



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

# **CAP Reform in the Light of the WTO Doha Round Negotiations**

**Prof. Péter Halmai and Andrea Elekes**

Szent István Egyetem, Budapest, Hungary. E-mail: [phalmai@vti.szie.hu](mailto:phalmai@vti.szie.hu) or  
[andreaelekes@hotmail.com](mailto:andreaelekes@hotmail.com)



*Paper prepared for presentation at the EAAE  
(European Association of Agricultural Economists) Congress,  
The Future of Rural Europe in the Global Agri-Food System, Copenhagen, Denmark,  
August 24-27, 2005*

*Copyright 2005 by [Halmai-Elekes]. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.*

# **CAP REFORM IN THE LIGHT OF THE WTO DOHA ROUND NEGOTIATIONS**

## **Abstract**

Our paper focuses on the question: how the measures of June 2003 agreement can help the EU to meet the new WTO commitments. As decoupling of direct payments and WTO classification of the new payments seem to be one of the most important questions from the point of view of WTO negotiations, our analysis focuses mainly on the Single Farm Payment (SFP). We assesses the decoupled nature of the single farm payment (SFP) based on WTO and OECD criteria. We conclude that the SFP meets not only the current WTO (design based) criteria of decoupling, but can also be qualified as effective fully decoupled system using the OECD terminology.

**Keywords:** CAP reform, WTO, decoupling

**JEL classification:** Q17, Q18, F13, F15

## **1 Introduction**

Measures agreed by the Council in June 2003, envisage a basic reform of the Common Agricultural Policy (CAP). With the new measures the CAP moves towards producer (income) subsidies instead of subsidising production. Reduction of institutional prices, and replacement (of the significant part) of the existing and certain newly introduced direct payments with a single decoupled payment all point to that direction. The new payments are based on reference data, and because of the already compulsory cross-compliance, they are available only on condition that certain environmental, animal welfare food security and quality standards are met. The scope of rural development measures is widening and as modulation provides an opportunity to re-allocate resources, the total fund available for rural development is growing. If the CAP budget threatens to exceed the budget ceilings agreed in October 2002, a new financial discipline can be invoked to scale down payments.

Our paper focuses on the question: how the measures of June 2003 agreement can help the EU to meet the new (but as regards the details, still unknown) WTO commitments. In order to answer the question, first we overview the possible impacts of the 2003 CAP reform (Part 2) and then we summarize the most important interfaces between CAP reform and the on-going WTO negotiations (Part 3). As it seems to be clear that decoupling of direct payments and WTO classification of the new payments seem to be one of the most important questions from the point of view of WTO negotiations, the following chapters focus on the Single Farm Payment (SFP) (Part 4) and on the questions of decoupling (Part 5). Decoupling is an issue attracting significant attention on behalf of agricultural economists. The principle is that policies should not distort decision making by producers and markets should adjust as if there were no policy in place. Different tools and different methodologies have been employed in the effort to better understand and rank policy measures in terms of their production and trade effects. Most of the literature classifies measures based on implementation criteria. Our paper assesses the decoupled nature of the single farm payment (SFP) based on WTO and OECD criteria (Part 6).

## **2 Possible impacts of the 2003 CAP reform**

Similarly to the earlier reform steps the decisions of the 2003 CAP reform were significantly less radical than the Commission originally proposed. As regards the construction of the reform the following compromises should be stressed.

- *Partial decoupling.* Full decoupling of direct payments from production was the central element of the Commission's January 2003 proposal. The approved decisions however, foresee only partial decoupling.
- *Modulation.* In contrast to the originally proposed digressive reduction a linear system was approved which provides opportunity only for a limited reallocation of funds. Reallocation of the modulated support is based on rather complex rules.
- *Cross-compliance.* The range of standards which should be met in order to be eligible for the single farm payment is narrower than the Commission proposed. However, problems may arise during the control even of this limited range of standards. The fact that – due to the special structure of the support system – meeting the same standards makes producers eligible for different sum of support can be a source of allocation problem.
- *National divergences.* The system based on partial decoupling will be very complicated. Significantly different models will be implemented. Implementation and control of all the systems both can cause significant difficulties. Wide ranging national divergences threaten the principle of single market and therefore transparency and operation of the common market organizations.
- *Financial disciplines.* The automatism designed to prevent the overspending is more rigorous than the former stabilization systems. When it comes into operation single farm payment can be curtailed significantly. This mechanism brings uncertainty into the economic environment of farming. In contrast to the originally proposed digressive system of dynamic modulation the reduction of the support is linear, so it creates proportional burden for producers with different farm sizes.

Despite of the above mentioned compromises implementation of the 2003 CAP reform may bring significant changes to the operational environment of the CAP.

*Market coordination becomes more important and the competitive pressure increases.* Reform decisions will significantly alter the CAP's operation mechanism. Decisive part of direct payments will be decoupled. Payments will not influence farmers' production decisions. As a main rule, the single farm payment does not have effect on production structure. Competition between different market actors may become more intensive, and so do the pressure for return. However, the possibility of partial decoupling may mitigate these effects as it limits the adjustment to market signals. Production in that way may continue to exceed the market demand.

*Reduction of overproduction and increasing competitiveness can be expected.* The reform will be accompanied with significant market effects, particularly in the dairy and beef sectors. (These effects however, differ significantly under the different national implementation alternatives.) Because of reduction in milk and dairy prices, declining surplus and the increase of competitiveness can be expected. Overproduction in the beef sector decreases significantly, prices will increase after an initial downturn and profitability improves. This process will supported by the fact that import protection continues to be high. Due to the rise in efficiency competitiveness improves not only the domestic markets. After a possible reform in the sugar sector, surpluses can further reduce. Dynamism of agricultural markets can be even stronger for the EU-25. New member states gradually exploit their possibilities. Market of the EU-25 will be characterized by improving competitiveness and stronger pressure for efficiency.

There will be important *redistribution effects*. An important objective of the reform is to improve the allocation and gradually enforcement of multifunctional aspects. Modulation will somewhat lessen the support of large farms. However the approved system foresees more restricted income reallocation than originally proposed. (Modulation will affect only 1.16 billion euro instead of the originally proposed 3.5 billion euro.) Reallocation of these resources can theoretically favour the less developed countries. Modulation however, will not reverse the fact that the larger part of support will be allocated to large farms of which efficiency and profitability is more favourable than that of the smaller ones. Reallocation effect of models chosen for national implementation of the single farm payment can be significant. Regionalisation could result in strong evening: it would put massive

burden on farms which are more intensive and at the same time, would favour the more extensive ones. (Effects of hybrid models, which are more or less based on regions, could be similar.)

