved by the English finisher farm.

Scenario 2: Full Decoupling

The impact of removing coupled payments to the finishing sector would be less than for cow-calf enterprises as Spain was the only MS included in the analysis that provided coupled support to the finishing enterprise. Decoupling support pushes one of the Spanish farms into a net negative margin position while the other two farms suffer greater losses than previously.

The change will represent a very small improvement in the relative position of the UK farms versus others investigated to reflect the fact that Spanish net margins will have only fallen a little compared to the status quo. However, in general, the position is very similar to Scenario 1.

Scenario 3: Full Recoupling

Finishing enterprises would benefit from full recoupling through the addition of the slaughter subsidy and the special male bovine subsidy to net margins.

Overall, the inclusion of coupled support in the finishing enterprises investigated would increase net margins for the farms considered. Most of the differences in the increase in net margins across MS are a result of the introduction of the special male bovine subsidy. It has been assumed that this can only be claimed on a limited number of animals on the farm, since that was how the subsidy was previously organised. This has the effect of meaning the largest enterprises (in terms of animal numbers) record the smallest increase in net margins per 100kg.

[29] Farms in Spain were eligible to a 100% slaughter subsidy for calves (equivalent to €50 per calf) and 40% slaughter subsidy for adults (equivalent to €32 per adult).

[30] These were the German farm DE-525T, the Spanish farm ES-5500 and the Irish farm IE-14.

[31] Recall that this paper considers benchmarked costs and revenues. It considers the full economic costs a business may face – e.g. it inputs a value of family labour used and rented equivalent for owned land. Actual cash costs should be lower and this may affect how a farm reacts to changes in coupled payment levels and explain why it may stay in business even if it is theoretically not covering full economic costs.

Scenario 4: Adjustment Scenario

In this scenario, the additional support to French and Spanish producers increases their relative net margins compared to other finishing farms. French finishers tend to benefit to a greater degree than the Spanish farms, as France had fully decoupled cattle finishing by 2010 while Spanish producers were previously eligible for partially coupled payments.

The increase in net margins received by French and Spanish finishers increases the differential between average margins taken by UK farms and the average of other farms considered[32]. Given that UK farms are still fully decoupled, they continue to make negative margins under this scenario and are now even further behind their French and Spanish counterparts.

[32] The average does not include Ireland.

Table 2: Costs, Returns and Margins faced by a set of beef finishing farms under the four scenarios

Country	Germany					France				Spain			Italy		UK				Poland		England	Ireland	
Farm Code[33]	DE-230	DE-280	DE-285	DE-525T	DE-800	FR-60	FR-70	FR-90B	FR-200	ES-440	ES-600	ES-5500	IT-910	IT-2880T	UK-35	UK-80	UK-90	UK-98	PL-12	PL-30	EN-83	IE-15	IE-14
	(€ per 100kg deadweight)																				(£ per head)		
Scenario 1 – Status Quo																							
Market returns	299	319	241	327	422	322	345	293	322	293	333	334	361	365	298	296	260	272	250	238	822	965	1405
Coupled payments	0	0	0	0	0	0	0	0	0	8	7	9	0	0	0	0	0	0	0	0	0	0	0
Total revenues	299	319	241	327	422	322	345	293	322	301	340	343	361	365	298	296	260	272	250	238	822	965	1405
Total costs	375	331	288	309	683	460	493	396	382	354	419	337	414	406	481	688	361	489	377	331	1152	1124	1339
Net margin	**-76**	**-12**	**-47**	**18**	**-261**	**-138**	**-148**	**-103**	**-60**	**-53**	**-79**	**6**	**-53**	**-41**	**-183**	**-392**	**-101**	**-217**	**-127**	**-93**	**-330**	**-159**	**66**
Scenario 2 – Full Decoupling																							
Coupled payments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net margin	**-76**	**-12**	**-47**	**18**	**-261**	**-138**	**-148**	**-103**	**-60**	**-61**	**-86**	**-3**	**-53**	**-41**	**-183**	**-392**	**-101**	**-217**	**-127**	**-93**	**-330**	**-159**	**66**
Scenario 3 – Full Recoupling																							
Coupled payments	27	24	22	20	38	97	128	38	41	50	77	34	31	31	89	45	69	125	65	39	292	266	354
Net margin	**-49**	**12**	**-25**	**38**	**-223**	**-41**	**-20**	**-65**	**-19**	**-11**	**-9**	**31**	**-22**	**-10**	**-94**	**-347**	**-32**	**-92**	**-62**	**-54**	**-38**	**107**	**420**
Scenario 4 - Adjustment																							
Coupled payments	0	0	0	0	0	72	96	29	30	34	56	17	0	0	0	0	0	0	0	0	0	0	0
Net margin	**-76**	**-12**	**-47**	**18**	**-261**	**-66**	**-52**	**-74**	**-30**	**-27**	**-30**	**14**	**-53**	**-41**	**-183**	**-392**	**-101**	**-217**	**-127**	**-93**	**-330**	**-159**	**66**

