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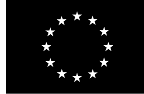

Directorate-General for Research

Division for Budgetary Affairs, Civil Liberties and Internal Affairs, Rules of Procedure, Petitions and Comparative Law

Working document

REFORM OF THE OWN-RESOURCES SYSTEM AND NET POSITIONS IN THE EU BUDGET

BUDGET SERIES-100
EN

DA DE EL EN ES FR IT NL PT FI SV

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ABBREVIATIONS

CAP	**Common agricultural policy**
CEEC	**Central and Eastern European countries**
EAGGF	**European Agricultural Guidance and Guarantee Fund**
EC	**European Communities**
ECB	**European Central Bank**
ESCB	**European system of central banks**
EU	**European Union**
GDP	**Gross domestic product**
GNP	**Gross national product**
PPP	**Purchasing-power parity**
TOR	**Traditional own resources**
VAT	**Value-added tax**
WTO	**World Trade Organization**

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0. Introductory remarks

0.1 The basic problems today

The discussion about the finances of the European Community and the European Union has been a running topic since the dawning of European integration. First of all, adequate resources are needed to perform genuinely European tasks; secondly, it is a fundamental principle of modern democracy that Parliaments have the power to approve or reject the budget; thirdly, conflicts of national interests can be solved by means of financial 'deals', i.e. compensatory payments; fourthly, compensation often has to be paid to those who stand to lose from integration and, fifthly, additional resources are needed whenever European integration is intensified and whenever the Union is enlarged.

Against this background it is hardly surprising that a complex web of liabilities, of expenditure, revenue and redistribution items, has developed, often as unintended side effects of planned European and international decisions taken in pursuit of a financial constitution. Deals, rather than ideals, have characterised the emergent financial structures of the EU. The result has been a mixture of groundwork and patchwork.

This situation has certainly never been entirely satisfactory - whatever the European Commission might say[1] - and as we approach the new millennium, reforms have become imperative. We need a financial constitution for the EU, with a reformed system of funding from the Union's own resources and a reformed expenditure structure, for the 21st century. The challenges are legion: enlargement to the east, a common foreign and security policy, internal security, economic and monetary union,[2] global competitiveness, the need for convergence and cohesion, areas in which the European economy needs to be brought under control and many other challenges make increased expenditure indispensable. Accordingly, more resources will be required from the Member States. If consensus cannot be achieved and if economic growth coupled with restrictions on the supply side does not produce adequate expenditure and funding margins, efficiency savings will have to be made by restructuring both the expenditure and the receipts side of the budget.

At the same time, in view of the diminishing popularity of European unification in many Member States, it is important to discuss the volume of the EU budget and the distribution of the cost of funding it, not least in terms of *what the European public are prepared to accept*. The potential impact of the frustration that arises from excessive net liabilities or from inadequate net benefits has to be minimised; efforts must be made to create the best possible redistribution structures on a non-national basis.

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[1] In its 1998 report on the financing of the European Union (see bibliography), the European Commission regards the existing system of Member States' contributions as satisfactory. There is no immediate need, it says, to revise the system. The defects examined in the report did *not* of themselves warrant any change in the decision on the resources contributed by the Member States.

[2] See the 1992 EC Commission report, *Stable Money: Sound Finances*.

To borrow a phrase from E. Blochs, this will be the simple solution that is difficult to achieve, a fact that is underlined by the intertwining of national and EU finances at a time when finance is in short supply and when spending cuts and fiscal straitjackets are the order of the day. In other words, any additional transfer of resources to the EU will leave gaps in national budgets. This is tantamount to an erosion of national fiscal sovereignty and would stir up the simmering issue of the fiscal equivalence of tasks and funding at and between different fiscal levels. This issue has never been resolved.

0.2 Criteria for a rational and efficient EU system of revenue raising and funding

The fundamental question of the financial constitution that would be appropriate for an entity such as the EU is difficult, if not downright impossible, to answer, for the approach to the fiscal aspect of European integration fluctuates between the supranational and the intergovernmental; this vacillation is occasionally described as a *productive ambivalence*, because it leaves a margin for interpretation, thereby precluding conflicts about the 'right' choice of model. So there is no clear answer to questions such as that of the tasks which the EU should perform in order to complement or replace the efforts of the Member States or whether the EU should have its own fiscal jurisdiction and tax-raising powers.

As a result, instead of developing and discussing rational systems, the usual practice is to pursue a *consequentialist line of argument*, identifying the effects of changes to the existing system and judging them by their acceptability in the eyes of the various vested interests.

Be that as it may, a few questions should be asked with all due brevity at this point, by way of an alternative agenda, so to speak, about some of the systemic problems inherent in the present financial constitution of the EU. To that end, in items (a) and (b) below, we present some criteria for a rational revenue system.

a. *Some key problems of EU funding*

1. The allocation of tasks is not clear-cut, responsibilities overlap and the allocation system has developed spontaneously. The subsidiarity principle is something of an empty phrase.

2. The allocation of financial resources is not task-related but rather tends to be determined by the shortage of resources and by general distrust, with the European Parliament being denied the right to decide autonomously on the approval or rejection of the budget. No credit mechanisms are available, the fees and contributions budget is limited, and the contribution of tax-based resources by the Member States is based on a single-track structure (VAT only).
3. The correspondence principle is violated, because there is no link between responsibility for raising revenue and responsibility for deciding how it should be spent. Voters and taxpayers have no means of controlling expenditure. One result of this is a tendency to err on the side of excessive expenditure.

4. An imbalance has developed in terms of the beneficiaries of EU expenditure; a north-south resource transfer tends to predominate, which is perceived to be unfair.

5. Public acceptance of the EU system of budgetary resources and finance is diminishing sharply.

In the light of these inadequacies, Henke (1997) formulated the following criteria for a rational EU national-resources system

(b) *Rational criteria for a revenue system*

1. Economic criteria

a. • consideration of national capacities (proportionality)
b. • availability for interregional redistribution (progressivity)
c. • availability for the promotion of stability
d. • avoidance of distortions of competition (external cross-border effects)

2. Legal criteria

a. • an 'own-resources' system to comply with Article 201 of the EC Treaty
b. • should the federal principle of mutual guarantees also apply in the EU?

3. Integration criteria

a. • greater (revenue-raising) autonomy for the EU
b. • greater solidarity within the Community
c. • quest for consensus in matters that are not politically controversial

4. Technical criteria

- sufficient and sustainable earning capacity (volume of the relevant receipts)
- equitable taxation (simple levying)
- little need for harmonisation,
- minimal impairment of national fiscal flexibility
- noticeability/perceptibility
- transparency and simplicity (political obviousness)

These criteria only provide a rough template, which can be used to assess existing financial structures as well as reform ideas.

0.3 Structure and aim of the present study

After compiling an inventory, from the points of view of financial theory and European integration policy, of unanswered questions, unresolved problems and untried solutions, based primarily on the European Commission initiative *Agenda 2000* and the burdens debate as the foundation stones for future reform efforts (section 1), we then turn to our first substantive priority, a critical appraisal of the way in which the net positions of the EU Member States are

calculated. In this we distinguish between statistical categorisation problems on the one hand, paying particular attention to the Rotterdam-Antwerp effect, and fundamental problems regarding the reliability of net balances as a measure of the *utility* of EU membership (section 2).

One of the early highlights of the study is the first-ever calculation of the net position for each of the EU Member States in which special account is taken of the fiscal effects of EU membership over and above direct payments to and from Brussels, namely the benefits derived from foreign trade (section 3). In this innovative approach, we develop an *integration factor*, on the basis of which we compute the additional volume of exports ascribable to EU membership; we then multiply the result by the average tax rate in the country in question to obtain the additional tax revenue. In the final step, this integration-induced change in the national tax yield is incorporated into two alternative net-position computations.

In the fourth section we carry out an analysis and a comparative evaluation of the main reform and adjustment ideas relating to the expenditure side. As well as describing and assessing the potential scope for savings these ideas offer, we also take time out to examine the arguments for a more radical approach to reform of the Structural Funds in the longer term.

