



the European Union's Common Agricultural Policy

an overview of reforms



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foreword

Since its inception in the early 1960s the Common Agricultural Policy (CAP) of the European Union has delivered high levels of support to EU farmers and has had substantial implications for markets for agricultural products internationally. Over time the CAP has been adapted to meet changing community expectations, internal budgetary constraints and external pressures.

While the CAP is being continually adapted to changing circumstances, there has been a consistent pattern of policy development since 1992. At that time the European Union started moving away from high levels of open ended, commodity based price support toward lower price support, but with farmers being compensated through ongoing direct support payments. This pattern has been developed in subsequent reforms that have been aligning internal prices more closely with world market prices for a widening range of commodities.

In its Mid Term Review of 2003, domestic support has become largely concentrated in the form of a single payment scheme under which the various previous commodity based payments are aggregated and paid on a single farm or area basis. Such payments have been structured to be largely independent of current commodity production and prices.

In this report – which is a slightly shorter version of ABARE's full report (available on the website too) – an appraisal is made of the changes that are occurring in the CAP and their implications for EU production and trade. The objective is to contribute to debate on the development of policies that will substantially influence markets for agricultural products internationally.



Phillip Glyde
Executive Director
August 2007

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summary and conclusions

establishment of high agricultural protection

- » The Common Agricultural Policy (CAP) as it has developed since the early 1960s has been highly protective. Since it was introduced it both encouraged production and discouraged consumption through open ended high price support that was underpinned by variable import levies, state intervention and trading, and export subsidies.
- » It helped transform the European Union from a net importer of major temperate agricultural products, including cereals, sugar, dairy products and beef, into a major net exporter. Because of the elevated internal prices generated, EU exports needed heavy subsidisation to be salable internationally and consequently they depressed world prices.
- » Although the European Union has become a net exporter of many temperate products, it has maintained preferential access to regulated amounts of imports from members' former colonies and traditional trading partners.

reforming the CAP

- » The CAP's encouragement of surpluses precipitated a budget funding crisis in the mid-1980s. Policy responses were to restrict output of milk, the highest budget cost item, through production quotas; to increase funds made available by members to the Community; and to impose budget expenditure guidelines or limitations for agriculture. These guidelines continue but their form was changed in 2002.
- » Since these earlier reforms, the CAP has been modified to make it less directly production stimulating and to meet a range of other objectives, including:
 - providing income support to farmers in more direct ways than through high price support
 - making budget outlays more predictable and manageable
 - better meeting a number of environmental, heritage, rural development and, recently, alternative energy objectives and
 - reaching accommodation with other countries on trade issues.

- » Since 1992, when Commissioner MacSharry introduced groundbreaking reforms, the European Union has pursued a strategy of weaning agricultural industries off high price support. This is being done through reducing market intervention prices to closer to world prices and compensating farmers by direct payments. Intervention purchases and sales are also being reduced.
- » The reforms have been on a commodity basis, initially reducing support prices for arable crops (cereals, oilseeds and protein crops), providing ongoing compensation payments to growers, and providing higher per animal payments (headage payments), along with reduced support prices for beef. The reforms were later deepened through larger compensated cuts to support prices and widened to include more commodities in ongoing subsequent reforms.
- » As part of the 1992 reforms, annual area reduction programs were instituted for arable crops, with program reductions ranging from 5 per cent to 15 per cent. For most recent years they have been set at 10 per cent. Farmers receive compensation payments for the areas set-aside and have been permitted to plant nonfood crops on them.
- » Under provisions in the Mid Term Review of 2003 the various forms of direct payments are now being aggregated and paid per farm or on a regional basis at an average rate per hectare under a single payment scheme (SPS). A key motivation has been to comply with WTO rules on decoupling. Such rules enable payments not linked to production, prices or inputs to be exempted through the 'green box' (see glossary) from cuts or limitations, because they are considered minimally market distorting.
 - Nevertheless, most EU member countries have elected to maintain a limited proportion of their support payments in coupled form.
- » An EU policy to orient support more toward rural development and environmental objectives is being advanced through a measure known as 'modulation'. This provides for a base rate levy of 5 per cent on guarantee payments for all but small farms, with funds used for rural development and the environment.

CAP and multilateral trade reforms

- » There were synergies between the 1992 reforms and the Uruguay Round of multilateral trade negotiations that concluded in 1994. The lower support prices and exemption of compensation and headage payments under the 'blue box' (see glossary) in the agreement enabled the European Union to

substitute forms of domestic support that were exempt from limits or cuts for direct export subsidies and to meet significant agreed cuts in direct export subsidies.

- This has made it easy for the EU to comply with commitments to cut both its nonexempt domestic support and export subsidies.
- » Although the European Union committed to marked reductions in bound tariffs in the Uruguay Round, the cuts were from abnormally high levels that applied in the period of extremely low world prices and high tariff equivalents from 1986 to 1988. Consequently, high to very high tariffs persist for key commodities, especially beef, sugar, cereals and dairy products.
- » Access to the EU market was prised open slightly in the Uruguay Round through the use of tariff quotas.
- » Use of tariff quotas also enabled EU authorities to continue their preferential arrangements to particular supplying countries.
- » In the Doha Round negotiations, the European Union is taking positions that further the course of the changes affecting it under the Uruguay Round, advocating further reductions or elimination of export subsidies, some tightening of rules on domestic support and further cuts to tariffs. However, it is also pursuing 'sensitive' product status, enabling lower tariff cuts along with expanded tariff quota access for key products.
 - The ongoing replacement of price support by direct payments under the single payment scheme, that the EU considers decoupled, also provides the European Union with the ability to commit to large cuts to, or even elimination of, export subsidies under the Doha Round – lower support prices mean lower export subsidies.
 - The European Union will also be able to commit to large reductions in nonexempt forms of domestic support. Reduction of support prices provides room for the EU to make significant reductions to import barriers without undermining the lower support prices.

changes in production, consumption and trade

- » In relative terms, agriculture is a declining industry in the European Union, its value added (the value of total output less intermediate consumption of inputs and depreciation) having declined from 3.7 per cent of gross domestic product in 1980 to 1.6 per cent in 2004.

- » The sector's declining share has arisen from faster growth in other activities. In absolute terms, EU agricultural production is still rising, slowly. Production increased relatively rapidly from the early 1960s to the mid-1980s. Since then it has been slow, with differing trends between commodities. Livestock industry growth has been especially slow since about 1987, with contributing factors including milk quotas and BSE and foot and mouth disease outbreaks as well as slowly increasing, and for some commodities like butter and beef declining, domestic demand.
- » While overall growth in both total livestock and crop production has been slow since the mid-1980s, there have been significant changes in the balance within these groups. Production levels of wheat and cheese have been rising steadily and there has been some growth for sugar. Production of coarse grains has been static and production of beef and butter are declining. Growth in cereals, including wheat, would have been reduced somewhat by area reduction programs.
- » Demand growth has also been slow, reflecting low growth in population. Nevertheless it has generally been slightly faster than production growth and exportable quantities have declined from the high levels reached between the mid-1980s and the early 1990s.
- » Some notable developments in trade since the late 1980s include:
 - reduced net exports of wheat, partly reflecting lower support prices under reforms that increased competitiveness relative to grain substitutes, and area reduction programs
 - maintenance of net exports of cheese that constitute a substantial proportion of total international trade in this item, for which demand has been rising both domestically and internationally
 - maintenance of high net exports of sugar
 - much reduced net exports of butter and milk powders and
 - declining exports of beef, with the European Union becoming a net importer.
- » Projections to 2013 by the European Commission (2007a) indicate:
 - a recovery in net exports of cereals, including wheat, from their low levels in the early part of this decade
 - net exports of pig and poultry meats and net imports of sheep meat being relatively constant
 - net exports of butter and skim milk powder declining

- a reversal from the EU being a net exporter of sugar to being a net importer and
- a substantial increase in net imports of beef.

issues of emerging and current policy importance

- » There is a wide range of issues of current and emerging policy importance concerning the CAP. Important issues and conclusions for some chosen issues of particular importance are addressed below.

sugar industry reforms

- » Since 2005 the European Union has pursued policies to substantially reduce subsidised sugar exports, to comply with WTO rulings. A restructuring program to ensure this outcome through reducing production capacity is running well behind schedule. While special measures to overcome domestic supply imbalances are likely during the restructuring, the ultimate outcome will be a smaller industry with its support being less distorting both to the EU economy and to the world sugar market.

dairy industry reforms

- » Dairy industry reforms are proceeding, with compensation payments for lower support prices to be included in the single payment scheme. Discontinuation of production quotas past 2015 is being foreseen; however, the EU Agriculture Commissioner has suggested expanding production quotas ahead of quota elimination.
- » If EU internal market prices remain well above world prices and/or large compensation payments are made for reductions in support prices, any marked quota expansion would be likely to result in substantially increased production and exports.
- » One effect of increased production would be depressed market prices for dairy products both on the world market and to EU producers. Another would be pressures by EU dairy interests for ongoing, additional compensating support that would be inconsistent with the thrust toward more market oriented agriculture. The risks of such outcomes would be far less if the quotas were simply eliminated, with producers then responding to the changed market situation.

- » The substantial potential impacts of EU supply policies on world dairy product markets arise because the EU market is far larger than amounts traded internationally and small changes in the balance between EU production and consumption can have major impacts on world trade and prices.

fruit and vegetable and wine industry reforms

- » In 2007, reforms are being considered for support arrangement for the fruit and vegetable industry and the wine industry. Support arrangements suggested by the European Commission are to promote greater market orientation and competitiveness, with direct payments, where they apply, to be incorporated into the single payment scheme.
- » The support arrangements in these sectors differ from those for other major agricultural commodities, like cereals, oilseeds and animal products, and support is generally less amenable for incorporating into the single payment scheme than for those other industries.
 - For fruit and vegetables, direct support has been provided for some products through processing aids, but much existing support has been through tariff protection and management of market supplies, including distillation as a last resort.
 - For wine, support has been through removal of surplus quantities through distillation and controls and incentives to limit and control plantings.
- » Reform proposals for the wine sector advanced by the Commission in July 2007 include grubbing areas of vines, elimination of distillation and a range of promotion, rural development and quality control measures.
- » Where the possibility exists for support payments to be incorporated into the single payment scheme, the Commission is suggesting that such payments be included in the scheme. This would include payments for processing aids for the fruit and vegetables to which they apply and payments for the total area under wine grapes, not just the areas to be grubbed, in the single payment scheme.
- » In essence, the suggestions for wine reform would be to remove excess production capacity through incentives to remove substantial areas of vines and to improve the competitiveness of EU wines through removal of regulatory impediments to competitive production and marketing. At the same time, removal of distillation as an avenue for surplus disposal would act to discourage the re-emergence of surpluses if the other measures are successful in addressing current surplus problems.

concerns about environment, animal welfare and health, and energy security

- » A range of issues associated with unpriced environmental conditions and cultural and heritage values have been referred to as the 'multifunctionality' of agriculture. Although there are also negatives associated with support of agriculture, such as agricultural pollution and agriculture induced loss of habitat, multifunctionality has been advanced as a reason for protection.
- » Also, community concerns about issues such as animal welfare, genetic engineering and energy security are now strongly entrenched on policy agendas.
- » Multifunctionality and animal welfare issues are increasingly being addressed in the context of rural development policy, along with more market oriented approaches involving decoupling and the single payment scheme. For example, cross compliance conditions for SPS payments require that environmental and animal welfare standards are met.
- » If 'modulation' (transfer of money from the CAP's direct aid and market support fund to its rural development and agri-environmental measures – see glossary) to advance rural development reduces direct agricultural protection and helps remove obstacles to rural adjustment, it should help reduce market distortions. If, however, public funds are used to finance rural development projects that should most efficiently be funded privately, modulation may help perpetuate many market distortions. Examples could include such things as state funding of pollution abatement, where the costs could be internalised to producers under the polluter pays principle or government subsidies to upgrade or maintain private plantings.
- » The European Union has responded to community concerns about fuel security through an ambitious biofuels production program that has the potential to markedly affect production and markets, especially for cereals.

appraisal of CAP reforms

- » The European Union has been making positive changes in its agricultural support policies through changing away from price support toward less market distorting decoupled payments, and limiting budgetary expenditure on agriculture.
- » It has been willing to change the *forms* of support for its agriculture but it has done very little to reduce the *levels* of support. In particular it has retained

substantial levels of support and protection through tariffs and tariff quotas, and member states have retained some coupled payments.

- » The EU has framed the rationale for changing toward decoupled payments in terms of decoupled support being minimally market distorting, as is stated in the Uruguay Round Agreement on Agriculture. The implication is that, by changing to decoupled payments, the effect on reducing policy induced market distortions will be much the same as eliminating support payments.
- » The extent to which the changes actually reduce market distortions depends critically on whether the decoupled payments are in fact minimally market distorting, not just considered to be. It also depends on the level of support provided and the effects of other forms of support.
- » To be minimally distorting to production, consumption, trade and prices, changing from current coupled payments or price support to decoupled support needs to be almost identical in its effects to the complete removal of coupled payments.
- » Changing from highly distorting price support toward decoupled payments clearly reduces market distortions because prices faced by consumers are closer to world prices. Because of this the EU change toward decoupled payments along with lower price support means less market distortion than maintaining the same levels of price support.
- » However, there are many reasons why changing to decoupled payments reduces production distortions by far less than eliminating the support, including:
 - The income and wealth effects from the payments affect credit availability and adoption of technology, thereby affecting production.
 - The payments are being made in conjunction with forms of clearly distorting support, including tariffs and tariff quotas, that affect prices and mean that even if the payments themselves were properly decoupled the support system would still distort market prices, production, consumption and trade.
 - Producers have expectations that payment bases and/or rates can be changed by current planting or production decisions and that political pressure can affect current production decisions. The EU single payment scheme, with its diffusion of support across activities, may reduce this factor but it is unlikely to eliminate it.
 - Importantly, ongoing payments enable producers to continue to produce their preferred products without the costs or risks of making substantial

changes that would be required in the absence of support. As such these payments lock in existing production patterns and levels – levels that have been highly distorted by decades of production stimulating support arrangements.

- The payments support agricultural land prices. The higher prices help to maintain land in agriculture rather than allow it to be used for nonagricultural purposes. They also make it more difficult for new farmers to enter the agriculture sector.
 - Whole farm payments, such as the single payment scheme, are a subsidy to farming and farmers. As such they are likely to maintain resources in farming that would flow to nonfarm activities if that subsidy were removed.
- » Because of these factors, the economic benefits from reduced market distortions arising from changing from coupled to decoupled payments are likely to be overstated, with the change to decoupled payments being only a partial substitute for reducing levels of support.
- » Overall, the European Union is making progress toward an agriculture that is less costly to its economy and less distorting to world markets than the very distorting, open ended price support policies that formerly applied. However, support levels remain high and many remain considerably market distorting. The move to decoupling is helping to reduce distortions but can only go part of the way. There are several areas where distortions could be reduced further, especially through reducing tariffs and other barriers to market access.

introduction

The objective in this study is to provide a brief stocktake of developments in EU agricultural policies and to give an assessment of where EU agriculture and agricultural policies are heading.

initial support arrangements

The stated objectives of a common agricultural policy (CAP) for the European Community, as set down in the Treaty of Rome, may be summarised as:

- » to increase agricultural productivity
- » to ensure a fair standard of living for the agricultural community
- » to stabilise markets
- » to ensure the availability of supplies and
- » reasonable prices to consumers (Harris, Swinbank and Wilkinson 1983).

From the inception of the CAP in the early 1960s, these objectives have been pursued through policies that have delivered high levels of support and protection to EU farmers. That support has covered the great bulk of EU farm products.

Initially, the aims were achieved through a free internal market on which prices were insulated from world markets. The support systems used for most commodities maintained internal prices well above world prices through a combination of border protection, involving mainly variable import levies and quantitative controls, government market intervention and export subsidies. As well as encouraging production, the high support prices depressed consumption. Along with technological advances, the CAP helped transform the European Union from being a net importer of the major temperate agricultural products, including cereals, sugar, dairy products and beef, to becoming a significant net exporter.

budgetary problems and measures to address them

Continuing high levels of support in the European Union along with a decline in international demand in the first half of the 1980s resulted in large surpluses for a wide range of commodities, particularly dairy products, beef, cereals and wine. The surpluses and the associated subsidised exports contributed to depressed world prices. Continuing high support prices and depressed world prices resulted in a Community budget crisis, whereby support through export subsidies, storage and intervention placed extreme pressure on available funds allowed to the Community by the members. An initial specific industry response to the surpluses and costs was to limit production of milk, the highest cost single supported item, through quotas from 1984. The more general policy response was twofold:

- » to increase the funds available to the Community from members and
- » to limit agricultural expenditure growth to 74 per cent of the growth in EU gross national income (GNI) – this guideline was changed in 2002 when it was decided that it should be replaced from 2007 through limiting expenditure growth on agricultural guarantees, though not on rural development, to 1 per cent a year (Rudloff 2006).

The expansion of the European Union to include new members raises challenges for financing the CAP. This is especially so with the accession of twelve new members, mainly in central Europe, since 2004. An important issue is the phasing-in of direct payments under the single payment scheme (SPS – see glossary and below). Payments to the new member states would be initially financed at 25 per cent of rates in the established EU members (EU-15), with rates rising over ten years to parity with the EU-15.

While the support arrangements for new members have been factored into budget plans, it was concluded by Swinnen (Agra Europe 2003a) that enlargement would result in EU budgetary problems after 2007 unless significant reforms were introduced. He concluded that the cost of meeting direct payments for the new member countries, even excluding Romania and Bulgaria, would be €5 billion a year, which is about 10 per cent of total planned 2013 agricultural expenditure.