Source: AHDB/*agri benchmark*

Source: AHDB/*Teagasc*

[33] A description of the farms relating to the farm codes shown is provided in Appendix 8.

Beef sector implications from Cow-calf and Finishing systems profitability analysis

Scenario 1: Status Quo

Scenario 1 showed that UK producers in 2010 received some of the lowest net margins per 100kg of both the cow-calf and finishing enterprises of the MS investigated. Difficulties in achieving positive margins and lower relative margins compared to other major MS for both suckler cow systems and beef finishing could be expected to result in falling UK cattle numbers, under the assumption of all other factors remaining unchanged. The result of this could be lower export and higher import levels.

However, strong prices seen since 2010 have also affected the decisions of farmers in the market. The UK's 2010 December Agricultural Survey reported an increase in beef cow numbers of 2% year on year to 1.66 million head. Reports indicate that better store cattle prices increased producer optimism with more heifer retentions as a result. Finishers benefited from the firmer finished cattle market. However, this was only a temporary rise. The 2011 December survey reported a 1% decline in beef cow numbers as an increase in the price for culled cows resulted in increased slaughterings while producer costs continued to rise. The first part of 2012 has continued to show strong prices and this may improve the net margin position of some UK farms beyond what the 2010 data investigated in this paper suggested.

Chilled and frozen beef imports were variable over 2010 and 2011. Chilled and frozen beef imports increased by 3% to 238,000 tonnes product weight in 2010 as a result of increased shipments from Ireland. These increased by 12% on the previous year to 168,000 tonnes and made-up 71% of total UK chilled and frozen beef imports[34]. Irish beef shipments to the UK in 2011 fell marginally by 400 tonnes with lower production contributing to this development. Total UK imports in 2011 fell to 235,000 tonnes in a year when UK consumer demand eased back.

An increase in overall beef and veal production in 2010 and 2011, driven by better profitability of young bull finishing and high cow replacement rates, contributed to a strong export performance in both years. Total exports in 2010, at 110,000 tonnes, were up by 32% on the previous year. In 2011, total exports increased an additional 30% to 143,000 tonnes.

If prices and other factors affecting supply and demand stay similar to 2011, under this scenario we would not expect major changes to UK competitiveness, production and trade from the 2011 position.

The implications of this scenario for the beef sector, under the assumption of all other factors staying unchanged, are set out in the table below:

Market measure	Possible impact compared to 2011 situation
UK competitiveness	Unchanged
UK production	Unchanged
UK exports	Unchanged
UK imports	Unchanged

Scenario 2: Full Decoupling

[34] The increase in supplies from Ireland reflected an increase in slaughterings of male cattle. Irish suckler cow systems were also shown to suffer significant losses in 2010, while finishers also struggled to make positive net returns.

Scenario 2 showed a reduction in the difference in margins between UK farms and those of the other MS investigated, due to the removal of coupled support for cow-calf systems in France and Spain and finishing systems in Spain.