The next part of the study, section 5, is devoted to a comprehensive analysis and evaluation of the capping model devised by the German Ministry of Finance and the model created by the finance ministers of the German federal states. The strengths and weaknesses of both models are analysed in detail.

A second highlight is the analysis in section 6 of the proposed reform of the receipts side, in which particular attention is focused on the distribution of burdens. A brief examination of the status quo and the theoretical and empirical background - aims, methods, constraints, the acceptance factor and the development of taxation and similar charges as a percentage of GDP -takes us to the heart of this section, in which we present *our own quantitative and qualitative evaluation* on the proposed reforms of the arrangements governing the EU's own resources. We examine the following potential means of generating these resources:

(a) income tax (surcharge),
(b) taxation of interest at source,
(c) corporation tax,
(d) VAT (percentages),
(e) excise duty on tobacco, wines and spirits,
(f) central-bank profits,
(g) environmental taxes,
(h) taxation of communication and transport services.

Our analysis is based on the work of Begg (1997) but goes further, laying particular emphasis on aspects and arguments that were not addressed, or received insufficient coverage, in the Begg study. What especially distinguishes our work from previous studies is its *explicit assessment of the effects of the various proposals on the distribution of burdens among the Member States*. What makes this especially desirable is the fact that a political and economic discussion of the pros and cons of individual proposals is scarcely possible without a comparative analysis of the

Member States' burdens and ultimately of their net gains and losses. To complete this section, we discuss the advantages and disadvantages of introducing a European 'Tobin tax' in the context of current political and economic developments.

The last section of our study sums up our main findings and draws the necessary conclusions from them as well as making some cautious recommendations.

1. Inventory of unresolved questions, problems and suggested solutions from the points of view of financial theory and European integration policy

The current discussion regarding the future financing of the EU is largely determined by two closely interrelated factors. The first is the establishment of the *amount of funding* that the Union will require in the coming years in order to meet its responsibilities. At the present time, the necessary volume of funds would seem to be chiefly determined by the potential cost of the planned enlargement to the east. The enlargement of the EU by up to eleven Central and Eastern European countries is primarily influenced by the amount of resources that can be activated in the new Member States by means of the budgetary policies of the EU.

The second factor at the heart of the discussion is the *distribution issue*, i.e. the distribution of financial burdens among the Member States. The net contributors are calling for financial relief, which meets with outright opposition from the net recipients. The latter fear that the planned eastward enlargement alone will reduce their net incomes and therefore vehemently oppose any further redistributions. It will be very difficult to achieve a consensus on the basis of these divergent interests (Walter, 1996).

The end of 1999 sees the expiry of the present agreements on the receipts and expenditure of the European Union. That is reason enough to initiate extremely thorough preparations for the creation of the *financial framework for the period 2000-2006*, with due consideration to the matter of the future volume of financial resources and the distribution issue. The thinking of the European Commission on the future funding of the EU was recently set out in the framework of *Agenda 2000* (European Commission, 1997). The decision on the financial framework, however, will not be taken by the European Council until it has consulted the European Parliament and is dependent on unanimous adoption by the Member States. There are other factors involved in this discussion process:

a. the report presented by the European Court of Auditors in June 1998,

b. the Commission report of October 1998 appraising the own-resources system,

c. the report of the European Parliament Committee on Budgets on the own-resources system (Haug, 1998),

d. numerous studies, arguments and suggestions presented by the Member States with a view to improving their respective net positions.

1.1 Starting point for a future European system of financial planning: Agenda 2000

In accordance with the financial forecasts ('financial perspectives') for the periods 1988 to 1992 and 1993 to 1999, the European Commission presented its proposals on medium-term financial planning for the period from 2000 to 2006 in *Agenda 2000* with a view to covering the cost of eastward enlargement, reform of the CAP and reorganisation of the Structural Funds.

In Agenda 2000, the European Commission recommends the preservation of the '*own-resources ceiling*' laid down in the current financial perspective, in other words the restriction of receipts to a maximum of 1.27 per cent of the total gross national product of the EU Member States, which automatically sets the same limit on EU expenditure.[2] The Commission believes that this volume of financial resources will be enough to fund not only its present activities but also the planned eastern enlargement. The financial framework presented by the European Commission for the period from 2000 to 2006 is based on the following premises:

a. accuracy of the economic forecasts presented in May 1997,

b. accuracy of the implicitly assumed average GDP deflator of 2% per annum after 1998,

c. continuation of relatively small increases in the Union budget, ensuring that the own-resources ceiling is not attained and that an expansion margin remains,

d. growth rates of 2.5% of GNP for the 15 Member States and 4% for the Central and Eastern European applicant countries; this is essential if the necessary addition of 10 billion euros is to be achieved,

e. accession of five Central and Eastern European countries (CEEC) and Cyprus in the year 2002, and

f. substantive reform of agricultural and cohesion policies, which may limit the increase in the cost of pursuing these policies on the accession of the CEEC.

---

[2] The prohibition of credit facilities laid down in the EC Treaty remains in force.

Table 1: Agenda 2000: new financial framework for the period 2000-2006

	1999	2000	2001	2002	2003	2004	2005	2006
	in bn. euros/ecus at 1997 prices							
Agricultural guideline	43.3	44.1	45.0	46.1	47.0	48.0	49.0	50.0
Structural operations	36.1	35.2	36.0	38.8	39.8	40.7	41.7	42.8
- Structural Funds (EU-15)	31.4	31.3	21.1	31.3	30.3	29.2	28.2	27.3
- Cohesion Fund (EU-15)	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
- New Member States	0.0	0.0	0.0	3.6	5.6	7.6	9.6	11.6
- Pre-accession aid	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Internal policies	6.1	6.1	6.4	7.3	7.5	7.7	7.9	8.1
External action	6.6	6.6	6.8	7.0	7.1	7.3	7.5	7.6
Administrative expenditure	4.5	4.5	4.6	5.1	5.2	5.3	5.4	5.5
Reserves	1.2	1.0	1.0	0.8	0.5	0.5	0.5	0.5
Appropriations for commitments	**97.8**	**97.5**	**99.8**	**105.1**	**107.1**	**109.5**	**112.0**	**114.5**
Appropriations for payments	92.5	94.1	96.6	101.1	103.9	106.5	108.9	111.4
GNP	7 400	7 589	7 790	8 287	8 516	8 730	8 926	9 131
Appropriations for payments (% of GNP)	1.25	1.24	1.24	1.22	1.22	1.22	1.22	1.22
Own-resources ceiling (% of GNP)	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27

Source: European Commission, 1997, p. 104.

Table 1 shows that the entire expenditure block in terms of appropriations for commitments will increase by 17% to 114.5 bn euros between 1999 and 2006. By contrast, the Commission anticipates a considerably more rapid rise in appropriations for payments, forecasting a 20.5% increase to 111.4 bn euros.

As far as the development of the *individual expenditure categories* is concerned, the Commission is known to be pursuing the following aims:

a. *Agricultural expenditure:* On the basis of the agreed agricultural guideline of 1988, the rate of increase in the agricultural expenditure of the EU must not exceed the European GNP growth rate. Accordingly, the table shows an increase of some 15.5% in the agricultural guideline between 1999 and 2006, which is equivalent to about 66% of the projected GNP growth. After 2003, the Commission expects to have some a safety margin below the agricultural guideline as a result of a divergence between the expenditure ceiling shown in the table and the actual development of agricultural spending (European Commission, 1997). The agricultural expenditure of the applicant CEEC is divided into pre-accession aid of 0.5 to 0.6 bn ecus/euros per annum, supplementary expenditure on market organisation (1.1 to 1.4 bn ecus/euros) and modernisation aid (0.6 to 2.5 bn ecus/euros) to replace the pre-accession aid, which is to be scaled down in the course of time and will benefit only a small number of States. There is no provision for compensatory payments to the applicant countries.

b. *Structural policy:* The financial perspective limits expenditure on structural policy to 0.46% of aggregate GNP, which represents a continuation of the current arrangement. This means that between 2000 and 2006 an increase of 18.6% of the 1999 rate is planned. In other words, for the period until 2006 a cumulative amount of 275 bn euros will be available; this figure includes 210 bn euros for structural policies and 20 bn euros for cohesion policies. This projection is equivalent to a 13% reduction in the resources earmarked for the Structural Funds compared with the allocation for 1999. The remaining amount of 45 bn euros is available for pre-accession aid to the CEEC that will be acceding to the EU.

c. *Internal policies:* The development of expenditure on internal policies is subject to two different motivating factors. On the one hand, there is the aim of concentrating resources, and on the other hand there is the need to give priority to programmes designed to promote economic growth, employment and technological development (European Commission, 1997). For these reasons, the allocation for internal policies is set to rise by 29.5% by the year 2006.

d. *External actions:* The Commission plans to increase expenditure under this heading by one billion euros to 7.6 bn euros, which represents a rise of about 15.2%.

e. *Administrative expenditure:* The Commission anticipates an increase of about 22% in the cost of administration as a result of factors such as the employment of staff from Central and Eastern European countries and the need to engage the services of additional interpreters and translators (European Commission, 1997).

