Implications for net positions of the agricultural reform in Agenda 2000

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Abstract
The budgetary consequences of the reform proposals in Agenda 2000 have stimulated the debate on the financial costs and benefits of EU-membership. This article analyses the implications of the proposed agricultural reform for the net contributions by simulating three scenarios. The inclusion of implicit trade subsidies is vital in the discussion on net positions. Agenda 2000 is projected to affect substantially the net positions of member states.

Samenvatting
De budgettaire gevolgen van de hervormingsvoorstellen in het Agenda 2000 rapport hebben het debat over de financiële kosten en baten van het EU-lidmaatschap aangewakkerd. Dit artikel bespreekt de effecten van de voorgestelde aanpassingen aan het Gemeenschappelijk Landbouwbeleid op de netto bijdragen, aan de hand van drie scenario simulaties. Wij illustreren ook het belang van impliciete handelssubsidies in de discussie over netto posities. Agenda 2000 zal de netto positie van de lidstaten aanzienlijk beïnvloeden.

Introduction

In July 1997 the European Commission (CEC, 1997a) launched a set of proposals to prepare the EU for major upcoming events such as the enlargement with Central and East European countries. The package specifies the budget of the Community over the period 2000-2006, which serves as ceiling on the expenditures and determines to a large extent the costs for the member states. The proposals therefore tend to revive the debate on the distribution of financial gains and losses over the member states. Some of the net paying countries, in particular the Netherlands and Germany, question the future pattern of net contributions, as they criticized the past allocations.

This article focuses on the contributions arising from the Common Agricultural Policy (CAP). A considerable part of the EU budget is still devoted to the financing of the CAP (agricultural expenditures accounted for 46% of total EU expenditures in 1995, down from 75% in the mid-eighties). The agricultural budget will remain important due to the nature of the CAP and the direction of CAP reform in Agenda 2000. The CAP was essentially a scheme of price support, with costs for both the consumer and the taxpayer. Consumers support the agricultural sector through high internal prices (known as intervention prices, fixed above world market level). The system of administered prices implies that internal prices must be kept above world market prices by imposing tariffs on (extra-EU) imports and by giving refunds on exports (see Merbis and Stolwijk (1996) for a formal representation of the CAP). In case of excess supply, surpluses must be bought and held in storage (called intervention stocks) or sold with a subsidy. The CAP also invokes production controls to ensure market clearing. Milk and sugar production is governed by quotas, and a substantial share of agricultural land is left idle (called set-aside land). This scheme is compulsory for arable farmers to become entitled to income transfers. Other instruments, such as supply and demand subsidies and direct income payments, complete the working of the CAP.

The core of the proposals in Agenda 2000 is a further shift from price support to income support. The level of intervention prices is lowered, and to prevent a strong fall in farmers' incomes the level of income support (called premiums in CAP jargon, since linked to specific production activities) must go up. Support to agriculture then appears in the budget ('budgetarisation' of support). Premiums were introduced in the agricultural budget in 1993, and its role has increased ever since. The increasing role for income transfers ensures that a substantial share of the total EU budget will need to be allocated to the financing of farm policy.

The outlays in the CAP budget determine member states' benefits from the CAP. The expenditures on the CAP (as well as other costs the Community is incurring) must be balanced by the own revenues of the EU and the member states' contributions. The difference of benefits and costs, allocated to member states, is an explicit transfer to (or from) the administration in Brussels. The debate on net positions is usually a debate on these explicit transfers. However, price support also generates *implicit* transfers. When a producer exports a CAP commodity inside the EU, the foreign consumer has to pay the internal price. Countries with large intra-EU exports thus benefit from implicit subsidies paid by the net-importing member states. Several studies have already pointed at the significance of implicit transfers in the discussions on the principle of 'common financial responsibility' (see Folmer et al. (1987, 1995), Kjeldahl et al. (1994), CEC (1994) and Keyzer (1995)). Yet, other studies (Ministry of Finance, 1997, Lemmink 1995) do not acknowledge the importance of implicit transfers in the debate on net contributions.

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This article focuses on the relevance of the implicit subsidies for the discussion as how to assess net positions. It analyses the effects of the further budgetarisation of support on the EU-budget and the financial transfers of the member states. The Agenda 2000 proposals will affect the size of both the explicit and the implicit contributions due to its shift to direct transfers as main instruments to support farmers. The consequences are quantified by simulating three scenarios with the CAP-Modelling and Accounting Tool (CAPMAT)[1] for the EU15 member states.