*Structural change, more efficient resource allocation.* The on-going reforms could somewhat reduce the ratio of animal breeding in the production structure. The most unprofitable part of it will be forced to leave the market. (This process will be accelerated by decoupling of support.) Sugar market reform could result in a decreasing sugar production. Production of plants could decline on marginal areas and extensification becomes more important. As regards the farm structure, significance of competitive aspects will increase. Structural change can accelerate. Activity of non-competitive units drives back: reduction of expenditure results in a more extensive structure, the rural activity possibly focuses exclusively on the maintenance of landscape. Competitive units can acquire physical resources of actors losing their market. Depending on the level of decoupling a more efficient system of resource allocation could be the result.

*Decreasing cost of land and/or declining land prices?* Decoupled nature of the single farm payment may affect costs and prices of land. The increasing sum of area based support can theoretically boost land prices. However, because of the system of cross compliance, beneficiaries are bound to provide certain (environmental etc.) services. Expenditure of these additional services and other conditions of the support can also influence the costs of land. These effects are different in the various models of decoupling. The model based on historical entitlements may strengthen the position of tenants, as the value of entitlements is based on individual performance (area cultivated, number of animals etc.) of former periods. However, if the ratio of areas without entitlements is small, possibilities of tenants are limited. If the support is allocated exclusively based on areas, all the arable and grass land is entitled for the support which is determined as a regional average. The support will than capitalise in land prices rental fees. (Depending on the elements chosen, hybrid models are between the two basic models.) At the same time, there will be market for support entitlements.

*Limited rural development possibilities.* Effects accelerating structural change and the adjustment pressure would require expanding investment, training and market development programs. At the same time more activity would be required in agri-environment and rural development. However, the reform does not result in a significant rise of rural development funds.

*Decreasing level of support?* Due to the tight budgetary frames a support decreasing mechanism may start to operate from 2007. Besides the modulation this mechanism can also reduce the sum of the single farm payment. The tight budgetary frames may prevent rural development to evolve. At the same time they can also strengthen the trends pushing for re-nationalization.

### **3 How the measures of June 2003 agreement can help the EU to meet the new WTO commitments?**

The 2003 CAP reform does not affect directly the *export and import measures* of the European Union. However, the proposed changes of the intervention system (price reductions, annual buying-in intervention limits, abandonment of rye intervention etc.) and possible impacts of the reform on production would have as a consequence a reduced need for export refunds and for high level protection. However, complete elimination of export refunds seems to be possible only if the EU basically reforms its sugar market. (The reform of the sugar sector has already been on the agenda, and the proposal for sugar reform follows the basic principles of the 2003 CAP reforms.)

As regards *domestic support*, the European Union would appear to have room to accommodate large cuts to its permitted AMS limit in the Doha Round negotiations. In recent years, the European Union's AMS levels have been substantially below the permitted Uruguay Round level. In 2001-2002, its actual AMS was 39.3 billion euro compared with the EU-15's total permissible AMS of 67.2 billion euro (WTO notification). Furthermore, the proposed changes of the intervention system (price reductions, annual buying-in intervention limits, abandonment of rye intervention etc.) and the series of new reforms (April 2004 reforms of the cotton, olive oil, tobacco, and hops sectors and the proposed sugar sector reform) would divert significant amounts of support away from its AMS. The

problem is that the framework agreement also contains that product-specific AMSs will be capped at their respective average levels.

Quite a lot hinges also on the future scope of the green and blue boxes. The Framework agreement contains specific commitments on blue box: support could not exceed 5% of the base period value of agricultural production. At first glance, capping blue box payments at only 5 per cent of the total value of agricultural production might be expected to be limiting. The European Union has been using blue box payments that have markedly exceeded 5 per cent of the total value of its agricultural production. In 2001–2002, EU blue box payments totalled 23.7 billion euro. This was 9.6 per cent of its total value of agricultural production for that year (EU notification G/AG/N/EEC/51). However, recent reforms aimed at decoupling direct subsidies from production could enable the European Union to manage a transition to blue box payments below the 5 per cent limit. According to the Commission, after a transitional period, the reforms transfer close to 90% of existing blue box support into the green box (Agra Europe, 17 December 2004).

It is estimated that even if all members opted to maintain the present blue box support systems to the maximum levels permitted by the reforms, and the single farm payment was accepted as green box, EU-15 blue box payments would be 3.4 per cent of the total value of EU agricultural production (Roberts, 2005). Now it is clear that not all members have chosen to apply the maximum coupled levels permitted by EU regulations. Consequently, it appears that the European Union would be able to accommodate the 5 per cent blue box cap without difficulty.

As there will be significant reductions both in the amber and the blue box, a general 20% reduction in domestic support (amber + blue + de minimis) could not be a problem for the EU. Consequently, decoupling of direct payments and WTO classification of the new payments seem to be one of the most important questions from the point of view of WTO negotiations. Therefore, the following chapters focus on the Single Farm Payment (SFP) and on the questions of decoupling.

#### 4 The single farm payment as a key element of the 2003 June CAP reform

The most radical feature of the June 2003 CAP reform agreement is the decoupling of subsidies from production and their replacement by one farm payment, known as the Single Farm Payment (SFP). The new payments are based on reference data, and because of the already compulsory cross-compliance, they are available only on condition that certain environmental, animal welfare food security and quality standards are met. Through the instrument of modulation member countries can reduce the SFP for bigger farms up to 5 percent in order to finance additional rural development measures. If the CAP budget threatens to exceed the budget ceilings agreed in October 2002, a new financial discipline can be invoked to scale down payments.

**Table 1: Maximum rate of coupled support, selected products**

Supported product	Maximum rate of coupled support (%)
Cereals and oilseeds	25
Rice	42
Protein crops (supplementary)	100
Sheep	50
Beef	
Option 1	
Slaughter Premium	40
Suckler Cow Premium	100
Option 2	
Slaughter Premium	100
Option 3	
Special Beef Premium	75

Decoupling has been made less strict than the European Commission originally proposed. Member states can choose for a delay of its introduction until 2007 instead of 2005. More important, member states are enabled to limit decoupling of income payments for a number of products, as they have the possibility to maintain a proportion of coupled policies (See Table 1).

