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# CAP reform post 2013: Examining the equity dimensions of agricultural support

Peter Howley*, Trevor Donnellan and Kevin Hanrahan

## Abstract

Using a dynamic multi-product partial equilibrium model, this paper firstly examines the potential impact of recent policy changes accruing from the mid term review of the Common Agricultural Policy (CAP) in 2003 on the cattle and sheep sectors in Ireland. Secondly, this paper evaluates the potential impact of the implementation of a CAP budget neutral, common EU flat area payment across all Member States. The European Commission has signalled that it will be evaluating current differences in the level of support between Member States as, for example, in the explanatory memorandum accompanying the Commission's Health Check proposals the Commission argues that it is "increasingly harder to justify the legitimacy of significant individual differences in the support level which are only based on past support" (CEC, 2008; p.18). This paper demonstrates how there are significant differences in the level of CAP payments per hectare across Member States, as generally farmers in more prosperous Western and Nordic countries receive a much higher level of payment per hectare than farmers in relatively poorer Central and Eastern European countries. In relation to Ireland, similar to most other EU-15 countries, farmers benefit from the current inequitable distribution of payments and the results indicate that any move towards equalising the level of payments per hectare will have a significant negative impact on agricultural production and net trade.

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## Introduction

The move from coupled payment policy instruments to payments that are decoupled from production in Ireland and in many other countries within the EU have made estimating the future behaviour of farmers much more challenging. Prior to the move towards the decoupling of direct payments in 2003, income support was linked to production decisions and farmers in the EU, to a large extent, were shielded from fluctuations in the market and agricultural production remained relatively stable. Breaking the link between payments and production, however, is likely to result in much more volatility in farm incomes and production. Policy changes such as the shift towards decoupled payments not only have significant effects on agriculture but also rural areas and society more generally (Moreddu et al, 2004; Kantelhardt, 2006; Boel, 2006). Farmers can be viewed as multifunctional providers of a range of commodity and non-commodity goods (Burrell, 2004) as in addition to providing us with food and other raw materials necessary for our survival (SOFA, 2002), and maintaining economic activity in rural areas (Kelch and Normile, 2004), farming activity has environmental (Firbank, 2005; Cocklin et al, 2006), aesthetic (Vanslembrouck et al, 2005) and social functions (Gerowitt et al, 2003). Given the significant and wide-ranging effects of farming activity on the agricultural sector and on society more generally, and the budgetary resources devoted to agriculture within the EU, it is important that the effect of policy changes on agricultural activity be assessed.

This paper utilising a partial equilibrium model of the EU agricultural sector (Agmemod[1]) examines the potential impact of recent changes to CAP on the cattle and sheep sectors in Ireland as these are two of the sectors most reliant on CAP support. Secondly, this paper analyses the effect of introducing a common EU wide flat rate payment across all Member States on the cattle and sheep sectors in Ireland. This is calculated as the sum of the currently agreed national budgetary envelopes divided by utilisable agricultural area in the EU-27. The European Council has called upon the European Commission "to undertake a full, wide ranging review covering all aspects of EU spending, including the Common Agriculture Policy (CAP)…to report in 2008/2009" (CEU, 2005; p. 32). One of the most likely results from this review is the recommendation of a move towards a more equitable distribution of income support across Member States. Under the current CAP there are large discrepancies between the payment entitlements per hectare between farmers and this difference in the level of support is particularly pronounced between the EU-15 (the 15 countries in the EU before the expansion in 2004) and new Central and Eastern European Countries (CEEC). In the explanatory memorandum accompanying the Commission's Health Check proposals (CEC, 2008; p. 18) the Commission argues that it is "increasingly harder to justify the legitimacy of significant individual differences in the support level which are only based on past support." Given that the CAP is very much an evolving policy, this paper in the following section evaluates the potential for further reforms at the end of the current financial perspective in 2013 with a specific focus on potential measures to address differences in the level of support across countries within the EU. Next a description of the research strategy employed in this paper will be given before moving on to a discussion of the empirical results. Finally, this paper will conclude with a discussion of its main findings and their implications for the agricultural sector.