The outline of the paper is as follows. The next section briefly sketches the proposed reform in Agenda 2000. After describing the model and the scenarios, we discuss simulation outcomes. The last section concludes.

The agricultural chapter in Agenda 2000

The agricultural chapter in Agenda 2000 proposes an extension of the reform of 1992, so a brief review of this reform is useful. It introduced premiums to compensate farmers for the reduction in intervention prices and the imposed set-aside scheme. These measures were only applied to cereals, oilseeds, pulses and beef. After its implementation, the 1992 reform became instrumental for the conclusion of the GATT agreement in 1994. Premiums were sufficient to prevent a fall in average farming income, but nevertheless the agricultural budget remained safely below the spending guidelines.

Major shortcomings of the 1992 reform are the limited coverage and depth. Measures were not extended to other sectors, like sugar and dairy, nor further deepened to tackle the various market distortions. Despite the fall in intervention prices, the gap between internal and world prices remained substantial for many products. Market access was not effectively improved, in particular for developing countries.

The GATT agreement imposes restrictions on the subsidized exports of agricultural products. Therefore the EU has only limited scope to expand on world markets of cereals, milk products and beef, whereas most projections of world food demand are promising. While the new WTO round will start in 2000, the EU has to prepare for negotiations aimed at a further liberalization of agricultural policies. The EU also has to prepare for the enlargement with Central and East European countries, which asks for a reduction of intervention prices to facilitate the harmonization of agricultural prices between the new and old member states. Hence, pressures increase to adapt the CAP.

Agenda 2000 can be viewed as a response to these challenges. The central part of the proposals, which were finalized in March 1998, is a reduction of intervention prices for cereals, beef and milk. The fall in income is compensated by higher premiums and lessening of production controls. The compulsory set-aside rate is set to zero, whereas milk quota are increased by 2%. To simplify the rules, premium rates for the concerned arable crops are equalized. The system of premiums for the livestock sector is expanded, and made more complex. The Commission aims at reaching an agreement on the final text at the end of 1998 and a gradual implementation starting in 2000.[2]

The model

CAPMAT is developed to calculate the medium run effects of CAP reforms for each of the 15 member states. The underlying database integrates information from various sources, notably commodity balances from FAO, costs and revenues of agricultural activities from EUROSTAT and detailed budgets from the CEC. As a second input source, outcomes of the applied general equilibrium model ECAM are used for projecting behavioral reactions by producers and consumers (see Folmer et al., 1995). The planning horizon is 2005.

Since intervention stocks are fixed by assumption, net exports by member state follow from commodity balance. As regards pricing rules, CAP commodities follow the common EU-intervention price while prices of other goods reflect assumed world prices. Detailed computations are performed to retrieve (1) commodity balances by country, (2) costs and revenues by activity and country, (3) farming income by country and (4) the EU-budget.

The scenarios

We distinguish three scenarios, presented in more detail in Bettendorf and Merbis (1998). These share the assumptions on world market prices, yield trends and total availability of land. For reasons of transparency, changes in EU policy are thus assumed not to affect the evolution of world prices, as projected by international organizations. In accordance with their forecasts, cereal prices will decline from their record levels in 1996 back to the levels of the early nineties. In view of expanding markets, world prices for dairy products and beef are believed to increase slightly. All figures are expressed at 1995 prices by assuming an inflation rate of 1% per year. Scenario-specific assumptions are summerized in the box.

Results

Central EU-budget

The structure of the EU-budget is summarized in Table 1 (cf. European Court of Auditors, 1997). At the *expenditures* side, the largest share in 1995 is taken up by outlays for the CAP. The agricultural budget is regrouped into three main categories: trade refunds, premiums & subsidies and remaining expenditures. Outlays on other (structural) funds and other expenditures (e.g. development aid, administration costs) complete the EU-budget.

The national (VAT and GDP) contributions have become the major source of revenues. Receipts of an agricultural origin consist of tariffs levied on agricultural imports and of levies imposed on sugar production. The other two

The scenarios

Basecase

This status-quo scenario assumes a continuation of existing policies:

– intervention prices and premium rates are kept constant in nominal terms.
– outlays on premiums are limited at the 1996 level by the use of stabilizer mechanisms
– the future rate of the compulsory set-aside is fixed at 5%.