As a new element the 2003 CAP reforms have provided a large space for national manoeuvre. The following elements of the reform fall within national competence:

- possibility of partial decoupling;
- determination of the date of introduction (2005-2007);
- re-allocation a part of the support through the national envelope;
- limited freedom to select the single farm payment (SFP) calculation model (historic, regional or hybrid).

As regards the SFP model there are two basic approaches. The *historic model* creates entitlements to support based on the average level of subsidies claimed in the livestock and arable sectors during the 2000-2002 reference period. The number of entitlements allocated to each farmer is set equal to the average area of land giving rise to subsidy plus all pasture land during that same period. The value of each of these entitlements is established by dividing the average amount of subsidy claimed by the farmer by the number of entitlements awarded.

The *regional (area based) model* operates by basing entitlements to farmers on the area of eligible land that they declare in their 2005 Integrated Administration and Control Scheme (IACS) returns. The value of all entitlements within a region would be set at a single, common rate. However, it is possible to create a third approach to decoupling by combining the historic and regional approaches into what is termed a *hybrid model*. This can be done in different ways to create various forms of hybrid. However, there are two broad hybrid classes – *horizontal* and *vertical*. A horizontal hybrid is created by putting a set proportion of the decoupled budget arising from each coupled regime into a regional element, with the balance of the budget allocated according to historical claims patterns. A vertical hybrid is created by putting specific coupled schemes, or proportions thereof, into the area-based component, with the balance allocated according to historical claims patterns. Also the ratio of regional and historical elements of hybrid models can vary in later years. If the ratios do not change in the future the model is static, while if the model incorporates changing ratios the model is dynamic. Models chosen by member states are summarized in Table 2.

**Table 2: National implementation models**

	Historical	Regional	Static hybrid	Dynamic hybrid
<b>Maximum possible coupling</b>	F			
<b>Partial decoupling</b>	A, B, GR, I, NL, P, E, GB (Scotland)	M, SLO	DK, S	SF, D
<b>“Full” decoupling</b>	IRL, GB (Wales)		L, GB (NIRL)	GB (England)

Source: Halmai, 2004

## 5 Basic questions of decoupling

### 5.1 Different concepts of decoupling

The term decoupling is used for agricultural policy measures that do not affect relative prices of agricultural commodities or of the inputs used to produce them.

According to the final communiqué of OECD agricultural ministers’ 1987 meeting market forces should be left to determine equilibrium prices and quantities. Policies should not distort decision making by producers (or consumers) and markets should adjust as if there were no policy in place. This restrictive concept of decoupling corresponds to the definition of a *full decoupling* given by

Cahill (1997). (The agricultural policy measure “does not influence production decisions of farmers receiving payments, and it permits free market determination of prices for all producers receiving or not payments”. This approach focuses on the adjustment process and not only on equilibrium values. Under this definition, the policy can be considered fully decoupled if the demand and supply functions remain unchanged after the introduction of the measure in question. There is no change in equilibrium prices and quantities, and there is no difference in the response of the market to any exogenous shock arising on the demand or the supply side.

Requirement of decoupling is an important element of rules on domestic support in the *WTO Agreement on Agriculture* (AoA). The so-called *green box* measures (for details see AoA Annex II) were not taken into account when the Aggregate Measure of Support (AMS) was calculated. A key feature of these measures is that they *have no, or at most minimal, trade-distorting effects or effects on production*. The support excluded from reduction commitments shall be provided through a publicly-funded government programme (including government revenue foregone) not involving transfers from consumers (Annex II, points 2-13); and the support in question shall not have the effect of providing price support to producers; and they should also comply with certain subsidy specific criteria. International literature usually focuses on direct income support for producers. Annex II of the AoA defines decoupled income support in the following way:

- a) Eligibility for such payments shall be determined by *clearly-defined criteria* such as income, status as a producer or landowner, factor use or production level in a defined and fixed base period.
- b) The amount of such payments in any given year *shall not be related to, or based on, the type or volume of production* (including livestock units) *undertaken by the producer in any year after the base period*.
- c) The amount of such payments in any given year *shall not be related to, or based on, the prices, domestic or international*, applying to any production undertaken in any year after the base period.
- d) The amount of such payments in any given year *shall not be related to, or based on, the factors of production employed* in any year after the base period.
- e) *No production shall be required* in order to receive such payments.

These are the most commonly referred criteria of decoupling. (In fact, logics of the Agreement suggests, that all measures listed in Annex II, including the stockholding for the purpose of food security, domestic food aid, support for income security etc., can be classified as decoupled.)

The AoA defined the criteria of decoupling based on the nature and design of the measures. However, the same policy may result in different effects. E.g.: the same policy may result in different effects when implemented in different locations (Gohin – Guyomard – Le Mouël, 1999).

In fact, the impact on production and trade of a given policy is of great importance. It is not enough then to analyse only the design of a decoupled policy. It is essential to explore the effects of different agricultural policy measures having regard decoupling.

OECD defines decoupling in terms of policy effects (OECD, 2001a). This approach results in more restrictive definitions, and makes difference between full and effective full decoupling. (The following descriptions rest strongly on OECD analyses.)

According to the equilibrium approach decoupled measures do not have trade and production effects or they are at most minimal. *Effective full decoupling* does not result in a production level exceeding the one without the applied measure (Cahill, 1997). The measure may affect decisions of producers but does not result in higher production.

In fact, the package of tightly coupled measures should be examined. The package could have a zero net effect on equilibrium prices and quantities, even if the individual measures have a significant impact on equilibrium prices and quantities. (This is the case, e.g. when the production effect of a



coupled payment is offset by a quantity restriction. A similar situation occurs when the same measure covers several products and the effect may be different product by product.)

*An effective fully decoupled policy package* (with a zero net effect on production) is *not necessarily fully decoupled in the restrictive sense*: they may have significantly different supply responses to exogenous shocks. An example in an open economy of this kind of supply responsiveness effect is an administered price fixed exactly at the world level, with the government ready to erect border measures to maintain this price. The introduction of such an administered price would have zero effect on production and trade. However, any shock in the world market would not be transmitted to producers. In this restrictive sense, zero market price support does not mean full decoupling of price support measures.

The term effective in that way refers to the less restrictive equilibrium concept of decoupling. Full decoupling however, reflects the more restrictive adjustment concept. (Different concepts of decoupling are summarized in Table 3.)