In the longer term, budgetary pressures generally in EU countries are likely to intensify as a result of demographic factors. The European Union's population is growing only slowly and is projected to start declining from the mid-2020s (European Commission 2006a – baseline figures). Also, the population is aging rapidly, with the proportion over 60 years of age projected to increase from 22

per cent in 2005 to 30 per cent by 2025. Increasing dependency levels and a declining proportion of population in the workforce would restrict the tax base and increase demand for government services. This would squeeze national budgets and increase competition between activities for funds within member countries. Lower national income growth in member countries arising from an eventually declining population and rising dependency levels could in time restrain the funds to be made available to the European Union which could impinge on all EU activities, including agricultural support.

2

reforms to the CAP

Commencing in 1992 with reforms instigated by Commissioner MacSharry, the European Union has been pursuing an ongoing strategy to reform the CAP. The strategy became necessary because of:

- » high costs, both budgetary and to the economy
- » the desirability of greater budgetary predictability
- » changing policy objectives, with less weight to encouraging production and more to qualitative factors including environment and rural development
- » a need to reach accommodation with trading partners such as in the GATT/WTO Uruguay Round.

The thrust of the reforms has been to reduce support prices to closer to world market prices and to compensate producers through direct payments. Initially they were applied to arable crops, comprising cereals, oilseeds and protein crops, and to beef and sheep meat. Ongoing compensation payments paid to crop producers were initially about 30 per cent of the previously supported prices, while various forms of payments were made per head of specified categories of animals held. For example, for beef, there were two main categories of payments – one termed a ‘suckler cow premium’ paid per cow for animals rearing calves for meat and the other a ‘beef special premium’ paid on young male animals twice a year on up to 90 animals per farm. For sheep, payments were made per ewe.

Annual area reduction programs were also applied for arable crops, with farmers being compensated. Under those programs, between 5 and 15 per cent of areas in the 1989-91 base period have been set aside. In recent years, except 2004-05 when the rate was 5 per cent, the annual area reduction program rate has been 10 per cent (European Commission 2007a).

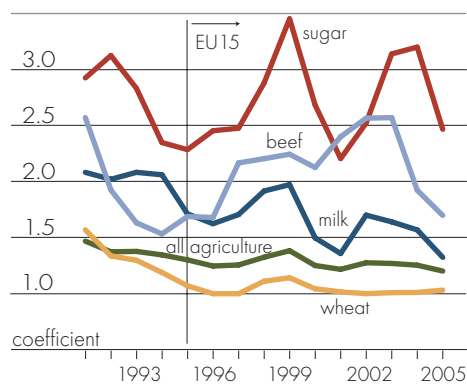
While the changes have given promise of reduced consumer transfers to farmers, it appears from figure A that the extent of the reductions has so far been limited. They have been confined largely to grain where the effects of the reforms are clear. Milk, the other commodity for which consumer transfer rates have declined, was not in the 1992 reforms – at least not to any degree (figure A). Reasons for the decline in consumer transfers for milk include minor reductions in internal

supported prices, while world market prices for dairy products in milk equivalent rose considerably (OECD 2006). For beef, for which significant administered support price cuts were in the reforms, consumer support transfers have varied but have not fallen, suggesting that factors other than the support prices and intervention arrangements have maintained protection. An assessment of the various factors affecting support and protection levels for beef is provided in appendix A.

Since the MacSharry reforms there have been ongoing reforms. In particular, there have been two major policy reviews – Agenda 2000 and the 2003 Mid Term Review. In both of these major reviews there was a deepening of the reforms through further reducing internal support prices and increasing direct payment rates. The price reductions were accompanied by greater support through direct payments. With beef in the Agenda 2000 reforms, marked reductions in intervention prices were accompanied by the introduction of new direct payments termed ‘slaughter premiums’ that were paid in addition to markedly increased payments under existing suckler cow premiums and beef special premiums.

Agenda 2000, the Mid Term Review and subsequent reforms also broadened reforms by increasing the range of commodities to include dairy products, rice, olive oil, tobacco, cotton and hops. Substantial reforms are also being adopted for sugar in response to WTO rulings. In early 2007, the Commission also proposed reforms for fruit and vegetables, and wine arrangements are being reviewed. A brief summary of the main reforms in the 1992 MacSharry reforms, Agenda 2000 and Mid Term Review is provided in box 1.

fig A **consumer nominal assistance coefficients for the EU**



The reform strategy is to replace the high price support arrangements that applied before 1992 by a single payment scheme under which the various payments to compensate producers for lower support prices are aggregated and paid annually either on a single farm basis or per hectare. Each member state is given the option whether the payments should be determined on a historical basis for individual farms, direct aids (the basic or historic approach), or under a flat-rate system (regional), whereby regional amounts are calculated and distributed to farmers on a per hectare basis.

box 1 summary of main reforms since 1992

1992 MacSharry reforms

arable crops

- » Support arrangements for the various cereals, oilseeds and protein crops were integrated, with this group of products categorised as arable crops.
- » Support prices for cereals were reduced from an indicator price of 155 ECU a tonne to a target price of 110 ECU a tonne, and an intervention price of 100 ECU a tonne over three years.
- » Cereal producers were paid ongoing compensation of 45 ECU a tonne for actual areas planted up to regional limits, with rates being proportionately reduced if regional limits were surpassed, on a regional yield base from 1986-87 to 1990-91, with the highest and lowest years excluded.
- » Annual set-asides were established for arable crops for farmers producing more than 92 tonnes cereal equivalents. Initially, actual rates were set at 15 per cent of the 1989-91 base area. Subsequent levels varied between 5 and 15 per cent.
- » Specified nonfood crops were permitted to be grown on set-aside land. These crops included cereals, soybeans, other oilseeds and several other crops, provided they were grown primarily for producing oils for nonfood use, fibres, energy and general biomass production.

beef

- » Intervention prices were reduced by 15 per cent over three years, with farmers compensated through increased direct payments under suckler cow premiums (see glossary) and under a special premium for male beef animals. The beef special premium was paid on up to 90 animals twice a year.

Agenda 2000 reforms (Ross et al. 1999)

cereals and arable crops

- » Intervention prices for cereals were reduced by 15 per cent over the two years to 2001-02 from €119.19 a tonne to €101.31. (The prices had been adjusted from those under the 1992 reforms through green currency changes [see glossary], before the discontinuation of green currencies following the adoption of the euro as the EU common currency in 1999.)
- » Aid payments that corresponded with the compensation payments under the MacSharry reforms were increased from €54.34 a tonne to €63, and aid payments on set-aside land were also set at €63 a tonne.

box 1 **summary of main reforms since 1992** *continued*

- » Set-aside rates for arable crops were set for future years at a basic rate of 10 per cent, although the actual rate would be set annually to reflect market conditions.

beef

- » Intervention prices were reduced by 20 per cent from their mid-2000 level of €3475 a tonne to €2780 by 2002-03. A new institutional support price, termed the 'basic price', was introduced at €2224 a tonne in mid-2002, with price support arrangements operating when average market prices falls below 103 per cent of the basic price.
- » Premium rates for suckler cows were increased over three years by 38 per cent, and for steers and bulls under the beef special premium by 38 per cent and 56 per cent respectively. Additional support was provided through a slaughter premium per animal slaughtered set at €80 per animal over eight months old and €50 per calf. The slaughter premium was to be paid on a ceiling for each member state, with a reference base of 1995 slaughterings plus exports to non-EU countries.

2003 Mid Term Review

systemic changes

- » The review established the single payment scheme (SPS) to apply from 2005, with a view to decoupling support payments from production or prices as much as possible. This was to be done through summing the various aid payments provided to compensate each farmer for price reductions and for other reasons for a base period 2000-02 and including additional payments, such as for milk, rice and sugar, that have subsequently been agreed and paying them as a single farm payment. Set-aside payments are also included.
- » While it was agreed to implement the SPS, member states were given a number of options to continue to pay limited proportions of various forms of payments in the same coupled forms as in the past. This was done in response to a concern that particular types of production may disappear in marginal areas if commodity specific incentives were removed.
- » The reforms instituting the single payment scheme are also complicated by phasing-in arrangements for EU funding of aid payments over ten years to the members that joined in 2004 and 2007. Initially payment rates for the new members were set at 25 per cent of those in the EU-15, with the percentage rising progressively to 100 per cent over ten years.
- » The review also instituted a system termed 'modulation', under which guarantee (pillar one) payments to producers in excess of €5000 are levied a basic

box 1 **summary of main reforms since 1992** *continued*

rate of 5 per cent. The resultant funds are required to be matched by member states and used for rural development measures. While the basic rate for modulation is 5 per cent, member states may opt for a higher voluntary modulation rate.

milk and rice reforms

- » Under the Mid Term Review, decisions were made to reduce support prices for butter and skim milk powder by 25 per cent and 15 per cent respectively and to compensate producers through a dairy aid payment. The dairy aid payment was not to be incorporated into the single payment scheme until it is fully phased in by 2007.
- » Intervention purchases of butter would be limited to 70 000 tonnes in 2004, declining in annual steps to 30 000 tonnes from 2007.
- » It was decided to discontinue milk production quotas beyond 2015.
- » The intervention price for paddy rice was reduced from €298.35 a tonne to €150 a tonne. The current direct aid payment would be increased from €52 to €177 a tonne, of which €102 would be part of the single payment scheme (Agra Europe 2003b).

Some members have opted for mixed systems including elements of both historic and regional approaches (appendix C).

The payments are not to be affected by current production or prices. The single payment scheme was instituted in the 2003 Mid Term Review, to apply from 2005. The effects of reforms to bring EU internal prices closer to world market prices are indicated in table 1, which shows that cereal and skim milk powder support prices have been brought close to world prices but prices of beef, butter and sugar remain substantially above world prices.

A motive for the SPS is to obtain exemptions for the payments from any cuts or limitations under WTO rules on grounds of them being decoupled from production, prices and inputs. To reach agreement on the SPS in the Mid Term Review, however, exemptions were allowed to member states to continue to provide specified coupled direct payments under specified conditions and up to limited levels.

Consequently, although most direct payments are under the SPS, some are still in coupled forms. Options taken up by members to maintain payments in nondecoupled form are shown in appendix C.

table 1 EU decisions and world market prices

product	price reduction under:			EU administered support price 2004 €/t	world market price €/t
	MacSharry reforms (1993-96) %	Agenda 2000 (2000-02) %	Mid Term Review (2004-07) %		
wheat	30	15	0	100	100 a
beef	15	20	0	2 224 b	1 500-2 000 c
butter	0	0	25	2 464 d	(at 1 July 2007) 1 400 a
skim milk powder			15	1 747 d	(at 1 July 2006) 1 700 a
sugar	0	0	33	632 e	(€421 in 2007-08) 250 f
rice			50	150	170 g

a Expectations of the European CIE and OECD are given in dollars; in euros depending on the exchange rate (approximately US\$1.3 = €1 at the time the table was compiled by Silvis and de Bont). **b** Basic price; the European market price, in 2004 was approximately €2800/t, carcass weight. **c** FAO; annual averages, beef (Australian, cow beef, boneless, cif, USA), 2003 US\$2110/t. **d** Intervention price set by decisions taken in 2003. **e** The proposal date, July 2004, led to a reduction in the current intervention price from €632/t to €421/t of white sugar in 2007-08; the market price in the EU was still over €700/t when this table was first published in 2005. **f** The average export price of white EU sugar was €223/t in 2002-03 and €280/t in 2001-02. **g** USDA sourced nominal quote for Thai white rice, 100 per cent, grade B, fob, Bangkok (August-July basis); converted to paddy equivalent at a rate of 1.25 tonnes paddy rice to 1 tonne white rice; converted to euro using an exchange rate of US\$1.3 = €1.

Sources: European Commission (2007b) from Silvis and de Bont (2006); Agra Europe (2003b).

3

the CAP and the Uruguay Round

The reforms agreed in 1992 made it easier for the European Union to negotiate in the Uruguay Round that was concluded in 1994. They enabled:

- » substantial cuts to direct export subsidies and helped the European Union to comply with them
- » substantial domestic support, including compensation and headage payments, to be exempted from cuts or limits (blue box exemptions) that applied to price support and clearly distorting payments (amber box support).

The Uruguay Round Agreement on Agriculture required the European Union to convert its nontariff barriers, primarily variable import levies, import quotas and voluntary export restraints to bound tariffs and to allow some increase in market access through tariff quotas. The agreement also required developed countries to reduce tariffs on average by 36 per cent, with cuts for individual tariff lines of at least 15 per cent. Many EU tariffs were cut by 36 per cent but some, including those for sugar and SMP were reduced by 20 per cent.

The concept of special safeguards was also incorporated into the Uruguay Round Agreement. Countries were entitled to nominate commodities, imports of which had previously been subject to nontariff barriers, for which additional duties could be allowed when prices for shipments fell below a certain reference level or in the case of a surge in imports (Young 1994). The European Union nominated a wide range of tariff lines to which special safeguards apply for meats, live animals, cereals and cereal products, dairy products and fruits and vegetables. Safeguards on top of a high tariff for sugar have been especially effective at excluding nonpreferential import competition.

While the Uruguay Round tariff cuts appeared significant, they were from abnormally high base levels for 1986-88 which was the period of highest agricultural support in recent decades (Ingco 1995). Very low world market prices at the time were directly reflected in high EU tariff equivalents as variable import levies, the main market access barrier used at that time, varied inversely with world

table 2 current EU bound tariffs as reported to the WTO

commodity	bound tariff rates in <i>ad valorem</i> equivalents
bovine meat (fresh, chilled or frozen)	76.88% to 146.35%
dairy	
- milk powders (skim and whole)	44.74% to 106.46%
- butter	82.82% to 135.32%
- cheddar cheese	52.73%
- emmentaler cheese	72.77%
- other cheese for processing	76.30%
durum wheat	81.93%
other wheat	59.36%
cane sugar for refining, raw	€33.9 /100 kg/net a
vegetables b	1.76% to 118.92%
fruit, excluding citrus b	7.20% to 117.94%
citrus b	31.08% to 46.39%

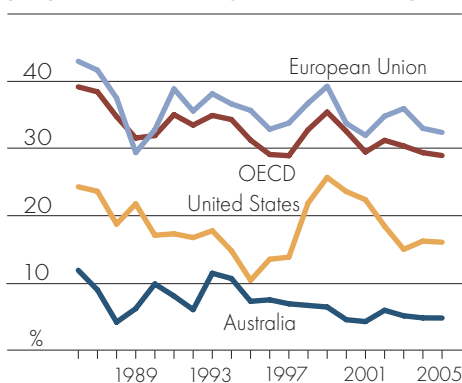
a The EU has not issued an *ad valorem* equivalent for raw sugar. ABARE's estimates range between 85 per cent and 225 per cent, depending on world prices. **b** Tariffs for fruit and vegetables vary principally according to season. Source: WTO (1999).

prices. Consequently the cuts were partly illusory, resulting in higher permitted tariffs than if the base were representative (Ingco 1995). After the cuts, many EU bound tariffs were still relatively high (table 2).

Despite the limitations of tariff reforms under the Uruguay Round, some expansion in import access to the EU market was negotiated under tariff quotas that enable imports within quota quantities to enter at tariffs below the general tariff rate. Tariff quota arrange-

ments are consistent with what appears to be an EU preference to manage imports, both in terms of volumes and sources. Some of the main tariff quotas employed by the European Union are shown in appendix B.

fig B producer support estimate as a proportion of total gross farm receipts



levels of agricultural support

Levels of EU agricultural support have changed little since the late 1980s (figure B), indicating that while the European Union has been prepared to change the forms of its support, it has not been prepared to reduce its levels of support.

4

changing characteristics of EU agriculture

As in other developed countries, EU agriculture is, in relative terms, a declining industry. In 2004 its value added contributed 1.6 per cent to total GDP, compared with 3.7 per cent in 1980. While agricultural production has been rising gradually, its growth has been much slower than for other major sectors. Since the mid-1980s production growth (EU-15) has been slower than previously, although output is still edging up, as can be seen from figure C.