Agenda 2000

The latest version of the proposals (March 1998) are implemented in the following way:

– intervention prices are reduced for cereals (20%), beef (30%) and milk (15%).
– all cereals and oilseeds now receive the same premium per ton. Cows and male bovines receive headage premiums, as a (partial) compensation for the price fall.
– the mandatory set-aside rate is set to zero.
– milk quotas are increased by 2%, distributed non-uniformly over the countries.
– the level of the premium rates as proposed may differ from the level actually paid to the farmer due to regulations that specify the eligibility to premiums. We express this difference as ratios, in the so-called modulation factors. As an example of modulation, beef premiums are limited to a fixed number of animals per farm, and are subject to a livestock density constraint (e.g., two cows per hectare of fodder land are eligible for premiums). Since the new proposals impose some new constraints and modify some old ones, the size of the modulation factors is still uncertain. In this scenario, the observed modulation factors of the 1992 reform are applied to the premiums for non-dairy cattle. No modulation is assumed for the new premiums of dairy cows. For crops, a reference acreage holds as constraint, limiting total expenditures.

Partial liberalization

From a free-trade perspective, the reduction in agricultural support can be criticized for being insufficient. A partial liberalization scenario will serve as an alternative benchmark, analyzing agriculture in a much more competitive setting:

– the fall of intervention prices is as in Agenda 2000, with additional reductions for sugar (20%) and sheep (30%).
– premiums and subsidies on CAP commodities are abolished (subsidies remain in sectors falling outside the Agenda 2000 reform).
– set-aside and milk quotas are as in Agenda 2000.

Alternatively, the Liberal scenario can be interpreted as an extension of the Agenda 2000 program, in which compensation payments are already phased out in 2005 and the coverage of commodities is expanded.

items concern duties on non-agricultural imports and remaining revenues (e.g. surplus of previous year).

In the simulations, the agricultural reform is taken in isolation by fixing the non-agricultural revenues and expenditures at their 1996 level.[3] Results for the EU15 are compared to the Base scenario in 2005. The budgetarisation of support in Agenda 2000 raises agricultural expenditures: the increase of premiums more than offsets the savings on export refunds. The growth of the agricultural budget (18%) is financed by an increase of the VAT and GDP contributions (12%). With the elimination of premiums in the Liberal scenario, the budget shrinks and the contributions are lowered (-41%). In the following subsections the effects on refunds and premiums are examined per country.

Net subsidies on agricultural trade

When internal prices exceed world market prices, tariffs are levied on imports and refunds are given on exports. These transfers are distributed over the member states according to their shares in gross exports (for refunds) and gross imports (for levies). For simplicity, these shares are fixed at the 1992 level. Table 2 gives the simulated difference between refunds and levies on agricultural trade for 1995 and 2005.

Obviously, net refunds are the largest for countries with a large share in exports, like France and the Netherlands, and the smallest for countries with a small share, like Spain, UK and Italy. Net refunds on Dutch exports are mostly paid for dairy products (51%), beef (22%) and sugar (11%, in 1995). Net refunds per commodity are equal to the difference between internal and external prices, times net extra-EU exports. So, net refunds per unit are smaller in 2005 since the gap between internal and external prices narrows in all scenarios. The impact on net exported quantities is driven by changes in supply and demand.[4] In total, the Agenda 2000 and Liberal scenarios generate substantial savings on trade subsidies compared to the Basecase (-46% and -62%, respectively).

Premiums and subsidies

The most important part of the agricultural budget comprises premiums and subsidies on production, inputs and consumption (net of levies on sugar production), as illustrated in Table 3. These outlays increase by 36% in Agenda 2000, illustrating the budgetarisation of support. Premiums and subsidies more than double for Belgium, Ireland and the Netherlands. The share of the Netherlands in total premiums remains small because it is not much specialized in sectors under reform and modulation factors reduce the potential premiums. The premiums are distributed to member states according to the production patterns of the EU. This distribution is uneven: about 90% of the premiums from cereals and 75% of the cattle premiums accrue to five member states. This constitutes a reason