It may be assumed that the Commission's plan to limit the Union's own resources to 1.27% of aggregate GNP will prove very difficult to implement and that its feasibility will depend entirely on whether the proposed agricultural and structural policy reforms can be sold to the Member States.

A *direct comparison of Agenda 2000* with various other analyses of the cost of eastward enlargement reveals that most studies proceed on the assumption that eastward enlargement will cost more than the Commission has estimated and that the planned financial framework is not entirely tenable (Axt, 1997; Friedmann, 1996; Gretschmann, Heitzer-Suša and Buchegger, 1998), as the following table shows:

Table 2: Cost estimates for enlarging the EU to include Central and Eastern European countries

Agricultural policy in bn euros	Structural policy in bn euros	Countries covered	Source	Remarks
6.6	45	4 Višegrad States[1]	Guhl/Marty, 1996	(annual) based on the year 2000
6.7-7.9	33.0-34.2	4 Višegrad States, Slovenia	Weise, 1996	(annual) period 2000-2010, status quo scenario (net accession costs equivalent to 30-37% of EU budget)
1.0-1.2	14.9-21.3			(annual) period 2000-2010, 'compromise' reform scenario (net accession costs equivalent to 10-14% of EU budget)
9 (2000) 11.7 (2005) 12.2 (2010)		10 associated States[2]	European Commission, 1995	Status quo scenario, based on estimated agricultural expenditure of 42 bn euros (2010) for the 15 EU Member States
3.7 7.4	11.6 11.3	4 Višegrad States, Bulgaria, Romania	Centre for Economic Policy Research (CEPR), 1992	Based on 1989 prices, per capita income growing to twice the 1989 figure
5.6	10	4 Višegrad States, Bulgaria, Romania	Stehn, 1994	CEPR approach, including growth and structural change
10	13	4 Višegrad States	Baldwin et al., 1997	Payments to the EU budget reduced by 4 bn euros (equivalent to 'net costs' of 19 bn euros, i.e. 19% of the planned budget for 1999 without enlargement)
37		4 Višegrad States	Anderson/Tyers, 1995	cited in Baldwin et al., 1997, p. 155.
34			Tyers, 1994	
4-31			Brenton/Gros, 1993	
6-16			Mahé, 1995	
9-14			Tangermann/Josling, 1994	
5-15			Slater/Atkinson, 1995	
13-15			Tangermann, 1996	
32-55		10 associated States	Brenton/Gros, 1993	
9-23			Slater/Atkinson, 1995	
	7.2	4 Višegrad States	Begg, 1992	cited in Axt, 1997, p. 16.
	14.5		Eser/Hallet, 1993	
	26.0	10 associated States	Courchene et al., 1993	
	42.2		Grabbe/Hughes	

Table based on Busch and Berthold, 1998.

[1] Višegrad States: Czech Republic, Hungary, Poland, Slovakia.

[2] The associated States are the Višegrad States plus Bulgaria, Estonia, Latvia, Lithuania, Romania and Slovenia.

It emerges clearly that the European Commission’s projections are based on rather shaky premises and therefore entail financial risks. Should it prove impossible to enact the reforms, additional costs of at least 60 bn euros are likely for both agriculture *and* structural policy (Baldwin et al, 1997; Laffan, 1997).

1.2 Consensus on reform or divergence of interests: the burdens debate

How consensus on the financial challenges of further integration can be achieved among the Member States, with all their varying interests, remains a moot point (Berschens, 1997).

The fact is that there are wide divergences between the aspirations of the various EU Member States in terms of the future development of the Union budget. The main broad distinction is between the so-called *net contributors*, in other words the Member States which pay more into the budget than they receive from it, and the *net recipients*, the countries receiving more than they contribute. The distribution of burdens is felt to be unfair by the net contributors, especially the main contributors such as Germany, the Netherlands, Sweden and Austria. The European Commission does not deny the existence of budgetary imbalances. In its latest report on the funding of the Community (European Commission, 1998), it recognises the need for corrective action. Germany, the Netherlands, Sweden and Austria have long been complaining that their burdens are disproportionately high when compared with their relative levels of prosperity. In the case of the Federal Republic of Germany, this became especially glaring in the wake of reunification, which caused a considerable drop in the country's relative prosperity level within the EU.

Although Brussels seems to be yielding some ground to Germany and other net contributors, the Commission remains wary of large demands. It emphasises that mere calculation of net balances cannot take full account of the impact of EU expenditure and receipts any more than it can take account of the political advantages and disadvantages of EU membership. The EU Treaty, moreover, requires Member States to contribute in a spirit of solidarity to the harmonisation of living standards in the Community. This explicitly emphasises that redistribution is a Community responsibility. The German claims for relief are also put into perspective by the Commission estimates which show that Germany's share of the net transfer of funds within the EU is set to diminish in the medium term from two-thirds to 40%.

Brussels has nevertheless come round to a moderate position. This position was mapped out by the Members of the European Parliament and also finds favour with the new German Government. It involves having the Member States finance a quarter of the cost of the direct grants that currently account for 60% of all expenditure from the EU agricultural budget. There would be no change as far as the farmers are concerned, as payments would continue to be made on the basis of Community decisions. The beneficiaries would be prosperous States such as Germany, which have a relatively small farming sector and consequently receive a minimal amount in subsidies from the EU budget.

But the net recipients are the ones who fear financial losses in the event of redistribution. They argue that net balances mean very little for several reasons, particularly because of the difficulties involved in assessing the utility of a net surplus and in categorising certain statistical data (see section 2 below).

Many proposals for reform of both the receipts and the expenditure side of the EU budget have been triggered by criticism of the projected growth rates on which the European Commission's financial perspective is based, these rates being widely regarded as far too optimistic, given the global economic crisis (Russia, Asia and Latin America). An increasing number of voices have also been raised, especially among the net recipients, against the plan to freeze the 1999 expenditure ceiling of 1.27% of aggregate GNP for a further *seven* years. There have been many calls for scope to put initial new arrangements in place before or shortly after the accession of the first wave of Central and Eastern European countries.

Germany is one of the major net contributors which welcome the principle of freezing the financial framework at the level it is due to attain in 1999. However, it has also been fiercely critical of the policy of persevering with the present system governing the acquisition by the EU of its own resources. The implementation of the financial framework proposed in Agenda 2000 would only improve the net positions of Germany and other net contributors by a fairly insignificant amount (Brok, 1994).

The various reform proposals that are currently under discussion cover a very broad spectrum. The highly complex proposals for the receipts side range from (1) a general restructuring of the EU budget to (2) the addition of more 'own resources' and (3) the creation of the Union's own new source of receipts. The principal aim of the purely expenditure-based reform efforts is to cut spending drastically and hence to reduce the number of policy areas for which the EU is responsible (Henke, 1997).

The models that are being discussed, especially in Germany, include the capping model proposed by the Federal Ministry of Finance and the suggestion put forward by the ministers of finance of the German *Länder*. In terms of their underlying theory, both of these models are designed to improve the net position of the countries where the distribution of burdens is deemed unfair, which makes them consequentialist by nature. The degree of relief, however, varies between the model. While the regional finance ministers' model has an advantage over the Federal Ministry of Finance model in that it does not impose an arbitrary capping limit, the latter model has two different means of influencing the operation of the system in the revenue-retention threshold and the compensatory percentage (working party of EU desk officers from the Finance Ministries of the German *Länder*, 1997). To what extent either model can prove politically acceptable, given that both of them impose greater burdens on other Member States, remains doubtful and will be examined in detail at a later point in this paper (see section 5).