## Further reform

The Mid-Term Review of the CAP sets out the budgetary framework until 2013 but the European Commission has signaled that further reform is likely at the end of this period. The overall budgetary cost of the CAP is large and although its share in the total EU budget has been decreasing it still currently accounts for 40 percent of the EU budget. Despite its large budgetary cost the cap is a policy which only benefits a small although sensitive sector resulting in a significant burden on the EU economy. The European Commission is, however, looking to focus more on other issues such as climate change, global security, energy and the Lisbon Agenda and thus there is likely to be significant pressure to reduce the CAP budget at the end of the current financial perspective in 2013. In addition to an overall reduction in the level of CAP payments, there is also likely to be significant changes in the structure of these payments. The

European institutions have extended the list of objectives of the CAP outlined in the Rome treaty and broadly speaking stress the need for the preservation of rural public goods, food quality and a greater consideration of the distributional impact of current payments between persons and nations (Bureau and Mahe, 2008). The structure of CAP payments is expected to change in order to have a greater focus on these issues. In particular, further agri-environment and cross compliance measures are likely to be introduced. Under the current financial perspective (2007-2013) there is a modest shift in first pillar payments towards second pillar rural development measures. It is highly probable that given the recent emphasis and discussion surrounding rural development that there will be a further shift of direct payments towards the second pillar of CAP support. In relation to trade, the CAP as it is currently formulated has a paradoxical relationship with EU competition policy. Pressures from the World Trade Organisation (WTO) are likely to result in large tariff cuts with the result that large sectors of EU agriculture such as beef will be much more exposed to competition from outside the EU (see Binfield et al., 2008).

In relation to the distributional impact of CAP, large disparities in payments across farms and Member States are a source of conflict within the EU. The policy of price support evident in the EU agricultural sector prior to the introduction of decoupled payments established a pattern of transfers that favoured larger farms (Ackrill, 2008). The recent move towards decoupled payments continues to favour the largest and most affluent farmers as payments are based on losses incurred in 1992 or on previous payment receipts. Furthermore, not only is a disproportionate amount of payments being accrued by the largest farmers there is also an inequitable distribution of payments between Member States. With enlargement in 2004 the EU-15 effectively ring fenced their own budget receipts and set accession terms which forced new Member States to accept a lower level of support. The result being that farmers, all things being equal, in new Member State countries (those who joined the EU in 2004) receive a lower payment per hectare than those in the EU-15. Gradually this disparity in payments is being phased out as new Member State countries received 25 percent of what the EU-15 received in 2004 and this is set to rise to an equivalent level of the EU–15 by 2013.

However, as demonstrated in the results section there is still set to be significant differences in the level of support across Member States, especially between the EU-15 and new Member States as the highest subsidies will still go to those products that are mainly farmed in old Member State countries. Furthermore, new Member State countries, for the most part, have lower yields and intensity of production than that generally observed in the EU-15. As Bureau and Mahe (2008) report the political legitimacy of these differences in payments is no longer justifiable as the current distribution of CAP payments across Member States do not contribute to the European Unions cohesion objectives as generally more prosperous Western and Nordic countries get a higher proportion of payments than poorer new Central and Eastern European Member States. Using Ireland as a case study, this paper, in addition, to examining the effect of recent changes in the CAP such as the move towards decoupled payments and the accession of new Member States on the Irish cattle and sheep sector also examines the potential impact of adopting a CAP budget neutral, common flat area payment across the EU. Ireland currently benefits from the present inequitable distribution of payments across countries and consequently any move towards a budget neutral common flat rate payment is likely to pose significant challenges to the Irish agricultural sector.

**Research Design**

The modelling approach used in this analysis is the development of an econometric, dynamic, multi-product partial equilibrium model in which a bottom-up approach is used. Based on a common country model template, country level models have been developed that reflect the specific situation of the agricultural sectors in individual EU Member State countries. In all country models, agricultural supply and use data as well as policy data for the years 1973-2005 have been collected for all countries with the exception of Cyprus, Malta and Luxembourg and the two newest members namely Romania and Bulgaria who joined in 2007. Problems with data availability have meant that these countries have been excluded from the analysis. For each commodity modelled, and in each country, agricultural production as well as supply, demand, trade, stocks and domestic prices are derived by econometrically estimated equations. Each country model contains the behavioural responses of economic agents to changes in prices, policy instruments and other exogenous variables. One element of the supply and demand balance (usually exports), for each commodity modelled, is derived as a closure variable to ensure that the supply and use identity holds for all EU markets throughout the projection period. This condition implies that production plus beginning stocks plus imports equal domestic use plus ending stocks plus exports.