Table 1 The simulated EU15-budget, 1995 and 2005

	1995	2005		
	bln ecu			
		Basecase	A2000	Liberal
Total agricultural budget	35.2	32.0	37.7	10.6
–Trade refunds	7.7	4.9	2.7	2.1
– Premiums & subsidies	24.6	23.2	31.2	4.7
– Other agr. expenditures	2.9	3.8	3.8	3.8
Other funds	15.9	20.4	20.4	20.4
Other expenditures	24.6	22.3	22.3	22.3
Total expenditures	75.7	74.7	80.4	53.4
Levies on agricultural trade	1.0	0.4	0.3	0.4
Levies on sugar production	1.4	1.3	1.3	0.6
Duties on non-agr. trade	13.9	13.1	13.1	13.1
National contributions	52.9	50.7	56.6	30.0
Other revenues	6.5	9.2	9.2	9.2
Total revenues	75.7	74.7	80.4	53.4

Table 2 Net trade refunds for CAP products, 1995 and 2005

	1995	2005		
	mln ecu			
		Basecase	A2000	Liberal
Austria	93	61	26	19
Belgium-Luxembourg	645	399	269	175
Denmark	377	269	176	152
Finland	53	35	19	16
France	1839	1435	691	416
Germany	1332	854	432	311
Greece	30	37	13	5
Ireland	582	274	110	127
Italy	271	184	105	68
Netherlands	1006	567	382	323
Portugal	3	1	11	2
Spain	152	85	60	40
Sweden	53	45	20	19
UK	270	234	105	15
EU-15	6706	4479	2419	1688

for concern about the net position. In the Liberal scenario the elimination of premiums and subsidies on CAP commodities reduces the expenditures by 82% (the southern member states still receive subsidies on olive oil).

Net contributions

The calculation of net contributions requires all items in table 1 to be allocated over the member states (remember that the non-agricultural items are fixed at the 1996 level). Some of the revenues and expenditures are not allocated to the member states, but to the Commission. These revenues (11% in 1995) mainly stem from the surplus of the previous year, exchange rate gains and cancellations of the previous year. Expenditures (24%) cover administration costs, development aid and the current surplus.

The net position of a member state is simply defined as the difference between the total revenues from the EU and total payments to the EU. From the simulated net positions in table 4 follows that EU-policy is primarily paid by Germany, with major contributions from the Netherlands and the UK (note that the inclusion of the European Commission in the list makes the average net contribution negative). Agenda 2000 causes substantial changes in the net contribution, but affects the ranking of the countries only slightly. The net position improves for countries with a relative strong specialization in cattle, like Ireland and UK. The reform turns out disadvantageous for the net payers Germany and the Netherlands. The changes under the Liberal scenario indicate the countries benefitting from the current CAP. Germany emerges as the greatest (absolute) winner and France as the biggest loser from partial liberalization. The net position of the Netherlands improves in this scenario due to the reduction in VAT and GDP contributions.

Expressed in per capita terms, the net contribution for the Netherlands belongs to the largest in the EU.[5] Therefore, the Dutch government questions the current distribution of net financial gains, following the principle that countries in a similar situation should be treated alike. A detailed discussion of the virtues and limitations of this concept is beyond the scope of this paper.[6] Clearly, the financial benefits and costs of EU-membership, let alone the non-financial gains and losses, are too heterogeneous to be captured by one single figure. We consider only one aspect, namely the implicit subsidy.

Implicit subsidies

The calculated *explicit* net contributions give an incomplete picture since the *implicit* benefits from the CAP price-support are not incorporated (see Folmer et al., 1995, section 6.4). Such benefits appear because exporters of CAP commodities to other member states are paid in internal and hence higher prices than world market prices. In concrete terms, Dutch exporters of cheese receive an implicit subsidy from, say, German consumers when settling their

Table 3 CAP premiums and subsidies, 1995 and 2005

	1995	2005		
	mln ecu			
		Basecase	A2000	Liberal
Austria	351	410	569	– 9
Belgium-Luxembourg	179	175	389	– 15
Denmark	636	635	896	32
Finland	235	171	239	– 8
France	5695	5755	7113	315
Germany	3003	3172	4644	30
Greece	2091	2240	2158	1558
Ireland	636	562	1247	22
Italy	2974	3261	4326	1178
Netherlands	389	294	680	62
Portugal	435	345	400	107
Spain	4057	2533	3192	768
Sweden	347	384	620	– 9
UK	2188	1984	3397	18
EU-15	23215	21930	29870	4049