Increasing EU agricultural production is being achieved through higher yields and increasing intensity. The total agricultural area (EU-15) declined from 162 million hectares in 1965 to 140 million hectares in 2003 – a drop of 14 per cent. The decline was similar for arable land and permanent pastures, whereas the area under permanent crops, mainly orchards, vineyards and olives has been relatively constant. The decline would have been largely from urbanisation and infrastructure

table 3 **EU set-aside rates for arable crops**

	%
1993-94	15
1994-95	15
1995-96	12
1996-97	10
1997-98	5
1998-99	5
1999-2000	10
2000-02	10
2001-02	10
2002-03	10
2003-04	10
2004-05	5
2005-06	10
2006-07	10

Source: Hodge et al. (2006).

fig C **volume of production EU-15**

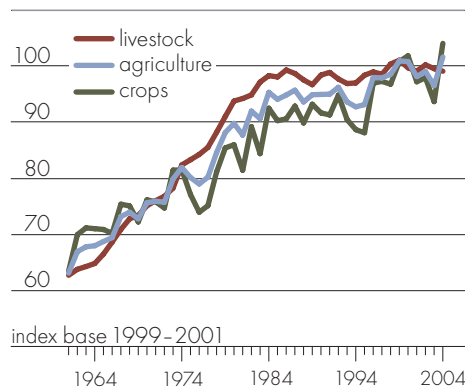
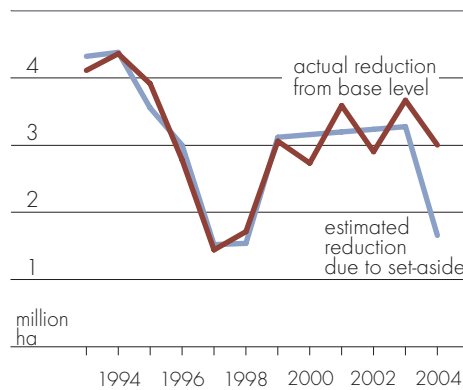
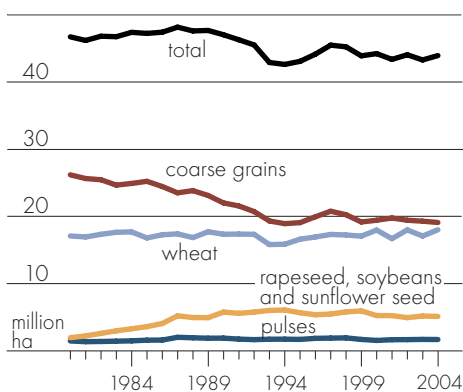


fig D **reduction in areas of arable crops**
EU-15



In making this comparison, it was assumed that over the period examined, the proportion of land used for arable crops that was exempt from set-asides on grounds of the farms producing less than 92 tonnes declined progressively from 40 per cent in 1992 to 30 per cent in 2004. A decline could be expected as farms are becoming larger and amalgamating. In 1991 a Commission study concluded that 40 per cent of the total cereals area was on farms producing less than 92 tonnes (Commission of the European Communities 1991). A more recent study (European Commission 2002b) indicated that 70 per cent of the area under arable crops was subject to set-asides. That is, 30 per cent were exempt on grounds of them producing less than 92 tonnes.

fig E **area harvested, by crop**
EU-15



development.

The slowing in production growth since the mid-1980s would have resulted from a range of factors, including the ongoing decline in agricultural areas, environmental concerns, and policy measures including milk quotas, reforms to reduce support prices and set-asides for arable crops. On environmental concerns, inorganic fertiliser consumption – that had risen rapidly for three decades until the late 1980s – declined between 1989 and 1992. It has since been relatively constant.

The annual set-asides appear to have been effective in limiting areas producing arable crops. Set-aside rates are shown in table 3. A brief analysis has been made comparing actual changes in areas of cereals, oilseeds and protein crops harvested, with changes that would have arisen from the set-asides alone, from base areas for 1989-1991. That analysis takes account of the exemption of farms producing less than 92 tonnes at the established regional yields. Farms with small plantings accounted for some 40 per cent of total area under arable crops in the early 1990s (Commission of the European Communities 1991), with the proportion declining to around 30 per cent in recent years (European Commission 2002b).

The analysis shows that annual changes in areas from their base levels in years up to 2000 corresponded closely with estimated areas of arable crops set aside at the announced rates (figure D). Since then the actual changes in areas from their base levels have either corresponded closely with or exceeded those estimated to arise from the set-asides. Where they exceeded it, such as in 2004, other factors such as competition from other crops and planting and growing conditions could also have been important. Actual areas of arable crops are shown in figure E.

farm numbers

Although total agricultural production in the European Union has been increasing only slowly since the mid-1980s, there have been large changes in numbers and sizes of farm holdings (table 4). As in most countries, farms are becoming fewer and larger, with urban encroachment and amalgamation to obtain greater economies of scale. Such developments occur irrespective of whether governments provide substantial agricultural support. Nevertheless, where support levels are high – such as in the European Union – that support becomes capitalised into higher farm land values. High farm land values resulting from agricultural support can make it difficult for new entrants to break into farming. Also, they can slow the rate of encroachment of nonagricultural activities into agricultural areas.

Between 1985 and 2005 the number of holdings in the western European member countries fell by 35 per cent, even though the European Union's membership rose from twelve to fifteen countries in the interim. Between 1987 and 2005, the average area per farm increased by 61 per cent. The entry of ten new member states in 2004 resulted in a big increase in farm numbers because some of the new members have very large numbers of small farms.

table 4 **number and average size of agricultural holdings in the EU**

includes holdings of any size

	1985	1987	1989	1993	1995	1997	2000	2003	2005
holdings (million)									
European Union-12	8.95	8.64	8.17	7.26	6.93				
European Union-15				7.82	7.34	6.99	6.77	6.24	5.84
European Union-25								9.87	9.69
usable agricultural area per holding (hectares)									
European Union-12	na	13.3	14.0	16.4					
European Union-15				16.4	17.5	18.4	18.7	20.2	21.4
European Union-25								15.8	16.0

Sources: For 2003 and 2005, Eurostat (2007c); for previous years, European Commission (2002a and previous).

farm incomes

Probably the most appropriate measurement of farm incomes used in the European Union that provides an indication of net incomes derived from the farm appears to be net value added of an operation. Farm net value added measures the return to the factors of production (land, labour and capital) regardless of whether they are family owned or hired, less intermediate consumption of inputs and depreciation of capital assets. With estimates for net value added it is possible to compare the returns across all farms, whether they are family operations or otherwise.

For the European Union, average net value added per farm, as reported by the Farm Accountancy Data Network (FADN 2007), increased in nominal terms by 71 per cent between 1990 and 2004 (table 5).

table 5 average net value added, by farm type and farm size

	EU-12	EU-15			EU-25
	1990	1995	2000	2003	2004
	€	€	€	€	€
average farm net value added, by farm type					
specialist field crops	15 812	25 139	26 255	30 826	30 070
specialist horticulture	41 560	46 345	64 572	76 450	62 938
specialist permanent crops	12 563	16 225	17 917	23 291	22 851
specialist grazing livestock	18 494	27 851	29 929	35 595	31 840
specialist granivore (pigs, poultry)	47 890	55 142	75 776	73 737	53 915
mixed cropping	9 322	13 865	16 894	22 818	18 104
mixed livestock	17 709	24 784	33 480	37 764	11 876
mixed crops-livestock	18 295	30 425	39 170	41 342	27 200
total	16 391	24 343	26 943	32 753	28 086
average farm net value added, by farm size					
0<4 ESU	3 207	3 611	5 245	5 048	4 016
4<8 ESU	5 576	7 210	7 135	7 687	6767
8<16 ESU	9 379	13 210	12 900	13122	12 903
16<40 ESU	20 397	25 256	24 915	26 138	25 967
40<100 ESU	47 056	53 739	49 906	50 462	51 517
≥100 ESU	135 169	161 495	152 474	156 254	168 118
total	16 391	24 343	26 943	32 753	28 086

Note: Farm net value added = total farm receipts - input costs - depreciation. The value of one 'European size unit' (ESU) is equal to an area with a standard gross margin of 1200 ECU in 1990.

Source: Farm Accountancy Data Network (FADN, <http://ec.europa.eu/agriculture/rica/>).

Difficulties arise in drawing strongly based conclusions about changes in farm incomes over time because the number of countries in the European Union has been increasing, making it difficult to compare like with like. It is clear, however, that increasing farm size has been a major determinant of the average increase in farm incomes. This is evident because the average net value added per farm for the EU as a whole has been increasing at a greater rate than for any individual farm size group (table 6). This could only occur if the farms in the higher income brackets become a much larger proportion of the total.

According to European Commission (2006b) data, between 1993 and 2003 the number of farms in the highest income bracket (over 50 ESU) increased by 15 per cent, whereas numbers in all smaller size brackets fell by 12–18 per cent. Note that there are differences in the reported farm size brackets between the FADN and European Commission agricultural statistics. The largest group in FADN is 100 ESU and above, while the European Commission data show the largest group as 50 ESU and above. The farm size information in table 5 is from FADN. Sizes are expressed in European size units (ESU), where 1 ESU represents a gross margin (returns minus variable costs) of 1200 European currency units (ECU) in 1990 values.

table 6 **average change in farm incomes (net value added) between 1990 (EU-12) and 2003 (EU-15)**

size group	nominal change %	change adjusted for inflation %
0<4 ESU	57.4	10.7
4<8 ESU	37.9	-3.0
8<16 ESU	40	-1.6
16<40 ESU	28.1	-9.8
40<100 ESU	7.2	-24.6
≥100 ESU	15.6	-18.7
total all farms	99.8	40.6

Note: 2003 was used instead of 2004 because the accession of new member states in 2004, with their large numbers of very small farms, was a significant factor in the lower average net value added in 2004 for the four lowest income cohorts. Farm net value added = total farm receipts - input costs - depreciation. The value of one 'European size unit' (ESU) is equal to an area with a standard gross margin of 1200 ECU in 1990. Sources: Farm Accountancy Data Network (FADN, <http://ec.europa.eu/agriculture/rica/>) and OECD Statistics, 'Consumer price index - all items' (<http://stats.oecd.org>).

EU projections of farm incomes, expressed in real terms per labour unit (European Commission 2007a, p. 46), indicate an increase across the whole European Union of 23 per cent between 2005 and 2013. However, the projections are for a much lower increase of 9 per cent for the EU-15 than in the new members. For the ten members who entered in 2004, the projected increase is 37 per cent, while the increase for Romania and Bulgaria, that entered in 2007, is 105 per cent. The differences appear largely to reflect the adoption of support in the new member states under the CAP, the restructuring of farms and agricultural industries and greater market opportunities with the expanded European Union.

Farm characteristics vary widely between countries within the European Union. In the EU-15 the largest farms and also those with the highest incomes are in the United Kingdom, the Netherlands and Denmark, while the smallest are in Portugal. Farm sizes and structures vary widely in the new member states, with large numbers of small farms in Poland, Hungary, Bulgaria and Romania, but a small number of large farms in the Czech Republic, where average incomes in 2003 averaged €95 600, higher than in any other member state.

It is difficult to establish clear links between government support policies and any contributions that they may make to farm incomes, especially over the longer term. In this context, observations from an OECD study (Moreddu and Cho 2002) are particularly relevant.

- » For OECD countries overall, substantial support is provided, but much has been linked to production and input use. Moreover, much leaks away to other economic agents, such as absentee landlords and input suppliers. Also much of the support is capitalised into land values and can only be realised on sale of the farm
- » From an income transfer efficiency perspective, support that is decoupled from agricultural activity would be much better as a way of transferring incomes to farm households.

From these OECD observations, the EU policy strategy of greater emphasis on support through the single payment scheme should result in a more effective transfer of support to farmers.

balance between production, consumption and trade

Changes in population, incomes and tastes, along with policy factors that influence prices, are major determinants of consumption of agricultural products.

The European Union is a major developed economy. Overall, it has high but relatively slowly growing incomes and member country populations are also growing slowly (table 7). As a developed, mature economy, the European Union has had high food and fibre consumption levels relative to most other countries for many years. However, the structure of the EU is becoming more diverse. This has been especially the case with the recent accessions of ten members in 2004 and of Bulgaria and Romania in January 2007. Income growth in the new member states has been more rapid than for the EU-15, though from a much lower base.

Since 1980, average food consumption per person in the EU-15 in terms of calories have been increasing slowly, with most of the increases being in vegetable products. Consumption levels in the new member states have been similar in terms of calories to the EU-15 (table 8). However, diets in the new member states have been skewed more toward vegetable products, especially cereals. It is likely that as incomes increase further in the new member states, consumption patterns will adjust toward more animal products and less cereals.

For major temperate commodities, including dairy products, beef, cereals and sugar, most EU market supplies are produced domestically. Before adoption of the CAP in the 1960s the group was a net importer. With high, open ended protection under the CAP and technical advances, production rose more rapidly than consumption and the European Union was transformed from a net importer of these commodities to a net exporter. For most of these products, net exports peaked in the late 1980s or early 1990s, and have since either declined (wheat, beef, butter and skim milk powder) or have been relatively static (cheese and coarse grains, although the latter have been highly variable). However, exports of sugar have, until recently been rising under the influence of highly protective support arrangements.

Declines in exports since the early 1990s reflect both changes in internal demand and production influences. For dairy, milk quotas have governed production,

table 7 **EU population and income**

		EU-15	ten new member states (2004)	EU-25 ^a
population				
total in 2005	million	384.46	74.03	458.49
average annual growth				
1995-2000	%	0.35	-0.09	0.28
2000-2005	%	0.50	-0.25	0.38
total GDP in 2005	€ billion	10 288	561	10 849
GDP per person ^a				
total in 2005	€	26 760	7 574	23 662
average annual growth in real GDP per person				
1995-2000	%	2.40	4.40	2.52
2000-2005	%	1.20	4.46	1.37

^a Includes the EU-15 and the 10 members that joined in 2004. Does not include Bulgaria and Romania.
Source: Eurostat (2007a,b).

while increasing demand for cheese both domestically and abroad, and support price cuts for butter and skim milk powder have oriented production more toward cheese. For cereals, support price cuts under the 1992 reforms encouraged domestic consumption at the expense of previously imported ingredients for feed grain substitutes while area set-asides have constrained production at the margin.

table 8 food consumption per person

	EU-15							Poland	Romania
	1961	1970	1980	1990	1995	2000	2003	2003	2003
daily calorie intake	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.
vegetable products	2 136	2 222	2 223	2 307	2 317	2 424	2 452	2 475	2 760
animal products	855	968	1 062	1 074	1 057	1 075	1 084	891	823
total	2 991	3 190	3 285	3 381	3 374	3 499	3 536	3 366	3 582
consumption of food per person a year ^a	kg	kg	kg	kg	kg	kg	kg	kg	kg
cereals	126.4	116.0	113.3	109.0	109.6	115.3	121.4	154.6	204.7
- wheat	105.9	98.6	97.3	92.1	93.0	97.5	102.6	109.9	160.1
- all other	20.5	17.4	16.0	16.9	16.6	17.8	18.8	44.7	44.7
potatoes	105.5	94.0	84.8	82.9	78.4	80.0	76.5	130.1	96.1
sugar and sweeteners	34.3	39.0	38.4	36.6	38.4	38.9	40.8	45.7	26.6
vegetable oils	10.7	13.4	14.8	18.1	19.3	20.3	19.7	11.6	13.2
vegetables	94.3	107.3	109.6	123.0	118.4	129.7	125.6	100.3	179.5
fruits	71.2	91.8	88.1	107.3	101.4	114.5	117.4	47.6	64.8
meat	53.6	67.6	81.8	87.3	86.2	91.3	91.5	76.0	59.3
- bovine meat	19.1	23.3	23.4	22.9	19.9	19.6	19.7	6.6	8.1
- pig meat	23.0	28.1	37.7	40.8	40.4	44.2	44.4	50.1	28.4
- poultry	5.6	9.9	13.9	17.1	19.3	20.7	20.9	19.1	19.1
- edible offal	3.9	4.6	5.5	5.3	4.7	4.3	3.9	2.6	4.3
animal fats	12.8	13.7	14.0	13.8	14.0	14.0	13.9	14.7	4.2
eggs	11.2	13.2	14.0	13.0	12.6	12.7	12.5	11.6	13.2
milk, excl. butter	183.8	198.7	228.7	236.6	238.9	245.8	255.1	173.4	224.2

^a Data from FAOSTAT; FAO data can differ significantly from data published by the European Commission in annual food balance sheets because of definitional differences in measurements used, such as boneless cuts equivalent as opposed to carcass weight.

Source: FAOSTAT (2006b and previous).

Special circumstances arising from outbreaks of BSE (bovine spongiform encephalopathy or 'mad cow' disease) and foot and mouth disease have affected EU beef production, consumption and trade. BSE in particular appears to have depressed demand since the late 1980s, both domestically and for export, although comprehensive identification and preventative measures have been adopted. EU production of beef has fallen faster than demand and net exports have declined.