In order to take account of the influence of other Member States on a given country market, when the national level market is not considered as the key market in the EU, the internal price is determined as a function of the chosen key price for the EU and the self sufficiency rate for this market and the self sufficiency rate for the key market. In addition, information from global models is used to represent the influence of the Rest of the World commodity markets on those of the EU. More precisely, projections of exogenous data relating to macroeconomic series such as exchange rates and GDP, and projections of world prices of agricultural commodities have been incorporated into this model. These national level models have then been combined into a composite EU model. The development of specific country models has allowed for the capture of the inherent heterogeneity of agricultural systems existing within the EU, while simultaneously maintaining analytical consistency across the estimated country models. Within this combined model environment all EU prices, as well as all elements of agricultural commodity supply and demand in each member state, are modelled endogenously. Hence, the final dynamic, multi-market, multi-country composite model developed allows us to generate projections for each Member State, under the assumption of exogenous world prices (for a more detailed description of the model structure the reader is referred to Chantreuil et al., 2005).

In order to analyse the impact of policy reform, data on all of the different types of direct payments that are and were part of the CAP, were collected for each member state. This was used to create a database which in a coherent manner across all the Member States incorporated the total budgetary envelopes, the different types of the EU CAP direct support elements, and their allocation from the total budgetary envelopes. The degree to which decoupled payments are expected to impact production decisions is captured via explicit coefficients that are termed multipliers.

Using these multipliers and the various policy data a set of country specific variables were developed which calculated the impact of policy instruments on the supply and use of various agricultural commodities. In particular, in the case of Ireland reaction prices for beef and sheep meats were calculated. These variables were then included in the estimated equations in the model. For example, in the case of beef it is assumed that the incentive price faced by farmers is the real cattle or beef price plus the beef reaction price. The reaction price varies according to the degree to which the decoupled payments of relevance to the beef sector are assumed to have a supply inducing effect.

Decoupled payments are in the World Trade Organisations (WTO) 'green box' of agriculture related subsidies and thus must adhere to the fundamental requirement that the policy has no, or at most minimal, trade-distorting effects. There is considerable uncertainty, however, as to whether these payments are indeed production neutral. While decoupled payments do not distort market price signals, they do increase a farm operators income and wealth and this is argued by many will alter production behaviour (Hennessy, 1998; Young and Westcott 2000; Adams et al. 2001; and Goodwin and Mishra 2005). Additionally, many commentators assert that many farmers do not respond in a profit-maximising manner and are determined to stay in farming despite low returns and will often use these payments to subsidise seemingly unprofitable production (Colman and Harvey, 2004; Hennessy and Thorne, 2005). The two most extreme viewpoints relating to the impact of decoupled payments are that firstly they will maintain the same supply inducing impact of previously coupled payments or secondly they will have a zero impact on production behaviour. For the purposes of this paper it is assumed that decoupled payments will have an impact in between these two values. More precisely, across all country models within the EU-15 multipliers are given a value of .5 which means decoupled payments are assumed to have 50 percent of the supply inducing impact of previously coupled payments. The true impact of decoupled payments may differ from this point and in any case the actual effect is likely to deviate across farm systems and regions. That said, it is felt that this serves as a reasonable approximation of the supply inducing impact of decoupled payments and enables projections of supply, demand and prices of various agricultural commodities as far as 2020.

## Results

In terms of model output, this paper firstly provides projections relating to the cattle and sheep sectors as far as 2020 assuming current policies remain in place. With decoupling of direct payments and the enlargement of the EU to incorporate Central and Eastern European Countries (CEEC), market signals will play a more important role in EU agriculture. This "baseline" scenario is concerned with analysing the effect of these recent changes. Under this Scenario the decoupling decision made by Member States in 2005 cannot be changed. The current mix of historic, static and dynamic regional models and hybrid models will continue for the complete projection period to 2020. The year 2005 was the last year in which all agricultural supply and use data were collected for all Member States and therefore, the model projections in 2020 are compared with this 'base' year. The CAP budget and national ceilings remain at the levels as set out in Regulation EC 1782/2003. The second scenario analysed is the effect of the introduction of a common EU wide flat rate payment per hectare calculated as the sum of the currently agreed national budgetary envelopes divided by utilisable agricultural area in the EU-27. While such a policy will not change the level of overall support within the EU it should, however, result in significant changes at a Member State level. For example, in the case of Ireland such a scenario if implemented would result in the average per hectare payment falling to a figure of €247 per hectare from a figure of €311. Consequently, our, a priori, expectation here would be that this policy scenario would have a negative effect on the Irish cattle and sheep sector.