Given the assumptions used in this analysis, the reduction in net margins could be expected to reduce production levels in the countries involved – France and Spain[35]. This may affect their imports and exports of beef to/from those countries and could hence have an indirect impact on the UK market.

However, neither France nor Spain exported a considerable amount of beef to the UK and hence decoupling in these countries would not be expected to have a large direct impact on the domestic sector. In 2010, less than 3% (6,000 tonnes) of total UK beef imports were sourced from France and Spain[36]. However there could be some opportunities for UK exporters if French and Spanish suppliers pull back in other markets they are used to supplying – such as Germany where France exported 38,000 tonnes of fresh or frozen beef to in 2010.

The implications of this scenario for the beef sector, under the assumption of all other factors staying unchanged and compared to the 2011 position, are set out in the table below:

Market measure	Possible impact compared to 2011 situation
UK competitiveness	Slightly Up
UK production	Slightly Up
UK exports	Slightly Up
UK imports	Slightly Down

Scenario 3: Full Recoupling

Scenario 3 involved all UK beef net margins increasing and the difference in relative margins between UK systems and those for the other MS investigated falling for both cow-calf and finishing systems. Under the assumptions of the analysis this could lead to an increase in UK cattle and beef production. Exports of GB live cattle reached 13,251 in 2011 with most of those being calves shipped into France. Any potential increase in calf production could be marketed towards the domestic or foreign finishing sector with the proportion dependent on market conditions at the time.

With the exception of one UK farm investigated, animal purchase costs in the UK averaged higher than finishing enterprises in all other MS. An increase in supply of calves, all other things staying unchanged, may put pressure on this and could therefore improve the relative position of UK beef producers. However, much will depend on prevailing demand levels. As a traditional net importer, increased domestic supplies of beef[37] could also help improve the UK's beef trade balance.

The implications of this scenario for the beef sector, under the assumption of all other factors staying unchanged and compared to the 2011 position, are set out in the table below:

[35] Previous experience of decoupling would suggest that it could result in increased production of cow beef in the short term, followed by a reduction in the supply of prime beef.

[36] The level of UK imports will also depend on supplies from other markets. Any increase in UK production could also substitute for imported supplies.

[37] This could be either directly through increased returns to finishing farms due to greater coupled support or indirectly through lower animal purchase costs.

Market measure	Possible impact compared to 2011 situation
UK competitiveness	Up
UK production	Up
UK exports	Up
UK imports	Down

Scenario 4: Adjustment scenario

In Scenario 4, increases to coupled support levels in Spain and France increases the difference in margins between these countries and UK farms. The additional support increases profit margins for most suckler cow farms in France and Spain and reduces the level of loss in the finishing farms also.

The UK continues to record negative net margins in both stages of production and the size of gap between UK net margins and those of the rest of Europe increases due to the extra support offered to French and Spanish farms. The adjustment scenario could hence see even larger changes to production and trade than the status quo scenario if all other factors remain unchanged.

The result could be reductions in UK production levels, reductions in exports and an increase in imports from the levels seen in 2011. The magnitude of these changes will depend on prevailing price levels and whether the high prices seen in 2011 are maintained into 2012 and beyond. As noted previously, beef imports and exports to the UK in 2011 from the considered countries were not significant and hence the effect on UK beef trade of an increase in production support in these countries may be indirect through reduced opportunities elsewhere for exports.

The implications of this scenario for the beef sector, under the assumption of all other factors staying unchanged and compared to the 2011 position, are set out in the table below:

Market measure	Possible impact compared to 2011 situation
UK competitiveness	Down
UK production	Down
UK exports	Slightly Down
UK imports	Slightly Up

Relative profitability of Sheep enterprises

Table 3 demonstrates the impact of the four payment level scenarios on a set of sheep enterprises considered across Europe.

Scenario 1: Status Quo

In 2010, no coupled support was available for sheep producers in any of the MS investigated. None of the sheep enterprises examined in 2010 showed positive net margins.

The largest loss in net margins was recorded in the UK, with one farm recording costs almost double the market returns to the enterprise. In general, UK net margins were the lowest of the group despite also having the lowest production costs[38].