As well as being an exporter of many temperate agricultural products the European Union also imports quantities of these products, largely under bilateral agreements involving preferential arrangements. Many of the imports are regulated through tariff quotas. Along with the tendency for exports of some major EU products to decline in recent years, there has been some increase in imports. Trends in production and consumption and in exports, imports and net trade for selected major temperate products are shown in figures F-J.

fig F **sugar production, consumption and trade**
EU-15

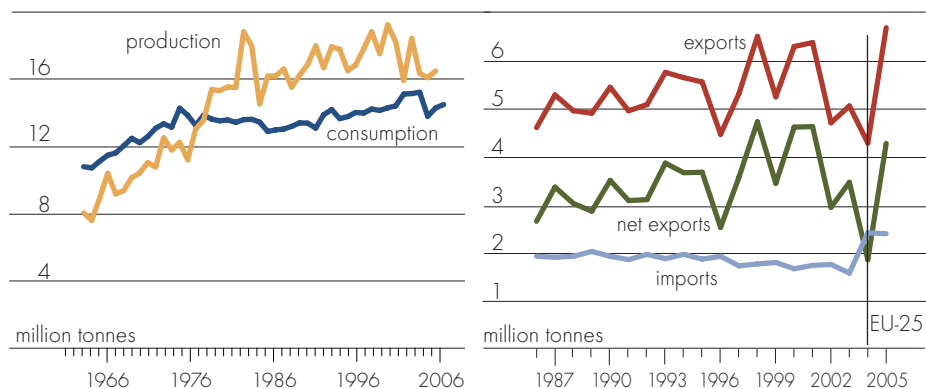


fig G **wheat production, consumption and trade**
EU-15

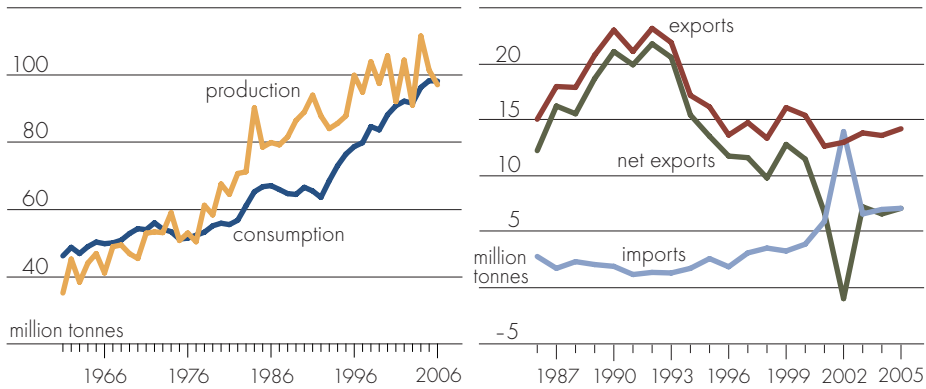


fig H **coarse grains production, consumption and trade**
EU-15

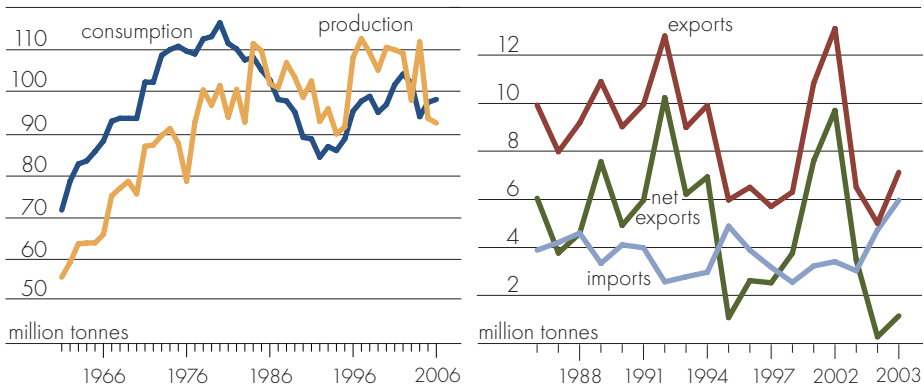


fig I **beef and veal production, consumption and trade**
EU-15

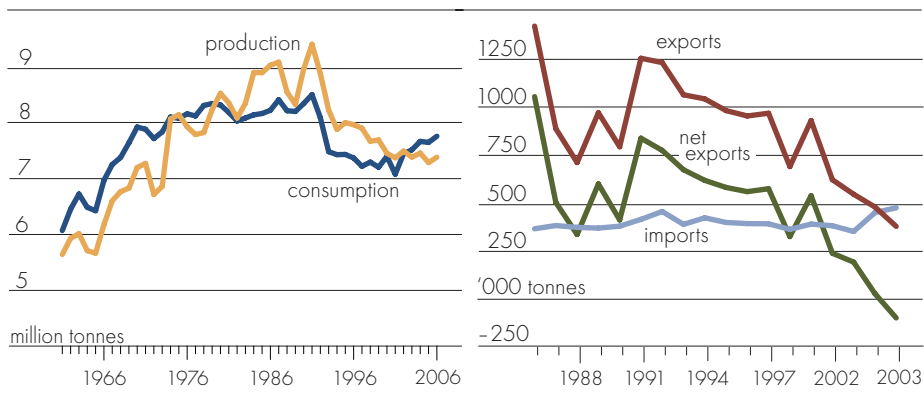
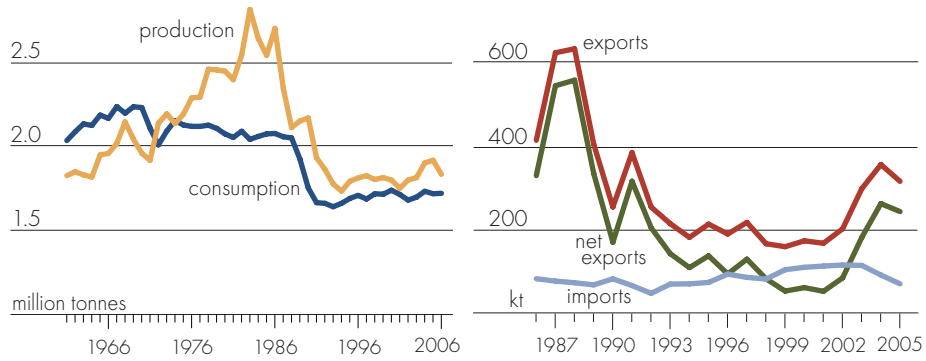
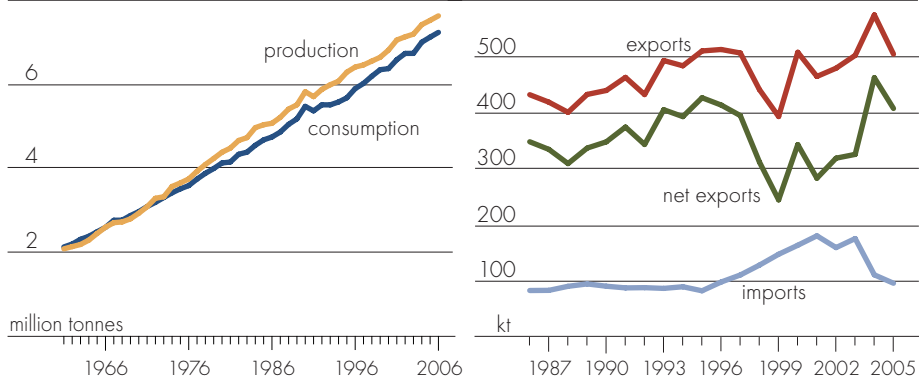


fig J **dairy production, consumption and trade**
EU-15

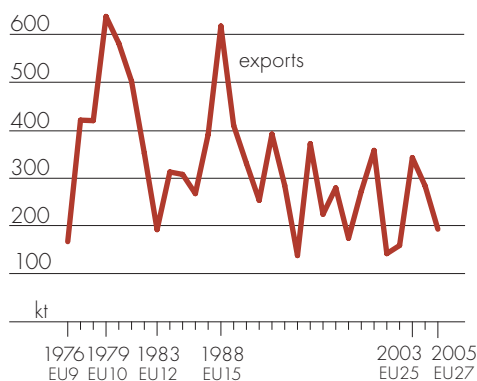
butter



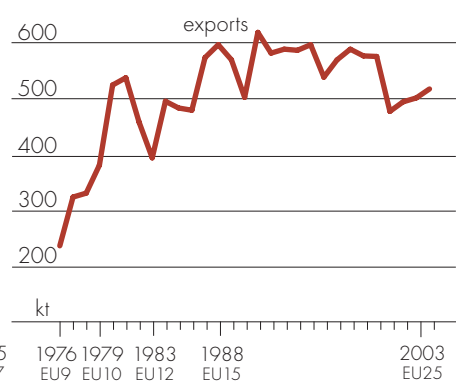
cheese



skim milk powder



whole milk powder



EU projections for trade

Future growth in EU consumption of most agricultural products is expected to be slow because of current relatively high consumption levels and even slower population growth than in the past. Recent EU projections to 2013 (European Commission 2007a) indicate diverse movements of production relative to consumption for different commodities, giving the following changes in trade (table 9):

- » a recovery in net exports of cereals from their low levels in the early part of this decade
- » net exports of pig meat and net imports of sheep meat being relatively constant
- » net exports of cheese remaining relatively constant but net exports of butter and skim milk powder declining markedly
- » a reversal from the EU being a net exporter of sugar to being a net importer and
- » a substantial increase in net imports of beef.

table 9 **EU-27 projections for net exports or net imports of selected major commodities**

		average net trade 2004 and 2005	projected net trade 2013
net exports			
wheat	Mt	6.5	14.7
coarse grains	Mt	6.0	7.4
pig meat	kt	1 235	1 135
cheese	kt	468	437
butter	kt	257	100
skim milk powder	kt	215	35
net imports			
beef	kt	316	730
change from net exports to net imports			
sugar	Mt	2.7 (net exports)	3.1 (net imports)

Source: European Commission (2007a).

5

issues of emerging and current policy importance

A number of issues have recently been and are currently important for policy development in the European Union. Some of these involve direct action to address particular policy problems, while others reflect emerging ideas that are influential in policy development. Some of these issues include:

- » recent and ongoing sugar reforms
- » ongoing and potential dairy support reforms
- » reforms to the fruit and vegetables sector
- » reforms to the wine sector
- » reorientation of support from guarantee payments toward rural development
- » a program for expansion of biofuels
- » community concerns about the environment, animal welfare and health
- » geographic indicators
- » impact of EU policy reforms on other countries, especially the ACP (African, Caribbean and Pacific) countries and least developed countries
- » management of import surges other than through the current WTO safeguards arrangements
- » reaching accommodation in the Doha Round.

recent and ongoing sugar reforms

In late 2005, the European Union embarked on a major reform of its sugar support arrangements. This became necessary when a WTO panel found that it was subsidising exports that were well above levels permitted under the Uruguay Round Agreement on Agriculture.

Sugar has had a highly regulated three tier support arrangement for decades, with high support prices for an A quota on a quantity similar to domestic consumption,

lower but relatively stable supported levels on a smaller B quota, with any production above A and B quotas, termed C sugar, required to be exported at world prices. Imports were strictly limited through quotas allocated mainly to members' former colonies. Exports of quota sugar were subsidised, with the subsidies being financed through taxes on A and B quota production. Additionally, exports of approximately 1.3 million tonnes a year that was equivalent to imports from the African, Pacific and Caribbean (APC) countries were being subsidised under the terms of a footnote that the EU had included in its Uruguay Round schedules.

The 2005 EU sugar reforms became necessary when a WTO panel found that EU C sugar exports were effectively subsidised exports, which meant that the EU was subsidising substantially more exports than permitted under the Uruguay Round agreement. Also, that part of sugar exports that was equivalent to imports from the African, Caribbean and Pacific (ACP) countries was ruled to be inconsistent with EU WTO undertakings. In that ruling, the European Union was estimated to have been subsidising exports of around 6 million tonnes a year compared with its permitted subsidised export limit of 1.3 million tonnes a year. To meet its WTO obligations the European Union instituted a four year program that involves:

- » forming a restructuring fund financed by levies on quota sugar to buy out voluntarily renounced quota, to provide compensation for factory closures and to provide funds for the most affected regions
- » buying down former C sugar levels with a one-off restructuring aid payment
- » markedly reducing support prices for quota sugar and minimum prices for sugar beet
- » providing ongoing compensation to growers, with the payments to be incorporated in the SPS
- » limiting and eventually eliminating the amount of sugar that could be purchased by intervention agencies.

The program is running well behind schedule. Borchardt (2006) indicated that, in the first two years of the reforms, 2.3 million tonnes of a required 6 million tonnes of abandoned quotas had been retired, which is well below the 4.5 million tonnes that should have been recorded at that stage.

Falling far short of the quota abandonment target could be expected to result in internal supply pressures, resulting in marked reductions in internal market prices

and either a build up of stocks or some form of disposal, such as distillation. Given limits placed by the EU on intervention stocks, any stock buildup would need to be in the hands of processors, which would curtail their future demand for beet.

dairy industry reforms

Since 1984, EU milk production has been subject to quota restrictions. The levels set for the quotas have limited the extent to which the high support for dairying in the European Union was permitted to stimulate production and exports.

However, with the reforms occurring in the EU dairy industry involving compensated reductions in support prices, with compensation payments being incorporated into the single payment scheme, the future removal of milk quotas is being considered. In this context, EU Farm Commissioner Marian Fischer Boel was reported in January 2007 as saying that in her opinion the milk quotas should not be renewed when the current system expires in 2015 and she suggested that one way of preparing farmers for a change in the system would be a general increase in quotas before the system ends (Agra Europe 2007). By that time it is possible that substantial dairy support will be incorporated in the single payment scheme and will be claimed to be nonmarket distorting, leaving the way open for removal of the quotas, which according to the present farm commissioner would 'sharpen competitiveness'. Several issues are of special importance for milk producers in both the European Union and elsewhere if expansion of EU milk quotas ahead of their removal is being considered.

Quota limitations on EU milk production have constrained the extent to which high EU support for milk has depressed output in New Zealand, Australia and some South American countries. Milk quotas, if expanded very much and taken up by EU producers, need only increase domestic production relative to consumption to a relatively minor degree to markedly increase EU exports that would be effectively supported through the single payment scheme and remaining price support.

If price support for milk that occurs through import tariffs, tariff quotas on imports of dairy products and export subsidies remains sufficiently large to encourage production, the expansion of production quotas ahead of their removal would result in additional market distortions. It would increase production and exports, and depress world market prices.

Even if EU price support were markedly reduced, the extent of compensation, the conditions for the compensation, and the extent of any pre-elimination quota expansion could all affect future production, exports and market prices. If, for example,

producers became entitled to greater amounts of future compensation for support price reductions and if they expanded production within increased quotas ahead of the scheduled elimination of quotas in 2015, the quota expansion would be clearly production enhancing and world market price depressing on a continuing basis.

In this context the potential for even a small percentage expansion in EU milk production to markedly depress world prices for dairy products is great because the EU internal market is several times larger than total international trade for key dairy products. This is particularly the case for cheese, where a 5 per cent increase in EU production is estimated, in the absence of any increase in domestic consumption, to increase internationally traded supplies by around 30 per cent, thereby greatly depressing world prices.

Dairy production capacity is capital intensive and once increased cannot be readily reduced. Much increased EU exports through increasing milk production quotas would depress world prices for dairy products prior to and after the elimination of the quotas, both for EU producers and to producers elsewhere. EU producers would have a reason to hold the official EU policy of quota expansion ahead of quota elimination responsible for the reduced market returns, and claim additional compensation. If provided, that compensation would be an ongoing production subsidy to maintain the profitability of expanded EU production. If it were not provided, the problems of overinvestment and excess capacity sparked by the quota expansion would reduce the subsequent profitability of EU dairy production.

These potential problems would not arise if the quotas were merely eliminated and producers, who are being compensated for the various industry reforms through inclusion of dairy payments in the single payment scheme, responded in their investment and production decisions to the new market situation and prices.

reforms to the fruit and vegetables sector

In January 2007, the European Commission proposed reforms to fruit and vegetable support arrangements. Existing arrangements include a combination of measures:

- » **aid paid to growers of fruit for processing** under schemes covering tomatoes (€329 million), citrus fruits (€241 million), peaches, pears, prunes and figs (€76 million) and a separate scheme for dried grapes (€115 million). Most such aid is for producers in Italy, Greece and Spain (Agra Facts 2007)

- » **withdrawal of product from markets to support prices** – permitted withdrawals have been progressively reduced from as much as 50 per cent of marketed production, since 1997-98, and have recently been set at 5 per cent for citrus, 8.5 per cent for apples and pears and 10 per cent for other products
- » **a complex system of *ad valorem* and specific tariffs**, with charges on imports varying for different seasons, with differing entry prices for import shipments and for products from different sources according to trade preferences extended
- » **export subsidies** for quantities of processed products that are limited under the WTO Uruguay Round Agreement – these include tomatoes, provisionally preserved cherries, glacé cherries, processed hazelnuts and certain orange juices.

Under the proposed reforms, the aid linked to production would be integrated into the single payment scheme, with the payments totalling €783.47 million (Agra Facts 2007a). The payments are to be allocated between members, with most going to Italy (€315.7 million), Greece (€186.5 million) and Spain (€166.9 million). Small amounts, totalling €26.7 million, would be paid to the twelve new member states.

There are also several proposals for strengthening producer organisations, establishing crisis management schemes involving green harvesting, promotion, harvest insurance aid for establishing mutual funds and training. The product withdrawal system would continue but would also be run by producer organisations. Both the crisis management systems and withdrawals would be jointly funded by the EU and member states (Agra Facts 2007).

wine industry reforms

Continuing surplus production of wine along with declining consumption, competition from 'new world' wines and EU funding of private storage aid and distillation of the surpluses to maintain market balance have been major concerns of EU agricultural policy makers. Intervention through distillation has been used to remove about 15 per cent of wine production a year. Such has been the degree of surpluses that crisis distillation of increasing quantities of quality wine produced in specified regions as well as ordinary table wines is becoming a regular practice. As such, it would be sustaining surplus production. Also, problems of oversupply have been reflected in tight restrictions, limiting planting rights.

In 2006, the EU Commission set down several alternative approaches to address these problems (Commission of European Communities 2006). The issue is currently being debated, with a view to developing reformed support and regulatory arrangements for the industry during 2007.

The Commission's preferred approach to reform, as spelled out in 2006, was:

- » to provide up to €2.4 billion to assist producers to grub 400 000 hectares or 12 per cent of EU's total area of vines over five years
- » to discontinue subsidies for wine distillation – that have amounted to around €500 million a year, or some 40 per cent of the overall EU wine budget
- » to simplify and clarify classification and labelling rules and to allow oenological practices applied by the International Organisation of Vine and Wine after filtering by the Commission
- » to allow areas formerly under vines to qualify for the single payment scheme, subject to minimum environmental requirements attached to payments
- » to introduce rural development programs to assist in modernising the wine sector, including investment aid to vine growers and wine sellers, pre-retirement aid for those growers wishing to cease production entirely, and payments to growers for the preservation of the countryside and environmental improvement (Commission of the European Communities 2006).

While there is agreement among the member states that reform is needed in the wine sector, some aspects of the 2006 proposals met with considerable resistance from the principal wine producing members, including France, Spain and Italy, that considered the initial proposals to be too drastic. In particular, it was reported (Agra Facts 2007b) that the grubbing scheme could be set much lower, that greater use be made of alternative measures, such as green harvesting to reduce production temporarily, and more be spent on promotion, especially in third country markets.