**Table 3: Different concepts of decoupling**

<b>DECOUPLED DESIGN</b>
<ul style="list-style-type: none"> <li>– The measure is part of a government funded program.</li> <li>– The support in question shall not have the effect of providing price support to producers.</li> <li>– The measure should also comply with certain subsidy specific criteria: payments are based on clearly-defined criteria; shall not be related to, or based on, the type or volume of production undertaken by the producer in any year after the base period; shall not be related to the prices applying to any production undertaken in any year after the base period; shall not be related to the factors of production employed in any year after the base period and no production shall be required.</li> </ul>
<b>DECOUPLED EFFECT</b>
<b>Full decoupling</b>
There are no production and trade effects.
<b>Effective full decoupling</b>
Does not result in a production level exceeding the one prevailing without the measure.

## 5.2 Possible impacts of agricultural policy measures

It is very difficult to rank production and trade impacts of alternative policies. Countries implement a complex system of support measures, making difficult the empirical analysis. As regards the equilibrium levels of production and trade, the static relative price effects seem to be decisive.

It is not surprising that most of the literature on decoupling has focussed on the static relative price effects of agricultural support. However, there is a large variety of additional mechanisms through which policies can affect production and trade, especially when markets work imperfectly. (We can take into account e.g.: risk, dynamic effects, expectations etc.) The specific characteristics of each policy package must be taken into account to have a complete picture of these possible mechanisms, however, it is difficult to assess the dynamic effects, especially those related to expectations.

The static relative price effects have a decisive role in assessing the effective degree of decoupling. The effects associated with risk and dynamics are more likely to be significant for assessing the degree of responsiveness with respect to external shocks.

The *mechanisms by which policies can affect production and trade* (OECD, 2001a) could be grouped as:

- *Static effects.* Whenever policies affect the prices of an agricultural output or input, there is a static production and trade effect. However, policies affecting only farm income — and not affecting prices — may also have static effects on production whenever markets work imperfectly or farmers make decisions under binding constraints. Market price support sustained by border measures can have an effect on production responsiveness in addition to the relative price effect. In this case, even a zero level of price support does not mean that the measure is decoupled in the restrictive sense.
- *Effects under uncertainty.* If farmers are risk averse, all policies reducing risk and/or increasing farm income may have additional effects on production and trade.
- *Dynamic effects.* Investments made in a supported framework affect production decisions in the following years. In addition, if there is uncertainty about future agricultural policies, present policies and Government decisions may affect farmers' expectations of future policies and through these channels may affect current production decisions. Complex policy packages could easily affect farmers' expectations and the responsiveness of farmers to market shocks and policy changes.

All these static, dynamic and risk mechanisms are cumulative and can occur simultaneously in response to a single measure. Under this broad framework of analysis, it seems difficult to design a policy measure not having some production or trade effects.

### 5.3 Measuring the degree of decoupling

The concept of the degree of decoupling is an attempt to measure the production and trade impacts of different measures (OECD, 2001a). All policies affecting relative prices of inputs or outputs have a direct effect on producers' decisions and they affect resource allocation.

It is very difficult to explore the above mentioned effects. Gohin, Guyomard and De Mouël (1999) developed a partial equilibrium model with the total amount of land fixed and to be allocated between two sectors (products). (The model includes two products and three inputs.) They examined various input and output based subsidies. They conclude that *only payments based on fixed product-specific inputs are fully decoupled*. Payments based on the use of land are coupled to the extent they affect the allocation of land. The degree of decoupling depends on the characteristics of the whole policy package affecting all the alternative products and the specific elasticity values in each country.

Under the Policy Evaluation Matrix (PEM) pilot project, the OECD (1999), in a stylised one-product two-input model, studies the ranking of the effects on production of different kinds of payments. They examined three kinds of payments: payments based on output, and payments based on two kinds of inputs, one with a more elastic supply than the other. The study shows that *the effects on production of payments based on the most rigid input are smaller than those induced by payments based on output*. But both are smaller than those induced by payments based on the most elastic input. This result is consistent with Gohin *et al.* (1999).

When measuring the degree of decoupling, it is the relative price effect on which most of the empirical studies focus. Cahill (1997) applied an empirical model for the behaviour of area and yields calibrated on 1991/92. Based on his analysis, the degree of decoupling of CAP area payments was 0.5 for sunflower and 1 for wheat.

Moro and Sckokai (1998) define a similar rate of decoupling. According to their research, the degree of decoupling of area payments was 0.5 for oilseed, 0.6 for maize and 1 for other cereals. These estimates refer to the case of identical percentage change in prices for the three commodities.

Other empirical studies try to measure the supply response effects of policy measures, without using the concept of decoupling. Guyomard *et al* (1996) and Lin and Washington (1997) provide two examples. The empirical studies illustrate two important issues in measuring degrees of decoupling in this context:

- *the difficulty of interpreting the rate of decoupling* when we have negative coupling, or whenever the calculated rate falls outside the interval (it is less than zero or more than one);
- *the importance of defining a complete package*, especially when there are strong effects across commodities.

A latest study (OECD, 2003a) using the PEM model analysed the production and trade effects of the various categories of measures that comprise the Producer Support Estimates (PSEs). The analysis which has focused on arable crops (cereals and oilseeds) has ranked these effects by size and then classified the various categories of measure according to their degree of decoupling (OECD, 2003a). Its findings show that payments based on the use of variable inputs and those based on output (market price support and output payments) are the categories with the greatest impact on production and trade. Conversely, *payments based on acreage are the most decoupled category*. Furthermore, the impact of such payments is all the lower where there is no obligation to grow specific crops on eligible land in order to receive the support. Finally, the study also reveals a positive correlation between the degree of decoupling of the relevant categories of measure and their efficiency in terms of income transfer to producers.

The latest results of the PEM model show that payments based on historical entitlements have the smallest market distorting effects, which are significantly lower than that of area based subsidies. This means that the degree of decoupling is the highest for this category. (See Figure 2.) The latest sensitivity analyses (carried out in 2005) show similar results.

These analyses suggest that more decoupled forms of agricultural support are less distorting and they provide more efficient income transfer than the traditional output based subsidies. (Martini – Anton – Dewbre, 2005.)

## **6 Assessment of the SFP based on WTO and OECD decoupling criteria**

In this chapter we confront the single farm payment (SFP) with the decoupling criteria described in Chapter 1.