Scenario 2: Full Decoupling

The fully de-coupled scenario for sheep is exactly the same as the status quo scenario since no MS made use of coupled support in Scenario 1.

Scenario 3: Full Recoupling

The full inclusion of the ewe subsidy[39] would benefit all farms, as all MS investigated had fully decoupled their sheep sectors by 2010. The introduction of the ewe premium results in an increase in net margins to the UK farm. Differences in the improvement of net margins between MS farms exist and are primarily due to variations in animal weights at sale, with production systems producing lighter sheep benefitting to a greater degree. As such, UK farm benefits less than the Spanish enterprises, with animal weights in the UK tending to be higher than those from Spain.

The introduction of the ewe premium means that one of the Spanish farms considered now achieves a positive net margin. All other farms considered on a per-100kg basis make a smaller loss of net margin. The UK farm would need a much larger subsidy if it were to make a positive margin[40].

Scenario 4: Adjustment scenario

Under this scenario, France and Spain employ 50% of the maximum ewe subsidy in their markets. The subsidy increases the difference in net margins compared to the UK farm. Given that only a 50% subsidy has been employed in this scenario for Spain and France the changes in relative margins received by these countries are half the magnitude of the equivalent changes in Scenario 3.

[38] Recall that this paper considers benchmarked costs and revenues. It considers the full economic costs a business may face – e.g. it inputs a value of family labour used and rented equivalent for owned land. Actual cash costs should be lower and this may affect how a farm reacts to changes in coupled payment levels and explain why it may stay in business even if it is theoretically not covering full economic costs.

[39] At €21 (£18) per ewe.

[40] See footnote 37.

Table 3: Costs, Returns and Margins faced by a set of sheep farms under the four scenarios

Country	Spain		France		UK	England		Ireland	
Farm Code[41]	ES-800	ES-930	FR-470	FR-860	UK-500	EN-388	EN-787	IE-129	IE-319
	(€ per 100kg liveweight)					(£ per ewe)			
Scenario 1 - Status Quo									
Market returns	308	323	256	285	156	91	80	95	100
Coupled payments	0	0	0	0	0	0	0	0	0
Total revenues	308	323	256	285	156	91	80	95	100
Total costs of production	420	354	348	369	294	122	102	173	137
Net margin	**-112**	**-31**	**-92**	**-84**	**-138**	**-31**	**-22**	**-78**	**-37**
Scenario 2 - Full Decoupling									
Coupled payments	0	0	0	0	0	0	0	0	0
Net margin	**-112**	**-31**	**-92**	**-84**	**-138**	**-31**	**-22**	**-78**	**-37**
Scenario 3 - Full Recoupling									
Coupled payments	66	68	34	47	46	18	18	18	18
Net margin	**-46**	**37**	**-58**	**-37**	**-92**	**-13**	**-4**	**-60**	**-19**
Scenario 4 - Adjustment									
Coupled payments	33	34	17	24	0	0	0	0	0
Net margin	**-79**	**3**	**-75**	**-60**	**-138**	**-31**	**-22**	**-78**	**-37**

Source: AHDB/*agri benchmark*

Source: AHDB/*Teagasc*

[41] A description of the farms relating to the farm codes shown is provided in Appendix 8.

Implications from the sheep sector profitability analysis

Scenario 1: Status Quo

Scenario 1 showed negative net margins for all sheep farms considered with the UK farm making the largest losses of any of the enterprises considered. Under the assumption that other factors influencing production remain unchanged from 2010 levels, the results might suggest a culling of sheep numbers[42].

However, in the UK, the December 2010 Agricultural survey reported a marginal rise in breeding numbers to 13.9 million head, driven by an increase in market prices, better seasonal conditions and resulting in increased optimism. This continued into 2011, with a further 3% increase in breeding numbers to 14.2 million head, also driven by improved prices in the market. The first part of 2012 has continued to show strong prices and this may improve the net margin position of some UK farms beyond what the 2010 data investigated in this paper suggested.