One of the main items discussed in the debate on the financial burdens of Member States is the possibility of introducing additional sources of income. The options discussed include a percentage of the income tax, value-added tax or excise duty on tobacco, wines and spirits, etc., collected throughout the EU. However, the differences in basic tax structures in the various Member States and the credit and debit effects assessed by us in subsection 6.5 below will make political consensus difficult to achieve in this area too.

The possibility of empowering the Union to raise its own tax revenue is also under discussion in connection with the drafting of a new EU budget. The options being examined here include variants of a European tax deducted at source, a corporation tax and an environmental and energy tax, as well as a sole right of access to the money created by the European central banks. The advantages and disadvantages of the various varieties of complementary and additional taxes and their potential political acceptability will also be examined comprehensively in section 6 below. In addition, we propose the examination of the idea of a 'Tobin tax' for Europe (see subsection 6.6 below).

Apart from a number of exceptions, the primarily expenditure-related reform proposals are far more closely based on the ideas of the European Commission as contained in Agenda 2000 and focus on reform of the CAP on the one hand and reform of the Structural Funds on the other. This stands to reason, since about three-quarters of all EU budgetary expenditure falls under these two headings.

At this stage, it may be said that the criteria for a future mechanism of whatever type are that it must ensure that the EU is adequately financed and that it must guarantee a fair distribution of burdens among the Member States, because fair distribution is one of the main keys to *public acceptance of the Union* in all Member States. Fairer distribution of the burden of funding the EU is essential in Europe's own best interests. If the financial framework cannot be established on the basis of the aforementioned criteria, Europe will suffer. Inadequate resources will jeopardise major projects such as eastward enlargement. On the other hand, an overexpensive EU would be rejected by its people.

1.3 The significance, limitations and efficiency of the existing own-resources pillars

As far as the development of the various pillars on which the EU has hitherto based the acquisition of its own resources, the traditional type of resources has become less significant, falling from 29% in 1988 to about 16% of the Union's own resources in 1998, while resources from value-added tax have plummeted even more drastically from almost 70% in 1990 to an estimated 37% for 1999. GNP-based EU resources, on the other hand, have risen from less than 3% in 1990 to almost 47% in 1998.

The decline of the traditional Community resources, however, has been the result of a welcome development in the domain of economic and commercial policy, namely an emphatic liberalisation of international trade, a lowering of the EU import thresholds and a reduction in the average external tariffs. In other words, since the EU has pursued a successful liberalisation policy, the bases of assessment and the rates levied, and hence the revenue from customs duties and import levies, have fallen.[3]

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[3] Total tax revenue is determined by the equation t x B = T, where t is the rate of taxation, B is the basis of assessment and T is the total tax revenue. Logically, if t and B are both reduced, T must also decrease.

The reduction in the proportion of resources from value-added tax is also politically desirable. Undesirable redistribution effects have long been ascribed to this source of Union revenue. The following propositions are advanced or unquestioningly accepted:

a. value-added tax is an excise duty, and

b. the equation C = f(Y), i.e. consumption is a function of income, applies to countries and industries, and that consumption increases at a slower rate than income (the theory of the diminishing average propensity to consume).

Accordingly, those countries with lower average propensities to save and higher average propensities to consume are unduly burdened. Moreover, it seems to be a general rule that economically less developed States tend not to resort to the taxation of income and business profits, since such countries often have high levels of tax evasion as well as problems with tax collection, and rely on value-added tax, which is more difficult to circumvent and is therefore '*self-policing*'. Both of these effects, it is alleged, make these sources of revenue *highly regressive* in their impact.

This objection is also frequently put forward as a 'killer argument' against the additional VAT component, which is the preferred option of the Committee on Budgets of the European Parliament. It must be said, however, that closer analysis shows the regressiveness argument to be unconvincing:

a. If we compare national income (GDP) with national average propensity to save in the Member States (see Table 3 below), *no* clear correlation emerges. Wealthy countries such as Sweden or Denmark have low average propensities to save, while the saving habit is more firmly rooted in poorer countries like Greece and Portugal. The correlation coefficient between per capita GDP and the national average propensity to save is -0.274 and is thus insignificant. If we look at the United States, we see that the richest country in the world has one of the lowest average propensities to save. In other words, the propensity of a nation to consume is evidently dependent on a host of other factors and not, or not only, on its level of prosperity.

b. The correlation between national VAT and income-tax assessment bases and the development status of national economies is also tenuous. Although the VAT basis is broader *de facto* in the poorer EU Member States than in the wealthier ones, that is a result of domestic fiscal-policy decisions rather than economic necessity. Moreover, there is an observable *general* tendency in Europe to move away from taxing the creation of income (direct taxes) to taxing the use of income for consumption (indirect taxes) with the aim of encouraging savings and hence the formation of capital.

c. To conceive of VAT as an excise duty is to see only one aspect of this net multistage tax, namely the imposition dimension. In procedural terms, however, value-added tax is a levy on business transactions (turnover) and on the creation of assets. To that extent, if a

nation's entire creation of economic assets were subject to taxation, VAT would be *identical* with the GNP pillar (the sum of the value of goods produced and services provided by a national economy).

These points demonstrate that the regressiveness theory has not gone unchallenged. The incidence pattern is not accurately measurable, nor is there a clear empirical link between pro capita income and the average propensity to consume *of any country* (Folkers, 1994; Teutemanns, 1992).

Lastly, the huge increase in the GNP-based proportion of the Union's own resources is also the result of a deliberate political strategy:

GDP (measured in ecus in the EU) is normally used as a prosperity indicator to measure the performance of national economies and as a convergence indicator too. There are general calls for GDP to be measured in purchasing-power parity (PPP) rates per head of population rather than at current prices, since the elimination of differences between price levels (differing rates of inflation) between individual Member States makes it possible to achieve better comparability between national prosperity levels. Unless such a correction were made, equal nominal amounts paid over by various Member States would correspond to different amounts of relinquished purchasing power. This would infringe the fairness rule. This position is advanced, for example, in the papers produced by the working party of EU desk officers from the Finance Ministries of the German *Länder* and by the German Federal Ministry of Finance.

Other studies, however, use per capita GNP at market prices (European Commission, 1998; Busch, 1998).

The differing treatment is no coincidence. Depending on whether the 'right' indicators are selected, the result in terms of the *contributory capacity* of an individual country, i.e. its level of financial prosperity, will vary. Nominal exchange rates, which are determined by external economic transactions and financial flows, generally *exaggerate* the differences in prosperity levels between the EU members. But conversely, the GDP purchasing-power parity indicator creates distortion. For example, when it comes to drawing a comparison between countries such as Portugal and Sweden, the bundles of goods and services that are required for the construction of a price deflator are quite dissimilar.

And so the PPP-based comparison usually *underestimates* the differences between countries' levels of solvency and their ability to contribute to the EU budget (Watler, 1996). It therefore comes as no surprise to learn that the German calculations are based on GDP/PPP, while those from other sources, such as the net-recipient countries, are based on market prices.

No consideration has yet been given in the discussion of this issue to the fact that, in an economic and monetary union, these differences will become blurred and will eventually disappear once two developments have taken place: (a) exchange rates between EU currencies will be abolished

when the single currency is introduced, and (b) the Member States' inflation rates, which are already converging very closely, will be replaced by a single rate of inflation. This will put an end to exchange-rate effects and differences in purchasing power. All Member States will contribute to the Union's own resources in euros and on the basis of a set of standard European prices.