### *6.1 Assessment of the SFP based on WTO decoupling criteria*

During the midterm review of the CAP WTO concerns became crucial. The Commission (2002) acknowledges that there is a need to preserve farming incomes in a less trade distorting way, and decoupling of direct payments is seen the solution to that problem. As the Commission stresses: the green box compatibility of the scheme will help secure these payments in an international context. The Commission states in its MTR proposal of January 2003 that decoupling will allow the European Union to maximise its negotiating capital in order to achieve its WTO objectives such as non-trade concerns. Hence, the proposals for decoupling could be crucial in getting the best deal for the European Model of Agriculture (EC, 2003).

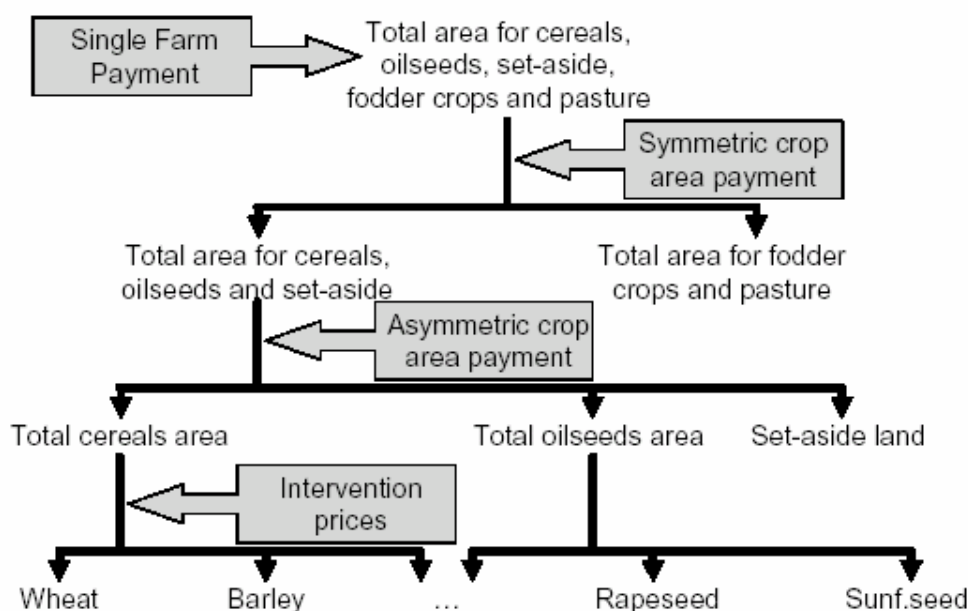
The 2003 CAP reform constitutes a major change in the way direct payments are made in the EU. The introduction of the SFP results in a reduction in the link between the payments and production. The EU argues that the payments do not distort trade and therefore should be placed in the green box.

The *WTO Agreement on Agriculture (AoA)* defines the *green box* criteria in the following way.

1. They have no, or at most minimal, trade-distorting effects or effects on production.

Findings of the OECD PEM analysis (2003) show that payments based on acreage are the most decoupled category. In that way they have no or at most minimal trade and production distorting effects. Furthermore, the impact of such payments is all the lower where there is no obligation to grow specific crops on eligible land in order to receive the support. SFP meets both criteria.

Despite a variety of potential indirect effects of decoupled programs on farmers' decisions, production effects are likely smaller than direct effects of price- and production-linked coupled programs. Modelling the producers production decisions also the results of the OECD's AGLINK model show that the SFP's influence is minimal (OECD, 2004). The impact of the various support measures on production decisions is represented in Figure 1. Intervention prices varied by crop and determined which crop was to be planted. As can be seen at the bottom of Figure 1, such price support created incentives for area decisions at all levels. The area payments introduced to compensate for reductions in intervention prices in 1992 did not favour a specific cereal compared to another, but oilseed producers received a higher payment per hectare than did grain producers. These payments were important in determining whether to plant cereals or oilseeds (or to set-aside land), but were not relevant for the allocation of land across individual cereals or oilseeds.



Source: OECD, 2004.

**Figure 1: Effects of different forms of support on production decisions**

The Berlin Agreement on the Agenda 2000 reform equalised payments between oilseeds, cereals and set-aside. Payments therefore no longer influenced the choice between these commodity groups, although, as shown in Figure 3, they still had an impact on the total area devoted to these uses. In other words, farmers still had an incentive to keep land in this general category of use, if not to a specific crop. The new SFP includes fodder crops and pasture, as well as some other crops and idling, as eligible activities. The direct impact of these payments relates to the decision on the total of these land uses (as opposed to the small share of non-eligible uses such as fruits, vegetables and, particularly, non-agricultural uses). The SFP affects only the first stage of Figure 3 as subsequent allocation decisions depend only on relative returns (OECD, 2004). Thus, although no program appears to be completely without potential effects on agricultural production, effects of decoupled programs are likely to be small.

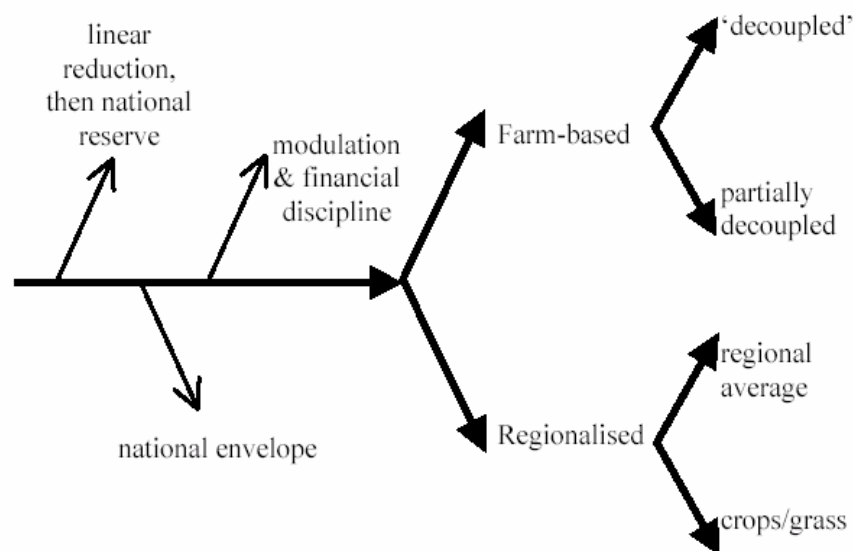
2. As the SFP is financed from the EU budget, it meets the criteria that payments shall be provided through a publicly-funded government programme not involving transfers from consumers.