In July 2007, the Commission published a new set of reform proposals, the main elements of which are:

- » the grubbing of 200 000 hectares of vines
- » abolition of crisis distillation and private storage aid

- » funds to be made available for promotion on third country markets, with 50 per cent co-funding by member states
- » all vine growing areas being made eligible for single payment system entitlements and grubbed areas automatically qualifying for payments
- » maintenance of the system limiting planting rights until the end of 2013, with abolition of the system thereafter enabling market oriented producers to expand production subsequently
- » targeting rural development expenditure to wine growing regions and
- » new rules on labelling reaffirming the system based on geographical origins (Agra Facts 2007c).

It appears that public funding for promotion of private sales of wine on third markets could be an effective export subsidy that would be inefficient in economic terms and could also be WTO inconsistent.

It is also difficult to know how the whole area under wine grapes could be incorporated into the single payment scheme in a comparable way to other commodities, in the absence of there being specific payments, such as the compensation payments for arable crops, rice and milk, or the headage payments for cattle and sheep. One suggestion incorporated in a Commission Communication to the Council and the European Parliament (2006) is to shift all or part of the budget for the wine Common Market Organisation to direct payments for vineyards that could be included in the single payment scheme. In that document, simplification was indicated to be an advantage of such an approach. However, it was observed that in contrast to other sectors, there would be no obvious equitable way of distributing SPS entitlements. Also, it was indicated that abolition of market management would transfer adjustment to changing market situations onto producers and, although a balanced market might be achievable in the medium to long term, it would probably be only 'after a major crisis in the sector leading to a massive adjustment process.'

reorientation of support from guarantee payments toward rural development

EU statements of policy intent in recent years have been placing greater emphasis on market orientation rather than market support (Europa 2007). This has been apparent in the thrust toward the single payment scheme and also in concrete measures toward advancing rural development rather than emphasising agricultural guarantees.

Until recently, about 90 per cent of EU budget outlays for agriculture have been from the Guarantee section of the European Guarantee and Guidance Fund that was established in the early 1960s to fund agricultural support. This is sometimes referred to as the first pillar of support. The remaining 10 per cent has been under the second pillar that covers rural development and environmental expenditure.

A key element of the Mid Term Review is called 'modulation', under which 5 per cent of Guarantee payments for farmers receiving €5000 or more would be transferred to Guidance funds for rural development. Those payments are available for spending under the second pillar and must be co-financed from national funds (Rudloff 2006).

The increasing emphasis on rural development was incorporated into the Lisbon Strategy that was initially launched in 2000. That strategy includes safeguarding the diversity of rural landscape, creating new employment possibilities and encouraging rural diversification (Europa 2007). The objectives that appear to be pursued for rural development are wider than development of agriculture, including such things as economic diversification to improve rural employment opportunities, measures to enhance quality of life in rural communities and greater education opportunities in rural areas.

Much of the expenditure for rural development appears likely to be in development of human capital, rural infrastructure and research and development (R&D), which can underpin the economic competitiveness of rural based activities, including those in agriculture. The objectives for future rural development policies, as spelled out by the European Commission (2004a), are:

- » increasing the competitiveness of the agriculture sector
- » enhancing the environment and countryside through support for land management, such as through expenditure on agri-environment, forestry and less favoured areas, and

- » enhancing the quality of life in rural areas and promoting diversification and economic activities such as for food quality and village restoration (Henke and Storti 2004).

To address these objectives, EU rural development funding is allocated according to four axes. Axis 1 is 'improving competitiveness of farming and forestry' and must have a minimum of 10 per cent of the Community Pillar 2 contribution applied to it. Axis 2 is 'environment and countryside', with a minimum proportion of 25 per cent. Axis 3 is 'improving quality of life and diversification of the rural economy', with a minimum of 10 per cent of the contributions. Axis 4, with a minimum contribution of 5 per cent, is the 'leader' approach that is devoted to promoting regional input into the development of strategies for sustainable development.

There is a wide range of activities to which EU rural development funding contributes, with marked differences in orientation between countries. For example, in the eastern part of Germany, much of the funding is used for village renovation; in the United Kingdom there is an emphasis on structural adjustment; in Austria the orientation is toward agri-environmental management; and in Spain the largest share is on upgrading agricultural irrigation systems as part of Spain's national water plan. In many of the new member states, where agricultural infrastructure is less advanced than in the EU-15, infrastructure development in rural areas would be likely to be an important aspect of the programs.

The extent to which such investment is well spent in rural development depends on the returns obtained, both in terms of profitability of activities and social outcomes relative to such returns from alternatives. If modulation results in reduced direct support for agricultural production and helps remove obstacles to rural adjustment it should help reduce market distortions arising from support. If, however, some projects for rural development may be effectively state financing of activities for private profit, they may help perpetuate many market distortions. Examples could be government financing of pollution abatement by farmers where, to obtain efficient outcomes, the costs should be internalised to farmers themselves under the 'polluter pays' principle, or state provision or subsidisation of improved planting material that would effectively be a production subsidy.

biofuel expansion

The 2003 reforms introduced special measures for energy crops, which until then had been grown as permitted industrial crops on set-aside land. An aid of €45 per hectare was introduced for energy crops produced for biofuels or other renew-

able fuels for transport and for electric and thermal energy from biomass. The main crops have been produced for biodiesel and ethanol. The aid is to be paid on up to 1.5 million hectares. By 2006, the area for which aid was claimed was between 1.2 and 1.3 million hectares.

A European Council Biofuel Directive of 2003 defined indicative targets for biofuel share for transport fuels at 2 per cent for 2005 and 5.75 per cent for 2010. With the sharp increases in world oil prices that commenced in 2005, environmental considerations and the adoption of a biomass action plan by the European Commission in 2005, there has been an upsurge in interest in biofuel production.

A European Commission (2007a) report indicates a baseline increase in demand for feedstock for biofuels to 18.6 million tonnes of cereals for bioethanol production and a crushing of 18.8 million tonnes of oilseeds for biodiesel by 2013. This compares with current total EU cereals supplies of around 250 million tonnes, while biodiesel demand compares with recent oilseed supplies of around 44 million tonnes. In early 2007 the Commission published a strategy to cut greenhouse gas emissions and reduce Europe's dependence on imported fossil fuels, including a compulsory target of 10 per cent biofuels in the transport fuel mix by 2020 (Fischer Boel 2007).

concerns about the environment, animal welfare and health

Increasingly, provision of support to EU farmers is becoming contingent on farmers meeting standards for environmental management and animal welfare. Some advocates of agricultural protection emphasise the fact that agriculture fulfils many unpriced landscape, environmental and cultural values. These are referred to as 'multifunctional' values, for which farmers should be rewarded. These nonpriced multifunctional values undoubtedly exist. However, their value is usually subjective. Importantly, there are negative as well as positive nonpriced values associated with agriculture, such as environmental pollution and loss of wildlife habitats from some farming systems.

While multifunctionality has been advanced as a reason for protection, recent official stances have emphasised the desirability of programs to support rural development to safeguard diversity of landscape, rural employment and rural diversification within a more market oriented agriculture (Europa 2007). The emphasis is more on rural development through assisting agricultural adjustment, education, R&D and infrastructure. Reference to market oriented agriculture in this context is to the replacement of high price support by direct payments that are considered decoupled.

In addition, in Europe there have been sensitivities on issues of animal welfare. These have been reflected in regulations on areas such as conditions for transport of livestock, sizes of cages and enclosures for birds and animals, and treatment of laboratory animals.

On the environment, awareness of damage to water quality, vegetation, wildlife and atmospheric quality have contributed to the development of EU and national measures to control agricultural pollution. Examples are the EU directive on the protection of waters against pollution caused by nitrates from agricultural sources (Council Directive 91/676/EEC) and measures in the Netherlands taxing generation of surplus manure and limiting amounts of manure that can be applied to an area of land (European Commission 1994).

As in other countries, there has been considerable concern within the European Union about the links between agriculture and human, animal and plant disease. Community awareness has been particularly heightened as a result of BSE, foot and mouth disease and avian influenza as well as ongoing human health problems arising from organisms such as listeria, salmonella and E.coli. The EU has implemented strict rules on 'traceability', whereby animals must be identifiable and all foodstuffs, animal feed and feed ingredients can be traced through the food chain (European Commission 2004b).

The European Union has taken what might be considered a conservative approach to the application of genetically modified organisms (GMOs) and use of hormone growth promotants in agriculture. Some GMOs, such as strains of maize, have been authorised for production in parts of the EU. Overall, however, very few GMOs have been authorised (European Commission 2004) and use of hormone growth promotants has not been permitted for meat or milk production.

There are obvious benefits from efforts to improve environmental and animal health outcomes. However, many environmental and animal welfare rules are capable of being used to impose 'process protection' that can adversely affect access of others to markets. This can be done either through the provision of extra support or protection to ensure that particular standards are met, or through insistence that outside suppliers apply the same standards as domestic producers despite marked differences in their production environment and conditions. This can be of concern where producers in other countries face production conditions that differ greatly from those in Europe.

geographic indicators

Labelling rules and geographic indicators (GI) have been prominent in policy positions taken by the European Union in recent years. The objective of geographic indicators is to provide exclusive benefits from property rights to producers or firms for products with particular characteristics based on geography alone. The implication is that there is something unique about the regional products based on such elements as a certain production technique or the use of locally produced inputs (Patterson 2007).

The historical development of many of today's foods and beverages has been such that many types were developed from the products and using processes originally developed in regions of what is now the European Union. The European Union now has over 700 products, primarily cheese, fresh meats, meat based products, honey, wines, olive oil, fruits and vegetables, that have been granted Protected Designations of Origin (PDOs) and Protected Geographic Indications (PGIs) under European Regulations 2081/92 and 2082/92. Examples are champagne, parma ham and fetta cheese.

With the development of similar industries and the application of the same technologies elsewhere, some of these names have come to be used in many countries and regions to denote styles of particular products. Under such conditions, obvious questions arise about conformity with the exclusive position taken on GIs by the EU and other countries. Issues of possible breach of property rights may arise where particular countries claim GI exclusivity because of a particular geographic environment and production process.

In the Uruguay Round, issues of geographic indicators were covered under the TRIPS Agreement (see glossary). However, this left many loose unresolved issues, including whether countries could be used as GI designations – for example, Canadian whiskey; who could use traditional expressions like 'vintage' or 'ruby'; and whether or not members could take back names that had been usurped worldwide, like fetta cheese (Patterson 2007). There have also been bilateral agreements between the EU and various countries, including Australia, on wine. In an agreement in 1994, Australia received improved access to the European Union wine market in exchange for forgoing the use of various terms including 'champagne', 'burgundy' and 'claret'. Since that time, Australian labelling has been oriented more toward identifying wines through the region of production and variety of grape used – for example, Barossa Valley shiraz (M. Ryan, Australian Department of Agriculture, Fisheries and Forestry, personal communication, 2007).

The general position taken by the European Union on GIs has been that only the product that was produced in the region from which the name was derived should be able to be marketed using that region's name. From an economic standpoint, that position might enable producers in the originating region to extract higher prices through enhanced exclusivity of their products. It was noted, however, by Patterson (2007) that GIs act as a nontrade barrier and reduce economic welfare by restraining trade.

effects of EU reforms on other countries

EU import arrangements are heavily oriented toward preferential entry conditions for particular suppliers (see appendix B for tariff quota allocations). In many instances, such as with ACP access for sugar, the arrangements have enabled imports to obtain prices on the EU market comparable with the internal support prices. The higher prices or 'economic rents' can be derived from preferential arrangements under the generalised system of preferences extended to developing countries and also for imports from least developed countries under the 'Everything But Arms' initiative. Additionally, depending on regulations and commercial arrangements, economic rents can be obtained for the tariff quota limited exports from developed countries such as New Zealand, Australia, Canada and the United States to the European Union.

EU reforms to reduce internal supported prices and to compensate domestic producers through direct payments directly reduce the prices received by supplying countries for allocated quota quantities and quantities entering at reduced tariffs under other preferential arrangements. Those domestic reforms reduce benefits from the preferences. For example, the much reduced internal EU sugar prices under the 2005 reforms would result in lower prices for the ACP countries. Unless compensating aid is provided, the loss of rents will adversely affect the sugar industries and the economies of the ACP countries.

Another example of the potential effects of EU reforms on preferential supplying countries is with the 'Everything But Arms' initiative. Two of the commodities through which the least developed countries were most likely to benefit from free access under this initiative were sugar and rice. The recent sugar reforms and the rice reforms in the 2003 Mid Term Review will greatly reduce and could in some instances even eliminate the benefits to least developed countries from the initiative. The former would reduce the economic rents from the preferential access for sugar. The latter, which involves a 50 per cent cut in EU rice support prices with domestic producers being compensated, could markedly reduce market rents from least developed countries' preferential rice exports to the European Union.

Any further reductions in meat and dairy support prices under the reforms could also be expected to adversely affect the unit returns obtainable on quota access of these products from the range of developed and developing countries that have tariff quota access to the EU market.

management of import surges other than through the special safeguards mechanism

In addition to the special safeguards arrangements in the Uruguay Round Agreement on Agriculture (see section on 'the CAP and the Uruguay Round'), the European Union has at times pursued other measures to limit imports when there has been a surge in imports, and/or when import prices have fallen sharply.

An example is the imposition of tariff quotas on imports of low and medium quality wheat (an annual total quota of 2.9816 million tonnes) and barley (a quota of 50 000 tonnes of malting barley and 300 000 tonnes of other barley) that followed a surge in cheap wheat imports between 1999 and 2002.

Another example is reclassification of imports of salted poultry pieces to a higher tariff category following a surge in imports from Brazil and Thailand from only 3000 tonnes in 1996 to 400 000 tonnes in 2001. To do this, the European Union introduced regulations in 2002 and 2003 reclassifying the product from customs heading 0210, for which the tariff was 15.4 per cent, to customs heading 0207, for which the tariff was much higher. Brazil and Thailand subsequently referred this change to a WTO panel. The panel ruled in favour of Brazil and Thailand and a WTO appellate body subsequently dismissed an EU appeal. As a result the European Union was obliged to again allow entry of the product from Brazil and Thailand at the lower rate (USDA Foreign Agriculture Service 2005).

reaching accommodation in the Doha Round

Agriculture is a key element of the current round of WTO multilateral trade negotiations, the Doha Round. The European Union is a key participant in that round and the positions it takes in the negotiations will be an important determinant of the outcomes for the round. The round aims to achieve substantial improvements in market access; reductions with a view to phasing out all export subsidies and substantial reductions in trade distorting domestic support; and the advancement of developing countries (WTO 2001).

Broadly, the positions taken by the European Union so far in the negotiations include:

- » preparedness to eliminate export subsidies by 2013
- » maintaining or extending exemptions on decoupled domestic support payments (green box) that are free from WTO cuts and limitations, but capping exempt payments under production limiting arrangements (blue box) at 5 per cent of the total value of agricultural production and
- » on market access, pursuing a relatively strong defensive stance, being prepared to reduce bound tariffs, in some instances by large amounts, but arguing for lesser cuts for 'sensitive' products but with compensating tariff quota expansion that could cover a large part of EU agricultural imports.

A summary of the 2005 EU proposal, which was the latest available published proposal when this study was prepared, for the round is shown in box 2. It should be noted, however, that the EU position is continuing to evolve with ongoing negotiations.

Those positions are consistent with the European Union's internal reform approaches that are oriented toward the single payment scheme that would be framed as exempt under the green box; replacement of overt export subsidies with direct payments, part of which effectively subsidise exports, and maintenance of relatively strong border protection.

box 2 **summary of major provisions in the EU proposals for agriculture for the Doha Round (Agra Europe 2005)**

domestic support

The permitted Aggregate Measurement of Support (AMS), which is nonexempt 'amber box' support for agriculture as a whole and which is subject to agreed cuts, to be subject to a three tier cut of:

- » 70 per cent for countries with the highest AMS levels
- » 60 per cent for countries with medium AMS levels and
- » 50 per cent for other countries.

continued...

box 2 summary of major provisions in the EU proposals for agriculture for the Doha Round *continued*

The *de minimis* threshold for which exemptions are permitted where amber box support is less than permitted thresholds should be reduced by 80 per cent. For developed members, that would reduce the thresholds from 5 per cent to 1 per cent of the value of production for each of commodity specific and non commodity specific support.

Support under the 'blue box' that is exempt from cuts for payments under production limiting arrangements or support for which no production is required would be capped at 5 per cent of the total value of agricultural production.

As with the AMS, the overall reduction in total trade distorting domestic support, comprising the AMS plus blue box plus *de minimis* should be reduced in three bands by 70 per cent, 60 per cent and 50 per cent.

The European Union would be prepared to phase out export subsidies provided there is a parallel treatment for all other forms of indirect export subsidies. Tariffs should be subject to the following cuts and caps:

developed countries		developing countries	
threshold (%)	%	threshold (%)	%
0 ≤ 30	35 ^a	0 ≤ 30	25 ^b
> 30 ≤ 60	45	> 30 ≤ 80	30
> 60 ≤ 90	50	> 80 ≤ 130	35
> 90	60	> 130	40
tariff cap	100		150

^a An average cut of 35 per cent but a minimum cut of 20 per cent and a maximum cut of 45 per cent allowed. ^b An average cut of 25 per cent but a minimum cut of 10 per cent and a maximum cut of 40 per cent allowed.

Source: Agra Europe (2005).

Up to 8 per cent of total agricultural tariff lines are to be designated sensitive products. Treatment of sensitive products allows for substantial market access but less than under normal tariff cuts. The EU proposes to allow countries to reduce the size of tariff cuts for sensitive products by between one-third and two-thirds. However, the greater the deviation from the standard tariff cut, the larger the tariff rate quota that would be created.