*Baseline scenario: Cattle*

Under the Baseline scenario, despite projected increases in nominal cattle prices the Irish suckler cow herd is projected to decline by 25 percent between 2005 and 2020 (see table 1). This is a continuation of the trend evident post decoupling as the Irish suckler cow herd declined by 3 percent between 2005 and 2007. The projected contraction reflects the decoupling of direct payments and the decline in the real returns to beef farming. This projected contraction contrasts with the evolution of the suckler herd in the years prior to the introduction of decoupled payments as over the 1980s and 1990s the numbers of suckler cows rose steadily in response to the introduction of coupled direct payments. The Irish dairy cow herd is projected to decline by 13 percent over the projection period. This decrease is due to an increase in milk yields as the milk quota is fixed at 2008/2009 levels for the Baseline analysis. Due to the projected declines in the Irish suckler and dairy cow herds, total cattle ending numbers, cattle slaughter and the calf crop are projected to decline by 30, 21 and 19 percent respectively over the period 2005-2020. As a result of the fall in total cattle slaughter, Irish beef production is projected to decline by 28 percent over the projection period.

*Baseline scenario: Sheep*

Under the Baseline scenario the decoupling of the ewe premium results in the ending stocks of ewes declining by 42 percent over the projection period despite nominal prices of lamb that are projected to increase strongly. The most recent data indicate that between 2005 and 2008 the Irish ewe flock has contracted by almost 22 percent in response to the introduction of decupled payments. The significant decline in ewe numbers over the projection period (2005-2020) results in the number of lambs produced declining by 44 percent over the projection period. With lower numbers of lambs produced each year the projected volume of lamb and other sheep slaughtering is projected to decrease over the projection period, with slaughtering of sheep in 2020 46 percent lower than in 2005. The reduction in numbers of sheep slaughtered results in a projected decline of 40 percent in sheep meat production between 2005 and 2020.

*Table 1: Baseline projections for Livestock Product markets*

| | | 2005 | 2010 | 2015 | 2020 | Total % change |
|---|---|---|---|---|---|---|
| **Beef** | | | | | | |
| Production | 1,000 ton | 545.9 | 468.8 | 426.4 | 393.2 | -28.0 |
| Beef cows ending stock | 1,000 head | 1150 | 1043 | 951 | 856 | 25 |
| Slaughtering weight | kg/animal | 324.0 | 291.0 | 294.6 | 297.5 | -8.2 |
| Domestic Use | 1,000 ton | 89.9 | 100.0 | 110.3 | 116.8 | 29.9 |
| Consumption/head | kg/head | 21.8 | 22.6 | 23.4 | 23.5 | 7.9 |
| Price | Euro/100kg | 136.4 | 155.4 | 165.8 | 171.9 | 26.0 |
| **Sheep meat** | | | | | | |
| Production | 1,000 ton | 73.3 | 57.5 | 50.0 | 43.7 | -40.3 |
| Ewes ending stock | 1,000 head | 3208.6 | 2639.8 | 2219.4 | 1849.8 | -42.3 |
| Slaughtering weight | kg/animal | 20.3 | 21.0 | 21.8 | 22.6 | 11.4 |
| Domestic use | 1,000 ton | 18.3 | 22.0 | 23.1 | 24.3 | 32.9 |
| Consumption/head | kg/head | 4.4 | 5.0 | 4.9 | 4.9 | 10.4 |
| Price | Euro/100kg | 152.6 | 189.4 | 199.1 | 204.0 | 33.7 |

Table 2 and 3 outlines differences in the average level of CAP payments per hectare between Member States. As can be seen in table 2 there is little projected change in the average CAP payment per hectare among old Member State countries. For farm operators in new Member States there is a projected significant increase in their level of payments between 2006 and 2013 as the European Commission has agreed to increase CAP direct payments from 25 percent of what the EU-15 get in 2004 to their full entitlement by 2013. The average payment per hectare in the new Member States included in the analysis stood at €59 per hectare in 2006 and this is projected to increase to €183 per hectare by 2013. Therefore, there is a projected significant convergence between new Member States and the EU-15. However, the majority of new Member States are still projected to have a payment far below that observed in the EU-15 as for example, the average per hectare payment among the EU-15 in 2013 is estimated to be almost double (€308) the average observed in the new Member States. Even among the EU-15 there is a significant degree of difference in the average level of payment per hectare. At one end lie Spain and Portugal who are projected to receive a figure of €176 and €150 per hectare respectively in 2013 and at the other end lie Greece, Netherlands and Belgium who are projected to receive an average per hectare payment of 488, 455 and 405 Euro respectively. Due to large tracts of relatively arid landscapes and a relatively large proportion of their land being in agricultural use, Spain and Portugal have a low level of productivity per hectare. Greece, the Netherlands and Belgium have a much higher average per hectare payment due to the concentration of CAP supported commodities in these countries and their relatively high intensity of production per hectare. To sum up, it can be seen from the tables below that, at the end of the current financial perspective in 2013 there is likely to be large differences in the level of support across Member States.