With producers rebuilding flocks, sheep slaughterings in 2010 were down by 8% to 14.2 million head. Lower production meant that exports of sheep meat fell by 7% to 89,000 tonnes. However, 2011 saw sheep meat exports increase by 12% on 2010 to 99,000 tonnes. This was due to higher shipments to a number of markets as competing New Zealand supplies remained tight. The reduction in New Zealand supplies also restricted UK sheep meat imports over the last two years. They were down by 13% year on year to 101,000 tonnes in 2010 and fell further in 2011 also - by 12% to 88,000 tonnes.

The implications of this scenario for the sheep sector, under the assumption of all other factors staying unchanged, are set out in the table below:

Market measure	Possible impact compared to 2011 situation
UK competitiveness	Unchanged
UK production	Up if prices remain at 2011 levels
UK exports	Similar to high 2011 levels
UK imports	Similar

Scenario 2: Full Decoupling

Implementing full-decoupling across the farms considered produces exactly the same situation as the status quo since Scenario 1 involved the sheep sectors of MS already being fully de-coupled.

The implications of this scenario for the sheep sector, under the assumption of all other factors staying unchanged and compared to the 2011 position, are set out in the table below:

Market measure	Possible impact compared to 2011 situation

[42] Producers could be expected to cull breeding flocks, particularly on lowland farms in favour of other types of agriculture, such as cereals. Farms located in upland areas, such as the English farm EN-787, could be more versatile to structural changes due to the limitations in alternative use of the land, but overall production would still be expected to fall.

UK competitiveness	Unchanged
UK production	Up if prices remain at 2011 levels
UK exports	Static compared to high 2011 levels
UK imports	Static

Scenario 3: Full Recoupling

Recoupling of direct payments in the sheep sector would benefit all farms, but in most cases, costs of production would continue to exceed market returns and a negative net margin would be made if all other factors affecting margins remain unchanged. Only the Spanish farm makes a positive net margin after full recoupling. The position of the UK in relation to other MS considered varies a little since the amount of coupled payments received per 100kg will depend on the average size of the animals produced. In effect the position of the UK farm relative to the French farms is similar while the UK farm will lose ground relative to the Spanish enterprise as Spanish animals tend to be smaller.

The impact of the UK market, even making assumptions about other factors staying unchanged, is hence very difficult to trace as it will depend on the size of animal produced. It should be noted however that the relative position of the UK compared to other MS under this scenario is not hugely different to the status quo position. However, it might be expected that the size of the UK flock increases as the net margin position of the UK farm improves, despite the relative position of the UK compared to other MS not changing significantly. Hence under this scenario market prices might weaken compared to 2011 due to increases in supply if demand and other sources of supply remain constant.

The implications of this scenario for the sheep sector, under the assumption of all other factors staying unchanged and compared to the 2011 position, are set out in the table below:

Market measure	**Possible impact compared to 2011 situation**
UK competitiveness	Similar
UK production	Up
UK exports	Slightly up
UK imports	Slightly down

Scenario 4: Adjustment scenario

The adjustment scenario sees France and Spain employ a 50% ewe subsidy in their sectors, with all other MS staying de-coupled. The re-introduction of coupled support to French and Spanish sheep producers tends only to reduce the level of loss associated with production in those areas, with only one farm subsequently recording positive net margins.

Given that the UK remains de-coupled in this scenario, the gap in margins between the UK farm and those from Spain and France widens. The UK farm continues to make a negative net margin of €138 per 100kg, while the average French and Spanish farm margin increases to minus €53 per 100 kg – an improvement of €27 per 100kg. The difference between this scenario and the status quo are larger than for the other scenarios.

As this scenario alters the relative position of the UK compared to Spain and France, there could be implications for UK production and smaller implications for trade. As the 50% ewe subsidy pushes

French and Spanish producers closer to achieving a positive net margin, there could be an increase in production from these areas if all other factors stay unchanged. In the case of Spain, only 3,280 tonnes of Spanish sheepmeat was imported into the UK over 2011 and an increase in Spanish production could see that increasing but this increase would be limited since Spanish production tends to involve smaller and lighter lambs which are less suitable for the UK market.. Conversely, France is the largest destination of UK sheepmeat exports – with nearly 60,000 tonnes shipped in 2011, or 60% of total UK exports. Hence an increase in French sheepmeat production could make trading conditions more difficult for UK exporters. Whether this actually happens will also depend on competitiveness versus other exporters and the level of success the UK has in exporting to other EU and also non-EU markets.