The EU proposed retaining special safeguards for most EU sensitive products including beef, poultry, butter, fruit and vegetables and sugar.

6

appraisal of CAP policy reforms

positive EU reforms

The European Union has been making positive changes to its agricultural support policies. Key positive aspects include:

- » a cohesive program and well advanced, staged progress have been made toward applying payments under the single payments scheme that are not linked to current production and/or prices as the main vehicle for the provision of domestic support
- » budget guidelines are in place that, in conjunction with the greater predictability of the single payments scheme, should limit the potential for future funding difficulties, at least up to 2013
- » at the margin, policies have been reoriented more toward safeguarding the environment and advancing rural development and less toward the currently funding dominant areas of market intervention and provision of guaranteed, supported prices and payments
- » costs to consumers have been lowered (though many consumer costs are being transferred to taxpayers) and distortions to consumption have been reduced – therefore economic costs from the CAP are now somewhat lower than previously
- » support arrangements have been managed to comply with WTO commitments on export measures and domestic support
- » the entry of many new members and their incorporation into the CAP have been successfully negotiated
- » sugar policy is being reformed to meet WTO commitments and, although the adjustment in that sector is likely to be difficult, progress is being made
- » a trend toward greater use of crops for biofuel purposes is appearing – this has the potential to precipitate appreciable changes in the orientation of crop use and in crop production in the European Union. However, the extent will depend on developments in oil prices, future government targets for the use of biofuels in transport fuels, and incentives provided to produce crops for biofuels compared with those provided to produce crops for food use.

some effects on other countries

The European Union is continuing to provide significant foreign aid to chosen countries by maintaining preferential trade with former colonies. Some reforms, however, such as those for sugar, raise some difficult issues. Also, the European Union is moving toward providing greater market access to the least developed countries under its 'Everything But Arms' initiative.

This effective provision of foreign aid through trade preferences does provide benefits to the recipient countries. However, aid through trade preferences is inherently inefficient and inequitable. It directs much of the aid to particular industries in the countries receiving preference and not to activities that could benefit their economies most. It also encourages production and exports of the products for which the preferences are provided in the recipient countries, displacing often more efficient production and exports by other countries, many of which are also developing countries. As such, preferences promote inefficient patterns of resource use and production internationally and reduce global welfare. A less market distorting and more welfare enhancing means of delivering aid to developing countries would be to directly target aid to meet specific development needs.

strengths and weaknesses of decoupled payments

Changing to decoupled payments by reducing internal prices toward world market levels and decoupling compensating support would expose producers to prices closer to world prices. Such a move would result in less distortion of production, consumption and trade than the same levels of coupled support if the payments are properly decoupled. However, there is considerable doubt about the extent to which the reforms will actually reduce market distortions. This is largely because while the European Union has been prepared to change how it supports agriculture, with the emphasis on decoupling, it is not reducing levels of support much.

The central role accorded the single payment scheme in EU support payments makes the degree to which such payments are actually, not just claimed to be, minimally distorting to production, consumption and trade and to the EU economy, critical for the real success of the reforms.

Issues of significance for decoupling support payments include:

- » whether the payments meet WTO provisions for decoupling and
- » whether the payments are in fact, and not just considered to be, minimally market distorting. If payments are indeed minimally distorting and they replace high levels of price support that have stimulated production for decades, the change to such payments should result in marked reductions in production from levels that would otherwise apply.

Swinbank and Tranter (2005) concluded that the single payment scheme may not meet WTO conditions for decoupling and therefore green box exemption for two reasons. One was because of an EU condition that entitlement hectares must be matched by farmed hectares, which could break the WTO rule that payments must not be linked to factors of production including land. Also, an EU rule that payments could not be claimed where land is planted to fruit or vegetables could break the rule that they should not be related to the type of production undertaken. This latter concern might be addressed with the proposed incorporation of payments for fruit and vegetables into the single payment scheme.

Just because WTO negotiations deem payments that are made in a particular way to be minimally market distorting does not necessarily mean that they are actually minimally market distorting. Important considerations include:

- » Reductions in distortions to the economy overall through replacing price support by decoupled payments are likely to be overstated because of the transaction costs in raising and transferring tax funds (Alston and Hurd 1990).
- » Payments deemed decoupled are being made in conjunction with other support, including through tariffs, so the system of support will still be distorting even if the payments are decoupled. For a system to be minimally distorting, producers and consumers must face actual world prices, which will not occur when tariffs and other coupled measures apply.
- » Expectations play an important role in influencing production decisions. If producers expect to obtain larger future benefits through increasing current production and influencing political outcomes on payment bases and/or rates, their production will not be properly decoupled from direct payments. This has been relevant for the United States where in its short history of attempted decoupling, governments have raised payment rates when prices have fallen and changed payment bases.

- » The periodic reviews of support policies in both the European Union and the United States and the possibility that bases and payment rates could be reviewed provide opportunities for political pressure to change payment rates and bases. That pressure might be less for the European Union than for the United States because of diffusion of support through the SPS system. Still, where inflation occurs or interest groups feel that they can obtain benefits through political influence, there will always be some pressures to adjust or update payment rates.
- » Large amounts of support affect recipients' wealth and incomes and increase access both to savings and credit. As such they can influence the adoption of production methods and technologies that would otherwise not be applied, thereby affecting production. Some studies have suggested that these effects are small. For example, Bascou et al. (2005) are dismissive of them.
- » Most importantly, ongoing direct payments give producers the option to continue to produce what they have already showed a preference for producing, and to avoid the risks, adjustment, and education costs inherent in fundamentally changing enterprises. An important influence on motivation for changing enterprises is not so much what will ultimately be the most profitable in money terms but what are the benefits and costs of making a change from current activities. Those benefits and costs involve nonpriced lifestyle and heritage values as well as financial profitability. Large, ongoing direct payments that are sufficient to maintain profitability of current activities enable producers to maintain production patterns established over decades of high distorting support and can lock in the distortions arising from that support. Hennessy and Thorne (2005) concluded on the grounds of survey results in Ireland that 'the evidence ... supports the hypothesis that, at least in the short term, a significant number of farmers will choose to use their decoupled payments to subsidise unprofitable production'. That conclusion could probably be expected, because the payments would have been likely to maintain the viability of otherwise unprofitable enterprises and allow producers not to have to face the costs of making substantial changes. Nor need the effects be limited to the short term, especially in areas where particular types of enterprise have been established for generations and ongoing payments, whether linked to particular products or not, permit continuing profitable production, not only by the present generation but also future generations.
- » Decoupled payments are capitalised into land prices and the maintenance of high land prices affects both patterns and intensity of land use. They would reduce the degree of substitution of land between agriculture and other uses

including housing, infrastructure, recreation and environmental activities, maintaining broad intersector resource misallocations.

These factors can lock in established distortions that are likely to be very large following decades of high support that has been provided in very market distorting ways. Although changing to decoupled payments can reduce market distortions from a given level of support, the change is unlikely to result in minimal distortions.

PSEs and EU levels of support and protection, using beef as an example

The 'producer support estimates' (PSEs) published by the OECD have provided the most widely used information base for support to agriculture in developed countries. They have also been estimated for some developing countries. Those estimates have been available for OECD countries on a relatively consistent basis since 1986. Estimates on a somewhat different basis were also made for earlier years back to 1979.

The objective of the PSEs has been to provide estimates of support to agriculture through transfers from consumers and taxpayers. The OECD has been careful to point out that they are estimates of support and not of trade impacts or market distortions arising from the support.

PSEs, which have until now been estimated on a commodity by commodity basis and also for agriculture as a whole, indicate the proportion of the supported value of production derived from transfers from consumers and taxpayers.

Transfers from consumers occur from internal prices being supported by government measures at levels that differ from (generally above) levels that would apply in the absence of government measures. These transfers arise primarily from limits to import competition and are underpinned by a range of instruments that restrict quantities available on the market at any time through barriers to imports, subsidies to exports and domestic intervention and storage policies that regulate the flow of domestic products to the market. Some of the trade policy mechanisms used over time have been tariffs, tariff quotas, variable import levies, voluntary export restraints agreed to by or forced on supplying countries and encouragement of exports through export subsidies.

Transfers from taxpayers are through budget outlays. Some are through direct subsidy payments to producers, while others are through government subsidisation of production, facilities or inputs.

As indicated in figure B in this report, overall levels of PSEs for EU agriculture have not changed very much since the early 1990s. Nevertheless, there have been

major changes in the mechanisms used for delivering such support. The main changes have been in the proportion funded by consumers, which declined from 89 per cent in 1986–88 to 52 per cent in 2004, and the proportion provided through payments based on areas planted and animal numbers, which increased over the same period from 3 per cent to 29 per cent (OECD 2006). Those changes reflect the change in policy orientation since the 1992 MacSharry reforms, under which internal support prices have been reduced and producers have been compensated largely through payments based on areas and animal numbers.

EU beef support and the PSE

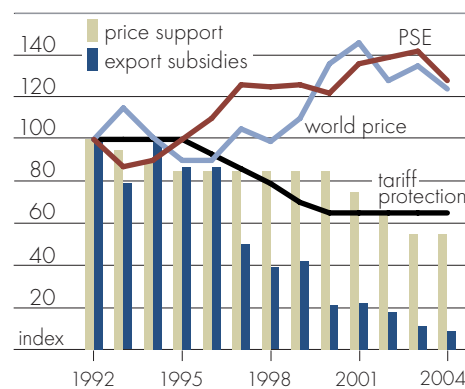
The Directorate General of Agriculture and Rural Development of the EU Commission (DG Agriculture) recently released an article (European Commission 2006c) in which it is claimed that the PSE can easily mislead, citing EU beef as an example, where the PSE has risen since 1992, while ‘trade distorting support in the EU has fallen dramatically over the period from 1992 to 2004 with every single measure of trade distortion having decreased’. The areas of trade distortion indicated are price support, export subsidies and tariff protection. The theme is that EU reform reduced all three of these means of support markedly and resulted in a marked reduction in market distortions even though PSE levels have risen.

how is it that the EU beef PSE rose while major forms of support were being cut?

The DG-Agriculture paper includes the following graph (reproduced here as figure K), which shows how the PSE has risen, how world prices have increased and how price support, export subsidies and tariff protection have all fallen markedly.

As the article indicates, the PSE is a measure of the monetary transfer from consumers and taxpayers to producers provided by agricultural policies; the OECD indicates that ‘it is incorrect to interpret the PSE as an indicator of protection or trade impact’.

fig K EU beef reform and the PSE

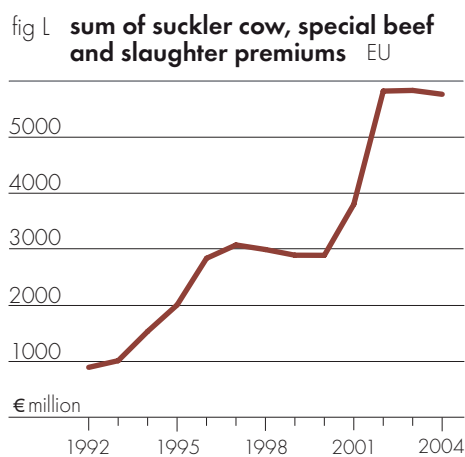


The actual situation with EU beef since 1992 is one under which the administratively set internal support prices have been reduced markedly but producers have been compensated through direct payments via special beef premiums, suckler cow premiums and, in recent years, also through slaughter premiums. In the WTO context, those premiums (subsidies) were exempt from cuts or restrictions under 'blue box' exemptions for production limiting arrangements under the Uruguay Round Agreement on Agriculture.

DG Agriculture paper excludes major direct premium payments

The DG Agriculture paper includes price support that, through examination of the index shown in figure K, is represented by using the administered support prices that the Council agrees for market intervention by EU intervention agencies. It also includes reductions in tariffs and export subsidies in its argument.

As shown in figure K, there have been marked reductions in EU market support prices, bound tariff rates and export subsidies since 1992. However, the figure omits subsidy support through the various premiums based on animal numbers that rose greatly between 1992 and 2004 (figure L; European Commission 2002a, 2007c). The value of such premiums increased from only 4 per cent of the value of beef production (EU-12) at producer prices in 1992 to 26 per cent by 2004. This appears to be a prime reason why the PSE for beef rose in that period despite the marked reductions in support prices, tariff levels and export subsidies – a reason that is not included in the DG Agriculture paper.



nominal prices received by EU beef producers have not declined along with the reductions in internal support prices

Although EU price support through intervention and latterly basic prices for beef have declined substantially since 1992 as shown in figure L, actual nominal prices received by EU producers have remained relatively constant since 1992. That is, the declining administered support prices have not been reflected in

reduced internal market prices (figure M; European Commission 2002a, 2006c; Eurostat 2007d).

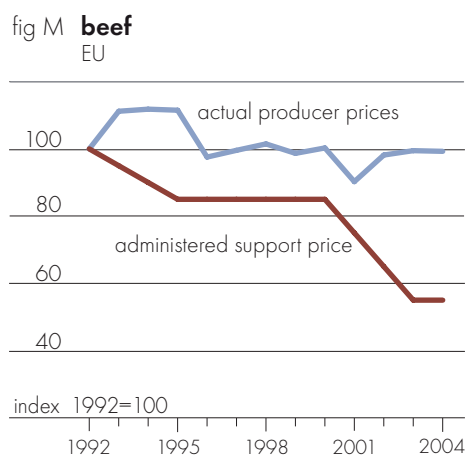
An obvious question is, how were actual nominal price levels maintained from 1992 to 2004 over a period when administered support prices fell by an estimated 45 per cent? The answer appears to be because it was not the administered support prices alone that were maintaining the internal market prices but a combination of factors, including border measures, changes in internal demand, changes in world market prices, export subsidies (even though they too declined markedly) and internal cost pressures.

A number of factors have acted to prevent internal market prices for beef from falling in nominal terms along with the administered support prices. In particular, the EU cattle industry faced considerable cost pressures over the period examined that did not apply previously. Compulsory measures to ensure traceability of animals and to ensure the absence of feed ingredients that might transmit BSE would have added to production costs. Also, substantial slaughtering of stock and stock movement restrictions to contain a foot and mouth disease outbreak in Britain in 2001 would have curtailed herds, set back production capacity and reduced flexibility of operations. Additionally, animal welfare regulations limiting times over which animals could be transported, conditions for transport and frequency of feeding, watering and exercising would have resulted in extra costs.

Reductions in export subsidies to meet Uruguay Round commitments would have placed downward pressures on internal market prices, and this would have been reflected in those prices only just being maintained in nominal terms.

However, the increases in world market prices that are indicated in the paper to have occurred would have reduced the extent to which export subsidies would have been required to sustain the export competitiveness of EU beef.

There has also been an increase in import competition that has accompanied the Uruguay Round tariff reductions and increases in tariff quotas, as is indicated in the DG Agriculture paper. However,



the extent to which the tariff reductions have increased import competition has not been sufficient to reduce internal prices in nominal terms. One reason is that EU imports for many categories of beef remain closely managed. Another is that, although substantial imports beyond tariff quota quantities have been able to enter, mainly from Brazil, the beyond quota tariff along with increased world market prices indicated in the DG Agriculture paper were sufficient to prevent prices for imports from forcing nominal internal market prices down.

The combined effects of the increased import competition and the reductions in export subsidies were insufficient to reduce internal market prices in nominal terms, although real prices would have declined.

It appears that reductions in transfers from consumers to EU producers through reductions in export subsidies and greater import competition from tariff reductions and tariff quota expansion were offset by the large increases in transfers from taxpayers through direct subsidies through the various headage based premiums. As a result, the transfers measured in the PSE were maintained, although the support was not sufficient to prevent some reduction in EU production (see figure 1). That reduction would have been influenced by abnormal costs and uncertainties, some of which would have arisen from BSE, foot and mouth disease and animal welfare regulations.

support, the PSE and market distortions

As indicated above, the PSE is a measurement of support to producers through transfers from consumers and taxpayers as a result of government measures. It is not an indicator of the degree of market distortion arising from such transfers. One reason for it not indicating levels of market and trade distortion is that different forms of support have different kinds of distorting effects on markets. Also, every country's agriculture has different characteristics and alternatives that can be produced and differing responses to the various government measures. Consequently activities and countries with the same levels of government induced transfers can experience markedly differing degrees of consequent market distortions.

While the PSE cannot be used as an indicator of the degree of market distortion from government measures, it remains an important indicator of the degree of support to farmers. Along with additional information on the means by which the support is delivered and information on the kinds of market distorting effects of differing forms of support, it provides a useful tool to help monitor progress of policy reforms to reduce community costs.

The DG Agriculture paper uses EU beef as an example where the OECD PSE is considered to be misused as it does not give credit for the EU domestic reforms on trade liberalisation. In doing this it is shown that the EU has indeed been reducing major trade distorting measures by reducing its tariffs and export subsidies. As indicated above, those measures underpin levels of price support that stimulate production and affect trade, so reductions in them would contribute to trade liberalisation.

The paper also shows that the EU has greatly reduced its price support, as indicated by the large reductions in its administratively set internal support prices. In addition, it shows marked reductions in tariffs that occurred as a result of the Uruguay Round Agreement on Agriculture.

However, actual internal market prices did not follow either the administratively set prices or the tariff rates down, indicating that the administratively set support prices were not an appropriate indicator for the levels at which internal market prices were in fact supported. Those levels were determined by the range of factors discussed in the previous subsection.