T*able 2: Average CAP spending per hectare in the EU-15*

| | 2006 | 2007 | 2008 | 2009 | 2010 and subsequent years |
|---|---|---|---|---|---|
| Belgium | 384 | 393 | 402 | 406 | 405 |
| Denmark | 376 | 375 | 377 | 378 | 378 |
| Germany | 332 | 335 | 337 | 339 | 339 |
| Greece | 553 | 543 | 532 | 529 | 488 |
| Spain | 179 | 179 | 176 | 176 | 176 |
| France | 279 | 282 | 277 | 273 | 272 |
| Ireland | 310 | 311 | 311 | 312 | 311 |
| Italy | 258 | 260 | 261 | 262 | 264 |
| Netherlands | 226 | 443 | 451 | 454 | 455 |
| Austria | 194 | 225 | 228 | 229 | 230 |
| Portugal | 132 | 150 | 150 | 150 | 150 |
| Finland | 246 | 246 | 247 | 248 | 247 |
| Sweden | 213 | 237 | 232 | 230 | 230 |
| UK | 251 | 253 | 255 | 256 | 256 |

*Table 3: Average CAP spending per hectare in New Member States*

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|
| Czech | 83 | 105 | 131 | 156 | 179 | 203 | 227 | 251 |
| Estonia | 36 | 44 | 57 | 69 | 81 | 94 | 107 | 119 |
| Latvia | 24 | 33 | 41 | 47 | 54 | 61 | 68 | 76 |
| Lithuania | 41 | 55 | 69 | 83 | 96 | 109 | 122 | 135 |
| Hungary | 77 | 77 | 112 | 133 | 154 | 175 | 196 | 216 |
| Poland | 61 | 79 | 99 | 117 | 135 | 153 | 171 | 189 |
| Slovenia | 88 | 117 | 145 | 173 | 200 | 228 | 255 | 283 |
| Slovakia | 66 | 83 | 104 | 124 | 142 | 161 | 180 | 199 |

If the total budgetary envelope devoted to the CAP in 2005 were divided by the total utilisable agricultural area within the EU then the average payment per hectare across all Member States would be 247 Euro. The following analysis using the Irish cattle and sheep sector as a case study examines the potential impact of implementing this common flat area payment per hectare. Under the present system Ireland is projected to have an average per hectare payment of €311 per hectare in 2013 so this policy scenario implies a reduction of €64 (20%) in the average per hectare payment. Table

4 compares the levels of production and net trade of both beef and sheep meat under the baseline analysis in 2020 with that projected if a CAP budget neutral common EU wide flat rate payment of €247 per hectare was introduced. It is important to note that the value of all payments are in nominal terms so that with inflation their real value will decrease and therefore their contribution to farm incomes and in turn their supply inducing impact will also decrease over the projection period. In addition all commodities in Ireland were fully decoupled from production in 2005 and as a result while it would be expected that changes in the levels of payments would impact farm operators behaviour any changes should be less than what would be expected if payments were still fully coupled. That said, as illustrated in table 4 the introduction of a CAP budget neutral common EU payment in 2013 is projected to have a significant impact on the cattle and sheep sectors. The lower level of payments implied by this policy scenario results in beef production and net trade being projected to fall by a further 10 and 17 percent respectively and sheep production and net trade by 11 and 15 percent respectively relative to the baseline. It seems likely that countries such as Greece, the Netherlands, Belgium and Denmark would witness an even larger fall in agricultural output in CAP supported commodities due to the greater reduction in their level of payments. Of course in some Member States especially new CEEC countries such as Latvia and Lithuania agricultural output should increase in response to the higher level of payments.