3. The SFP does not have the effect of providing price support to producers.

4. Payments should also comply with certain subsidy specific criteria. As regards direct income support Annex II of the AoA defines decoupled income support in the following way:

*Payments are based on clearly-defined criteria.*

It was expected that single farm payment brings a significant simplification of the support system. However, different de-coupling models and the possibility of partial de-coupling have resulted in a very complex system with a wide range of national diversities (See Figure 2).



Source: Swinbank, 2005.

**Figure 2: Overview of the SFP system**

What is more, rather than determine payments for the farm on the basis of that farm's historic claims, regionalised schemes can apply. All of the money that would have been paid in a particular region (or country) can be pooled, and then paid on a flat rate basis on all eligible land in the region (with or without combination of arable and livestock payments) (Swinbank, 2005). The picture is more complicated if a hybrid of these to basic systems is applied.

*Payments shall not be related to, or based on, the type or volume of production undertaken by the producer in any year after the base period.*

There are two shortcomings of the SFP as regards this point. First, to claim the SFP, the farmer in subsequent years would have to remain in agriculture and show that the land still farmed or kept in good agricultural and environmental condition. Second, land on which fruit and vegetables were grown, or which was planted to permanent crops (e.g. orchards) could not be used to claim the SFP.

*Payments shall not be related to the prices applying to any production undertaken in any year after the base period.* (See above at green box criteria.)

*Payments shall not be related to the factors of production employed in any year after the base period and no production shall be required.*

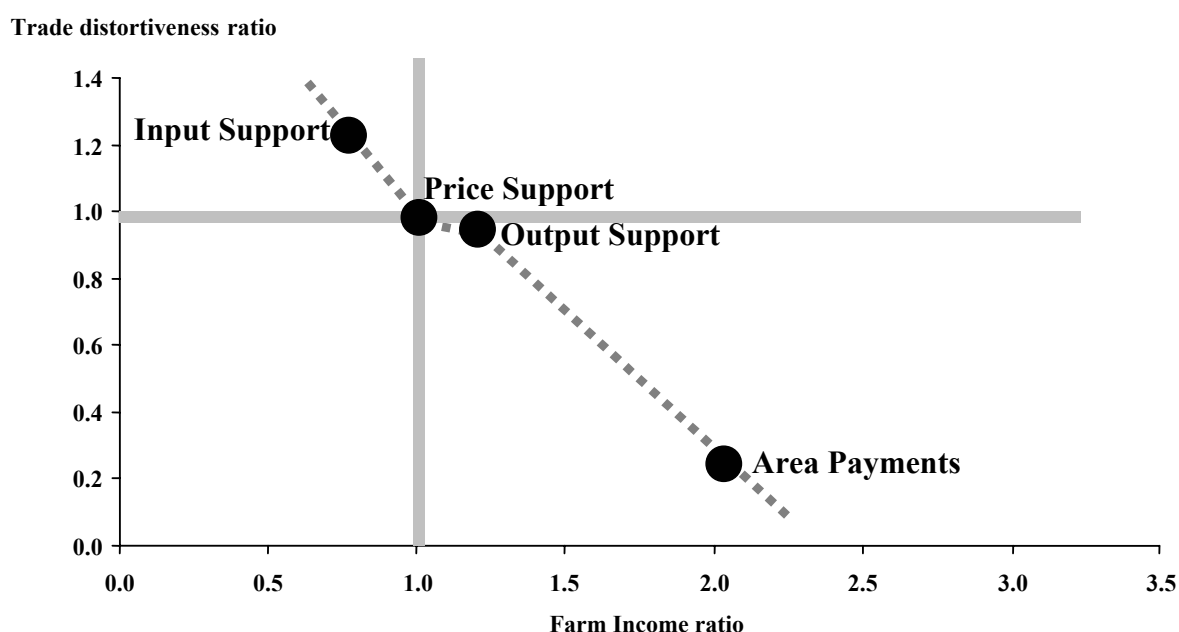
It is very difficult to design a policy which does not influence the future use of inputs. Even when payments are based on historical acres and yields, expectations of the eventual reassessment of those bases can cause farmers to retain land in production of particular crops. Similarly, safety-net policies that reduce the downside risk of fluctuations in income clearly can have an effect of keeping resources in farming (Josling, 2004).

## 6.2 Assessment of the SFP based on OECD decoupling “criteria”

According to the equilibrium approach decoupled measures do not have trade and production effects or they are at most minimal. *Effective full decoupling does not result in a production level exceeding the one without the applied measure.* The measure may affect decisions of producers but does not result in higher production

In theoretical terms, no specifically agricultural policy is fully decoupled from production and therefore without consequences for trade. If, in any way, the terms of a support measure are tied to the process of farming, then that measure is likely to alter the relative incentive to farm production *vis-à-vis* other economic activities (OECD, 2002).

As OECD (2002) suggests policy reform should be eased by evidence of a win-win relationship between the income transfer efficiency of domestic policies and their tendency to distort trade. According to this work there is a strong inverse correlation between the extent to which a measure distorts production and trade, and its efficiency in transferring income benefits to those who farm. Put simply, the more a policy pays to a farmer without affecting production decisions, the greater the share of income retained by the household and the smaller the impact on production and trade. Figure 3 presents these trade-offs, which were calculated using the OECD’s PEM model. The OECD’s work on income transfer efficiency shows clearly that if current production-based supports were replaced with direct income payments, efficiency costs could be halved without reducing the incomes of farm households.



Source: Dewbre, Anton and Thompson (2001). The trade distortiveness ratio measures the impact of policy on net traded quantities relative to the impact of market price support, while the farm income ratio measures the effect of policy on farm income, also relative to that of market price support.

**Figure 3: The relationship between trade distortions and the transfer**

Both the results of the PEM analysis (OECD, 2005) and analysis on transfer efficiency (OECD, 2002) suggest that the SFP seems to be an efficient choice. It is efficient as it provides only minimal distortions and can meet the simultaneous requirement of income support of domestic producers and minimal distortions with the smallest cost.

According to Cahil (1997) a policy is *fully decoupled* if it does not influence production decisions of farmers receiving payments, and if it permits free market determination of prices. That is, full decoupling is a very restrictive concept that requires no change in the way farmers and consumers take decisions.

Decoupled farm programs provide income transfers that raise the overall income and economic well-being of farm households. Decoupled payments do not have direct effects on production decisions or agricultural output because they do not change returns to production. However, decoupled programs can have indirect effects on farm production decisions and aggregate output. The system of SFP with several national deviations can not be considered as fully decoupled.