When the GDP pillar is used, greater significance will attach to problems relating to the statistical methods used to assess the value added in each country. In particular, the amounts of undeclared income from the so-called unofficial economy varies enormously from one Member State to another and may result in considerable distortions, with particular countries' economic performance being systematically understated. Although the European Statistical Office (Eurostat) now operates with correction mechanisms, these are not yet sophisticated enough to adjust GDP data accurately. If we assume that the Berger/Schneider estimates provide a fair reflection of the size of unofficial economies in the EU Member States in 1994, the following corrections would be appropriate:

Table 3: Per capita GDP at market prices, adjusted to take account of the unofficial economy

Country	Per capita GDP at market prices	Size of unofficial economy in 1994	Corrected per capita GDP
Austria	18 136	6.8%	19 369
Belgium	16 878	21.4%	20 490
Denmark	23 843	17.6%	28 039
Finland	22 175	4.8%	23 239
France	18 183	14.8%	20 874
Germany	18 134	13.1%	20 510
Greece	7 405	22.5%	9 071
Ireland	15 556	15.3%	17 936
Italy	16 424	25.8%	20 661
Luxembourg	27 740	3.0%	28 572
Netherlands	17 255	13.6%	19 602
Portugal	6 178	19.3%	7 370
Spain	11 255	22.8%	13 821
Sweden	21 587	18.3%	25 537
United Kingdom	15 039	12.4%	16 904

Source: Our own calculations, based on Berger and Schneider, 1998.

Against this background, it seems obvious that the GDP pillar is not exactly a perfect indicator of performance, solvency or contributory capacity either. At the same time, it seems to be the prosperity indicator that meets with least political resistance. This is often apparent in connection with the high correlation between the Member States' official per capita GDP figures and their contributions to the 'own-resources' pillars (Table 4).

Table 4: Percentage of Member States' contribution to the own-resources pillars and correlation with per capita GDP (prosperity indicator)

	Percentage of EU GNP	Percentage funding of EU budget	Traditional EU resources	Contributions based on VAT and GNP
Austria	2.6	2.8	1.8	3
Belgium	3.1	3.9	7.4	3.1
Denmark	1.9	2	2	2
Finland	1.4	1.4	1	1.33
France	17.2	17.5	10.9	19
Germany	26	28.2	24.2	29.1
Greece	1.5	1.6	1.2	1.7
Ireland	1	1	2	1
Italy	14.2	11.5	7.9	12.4
Luxembourg	0	0	0	0
Netherlands	4.5	6.4	12	5.1
Portugal	1.2	1.4	1.1	1.3
Spain	7	7	5	8
Sweden	3	3	3	3
United Kingdom	16.1	11.9	21.5	9.3
Correlation coefficient		**0.979**	**0.894**	**0.966**

Source: European Commission (1998) and our own calculations.

This comparison of national percentage contributions to the Union's own resources and national GNP figures shows, as might be expected, a very high degree of correlation in percentage terms between national contributions to total EU GNP and national contributions to the EU budget, in other words both solvency and economic performance are taken into account. This correlation is significantly closer in the GNP and VAT pillars than in the case of the traditional Community resources.

2. Critical appraisal of the computation of net positions

The following table will serve as a point of reference for the next stage in our analysis. It summarises the development of the net positions of the various EU Member States during the period from 1992 to 1997.

Table 5: Member States' net positions from 1992 to 1997 (in m.ecus)

	1992	1993	1994	1995	1996	1997
Austria				-860.5	-213.5	-723.6
Belgium	1224.2	1333.1	1139.6	1718.2	1415.8	1079.5
Denmark	295.4	356.9	236.6	345.1	247.8	68.6
Finland				-133.9	88.0	56.1
France	-1319.3	-1026.9	-2465.3	-1540.1	-137.6	-781.1
Germany	-9561.6	-11659.7	-13465.7	-13198.3	-10528.3	-10943.5
Greece	3588.2	4094.7	3873.9	3528.5	4081.0	4371.8
Ireland	2119.8	2402.5	1767.9	1913.7	2316.1	2676.7
Italy	-231.7	-1142.8	-2366.0	-672.7	-1152.5	-61.3
Luxembourg	626.2	737.0	607.6	694.1	787.8	725.4
Netherlands	-818.6	-1263.9	-1762.9	-1921.2	-2331.8	-2276.2
Portugal	2124.4	2457.7	1844.9	2441.1	2849.7	2721.8
Spain	2708.1	3022.4	3171.6	7253.2	6114.3	5936.0
Sweden				-897.7	-656.6	-1129.5
United Kingdom	-2256.1	-2959.3	-1074.0	-4639.1	-2106.1	-1798.8

Source: European Commission, 1998.

The above table shows that the France, Germany, Italy, the Netherlands and the United Kingdom were net contributors throughout the reference period from 1992 until 1997. Austria and Sweden, which acceded to EU membership as part of the 1995 enlargement, are also net contributors. While the other net contributors carry less of a burden in absolute terms as well as in per capita terms, Germany and, to an increasing extent, the Netherlands bear the main brunt of funding the EU budget. In 1997, Germany alone accounted for 62% of all net contributions. Among the net recipients, Greece, Ireland, Portugal and Spain stand out as the main beneficiaries in both absolute and per capita terms.

The computation of net positions proceeds on the assumption that it is possible to make a numerically precise evaluation of the extent to which EU membership is an advantage or disadvantage for individual countries on the basis of payments made to and received from the EU. There are, however, considerable objections to this sort of instrumentalism in the computation of net payments. For one thing, the calculation of payments made between the Member States and the EU runs into *statistical categorisation problems* which cannot be ignored. For that reason, it is impossible to work out *exactly* the true net positions of the individual EU Member States. Moreover, judging the benefit a country derives from EU membership by its net position as a contributor or recipient is simplistic. The advantages attaching to EU membership go far beyond its immediate monetary impact, while to link EU receipts and expenditure with the aim of establishing the various net positions of the Member States is to follow the *principle of*

equivalence. This, however, would be inconsistent with the *aims of cohesion and redistribution* associated with the EU budget. In the following subsections we shall deal in more detail with some reservations about the indicative value of net balances.

2.1 Systematic reservation I: statistical categorisation problems

The computation of net credits and debits presupposes the possibility of categorising precisely the payments that individual countries make to and receive from the EU budget. On account of the structure of the expenditure and receipts sides of the budget, however, the requisite breakdown of payments is not always possible.

Table 6 summarises the volume and structure of total *receipts* for the 1997 financial year, comparing them with the 1996 figures.

Table 6: Volume and structure of total receipts for the 1997 financial year

	Absolute amounts (in m.ecus)		Percentage of total expenditure	
Type of receipts	**1997**	**1996**	**1997**	**1996**
Agricultural duties; sugar and isoglucose levies	2015.5	1966.6	2.4	2.4
Customs duties	12203.2	12865.1	14.8	15.7
VAT own resources	34471.1	35481.5	41.9	43.3
GNP-based own resources	33063.8	21878.9	40.1	26.7
Other revenue	612.0	9751.3	0.8	11.9
Total	82365.6	81943.4	100.0	100.0

Source: European Parliament, 1997, and our own calculations.

Note: The figures given above for agricultural duties and customs duties are 10% less than the total, this being the percentage of the amount levied which is retained by the Member States to cover collection costs. The sharp increase in the GNP-based Community resources is partly due to the fact that surpluses amounting to 9.2 bn ecus from the previous year were allocated to the 1996 budget. These are shown in the table under 'other revenue'. No such surplus was available for the 1997 budget, however, which meant that there was a sharp fall in other revenue and that the Member States therefore had to provide more GNP-based resources in 1997 to make up the shortfall.

In the EU budget, the amounts of each of the various types of revenue as well as the correction mechanism for the United Kingdom are broken down precisely into countries of origin. The following table shows the aggregate payments made by each of the Member States to the EU in the four general revenue categories. The amounts of the British rebate, which are entered separately in the budget, are taken into account here the VAT and GNP-based own-resources figures.