Most importantly, the paper makes no mention of the sixfold increases in headage premiums paid to EU beef producers over the period 1992-2004. The suckler cow premium was paid per animal and would have provided an incentive to maintain or increase numbers of such animals, thereby supporting production. The special beef premium was paid on up to 90 animals twice a year and would have encouraged those with fewer than that number to increase their herds, thereby encouraging production. From the year 2000 the slaughter premium applied on the number of animals slaughtered, which would have encouraged expansion of herds and rates of turnoff of animals. These payments would have been market distorting even though they were eligible for exemption from the European Union's AMS under the blue box provisions of the WTO Agreement on Agriculture.

The large increases in those payments would have encouraged EU production, reducing the trade liberalising effects of the reductions in tariffs, increases in tariff quotas and reductions in export subsidies. The large increase in those headage payments, being taxpayer transfers, would also have contributed to the PSE transfers being maintained at a high level despite the other reforms.

The situation on headage payments has been modified since 2005 with their incorporation into the single payment scheme. Issues concerning market distortions arising from such payments are canvassed in the section of the paper titled 'strengths and weaknesses of decoupled payments'.

B

appendix

major tariff quotas applied by the European Union

	2000		2006	
	relevant quota date	tonnes	relevant quota date	tonnes
meat				
bovine meat				
frozen beef for processing (bone-in equivalent)	1 July 2000 - 30 June 2001	50 700	1 July 2006 - 30 June 2007	54 703
frozen beef and veal (boneless equivalent)	1 July - 30 June	53 000	1 July 2006 - 30 June 2008	53 000
high quality 'Hilton' beef (bone-in and boneless, fresh, chilled and frozen)	1 July - 30 June	58 100	1 July - 30 June	60 250
<i>allocation:</i> Argentina		28 000		28 000
North America		11 500		11 500
Australia		7 000		7 150
Uruguay		6 300		6 300
Brazil		5 000		5 000
New Zealand		300		1 300
Paraguay		-		1 000
frozen buffalo meat				
<i>allocation:</i> Australia	2 250		2 250	
frozen thin skirt	1 July - 30 June	1 500		1 500
<i>allocation:</i> Argentina		700		700
other third countries		800	1 July 2006	800
Chilean beef quota			- 30 June 2008	1 350
bilateral and multilateral agreements				
ACP scheme (boneless equivalent)		52 100		52 100
<i>allocation:</i> Botswana		18 916		18 916
Namibia		13 000		13 000
Zimbabwe		9 100		9 100
Madagascar		7 579		7 579
Swaziland		3 363		3 363
Kenya		142		142
baby beef			2007	22 525
<i>allocation:</i> Serbia, Montenegro & Kosovo				9 975
Croatia				9 400
Macedonia				1 650
Bosnia & Herzegovina				1 500

major tariff quotas applied by the European Union

	2000		2006	
	relevant quota date	tonnes	relevant quota date	tonnes
bovine meat <i>continued</i>				
dried boneless beef			1 January	
<i>allocation:</i> Switzerland		700	-31 December	1 200
Europe Agreement		30 750	-	
<i>allocation:</i> Poland	1 July - 30 June	12 000	-	
Hungary		11 375	-	
Slovakia		1 750	-	
Czech Republic		3 500	-	
Romania		1 875	-	
Bulgaria		250	-	
Slovenia	2000	9 100	-	
Macedonia		1 650	-	
Estonia, Latvia, Lithuania (fresh, chilled or frozen)	1 July 2000 - 30 June 2001	1 875	-	
Latvia (processed beef)		250	-	
pig meat				
loins and hams boneless, fresh, chilled or frozen		34 000		35 265
tenderloin fresh, chilled or frozen		5 000		5 000
sausages, dry or for spreading, uncooked.		3 000		3 302
other prepared or preserved meat, meat offal or blood		6 100		6 161
carcasses and half-carcasses fresh, chilled or frozen		15 000		15 067
cuts of domestic swine, fresh, chilled or frozen with or without bone, excluding tenderloin presented alone		5 500		5 535
additional quota (0203.19.13 and 0203.19.15)		7 000		7 000
loins and hams				
<i>allocation:</i> United States			yearly starting	4 722
ACP scheme (50% 1601.00 and 50% 0203, 0209 and 0210 products)		500	July 2006	
Chilean quota (fresh and frozen pig meat and products)			1 January - 31 December 2006	1 000 4 659

major tariff quotas applied by the European Union

	2000		2006	
	relevant quota date	tonnes	relevant quota date	tonnes
pig meat <i>continued</i>				
concessionary import schemes for Eastern Europe	July 2000 onwards		-	-
fresh/chilled				
<i>allocation:</i> Hungary		38 625	-	-
Poland		12 750	-	-
Czech Rep		6 625	-	-
Slovakia		2 875	-	-
Bulgaria		375	-	-
Romania		15 625	-	-
Lithuania a		1 250	-	-
Latvia a		1 250	-	-
Estonia a		1 250	-	-
salted/in brine				
<i>allocation:</i> Hungary		2 000	-	-
Poland		3 750	-	-
Slovenia b		65	-	-
sausages				
<i>allocation:</i> Hungary		8 750	-	-
Poland		2 875	-	-
Romania		1 125	-	-
Latvia		250	-	-
Estonia		625	-	-
Slovenia c		130	-	-
prepared/preserved				
<i>allocation:</i> Hungary		875	-	-
Poland		12 375	-	-
Romania		2 125	-	-
sheep meat	2001		2007	
sum of country allocations		279 197 d		283 410
<i>allocation:</i> New Zealand		226 700		227 854
Argentina		23 000		23 000
Australia		18 650		18 786
ACP states				100
ACP states (for the species 'domestic sheep' only)				500

major tariff quotas applied by the European Union

	2000		2006	
	relevant quota date	tonnes	relevant quota date	tonnes
poultry meat				
poultry meat			1998-99	18 000
eggs and egg products			1998-99	128 153
salted meat				264 245
<i>allocation:</i> Brazil				170 807
turkey meat preparations				103 896
<i>allocation:</i> Brazil				92 300
cooked chicken meat				230 453
<i>allocation:</i> Brazil				73 000
dairy				
butter	2000-01	86 667	1 January -31 December	88 762
<i>allocation:</i> New Zealand	2000-01	76 667		77 402
cheese for processing		4 500		4 500
<i>allocation:</i> New Zealand		4 000		4 000
Australia		500		500
cheddar		14 250		14 711
<i>allocation:</i> New Zealand		7 000		7 000
Australia		3 250		3 711
Canada		3 250		4 000
cheese and curd (incl. emmental, gruyere, sbrinz, cheddar cheese for processing fresh cheese [pizza] and other)	1995-96	30 546	1 July -30 June starting 2000-01	83 738
skim milk powder		40 401		68 000
cheese (jarlsberg, ridder, gouda, edam, fresh, other): Norway		2 200		4 000
cheese (cheddar, gouda etc): South Africa e		5 000		5 000
cheese (kashkaval etc): Turkey		-		1 500
condensed milk: ACP states		-		1 000
cheese: ACP states		-		1 000
cheeses other than tilsit and some specified other cheeses: Switzerland		-		4 250
cream natural yogurt: Switzerland		-		2 000
cheese: Chile f		-		1 500
whey: Israel g		-		824

major tariff quotas applied by the European Union

	2000		2006	
	relevant quota date	tonnes	relevant quota date	tonnes
sugar				
ACP molasses		600 000		
ACP Sugar Protocol (cane sugar)	1995-2002-03	1 304 682	2006-07	1 304 700
LDC h 'EBA Sugar'	2001-02	74 185	2006-08	149 213
OCT import quota	1 January 1998	3 000		
fructose		4 504		
CXL sugar imported under a WTO				
reduced rate tariff quota	from 1995	85 463	from 1995	85 463
allocation: Brazil		23 930		23 930
Cuba		58 969		58 969
others		2 564		2 564
complementary quantities to make up refiner TSNs				≥75000
allocation: first 75000 go to Ivory Coast, Swaziland, Malawi and Zimbabwe				75 000
preferential imports of white sugar				
from the Balkans	21 June 1905	0	1 July 2005	380 000
allocation: Croatia			-	180 000
Serbia and Montenegro			-	180 000
Bosnia and Herzegovina			-	12 000
former Republic of Yugoslavia			-	7 000
Albania			-	1 000
cereals				
wheat				
high quality wheat	2000-01	300 000	-	
medium and low quality wheat	-		from 1 January	2 981
600				
allocation: United States	-		2003 annual	572 000
Canada	-			38 000
other third countries	-			2
barley				
malting barley	-		2006	50 000
other barley	-			300 000
fruits and vegetables				
garlic	quota until June 2001	12 000	from 2001	38 370
preserved mushrooms of the Agaricus variety	from 1999	62 660	from 1999	62 660

a Includes frozen. **b** Increases by 5 tonnes each year between 2000 and 2002. **c** Increases by 10 tonnes each years between 2000 and 2002. **d** Excludes imports from central and eastern European countries that could be imported either as live animal or meat. **e** 5000 in 2000 rising by 5% a year. unlimited in 2010 with no duty. **f** 2004, rising by 75 tonnes a year. **g** 2004, rising to 895 tonnes in 2007. **h** Based on best LDC export levels to the EU in the recent past, plus 15%. This total is increased by 15% annually.

summary of different CAP single payment scheme models applied in EU member states in 2007

start	regions	model	level of 'coupling' retained	other
Austria				
2005	one region	historical	suckler cow: 100% beef slaughter - adult: 40% - calf: 100% hops: 25% potato starch 60%	-
Belgium				
2005	Flanders & Brussels	historical	suckler cow: 100% beef slaughter - calf: 100% flax seed: 100%	-
	Wallonia	historical	suckler cow: 100% flax seed: 100%	-
Denmark				
2005	one region	static hybrid	male beef premium: 75% sheep/goats: 50%; potato starch: 60%	-
Finland				
2006	3 regions based on regional yields	dynamic hybrid moving toward flat-rate model	sheep premium: 50% potato starch: 60% male beef premium: 75% timothy grass seed: 100%	article 69: reduction for arable crops (2.1%) and beef (10%) to support extensive beef and some arable production
France				
2006	one region	historical	arable: 25% hops: 25% seeds: 100% suckler cow: 100% beef slaughter - adult: 40% - calf: 100% outermost regions: 100% tobacco: 60% potato starch: 60%	article 110: 10% reduction sheep/goats: 50% for olive oil to fund PO schemes
Germany				
2005	13 Bundesländer (Hamburg, Bremen, Berlin, incl. in closest other Land)	dynamic hybrid moving toward flat-rate model	hops: 25% potato starch: 60% tobacco: 60%	-

summary of different CAP single payment scheme models applied in EU member states in 2007

start	regions	model	level of 'coupling' retained	other
Greece				
2006	one region	historical	seeds: 100%	article 69: reduction for arable beef and sugar (10%), sheep/goats (5%), olive oil (4%), tobacco (2%) to support quality products article 110i: 2% reduction for olive oil to fund PO schemes; transitional coupled payment for sugar
Ireland				
2005	one region	historical	none	-
Italy				
2005	one region	historical	seeds: 100% tobacco: 60% (except in Puglia, where it is fully decoupled)	article 69: reduction for arable and sugar (8%), beef (7%), sheep/goats (5%), to support 'quality' production article 110i: 5% reduction for olive oil to fund PO schemes; transitional coupled payment for sugar
Luxembourg				
2005	one region	static hybrid	none	-
Malta				
2007	one region	flat-rate model	full decoupling	Note: EU funding = 40% of EU-15 levels in 2007; nationally funded complementary national direct payments (CNDPs) (up to 30% of EU-15 levels) to be paid per hectare
Netherlands				
2006	one region	historical	slaughter premiums - adult and calf: 100% linseed: 100% potato starch: 60%	-
Portugal				
2006	one region	historical	sheep/goats: 50% suckler cow: 100% beef slaughter - adult: 40% - calf: 100% seeds: 100% outermost regions: 100% tobacco: 50%	article 69: reduction for arable rice beef and sheep meat (all 1%), olive oil (10%) and sugar (10%), in order to support environmental measures transitional coupled payments for sugar - from 2007/8

summary of different CAP single payment scheme models applied in EU member states in 2007

start	regions	model	level of 'coupling' retained	other
Slovenia				
2007	one region	flat-rate model	male beef premium: 75% sheep/goats: 50% hops: 25%	-
Spain				
2006	one region	historical	arable: 25% seeds: 100% sheep/goats: 50% suckler cow: 100% - calf 100% outermost regions: 100% tobacco: 60% olive oil: 6.4% potato starch: 60%	article 69: reduction for dairy cotton and sugar (10%), beef (7%) and tobacco (5%), to support quality and other production beef slaughter - adult 40%
Sweden				
2005	five regions (based on historical cereal yields)	static hybrid	male beef premium: 74.55% potato starch: 60%	article 69: 0.45% of total is retained to support quality production
UK				
2005	England - three regions (normal moorland SDA minus moorland)	dynamic hybrid moving toward flat-rate model	none	-
	Scotland	historical	none	article 69: 10% of aid is retained to support the beef sector
	Wales	historical	none	-
	Northern Ireland	static hybrid	none	-

Source: AGRA FACTS no. 18-07 02/03/07.

Sectors in the table: Where a sector is not specifically mentioned, for example, tobacco or olive oil, the member state has opted for fully decoupled support.

For **potato starch**, the reform required 40 per cent of the traditional aid payment (€110.54/t) to be decoupled (and added to the SPS envelope) thereby retaining a 'coupled' payment of €66.32/t. Member states had the choice of whether to apply this from 2005 or 2006. For 2007, member states therefore have no choice on the level of 'coupling' – but here it is included in 'coupled' payments.

For **sugar**, the November 2005 reform foresees an additional transitional 'coupled' aid to member states renouncing more than half of their quota – that is, Italy and Portugal (in 2006-07) and Greece (from 2007-08) – in addition to the additional amounts in the SPS envelopes for decoupled payments. This aid may be provided for up to five successive years. Ireland, Latvia and Slovenia will not get any such aid because they have renounced 100 per cent of their sugar quota and therefore have no production left under quota to which the payment could be coupled.

For **dairy**, EU-15 member states had flexibility on the date from which they decoupled the dairy payment – some chose 2005 (Denmark, Germany, Luxembourg, Ireland, Sweden and the United Kingdom) other 2006 (Belgium, Finland, France, Italy and Spain) and the remainder from 2007 (Austria, Greece, Netherlands, Portugal, Slovenia and Malta).

Historical = model based on farmer direct receipts in set period (2000-02 for Ireland and most other users).

Flat-rate or 'regional' model = model based on flat-rate payment per hectare in a given region, with a possible distinction between arable land and pasture;

Hybrid = mix of 'historical' model and 'regional flat-rate' model – that is, all farmers will get a hectare payment (sometimes differing for arable and grassland) plus a decoupled payment based on historic production.

Dynamic = model that changes gradually over the period – for example, moving from a historical-based scheme toward a flat-rate payment.

Static = model which does not change in subsequent years – that is, not dynamic.

Article 69 of regulation 1782/03: possibility for a member state to rechannel up to 10% of the SPS envelope to provide additional support to types of farming important for the environment and/or improving the quality and marketing of products.

Article 110i of Reg 1782/03: under the olive oil reform a member state may rechannel up to 10% of its envelope specifically into operator organisation schemes.

* see <http://eur-lex.europa.eu/LexUriServ/site/en/consleg/2003/R/02003R1782-20060101-en.pdf> for consolidated text of Regulation 1782/03

glossary

European Union (EU): An intergovernmental union of democratic European countries founded on 25 March 1957 by the signing of the Treaty of Rome. Since that time the group has grown from six to 27 member states.

abbreviations

ACP	African, Caribbean and Pacific countries
AMS	Aggregate Measurement of Support
BSE	bovine spongiform encephalopathy ('mad cow' disease)
CAP	Common Agricultural Policy
CNAC	consumer nominal assistance coefficient
EAGGF	European Agricultural Guidance and Guarantee Fund
EBA	Everything But Arms
ECU	European currency unit
EU	European Union
ESU	European size unit (a measure of economic size)
FADN	Farm Accountancy Data Network
GATT	General Agreement on Tariff and Trade
GMO	genetically modified organisms
LDC	least developed countries
NMS	new member states
R&D	research and development
SPS	single payment scheme
SMP	skim milk powder
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UAA	utilised agricultural area
WTO	World Trade Organisation

definitions

Agenda 2000	A set of proposals and decisions for the European Union that covered a wide range of activities, including the CAP, with a view to steering the Union into the 21st century. Decisions under Agenda 2000 were reached by EU agriculture ministers in March 1999.
Aggregate Measurement of Support (AMS)	The measured level of nonexempt domestic support for agriculture in aggregate used in the WTO Agreement on Agriculture. It is determined by summing levels of nonexempt support for each commodity and nonexempt non commodity specific support. It includes market price support as measured by the difference between internal administered support prices and a fixed external reference price (import parity for importing countries and export parity for exporting countries at the level for the base period 1986-88), multiplied by the supported quantity plus nonexempt direct payments or any other subsidy not exempted from reduction commitments, less specific agricultural levies or fees paid by producers. In the WTO Agreement on Agriculture the AMS was used for negotiated domestic support reductions on a whole of agriculture basis.
amber box support	All domestic support measures that were subject to agreed cuts under the WTO Agreement on Agriculture.
applied tariff	The actual tariff that is applied to imports at a particular time.
arable crops	A term used in the European Union for crops, including cereals, oilseeds and protein crops.
biodiesel	A renewable liquid fuel produced from vegetable oils, most commonly rapeseed, sunflower and soybean oils. It may also contain other kinds of fats (Garafolo 2004).
biofuel	A renewable fuel produced from biomass, such as agricultural waste, corn or sugar cane.
biomass	A renewable energy source used in the production of biofuels. Examples of biomass include agricultural waste, corn and sugar crops.

blue box support	Payments under agreed production limiting arrangements. Such payments are exempt from domestic support reductions under the WTO Uruguay Round Agreement on Agriculture.
bound tariff rate	The maximum rate of import tariff that a WTO member undertakes to apply. The bound rate provides a ceiling that applied tariff rates cannot exceed except by negotiation, with compensation for affected partners.
bovine spongiform encephalopathy (BSE)	A progressive, fatal, neurological disease that typically causes nervousness, exaggerated reactions, unsteadiness and recumbency in adult cattle. The disease is commonly known as 'mad cow' disease.
consumer nominal assistance coefficient (CNAC)	A measurement used by the OECD to express the extent to which internal prices faced by consumers exceed or are below world market prices when expressed at the farmgate equivalent level. When the CNAC for an agricultural commodity is equal to one, total consumer expenditure on that commodity is at world market prices and there are no transfers of support between consumers and producers.
cross compliance	A number of statutory environmental, food safety, animal and plant health, and animal welfare standards to which agricultural producers must adhere to qualify for the full granting of payments under the SPS and other direct payments under the CAP.
decoupled payments	The provision of support to producers that is not linked to variables that affect markets, including production, prices, trade or factors used in production. Such support is considered less market distorting than support that is linked to those variables.
deficiency payment	A taxpayer funded payment made by the government (in this case the European Union) to cover the gap between the price that the government considers that producers should receive and the price that they can obtain from the market.
Doha Round	The most recent round (and at this time, ongoing) of trade negotiations by WTO member countries that began in November 2001.