## 7 Concluding remarks

During the mid-term review the European Union (EU) made a significant step in the direction of a more transparent and less trade distorting agricultural policy. The reforms although, have direct impacts only on domestic subsidies, only one of the three pillars of the WTO Agreement on Agriculture (AoA). The reforms did not include any significant changes to EU border support. However, the proposed changes of the intervention system (price reductions, annual buying-in intervention limits, abandonment of rye intervention etc.) and possible impacts of the reform on production would have as a consequence a reduced need for export refunds and for high level protection.

As regards the domestic support, the European Union appears to have large space for manoeuvre. The above mentioned changes of the intervention system and the series of new reforms (April 2004 reforms of the cotton, olive oil, tobacco, and hops sectors and the proposed sugar sector reform) would divert significant amounts of support away from the EU's AMS, while the introduction of SFP can transfer much of the blue box subsidies into the green box. Decoupling of direct payments and WTO classification of the new payments seem to be one of the most important questions from the point of view of WTO negotiations.

The 2003 reform of the CAP constitutes a major change in the way direct payments are made in the EU. The introduction of the SFP results in a reduction in the link between the payments and production. The EU argues that the payments do not distort trade and therefore should be placed in the green box as a decoupled income support. Based on our analysis, this seems to be possible, as the SFP meets not only the current WTO (design based) criteria of decoupling, but can also be qualified as effective fully decoupled system using the OECD terminology.

## References

- ABARE (1999): Reforming World Agricultural Trade Policies, ABARE Research Report 99.12.
- AGRA EUROPE, Bonn (various issues)
- AGRA EUROPE, London (various issues)
- Annania, G. – Bohman, M. E. – Carter, C. A. – McAlla, A.F. (2004): Agricultural Policy Reform and the WTO. Where are we heading? Edward Elgar Publishing, Cheltenham, Northampton.
- Baffes, J. – De Gorter, H. (2003): Decoupling Support to Agriculture. An Economic Analysis of Recent Experience. Paper prepared for presentation at the Annual Bank Conference on Development Economics-Europe, Paris, May 15-16, 2003.
- Berthelot, J. (2004): Why the EU's blue subsidies are coupled and subject to reduction commitments. Multilateralism at a crossroads. WTO Public Symposium, 25-27 May 2004.
- Binfield, J. – Donnenellan, T – Hanrahan, K – Hart, C. – Westhoff, P. (2004) CAP Reform and the WTO: Potential Impacts on EU Agriculture, FAPRI Columbia

- Blandford, D. H. - de Gorter, H. – Harvey, D. (1989) Farm income support with minimal trade distortions. Food Policy 14.
- Brockmeier, M. - Salamon, P. (2004), WTO-Agrarverhandlungen – Schlüsselbereich für den Erfolg der Doha-Runde: Optionen für Exportsubventionen, interne Stützung, Marktzugang. Sonderheft 268, Braunschweig.
- Burfisher, M.E. –Hopkins, J. (2003): Decoupled Payments: Household Income Transfers in Contemporary U.S. Agriculture. ERS/USDA, Agricultural Economic Report No. 822, Washington DC.
- CEC (2003a): A long-term perspective for sustainable agriculture, COM (2003)23 final, January, Brussels.
- CEC (2003b): Reform of the Common Agricultural Policy: A Long-Term Perspective for Sustainable Agriculture – Impact Analysis, March, Brussels.
- CEC (2003c): Reform of the Common Agricultural Policy: Medium-Term Prospects for Agricultural Markets and Income in the European Union, December, Brussels.
- Cahill, S.A. (1997), “Calculating the rate of decoupling for crops under CAP/oilseeds reform”, *Journal of Agricultural Economics*, Vol. 48(3), pp. 349-378.
- Chatellier, V. –Delattre, F. (2003): L'évolution des soutiens publics directs aux exploitations agricoles de montagne. INRA
- Cochrane, W.W. (1959) Some Further Reflections on Supply Control. *Journal of Farm Economics* 12/3.
- Council of the European Union (2003): Legislative acts and other instruments, Council Regulation establishing common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers and amending Regulations (EEC) No 2019/93, (EC) NO 1452/2001...
- Daughjerg, C. (2004): International trade negotiations and reforms of the CAP. Paper to the 5th SGIR Pan-European Conference, ‘Constructing World Orders’, The Hague, Netherlands, 9-11 September 2004, Section 15: The European Union in World Politics.
- DEFRA, Economic and Statistical Directorate (2003): CAP Reform Implementation: Distributional Impact of Area vs. Historical Payment Schemes. <http://www.defra.gov.uk/farm/capreform/back01.htm>
- DEFRA (2004) CAP Single Payment Scheme: Basis for Allocation of Entitlement. Impacts of the Scheme to be Adopted in England. London
- Department of Agriculture and Rural Development (2004c): CAP Reform – Single Payment Scheme: Operation of the National Reserve and other Entitlement issues. [www.dardni.gov.uk](http://www.dardni.gov.uk)
- Department of Agriculture and Rural Development (2004d): CAP Reform – Decoupling Models and Equality Implications. [www.dardni.gov.uk](http://www.dardni.gov.uk)
- Dewbre J., Anton J., Thompson W. (2001): The transfer efficiency and trade effects of direct payments. *American Journal of Agricultural Economics* 83(5): 1204-1214.
- Dijck, P. – Faber, G. (2004): CAP Reform and the Doha Development Agenda Tjalling C. Koopmans Research Institute Universiteit Utrecht. <http://www.koopmansinstitute.uu.nl>
- Frandsen, S. E. – Gersfelt, B. – Jensen, H. G. (2002): Decoupling Support in Agriculture. Impacts of redesigning European Agricultural Support. Paper prepared for the Fifth Annual Conference on Global Economic Analysis, Taipei, Taiwan, June 5-7, 2002.
- Frandsen, S.E. et al. (2003): The Impacts of Redesigning European Agricultural Support. In: *Review of Urban and Regional Development Studies*, Vol. 15, No. 2.
- Gohin, A., – Guyomard, H. – Le Mouel, C. (1999): Measuring the degree of decoupling of alternative internal support policy instruments: The greenbox issue, EAAE Conference, Warsaw.
- Gohin et al. (2000): Measuring the Degree of Decoupling of Alternative Internal Support Policy Instruments: The Green Box Issue, Rennes. Electronical version: <http://www.rennes.inra.fr/economie/pdf/AJAE1.pdf>, February 20th, 2004.
- Guyomard, H. – Le Bris, K. (2003): The Fischler's Proposals for the Common Agricultural Policy: Paving the Way for the Future? Paper presented at the International Conference on Agricultural policy reform and the WTO: Where are we heading? Capri (Italy), June 23-26, 2003
- Guyomard, H. – Baudry, M. – Carpentier, A. (1996): “Estimating crop supply response in the presence of farm programmes: application to the CAP”, *European Review of Agricultural Economics*, Vol. 23, pp. 401-420.
- Halmai, P. (2004): A reform ökonómiája. (Economics of the Reform) KJK-KERSZÖV Jogi és Üzleti Kiadó Kft. Budapest
- Harvey D. (2003): How decoupled can we get? EuroChoise
- Hennessy, D.A. (1998): “The production effects of agricultural income support policies under uncertainty”, *American Journal of Agricultural Economics*, Vol. 80, pp. 46-57.
- Horseman, C. (2003) CAP Reform Executive Briefing Agra Europe Special Report, London
- Josling, T. – Tangermann, S. – Warley, T. K. (1996) Agriculture in the GATT MacMillan, Houndmills
- Josling, T. – Tangermann, S. [1999]: Implementation of the WTO Agreement on Agriculture and Developments for the Next Round of Negotiations. *European Review of Agricultural Economics*, 26(3)., 371–388.