Table 4 Net (explicit) contribution (mln ecu), 1995 and 2005

	1995	2005		
	mln ecu			
		Basecase	A2000	Liberal
Austria	– 848	– 170	– 210	– 53
Belgium-Luxembourg	– 905	– 929	– 1040	– 659
Denmark	119	15	72	– 311
Finland	– 149	– 10	– 41	83
France	– 1158	– 373	– 870	– 2926
Germany	– 13079	– 9577	– 10292	– 7056
Greece	3429	3723	3520	3354
Ireland	1736	1595	2064	1089
Italy	– 632	– 1237	– 1056	– 600
Netherlands	– 2220	– 2355	– 2443	– 1814
Portugal	2458	2805	2783	2836
Spain	7206	5218	5451	4815
Sweden	– 915	– 650	– 600	– 504
UK	– 4741	– 2365	– 1646	– 2564
EU-Commission	9698	– 4309	4309	4309

Note: column elements add up to zero.

bills at intervention prices rather than at world prices. The total (explicit plus implicit) subsidy due to trade protection is computed for each member state by multiplying its net total exports with the difference between internal and export prices. Subtracting the explicit subsidies given in table 2 yields the implicit subsidies in table 5.

In 1995 countries like the Netherlands, France and Ireland receive relatively large implicit subsidies, reflecting their strong export position of products with high internal prices (beef, dairy). For the Netherlands this subsidy equals almost 70% of the explicit net contribution. Implicit support is paid by the importing countries, such as Italy and UK. In 2005 implicit transfers are reduced in absolute value for all scenarios due to the fall of internal prices relative to external prices. In other words, Agenda 2000 will decrease the implicit gain (loss) for the net exporting (importing) countries. The only exception is Germany, where the dominating effect on net imports results in increased implicit subsidies.

Total net contribution

In view of the size of the implicit transfers, one should also look at the *total* net contribution, computed as the sum of the previous two tables. Rankings of total contribution per capita are given between brackets in table 6.

The explicit and the total contributions are first compared for 1995. The incorporation of implicit subsidies does not much affect the ranking for most of the countries: Germany remains the largest payer and Ireland and Greece the largest receivers (per capita). However, there are exceptions. The ranking of the Netherlands considerably improves when the broader definition is applied. Whereas the explicit contribution seems not to conform with its relative prosperity, the total contribution looks more reasonable. In terms of this broader concept, the Netherlands occupies the pursued middle position in the EU. In contrast, Belgium, Italy and the UK face opposite changes. Whereas their explicit losses seem limited, their total positions show that they effectively co-finance the current CAP.

Next, total contributions are discussed for 2005. Implicit transfers become less important and the rankings are quite stable over the scenarios. The net position of the Netherlands will deteriorate under Agenda 2000 due to a substantial reduction in implicit subsidies. When the Netherlands pursues a reduction of its net contribution, it should object price reductions compensated by premiums. Along the same line of reasoning, it should be in favor of partial liberalization, which is more in line with its credentials as free trading nation. Notice that its ranking in 2005 becomes worse than in 1995 for each scenario.

Table 5 Implicit subsidies due to EU trade protection, 1995 and 2005

	1995	2005		
	mln ecu			
		Basecase	A2000	Liberal
Austria	146	90	– 20	2
Belgium-Luxembourg	– 151	16	– 74	– 54
Denmark	825	471	367	375
Finland	160	144	93	98
France	1328	645	596	470
Germany	– 422	– 117	– 401	– 488
Greece	– 564	– 313	– 87	– 93
Ireland	1217	363	192	214
Italy	– 2675	– 1067	– 399	– 536
Netherlands	1522	883	394	533
Portugal	– 291	– 146	– 60	– 16
Spain	– 448	– 316	– 83	– 50
Sweden	107	29	11	13
UK	– 754	– 681	– 531	– 468

Note: column elements add up to zero.

ingly determined by production patterns, and hence independent from the national GDP and VAT transfers that balance the budget. Member states are thus likely to face significant changes in the resulting explicit net contributions.

Apart from the explicit transfers, the system of price support in the CAP implies that member states receive or pay implicit transfers. A country exporting agricultural products to another member state implicitly benefits from the gap between the internal and the world market price. This often neglected item is relevant for a more accurate assessment of the costs and gains of the CAP. The net position of the Netherlands in 1995 looks much more favorable when these implicit subsidies are taken into account. However, lower internal prices under Agenda 2000 reduce the implicit gain for the Netherlands, turning it into one of the largest net payers in the future.