The implications of this scenario for the sheep sector, under the assumption of all other factors staying unchanged and compared to the 2011 position, are set out in the table below:

Market measure	**Possible impact compared to 2011 situation**
UK competitiveness	Down
UK production	Down
UK exports	Slightly Down
UK imports	Slightly Up

Conclusions

The analysis presented has attempted to model the impact on net margins from the application of the draft CAP legislative proposals regarding coupled payments in the cattle (cow-calf and finishing) and sheep sectors. The main findings of this paper are as follows:

- Under Scenario 1[43], where coupled payment levels across EU MS stay unchanged from their 2010 levels, UK farmers face negative margins[44] in both cattle and sheep production. In addition, some of the UK farm systems considered show some of the highest losses of all systems examined. The implication of this to the UK market could be pressure on production levels in the domestic beef and sheepmeat industries, unless market prices remain at the high levels seen in 2011. The result could be a reduction in export prospects and substitution by imported products from other major suppliers.

- Under Scenario 2, direct payments are fully decoupled from production in the cattle and sheep sectors in all EU MS. As the UK sectors are already fully decoupled, there is no direct impact on the revenue and net margin of UK beef and sheep producers. However, due to decoupling elsewhere, the difference in net margins between the UK and other MS reduces and the relative position of the UK improves a little. The implication to the UK market could be a small reduction in pressure on production levels, a potential minor fall in imports and potentially slightly more export opportunities for UK producers to fill supply gaps created in other MS. These could potentially improve the profitability of UK producers.

- Scenario 3 considers the situation where direct payments in the cattle and sheep sectors of all EU MS investigated are fully coupled with production[45]. The revenue of UK cattle and sheep farms increases but some farming systems are still shown to be making negative margins. As a result of partially coupled support in some MS existing in 2010 for cow-calf and finishing enterprises, full coupling in all MS reduces the gap in net margins between UK beef producers and producers in other MS. For sheep, as all MS were fully de-coupled in 2010, fully recoupling these farms would produce no change to the relative UK position compared to other MS. Hence, for both the beef and sheep sector, the implications for the UK market of full recoupling are hence very similar to those from Scenario 2.

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43 The scenarios considered are chosen for comparison purposes only and are not based on official views of the MS governments involved. The level of coupled payments employed in a sector will be agreed between the relevant MS and the EU Commission.

44 This paper considers benchmarked costs and revenues. It considers the full economic costs a business may face – e.g. it inputs a value of family labour used and rented equivalent for owned land. Actual cash costs should be lower and this may affect how a farm reacts to changes in coupled payment levels and explain why it may stay in business even if it is theoretically not covering full economic costs.

45 Full recoupling allows producers in all MS investigated to benefit from 100% of the maximum allowance for coupled payments as described in Appendix 1.

- Scenario 4, considers the situation where some MS maintain, or increase, their levels of coupled support, while others remain fully decoupled. The scenario is based on the possible decisions made by policy makers in each of the MS. While Scenarios 2 and 3 can be viewed as extreme changes from the status quo, this scenario could be viewed as a much more likely description of the future than Scenarios 2 and 3. Under Scenario 4, the revenues and margins of UK farm systems remains unchanged from Scenario 1 since UK direct payments remain fully decoupled. However, the difference in net margins between UK farming systems and those of other MS rises due to increases in coupled payment levels in those other MS. The implication of this is even more pressure on UK production levels than in Scenario 1, a potential larger decrease in UK export potential and a possible greater increase in the amount of imported products that could enter the domestic market. These factors could put further pressure on the profitability of UK producers unless market prices remain at the high level seen in 2011.

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