Table 7: Breakdown of EU receipts by Member State for 1997

	Agricultural duties; sugar and isoglucose levies	Customs duties	VAT own resources	GNP-based own resources	Total funding	Percentage of total EU funding
Austria	48.7	256.5	1050.0	874.1	2229.2	2.7
Belgium	129.2	930.0	1038.9	1048.1	3146.2	3.8
Denmark	48.7	217.4	662.9	670.2	1599.2	2.0
Finland	29.1	193.5	516.3	483.2	1222.1	1.5
France	389.3	1288.8	6912.7	5932.8	14523.6	17.8
Germany	454.2	2981.5	10982.2	9065.7	23483.6	28.7
Greece	26.1	125.1	574.3	484.8	1210.3	1.5
Ireland	14.8	228.3	274.3	223.9	741.3	0.9
Italy	203.7	1131.8	4156.2	4678.8	10170.6	12.5
Luxembourg	0.2	16.9	90.5	71.3	179.0	0.2
Netherlands	151.4	1498.5	1759.3	1539.8	4948.9	6.1
Portugal	45.5	110.2	513.8	419.5	1089.0	1.3
Spain	171.0	474.3	2653.4	2332.6	5631.3	6.9
Sweden	58.1	329.4	931.0	907.5	2226.0	2.7
United Kingdom	245.5	2421.0	2355.3	4331.5	9353.3	11.4
EU	2015.5	12203.2	34471.1	33063.8	81753.6	100

Source: European Parliament, 1997, and our own calculations.

So although on the receipts side the distribution of burdens among the Member States can be illustrated accurately enough, statistical categorisation problems arise in connection with the actual burden arising from the transfer of agricultural levies and customs duties to the EU. These problems are known collectively as the Rotterdam-Antwerp effect.

The Rotterdam-Antwerp effect: On the receipts side of the EU budget, distortions are caused by the collection of the agricultural and customs duties which are levied at the external borders of the EU, irrespective of the country of destination. They are debited as a charge on the country at whose border the goods enter the EU.

Countries which, on account of their geographical situation and their customary trading role, tend to operate as handling centres for goods from non-EU countries, thereby collect a greater amount of customs duties than other countries. They transfer these duties to the EU, which then treats these transfers as payments to the Community budget when assessing the Member States' net positions, even if the goods in question have been forwarded to other EU countries and the

economic cost of the duty is met in the country where the end users live (May, 1985). This syndrome is termed the '*first-round gateway effect*'. If, for instance, an agricultural product is imported into Germany through the port of Hamburg, German levies result, and these are transferred to the EU budget, but if the product is imported to Germany through the port of Rotterdam, this accordingly results in a Dutch payment into the EU budget. If the product is purchased direct within the EU, no funds are transferred to the EU budget. But in all three cases the consumer in the country of final destination will ultimately have to pay an amount in excess of the world market price for the product. Regional revenue and regional burdens therefore diverge in many cases.

Then there is the '*second-round gateway effect*' to consider: this relates to intra-Community re-exporting goods originating in non-EU countries which are merely processed in the handling country. In this case too, the duties collected are set off against the handling country's payments to the EU, even though these duties are ultimately paid by the end user in the country of destination.

Since the major ports of Rotterdam and Antwerp are particularly important handling centres for imports into the EU, the term 'Rotterdam-Antwerp effect' has established itself (Peffekoven, 1994). A study by the European Centre for Strategic Analysis (1997) found that these gateway effects accounted for 31% of all customs duties collected in Belgium and 27% of those collected in the Netherlands.

The agricultural duties and customs duties figures in particular for Belgium and the Netherlands are therefore likely to be overestimated in the computation of net balances and do not reflect the actual burdens on those countries. While Belgium contributes about 3.8% of the total resources in the EU budget, the agricultural duties, sugar and isoglucose levies and customs duties provided by Belgium amount to some 7.5% of the EU total. The Netherlands' contribution in terms of these duties and levies, at 11.6%, is almost twice as high as its overall contribution to the EU budget (6,1% - see Table 7 above). A similar situation applies, albeit to a lesser extent, in the cases of Portugal, the United Kingdom and Ireland. If a deduction were made to allow for the Rotterdam-Antwerp effect, Belgium, France and the United Kingdom would emerge as net recipients. Germany's net contribution would be further increased (Welter, 1997). Account should, however, be taken of the standard 10% allowance for collection costs which the Member States retain from the customs duties and agricultural levies they collect.

But then there is also the '*inverse gateway effect*'. This effect derives from the fact that refunds on agricultural exports are often paid at the port of shipment (e.g. the Netherlands or Belgium); these refunds are not retained by nationals of the countries of shipment but are passed on to the countries of the producers. This phenomenon results in the recording of net gains which do not really exist. However, it is doubtful whether the gateway effects and the inverse gateway effect cancel each other out, since the sum of export refunds is falling faster than the product of the volume of imports and the average EU rate of customs duty.

If we are to believe the German Council of Experts for the Assessment of Macroeconomic Trends, the 'Five Wise Men' (Sachverständigenrat, 1994/95), the Rotterdam-Antwerp effect makes it difficult to assign about 25% of the receipts with which the EU budget is funded.

However, the fact that the significance of the traditional Community resources, to which the Rotterdam-Antwerp effect relates, will continue to diminish and the fact these are the only funds that can truly be called the Union's *own* resources give rise to two consequences:

1. *The methodological implication:* When net balances are compared, traditional Community resources should be completely disregarded, since they are diminishing 'transitory items' which do not represent a burden on the Member States. This would also render the Rotterdam-Antwerp effect irrelevant.

2. *The substantive implication:* Since the significance of these genuine Community resources is waning, they should be supplemented by new genuine Union resources, possibly in the form of a common EU tax, so that *the status quo is at least preserved*. This will prevent a shift in the fiscal power structure.[4]

As in the case of the EU receipts, its planned expenditure is broken down in the budget by institutions, expenditure categories and budget chapters. The volume and structure of EU expenditure can therefore be quite precisely determined. The following table summarises the volume and structure of total expenditure for the 1997 financial year compared with the previous year.

[4] Such a Community tax, however, is rejected in the paper produced by the EU desk officers of the Finance Ministries of the German *Länder* (1997) as well as by Caesar (1996) and Walter (1996), for example. The main reservations expressed in these documents are constitutional in character.

Table 8: Volume and structure of total expenditure for the 1997 financial year, compared with 1996

	Amounts (in m.ecus)		Percentage of total expenditure	
Expenditure categories	**1997**	**1996**	**1997**	**1996**
EAGGF, guarantee section	41233.0	41328.0	50.1	50.5
Structural Funds and Cohesion Fund	26632.9	26008.6	32.3	31.7
Research and development	3996.5	3952.5	4.9	4.8
External actions	4687.5	4652.1	5.7	5.7
Education and culture	736.1	823.4	0.9	1.0
Administrative expenditure	4283.6	4183.6	5.2	5.1
Other expenditure	796.0	995.2	0.9	1.2
Total	82365.6	81943.4	100.0	100.0

Source: Commission of the European Communities, 1997, and our own calculations.

However, there are also problems on the expenditure side of the EU budget when it comes to assigning items of expenditure to individual Member States, for although the amounts are broken down by the purpose for which they are used, they are not broken down by Member State as the receipts are.

a. *Agricultural expenditure:* Market-support expenditure in the agricultural domain has a major influence on the Member States' net positions. These are credited, on the basis of the place where the intervention agency has its registered office, as a payment to the country in which the produce in question leaves the territory of the EU. Intervention agencies, however, also buy farm produce from other countries. The payment, then, is not necessarily credited to the country where the assisted farmer is based (Peffekoven, 1994).

b. *Reflux of Structural Fund resources:* Businesses in net-contributor countries benefit from payments made from the Structural Funds to net-recipient countries in the form of contracts. This means that some of the resources flow back into the net-contributor countries. In response to this argument, however, it may be said that such a reflux of resources from the Structural Funds is offset by identifiable supplies and services selected by the customer on the basis of competitive tendering (see the example on Athens airport). On the other hand, the resources from the Structural Funds may be said to have been diverted from other potential uses, very possibly in the net-contributor countries.

c. *Research and development:* There is a limit to the precision with which research and development expenditure can be assigned to particular Member States.

d. *Payments to non-EU countries:* It should also be borne in mind that not all activities within the Member States do not account for all EU expenditure; some of it flows into non-EU countries, for example in the form of development aid (Seidel, 1992). The economic and/or political advantages of such expenditure can scarcely be converted into monetary terms and distributed among the Member States of the EU.