*Table 4: Beef and sheep meat scenario analysis - Results in 2020*

| | | **Baseline** | **EU flat rate** |
|---|---|---|---|
| **Beef** | | | |
| Production | 1,000 ton | 394 | 354 (-10%) |
| Net trade | 1,000 ton | 278 | 231 (-17%) |
| **Sheep meat** | | | |
| Production | 1,000 ton | 44 | 39 (-11%) |
| Net trade | 1,000 ton | 20 | 17 (-15%) |

## Conclusion

As can be seen in the baseline analysis the continuation of current polices is projected to lead to significant changes in the Irish beef and sheep sectors. The decoupling of premiums in 2005 results in the number of suckler cows and ewes being projected to decrease by 18 and 42 percent respectively over the projection period. One potential factor behind the larger decrease in the number of ewes relative to suckler cows is the differences in their respective farming systems. Specifically, maintaining ewes is much more labour intensive than maintaining suckler cows and thus sheep farmers may have more of an incentive to reduce output or even leave the sector in response to lower real market returns. In addition, there has been a much longer term trend in decline in the sheep sector with ewes numbers falling significantly since the early 1990s as a result of the introduction of cross compliance obligations initiated to reduce the number of ewes in environmentally sensitive areas. The decline in the number of suckler cows and ewes leads to a significant fall in the production of beef and sheep meat over the projection period.

The cap is very much an evolving policy and the European Commission has signaled that further substantial reforms of the CAP is likely at the end of the current financial perspective in 2013. Some of the potential reforms highlighted in this paper include a reduction in the overall level of support as well as a more pronounced shift of first pillar payments to rural development measures under the second pillar of CAP support. Additionally, WTO pressures are likely to result in a reduction of tariffs which will have significant implications for certain agricultural sectors such as beef within the EU. One further likely shift in CAP policy is a move towards a more equitable distribution of payments between Member States. This paper demonstrated that at the end of the current financial perspective in 2013 there will still be significant disparities between the average per hectare payment across Member States. Generally farmers in new Member State countries (the exception being Slovenia and the Czech Republic) and to a lesser extent Spain and Portugal will receive a much smaller average payment per hectare than farmers in more prosperous Western and Nordic countries. Given that the distribution of these payments do not support cohesion objectives or address income inequalities then it is likely that the EU Commission will seek to implement measures to address this imbalance.

To help illustrate the possible impact of introducing a more equitable distribution of payments across Member States, this paper using the Irish cattle and sheep sectors as a case study examined the potential impact of the implementation of a CAP budget neutral common per hectare payment. This was calculated as the total level of CAP payments in 2005 divided by the total utilisable agricultural area within the EU. As expected the adoption of such a policy scenario would have a substantial negative effect on CAP supported commodities such as beef and sheep meat in Ireland. It would be expected that similarly to Ireland, agricultural output in many other countries within the EU-15, in particular, the Netherlands, Greece, Belgium and Denmark will also witness a significant reduction in the output of CAP supported commodities. Spain and Portugal and new Central and Eastern European countries with the exception of Slovenia and the Czech Republic will benefit significantly from the implementation of such a policy given their current relatively low average per hectare payments. For instance, the average per hectare payment is projected to increase by 171 and 128 Euro in Latvia and Estonia respectively with the introduction of such a policy scenario. In terms of income distribution this policy scenario would result in a transfer from richer Western and Nordic countries to poorer Mediterranean, Eastern and Central European countries. In relation to output the overall aggregate effect at an EU level from such a policy scenario will depend on any differences in the actual supply response to changes in the level of support between Member State countries. Given that there is no historical link between payments and production in new Member State countries it seems likely that the supply inducing impact of changes in the level of support should be less than in the EU-15. In addition, average productivity per hectare is less in new accession countries. Therefore, at an aggregate level, even though the policy scenario examined here does not result in a change in the overall CAP budget it seems reasonable to assume that total EU production should fall, to some degree, in response to the implementation of a CAP budget neutral common flat area payment across Member States.

Notes 1: AGMEMOD is funded under the European Commission 6th Framework and by contributions from the partners' institutes throughout the EU. The AGMEMOD Partnership model is an econometric, dynamic, multi-product partial equilibrium model and involves institutes in the EU15 group of Member States. In advance of the accession of the so-called "new" Member States in May 2004 the AG-MEMOD partnership was expanded in 2002 to include research institutes from 8 of the 10 new EU Member States.

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