Conclusions

A simulation model is used to study the consequences of the agricultural reform as proposed in Agenda 2000 for the financial transfers within the EU. Agenda 2000 proposes a further shift from price support to income support. The increased income payments to farmers are the dominating expenditures item of the growing agricultural budget. The allocation of these premiums becomes increas-

These results should be interpreted with due caution. First, calculations of explicit refunds and implicit subsidies are sensitive to the assumed levels of world market prices. Assessing the impact of an EU reform on world markets even enhances the uncertainty of price projec-

Table 6 Explicit and total net contribution, 1995 and 2005

	1995 explicit	1995 total		2005 total	
	mln ecu				
		Basecase	A2000	Liberal	
Austria	– 848 (3)	– 702 (5)	– 80 (7)	– 230 (6)	– 50 (8)
Belgium-Luxembourg	– 905 (5)	– 1056 (2)	– 912 (3)	– 1114 (3)	– 713 (3)
Denmark	119 (10)	944 (11)	486 (10)	439 (10)	64 (9)
Finland	– 149 (7)	10 (8)	134 (9)	52 (9)	181 (10)
France	– 1158 (8)	171 (9)	271 (8)	– 274 (8)	– 2455 (6)
Germany	– 13079 (1)	– 13501 (1)	– 9693 (1)	– 10693 (1)	– 7544 (1)
Greece	3429 (13)	2865 (13)	3410 (13)	3433 (13)	3261 (13)
Ireland	1736 (14)	2953 (14)	1958 (14)	2256 (14)	1303 (14)
Italy	– 632 (9)	– 3307 (6)	– 2304 (6)	– 1456 (7)	– 1136 (7)
Netherlands	– 2220 (2)	– 697 (7)	– 1471 (2)	– 2049 (2)	– 1281 (2)
Portugal	2458 (12)	2167 (12)	2659 (12)	2723 (12)	2820 (12)
Spain	7206 (11)	6758 (10	4901 (11)	5369 (11)	4765 (11)
Sweden	– 915 (4)	–809 (4)	– 621 (4)	–589 (4)	– 492 (4)
UK	– 4741 (6)	– 5495 (3)	– 3046 (5)	– 2176 (5)	– 3032 (5)

Note: Ranking of total contribution per capita between brackets.
Column elements do not add up to zero due to net expenditures that are not allocated to any member state.

tions. Second, compensation payments will be affected by modulation factors, the range of which still is uncertain. Third, this study does not consider the complete Agenda 2000. The reorientation of the structural funds opts for a reduction of transfers to the relatively rich members. The costs of EU enlargement before 2005 have also been neglected in the analysis (see CEC, 1997a). Finally, Agenda 2000 is still a proposal and amendments by member states are to be expected. Analyzing the budgetary implications clearly provides only one angle to evaluate policy reforms. A full appraisal preferably considers the welfare effects on European consumers. The reform was motivated by other objectives as well, that have not been considered here, in particular whether the EU prepares itself adequately for the upcoming WTO round and accession negotiations. ■

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Notes

[1] This model is developed as part of the FEA (Future of EuropeanAgriculture) project, a joint venture of three institutes: the Agricultural Economic Research Institute (LEI-DLO, The Hague), the Centre for World Food Studies (SOW-VU) and CPB. The project is led by Prof. M.A. Keyzer (SOW-VU). J. Muskens (LEI-DLO) also contributed to the development of the tool. The institutes present a more comprehensive analysis of Agenda 2000 in SOW-VU, CPB, LEI-DLO (1998), commissioned by the Ministry of Agriculture, Nature Management and Fisheries (Min-LNV).

[2] The CEC has also announced adjustments for the olive oil, tobacco, fruit, vegetables and wine sector in the course of this year. Notice that the sugar sector is not subject to any reform.

[3] The CEC (1997a) foresees an increase of total expenditures from 82 billion ecu in 1997 to 109 billion ecu in 2005 (in 1997 prices).

[4] Remember that the effect of changes in EU net exports on world market prices is neglected in this analysis. An increase of the refund per unit follows when an increase of EU exports depresses the world market price.

[5] The Dutch Ministry of Finance (1997) has calculated a net position of 2.0 bln ecu for 1995 (-0.68% of GNP).

[6] See e.g. Lemmink (1995), CEC (1997b) and SER (1998).