- Josling, T. (2004): Domestic Farm Policies and the WTO Negotiations on Domestic Support. In: Annania, G. – Bohman, M. E. – Carter, C. A. – McAlla, A.F. (2004): *Agricultural Policy Reform and the WTO. Where are we heading?* Edward Elgar Publishing, Cheltenham, Northampton.
- Kelch, D. – Normile, M. A. (2004): CAP Reform of 2003-04. USDA ERS working paper (WRS-04-07).
- Kjeldahl, R. (1993) Direct Payment: How to Classify and Evaluate the Schemes, in: Lehmann-Popp-Stucki (1993)
- Lehmann, B. – Popp, H. W – Stucki, E. Ed. (1993) *Direct Payments in Agricultural and Regional Policies*, Konstanz
- Lin, W. - Washington, A. (1997), Measuring supply response under 1996 Farm Act: The cases of corn and soybeans, paper presented at the AAEA annual meeting, Toronto.
- Mahé, J. P. (2001) Can the European Model be negotiable in the WTO? *EuroChoices* pp. 10-15.
- Moro, D. - Sckokai, P. (1998), Modelling the CAP reform: degree of decoupling and future scenarios, WP. Università Cattolica de Milano.
- OECD (1999): A matrix approach to evaluating policy: preliminary findings from PEM pilot studies of Crop policy in the EU, the US, Canada and Mexico, COM/AGR/CA/TD/TC(99)117/FINAL.
- OECD (1998): *Agriculture in a Changing World: which Policies for Tomorrow?*, Meeting of the Committee for Agriculture at the Ministerial level, Press Communiqué, Paris, 5-6 March.
- OECD (2001a): Decoupling: a conceptual overview.
- OECD (2001b): Market effects of Crop Support Measures. OECD, Paris.
- OECD (2001c): Income transfer efficiency of farm support measures. [AGR/CA/APM(2001)24].
- OECD (2001d): Multifunctionality: Towards an Analytical framework.
- OECD (2001e): The Uruguay Round Agreement on Agriculture: An Evaluation of its Implementation in OECD Countries.
- OECD (2002): Impacts of Future Trade Liberalisation on Agriculture: Extending the Uruguay Round.
- OECD (2003a): Effects of Quantitative Constraints on the Degree of Decoupling of Crop Support Measures. [www.oecd.org](http://www.oecd.org) AGR/CA/APM(2002)12/FINAL
- OECD (2003b): Analysis of the 2003 CAP Reform. AGR/CA/APM(2003)16/FINAL
- OECD (2004): Analysis of the 2003 CAP Reform. AGR/CA/APM(2003)16/FINAL
- OECD (2005): Decoupling: illustrating some open question on the production impact of different policy instruments. AGR/CA/APM(2005)11/FINAL
- Petit, M. (2003): The Current Process of CAP Reform Implications for WTO Negotiations. Contributed paper presented at the International Conference Agricultural policy reform and the WTO: where are we heading? Capri (Italy), June 23-26, 2003
- Roberts, I. (et al.) [1999]: Reforming World Agricultural Trade Policies, ABARE Research Report 99.12, RIRDC Publication no. 99/96, Canberra.
- Roberts, I. [2003]: Three Pillars of Agricultural Support and Their Impact on WTO Reforms. ABARE eReport 03.5 Canberra.
- Roberts, I. [2005]: WTO Agreement on Agriculture: The Blue Box in the July 2004
- Swinbank, A. (2005): The Evolving CAP, Pressures for Reform, and Implications for Trade Policy Paper prepared for the Australian Agricultural and Resource Economics Society's pre-conference workshop: *Trade Policy Reform and Agriculture: Prospects, Strategies, Implications*. Coffs Harbour, NSW, 8 February 2005
- Tangermann, S. (1996) Implementation of the Uruguay Round Agreement on Agriculture: Issues and prospects. *Journal of Agricultural Economics*
- Tangermann, S. (1998) An Ex-post Review of the 1992 MacSharry Reform. In: Ingersent – Rayner – Hine (Eds.) (1998)
- The Royal Institution of Chartered Surveyors (RICS), Rural Faculty (2003): *Single Farm Payment. The prospects for trade and value*. London
- Tyers, R. (1991) "Searching under the Light: The Neglect of Dynamics and Risk in the Analysis of Food Trade Reforms" 21st International Conference of Agricultural Economists. Tokyo. (manuscript)
- WTO Committee on Agriculture (2003a): Negotiations on Agriculture. First Draft of Modalities for the Further Commitments. TN/AG/W/1.
- WTO Committee on Agriculture (2003b): Negotiations on Agriculture. First Draft of Modalities for the Further Commitments. Revision. TN/AG/W/1/Rev. 1.
- WTO Committee on Agriculture (2003c): Negotiations on Agriculture. Report by the Chairman, Mr. Stuart Harbinson, to the TNC. TN/AG/10.
- WTO (2004): Decision Adopted by the General Council on 1 August 2004. WT/L/579
- Young, C.E. and P.C. Westcott (2000): How decoupled is US agricultural support for major crops?, *American Journal of Agricultural Economics*, N°3, Vol. 82, pp. 762-767.