e. *Assignment of administrative expenditure:* Administrative expenditure, comprising staff costs and material costs, accounted for more than 5% of the Community budget in 1997. This is another area of EU expenditure which can have quite a significant distorting effect on net positions, since the extent to which this expenditure should be included in the calculation of net balances is a bone of contention. One option is to ascribe the expenditure entirely to the country in which it arises. This would result in almost the entire administrative expenditure of the EU being treated as payments from the EU budget to Belgium and Luxembourg, since the Community institutions are based almost exclusively in these two countries. There is something to be said for this approach, since the location of administrative headquarters with their staff brings considerable benefits to a country or a particular region. On the one hand, the need to purchase office equipment and materials and the high number of employees creates a certain level of demand, thereby making the local area more attractive as a business location. On the other hand, the location of administrative offices helps to absorb some of the country's excess labour. This approach naturally raises problems too, since administrative expenditure, unlike many other EU payments, corresponds to the supply of goods and the provision of services and cannot therefore be regarded as a pure inflow. Furthermore, the impact of the expenditure in terms of employment is not limited to the country in which the administrative offices are located but also benefits the other Member States, since the employees come from many countries of the Union. Part of these employees' incomes will also stimulate demand in their countries of origin (Ott, 1987). Depending on the computation method used, the country-by-country distribution of EU spending includes administrative expenditure in full (Federal Ministry of Finance), in part (the European Commission assigns 50% of EU administrative expenditure to Belgium and Luxembourg) or not at all (European Court of Auditors).

f. *Omission of certain expenditure categories:* Several areas of political activity with financial implications (e.g. the ECSC operating budget, the European Development Fund, the European Investment Bank and other Union borrowing and lending activities), are not included in the EU budget. These omitted categories of expenditure have grown rapidly in volume and importance over the past few years. If only for purely budgetary reasons, financial activities outside the EU budget should be included in the computation. In order to assess their precise net position, all Member States should take account of these extrabudgetary financial transactions and deduct them from the net balance.

2.2 Systematic reservation II: the limited validity of net balances in terms of the utility of EU membership

Besides the statistical categorisation problems referred to above, the question also arises whether the computation of net balances are fundamentally capable of satisfying the need for adequate documentation of the advantages and disadvantages of EU membership. The advocates of the computation approach take the view that the balance of financial transfers is a suitable measure of the way in which burdens are distributed within the Community, while its opponents argue that to contemplate a mere statement of account, which only includes payments made directly to and from the EU budget, is to ignore the indirect economic and political impact that EU membership can have on a country (Caesar, 1996(b)). Moreover, they fear that the future development of European integration may be jeopardised if equivalence is allowed to become a political obsession. Peffekoven (1998) therefore proposes that an end be put once and for all to the discussion of net positions.

On the whole, the use of net balances to assess the utility of EU membership must certainly be subjected to critical examination. It all too easily creates the impression of misplaced precision when anyone attempts to define utility in statistical terms. Although every first-year student of economics learns that utility can at best be measured *relatively* (increasing/diminishing), it cannot be measured *absolutely* (on a calibrated scale). There is no denying, of course, that net balances can be useful as proxies, since they indicate general trends and reveal imbalances. We shall now enumerate some examples of the arguments used in defence of the proposition that mere examination of net balances tells us too little.

(1) *Advantages of the single European market*

Concentration on the net positions of contributors and recipients ignores the prosperity-enhancing effects of the single European market for the net-contributor States:

a *Easier cross-border trade:* By liberalising trade in goods, services and capital and by developing uniform standards and legislation, the European single-market programmes have vastly improved the conditions for cross-border trade between EU Member States. The main beneficiaries of such a development are the export-orientated industries of the (economically stronger) net-contributor countries.

b. *Increased sales opportunities:* The redistribution of resources through the EU budget to the economically less-developed regions of Europe results in an increase in those regions' purchasing power. Moreover, the European integration process has helped to stabilise the foundations of individual Member States' economies. Exporters in the net-contributor countries can benefit from this in terms of finding new markets for their products.

c. *Increased employment:* An increase in the turnover of exporters as a consequence of easier cross-border trade and increased sales opportunities within the EU may enhance prosperity by creating new employment and safeguarding existing jobs.

d. *Increased tax revenue:* Both the increase in trade volume and turnover and the employment growth that may accompany such an increase can be expected to boost direct and indirect tax revenue in the net-contributor countries. This revenue can then be used to improve the quality of life in those countries. *The first-ever attempt to quantify this effect will be saved for section 3.*

(2) *Opportunity cost of non-membership of the EU*

a. *Agriculture and structural policy:* When we discuss net positions as the basis of a cost-benefit analysis, we should remember that, in the - albeit hypothetical - event of non-membership of the EU, opportunity costs would arise which would burden national budgets. For example, high levels of subsidisation would be virtually unavoidable, even in the context of purely national agricultural policies. Similarly, the structural measures implemented by national governments would have to be intensified.

b. *Political aspects - I:* Another point relates to the political implications of the existence of the European Union. The developing European integration process, which could be endangered by a prolonged discussion about net contributors and by excessive self-seeking on the part of individual States, is helping to safeguard peace, which is one aspect of the planned eastward enlargement, and to strengthen democracy where it is still in its infancy, for example in Eastern Europe.

c. *Political aspects - II:* As the integration process continues, Europe is also likely to become a more influential player in international politics. While individual EU Member States have relatively little to put on the bargaining table in negotiations with the United States, for example, the EU as a whole is able to negotiate as an equal partner (Gretschmann, 1997(a)). The challenges faced by the EU at the turn of the millennium -the achievement of economic and monetary union and eastward enlargement - can ultimately be taken as an opportunity to overcome resistance and indifference to essential reforms within the Member States (Gretschmann, 1997(b)). These efforts must focus on both the public sector (e.g. greater flexibility, consolidation of public budgets) and the necessary structural adjustments in the private sector. The EU must therefore act as a catalyst in the implementation of essential reforms in the Member States.

2.3 Net balances and beyond

The foregoing reflections have shown that, on account of statistical categorisation problems as well as the limitations of a purely budgetary perspective, the computation of net positions fails to take proper account of the utility and benefits attaching to EU membership. Although these difficulties are virtually insurmountable because of the problems in measuring utility and finding utility indicators, in the next section we intend to undertake a rather bold attempt to translate the commercial benefits deriving from membership into budgetary effects and to render them quantifiable. Thanks to the political stability the EU has created and the advantages of economic integration, culminating in the completion of the single market, the Member States of the European Union have undoubtedly experienced a considerable increase in the volume of intra-Community trade. This has also enhanced national prosperity - particularly in the net-contributor countries.

3. Calculation of net positions with special regard to trade-driven fiscal effects

In the previous section we discussed the limited value of assessing EU membership by considering the balance of the payments made between a Member State and the EU. In the following computation of the Member States' net positions we shall therefore look beyond these payments to highlight the fiscal effects of EU membership that derive from increases in external trade.

As we mentioned above, the literature and political discussions on this subject often focus on non-fiscal advantages of EU membership. Time and again, emphasis is placed on the fact that potential commercial benefits of integration cannot be incorporated into an examination of the fiscal position.

Particularly in the case of Germany, it is argued with insufficient precision that special benefits on the export side do nothing to alter the basic equation (working party of EU desk officers from the Finance Ministries of the German *Länder*). Although the creation of the single market has simplified many important aspects of trade within the European Union, and although Germany is the major participant in the internal market in absolute terms, if we consider the proportion of all Germany's foreign trade or of its GDP at market prices for which intra-Community trade accounts, it emerges that other Member States are far more dependent than Germany on the internal market. To take account of this phenomenon, we shall try in the present study - and this is the first such attempt - to translate the utility of EU membership in terms of foreign trade for each Member State into a measurable budgetary impact. To do this, we have taken the total value added by these transactions and multiplied it by the taxation quotient (total national tax revenue as a percentage of total national GDP).

The approach we have chosen in order to measure the fiscal impact of EU membership is based on the following line of argument (see section 2 above): it is assumed that a State's accession to the European Union will lead to a considerable increase in its trade with the other Member States. EU membership may therefore be expected to bring not only an increase in import and export activity but also to an increase in the importance of trade with the other EU Member States in relation to trade with non-European countries. This additional export volume should increase the national tax yield of a new member country by additional direct and indirect tax receipts from value added from external trade. To determine the actual net position of an EU Member State, then, these fiscal effects of EU membership must be added to the balance of payments to and from the EU.