EAGGF - Guarantee section	The Guarantee section of the EAGGF finances expenditure on the common organisation of agricultural markets, comprising market support and direct aid to producers (European Commission 2002a).
EAGGF - Guidance section	The Guidance section of the EAGGF finances rural development that is jointly financed along with the member states.
economic rents	Additional returns obtainable to those with access to a market because of restrictions of supplies to that market.
energy crops	Crops supplied primarily for the production of biofuels or other renewable fuels for transport, electric and thermal energy.
ethanol	Ethanol is a clean burning, high octane fuel that is produced through the fermentation of sugars from plant material with the use of enzymes and yeast. Corn, wheat and sugar crops are some of the major plant materials used for ethanol production.
EU enlargement	The expansion over time of the European Union from its original six countries in 1957 to its current 27 member states.
European currency unit (ECU)	From 13 March 1979 until it was replaced by the euro in 1999 the ECU was the common unit of account of the European Union. Its value was derived from a 'basket' of specified amounts of currencies of the European Union's member states, determined mainly on the basis of the economic size of each.
European size unit (ESU)	The value of one European size unit (ESU) for EU farms is equal to one standard gross margin of ECU 1200 in 1990.
export credit	The granting to the importer (buyer) of goods and services of an extended term to pay for them.
export parity price	The price obtainable from exporting a product minus transport and other costs involved in exporting.
export subsidy	Government payments or other benefits provided to domestic producers or exporters contingent on the export of their goods or services.

Farm Accountancy Data Network (FADN)	A system of sample surveys on a EU-wide scale carried out each year. The FADN survey covers all the different types of activity on farms and also collects data on some of their nonagricultural activities (such as tourism and forestry) (Eurostat 2007b).
foot and mouth disease	A highly contagious viral disease that does not affect humans but has devastating effects on animals with cloven hooves, such as cattle, swine, sheep, goats and deer.
General Agreement on Tariffs and Trade (GATT)	The GATT was formed in 1947 with the view of reducing tariffs and other trade barriers and eliminating discriminatory treatment in trade in order to raise the living standards of member countries. In 1995 the GATT was subsumed in the World Trade Organisation (WTO).
genetically modified organisms (GMO)	Organisms that have been genetically engineered. Genetic engineering is the process of taking genes from one strain of a plant, animal or virus and inserting them into another, with the goal of reproducing characteristics of the original species in the receiving species (www.ag.uiuc.edu/~asap/expanded/gmo/gmo.html).
green currency	For around 30 years until 1999, EU member states used agricultural conversion rates that differed from their national central currency exchange rates under what was termed the agrimonetary system. These agricultural conversion rates, termed green currency rates, were used for determining agricultural support prices and payments. With adoption of the euro as a single currency in 1999 the green currencies were discontinued.
green box support	Domestic support in forms that were agreed to be minimally distorting and are exempt from reductions under the WTO Agreement on Agriculture. Conditions for exemption are set down in annex 2 to that agreement.
green harvesting	The removal of immature fruit, wine grapes or vegetables typically for the purpose of limiting supplies to the market.
import parity price	The internal market price that is equivalent to the price that customers would pay for an imported product with the same characteristics and qualities if no import duty was applied.

industrial crops	Crops grown for purposes other than food or stockfeed, such as for fibre or biofuels.
inorganic fertiliser	Fertilisers that contain no organic compounds. Examples include phosphate, nitrate and potassium fertilisers.
intervention agencies	National bodies in each EU member state that perform the market intervention roles required under the CAP. In particular, they purchase and release quantities to the market to ensure that market prices are supported and stabilised around the levels agreed at the EU level.
intervention price	The price at which intervention agencies are normally obliged to make purchases, thereby placing a floor under the domestic wholesale price.
intervention purchases	Purchases of agricultural products by intervention agencies (see above).
Lisbon Strategy	The action and development plan for the European Union set out by the European Council in Lisbon in March 2002 to increase productivity and economic growth in the European Union.
Mid Term Review	A review of EU agricultural policies that was completed in 2003. Under that review, key decisions were made on the SPS and modulation.
modulation	The process of transferring money from the CAP's direct aid and market support funds (pillar I) to its rural development and agri-environmental measures (pillar II). From 2007 onwards, modulation will operate at a basic rate of 5 per cent a year.
multifunctionality	Any unpriced spillover benefits that are additional to the provision of food and fibre in agricultural production. These include environmental and social effects. Some countries also include food security.

new member states (NMS)	The countries that have newly entered the European Union. In this paper the NMS-10 refers to the central and eastern European countries and Cyprus and Malta that joined in 2004. In 2007 a further two states, Romania and Bulgaria, joined.
preferential import arrangement	An agreement between an importing country or countries (buyers) and certain exporting nations that products or services from those nations should face lower import tariffs or other impediments to trade than those encountered for imports from other nations.
price support	The maintenance of internal prices at levels that are usually above world market prices through the use of government measures.
production quotas	Explicit limits on the physical amount of particular products that is permitted to be produced during a specific period of time.
sensitive products	As part of the Doha Round of trade negotiations, all WTO members are to be permitted to identify certain agricultural products as 'sensitive'. These products are to be subject to smaller tariff cuts than nonsensitive products but would also be subject to additional import access through tariff quotas. The arrangements and levels of tariff cuts and tariff quota access are yet to be agreed.
set-aside program (also area reduction program)	A program under which producers are required not to plant a specified percentage of their land that was previously used to produce particular crops or a particular group of crops. Usually the required reductions are designated as a percentage of an historical base level and producers are either compensated or receive other benefits for complying with the required area reductions.
single payment scheme (SPS)	A scheme agreed in 2003 and established from 2005, whereby most direct aids to EU farmers would be paid in a way that is independent of production. It operates through aggregating former direct payments, most of which were commodity related, into reference amounts for a base period, generally from 2000

to 2002. Farmers are allocated payment entitlements based on those reference amounts. As further reforms are enacted for various commodity regimes, an increasing range of payments is being incorporated within the scheme. Member states are given some flexibility for distribution of the payments to farmers. The main options are to relate payments to those received and the number of hectares farmed by each farmer in the reference period and a regional flat rate approach under which regional reference amounts are divided by the number of eligible hectares and distributed to individual farmers according to their eligible hectares in the year of SPS introduction.

special safeguard provisions	Provisions in the WTO Agreement on Agriculture to members that have converted nontariff measures to tariff protection. They allow members to impose additional tariffs if import volumes exceed defined trigger levels or if import prices fall below defined trigger prices (Goode 2002).
tariff	A duty (or tax) levied on goods transported from one customs area to another. Tariffs raise the price of the imported goods, thus making them less competitive within the market of the importing country.
tariff quota	Application of a reduced tariff rate for a specified quantity of imported goods. Imports above this specified quantity face a higher tariff rate.
tariffication	Conversion to tariff equivalents of nontariff measures applying to particular products and the opening of current or minimum access opportunities for these products.
TRIPS Agreement	The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) within the Uruguay Round WTO Agreement.
utilised agricultural area (UAA)	This area corresponds to arable land, permanent grassland, permanent crops (vines, orchards, etc), kitchen gardens and crops under glass (Eurostat 2007c).
variable import levies	A tax on imports that varies with changes in import prices in order to maintain internal prices at a specified level.

voluntary export restraints	A mechanism whereby an industry in an exporting country undertakes not to export more than a specified quantity of a product to a particular importing country over a given period. The undertaking is often made under threat that some penalty would be imposed if the limitation were breached.
World Trade Organisation (WTO)	The institution established in 1995 to cover a range of objectives on international trade. It subsumes the General Agreement on Tariffs and Trade, which was formed in 1947. Its objectives include: to set rules for international trade and trade related activities; to provide a forum to negotiate trade liberalisation multilaterally; to settle trade disputes between contracting parties; to provide information on trade and trade policies; and to cooperate with other multilateral institutions (Anderson 1998).
WTO Agreement on Agriculture	The agreement that was negotiated for agriculture in the Uruguay Round of multilateral trade negotiations. It was ratified in 1994.

references

- Agra Europe 2003a, 'Enlargement posing budget problems after 2007', no. 2048, 4 April, Tunbridge Wells, England.
- 2003b, 'Ministers reach historic deal on CAP reform at last', no. 2060, 27 June, Tunbridge Wells, England.
- 2005, 'Figures, but no agreement, emerging in WTO tariff talks', no. 2176, 30 September, Tunbridge Wells, England.
- 2006, 'EU agrees 2.5 Mt sugar quota 'cut' for 2006/07', no. 2197, 3 March, Tunbridge Wells, England.
- 2007, 'Milk quotas must go, Fischer Boel tells industry', no. 2243, 26 January, Tunbridge Wells, England.
- Agra Facts 2005, 'Commission clarification of sugar direct aids causes consternation', no.89-05, 6 December, Paris.
- 2006, 'Market reports: sugar reform aid for 2006/7 & NMS surplus stock fines; cereals ManCom', no.89-06, 10 November, Paris.
- 2007a, 'Fruit and vegetable reform proposals published', no. 06-07, 24 January, Paris.
- 2007b, 'Wine reform: DG AGRI to propose lower grubbing-up targets?', no. 33-07, 25 April, Paris.
- 2007c, 'Wine reform proposals: getting the EU sector back on top', no. 55-07, 4 July, Paris.
- 2007d, 'Market forecasts see greater biofuel potential by 2013', no. 11-07, 7 February, Paris.
- Alston, J.M. and Hurd, B.H. 1990, 'Some neglected social costs of government spending in farm programs', *American Journal of Agricultural Economics*, vol. 61, pp. 149-56.
- Anderson, K. 1998, *Agriculture and the WTO into the 21st Century*, CIES Policy Discussion Paper 98/03, Prepared for the Cairns Group Farm Leaders' Strategy Seminar, Sydney, 2-3 April, Centre for International Economic Studies, University of Adelaide.

- Bascou, P., Londero, P. and Münch (Commission of the European Communities) 2005, 'Policy reform and adjustment in the European Union: changes in the Common Agricultural Policy and enlargement', ch. 5 in Blandford, D. and Hill, B. (eds), *Policy Reform and Adjustment in the Agricultural Sectors of Developed Countries*, Cromwell Press Ltd, Trowbridge, pp. 55-68.
- Borchardt, K.D. 2006, Speech given to the General Confederation of Sugar Beet Planters - General Assembly by Mr Klaus Dieter Borchardt, Deputy Head of Cabinet of Mrs Fisher Boel, European Commission, 5 December.
- Commission of the European Communities 1991, 'The development and future of the common agricultural policy', Supplement 5/91, *Bulletin of the European Communities*, Luxembourg.
- 2006, 'Towards a sustainable European wine sector', Communication from the Commission to the Council and the European Parliament, COM (2006) 319 final, 22 June, Brussels.
- Council of Agriculture Ministers 2003, 'CAP reform summary', Brussels (http://ec.europa.eu/agriculture/mtr/sum_en.pdf).
- Europa 2007, 'The Common Agricultural Policy and the Lisbon Strategy', Agriculture and Rural Development, (http://ec.europa.eu/agriculture/lisbon/index_en.htm).
- European Commission 1994, *Potential Benefits of Integration of Environmental and Economic Policies*, European Communities Environmental Policy Series, Graham and Trotman, Office for Official Publications of the European Communities, Brussels.
- 2002a, *The Agricultural Situation in the European Union - 2000 Report*, Office for Official Publication of the European Communities, Luxembourg.
- 2002b, *Evaluation of the Impacts of the Community Measures on Land Set Aside*, Brussels (http://ec.europa.eu/agriculture/eval/reports/gel/sum_en.pdf).
- 2004, 'From farm to fork: safe food for Europe's consumers', European Commission Directorate-General for Press and Communication, Brussels.
- 2005, *Agriculture in the European Union - Statistical and Economic Information 2004*, Brussels.
- 2006a, *Population Statistics*, Office for Official Publications of the European Communities, Luxembourg.
- 2006b, *Agriculture in the European Union - Statistical and Economic Information 2005*, Brussels.

- 2006c, 'Does the trade talk match the "trade walk"?' no. 03-06, Monitoring Agricultural Trade Policy, Directorate-General for Agriculture and Rural Development, December, Brussels.
- 2007a, *Prospects for Agricultural Markets and Income in the European Union: 2006–2013*, Directorate-General for Agriculture and Rural Development, January, Brussels.
- 2007b, *Scenar 2020: Scenario Study on Agriculture and the Rural World*, Directorate-General for Agriculture and Rural Development, Directorate G. economic analysis and evaluation, and G.4 evaluation of measures applicable to agriculture; studies, January, Brussels.
- 2007c, 'Budget on line', Brussels (www.eur-lex.europa.eu/budget/www/index-en.htm).
- Eurostat 2007a, 'Population and social conditions', (<http://epp.eurostat.ec.europa.eu>).
- 2007b, 'GDP and main components', (<http://epp.eurostat.ec.europa.eu>).
- 2007c, 'Key variables by legal status of holding, size of farm (UAA) and region', (<http://epp.eurostat.ec.europa.eu>).
- 2007d, 'Price indices of agricultural products, output', (<http://epp.eurostat.ec.europa.eu>).
- FAOSTAT 2006a, 'Domain Agricultural Production Indices (Gross PIN) base 1999–2001', (<http://faostat.fao.org/site/499/default.aspx>).
- 2006b, 'Data Archives - Food Balance Sheet', (<http://faostat.fao.org/site/502/default.aspx>).
- 2007a, 'Data Archives - Land Use', (<http://faostat.fao.org/site/418/default.aspx>).
- 2007b, 'Data Archives - Commodity Balances', (<http://faostat.fao.org/site/519/default.aspx>).
- 2007c, 'Data Archives - Trade (excluding Intra-EU trade)', (<http://faostat.fao.org/site/412/default.aspx>).
- 2007d, 'Data Archives - Production', (<http://faostat.fao.org/site/408/default.aspx>).
- 2007e, 'Data Archives - Means of Production (Fertilizers)', (<http://faostat.fao.org/site/422/default.aspx>).

- Farm Accountancy Data Network (FADN) 2007, (<http://ec.europa.eu/agriculture/rica>).
- Fischer Boel, M. 2006, 'Simplification of the CAP: meeting the challenge', Speech/06/556, Member of the European Commission responsible for Agriculture and Rural Development, Conference 'A Simple CAP for Europe', 3 October, Brussels.
- 2007, '2007: a year of delivery', Speech/07/20, Member of the European Commission responsible for Agriculture and Rural Development, Grüne Woche press conference, 18 January, Berlin.
- Garafolo, R. 2004, *Biodiesel in Europe and World-wide: Overview and Development Perspectives*, Presentation to the European Biodiesel Board (EBB) at 'Renewable Resources and Renewable Energy: A Global Challenge', 10-12 June, Trieste.
- Harris, S., Swinbank, A. and Wilkinson, G. 1983, *The Food and Farm Policies of the European Community*, John Wiley and Sons, Chichester.
- Henke, R. and Storti, D. 2004, 'CAP reform and EU enlargement: effects on the second pillar endowments', 87th EAAE Seminar, *Assessing Rural Development of the CAP*, Vienna.
- Hennessy, T.C. and Thorne, F. S. 2005, 'How decoupled are decoupled payments? The evidence from Ireland', *EuroChoices* 4(3), The Agricultural Economics Society and the European Association of Agricultural Economists, Whitchurch.
- Hodge I., Reader, M., Revoredo, C., Crabtree, R., Tucker, G., King, T. 2006, *Project to Assess Future Option for Set-Aside*, Final Report for the Department for Environment, Food and Rural Affairs, Department of Land Economy, University of Cambridge, 28 February.
- Ingco, M. 1995, *Agricultural Trade Liberalisation in the Uruguay Round: One Step Forward, One Step Back?* Policy Research Working Paper 1500, International Economics Department, International Trade Division, World Bank, Washington DC.
- International sugar Organisation 2007, *Statistical Bulletin*, January, London.
- Joaris, A. 1999, 'Nonfood and energy crops, a long tradition and potential for future Agriculture', *Environment, Rural Development: Facts and Figures - A Challenge for Agriculture and Environment*, European Commission e-report (<http://ec.europa.eu/agriculture/envir/report/en/>).

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