To calculate the fiscal effects, the external trade elasticity with reference to EU membership must first therefore be calculated for the individual countries. It is then a feasible proposition to make a comparison between the situation a number of years prior to EU accession to the Community and the post-accession situation. For the six EU founder members - Belgium, Germany, France, Italy, Luxembourg and the Netherlands - this approach is not entirely straightforward, however,

established. Our analysis of those states therefore takes as its reference year 1968, when the Customs Union was completed. This was an obvious choice in so far as establishment of the Customs Union generated major trade-facilitating effects. We further make a distinction between the first EU enlargement involving the United Kingdom, Ireland and Denmark (1973), the accession of Greece (1981), the second, southwards enlargement involving Spain and Portugal (1996) and the accession of the former EFTA states Austria, Sweden and Finland in 1995. The examination is based on external trade figures three years before and seven years after accession to the EU. To ensure that the results are sufficiently immune from special distorting factors, a ten-year review period appears appropriate. Only for the analysis of the founder members and the most recently acceding EFTA states has the review period been cut to six years (1965-1971) and five years (1992-1997) respectively. Although, for the EFTA states, it is not possible to examine the effects seven years following accession, because accession to the EU did not take place until 1995, it is helpful to shorten the review period for examining the impact on the founder members in order to prevent the calculations from being distorted by the effects of the first EU enlargement in 1973.

The approach can be summarised as follows: (1) Firstly, the volume of intra-Community exports and total exports for the acceding states before and after EU accession must be determined and, on the basis of a comparison of the percentage of total exports accounted for by intra-EU exports, their relative significance must be illustrated. (2) In step two, we estimate the notional level of total exports by the acceding states if they had not acceded to the EU. (3) By dividing actual exports by our calculation of the notional exports which would have occurred if they had not acceded, an 'integration factor' can be calculated which indicates whether EU accession has helped to increase total external trade for the acceding states in question. (4) The next step consists in calculating - on the basis of the integration factor - the additional exports (or decrease in exports) as a result of EU membership. (5) By multiplying this export difference by the respective average tax rate in the acceding countries, their additional or reduced tax yield is approximated. (6) The final step consists in incorporating this integration-dependent change in the acceding states' tax yields into two alternatives for calculating net contributor positions.

(1) *Intra-EU exports and total exports before and after EU accession*

The following table shows actual exports by the individual acceding countries to the other EU states three years before and seven years after accession to the EU, expressed in ECU and at the prices obtaining in the respective year of accession. The development of intra-Community exports is compared with the changes in the acceding states' total global external trade during the same period, again expressed in ECU and at the prices obtaining in the respective year of accession.

	Exports to EU[1]			
	Before EU accession[2]	After EU accession	Before EU accession	After EU accession
	1965	1971	1965	1971
Germany	**6587**	**10945**	**18689**	**27308**
France	**4426**	**9116**	**10806**	**18437**
Italy	**3002**	**5412**	**7464**	**12116**
The Netherlands	**3983**	**6617**	**7151**	**10394**
Belgium/ Luxembourg	**4228**	**6723**	**6836**	**9805**
	1970	**1980**	**1970**	**1980**
United Kingdom	**4443**	**14403**	**20425**	**33710**
Ireland	**143**	**2433**	**1240**	**3249**
Denmark	**982**	**3350**	**4332**	**6630**
	1978	**1988**	**1978**	**1988**
Greece	**1689**	**2493**	**3324**	**3847**
	1983	**1993**	**1983**	**1993**
Spain	**12092**	**23951**	**27535**	**38419**
Portugal	**3363**	**6171**	**6323**	**8193**
	1992	**1997**	**1992**	**1997**
Austria	**26325**	**32982**	**39833**	**53068**
Sweden	**21245**	**36652**	**38056**	**66037**
Finland	**10628**	**19398**	**19961**	**36552**

[1] ECU m at accession year prices.

[2] 1968 (Commencement of the Customs Union) has been taken as the reference year for founder members.

Source: own calculations on the basis of basic Community statistics from Eurostat.

Method of calculation: ECU values have been converted at the respective exchange rates into national currencies and adjusted to reflect the corresponding year of accession by means of the price deflators for national gross domestic product at market prices.

For all acceding states, a marked expansion of external trade during the review period can clearly be seen. During that period there was a considerable increase both in intra-Community exports by acceding states and in their global external trade. To some extent, however, there are variations in growth between the individual states: while, as regards intra-EU trade, Denmark and Ireland experienced a huge increase in exports following their EU accession (+ 240% and +1600% respectively), there was only a moderate increase in Greece's exports to the other EU Member States (+48%). In the case of Ireland, however, we must point to the special situation in that the United Kingdom acceded to the EU at the same time: since a large proportion of Ireland's external trade is with the United Kingdom, the huge increase in Ireland's exports to the other EU states can be accounted for to a considerable extent by the fact that trade with the United Kingdom, too, was henceforth classified as intra-EU trade.

accession of Spain and Portugal, they also being important trading partners for each other. The expansion of EU-wide exports from *these* states can therefore only be attributed in part to the trade-facilitating effect of EU membership. With regard to the development of total exports, the greatest increases were recorded by Sweden (+74%), Finland (+83%) and - once more - Ireland (+162%). Again it is Greece whose export growth lags behind the other states which acceded to the EU.

An appropriate way of illustrating changes in relative significance of intra-European exports in relation to global exports is to compare the percentage of acceding states' total exports accounted for by intra-EU exports, before and after accession to the EU, as is set out in the table below.

Table 10: Share of global exports accounted for by intra-EU exports before and after EU accession

	Percentage share of total exports accounted for by exports to the EU	
	Before EU accession [1]	**after EU -accession**
	1965	***1971***
Germany	**35.2**	**40.1**
France	41	49.4
Italy	40.2	44.7
Netherlands	55.7	63.7
Belgium / Luxembourg	61.9	68.6
	1970	***1980***
United Kingdom	21.8	42.7
Ireland	11.6	74.9
Denmark	22.7	50.5
	1978	***1988***
Greece	50.8	64.8
	1983	***1993***
Spain	43.9	62.3
Portugal	53.2	75.3
	1992	***1997***
Austria	66.1	62.2
Sweden	55.8	55.5
Finland	53.2	53.1

[1] 1968(commencement of the Customs Union) has been taken as the reference year for founder members.

Source: Own calculations on the basis of basic Community statistics from Eurostat.

For all acceding States during the review period, with the exception of the most recently acceding EFTA countries, a significant increase in the relative significance of intra-Community exports in relation to global exports can clearly be seen. In particular for the first states to accede - the United Kingdom, Ireland and Denmark - the share of total exports accounted for by EU exports increased considerably: while Denmark's and the United Kingdom's percentage share roughly doubled, the percentage for Ireland increased sixfold, though here too we must point to special effects in connection with the simultaneous accession by Ireland and the United Kingdom. (These

in significance of intra-Community exports, however, Germany and Italy have lagged behind the other acceding states. For Germany and Italy, the increase in the share of total exports accounted for by intra-Community exports has only risen from 35.2% to 40.1% and from 40.2% to 44.7% respectively.

(2) *Volume of total exports if accession had not taken place*

The next step consists in comparing the actual development in total exports with the estimated notional total external trade volume of the acceding states if they had not acceded to the EU. The notional volume of exports if there had been no accession to the EU is calculated here as follows:

$$Ex_{notional(t+7)} = (Ex_{tot(t+7)} - Ex_{EU(t+7)}/(1 - Ex_{EU(t-3)}/Ex_{tot(t-3)})$$

where: t = year of accession

$Ex_{notional(t+7)}$ = notional exports without EU accession

$Ex_{tot(t-3)}$ = total exports three years before EU accession

$Ex_{tot(t+7)}$ = total exports seven years after EU accession

$Ex_{EU(t-3)}$ = exports to EU states three years before EU accession

$Ex_{EU(t+7)}$ = Exports to EU states seven years after EU accession.

Firstly, then, exports to non-EU states are calculated by subtracting intra-EU exports from total exports. The share of the country's total exports accounted for by exports to non-EU states before EU accession is then determined. The calculation for total exports which a country would have generated seven years after accession if it had not acceded to the Community is based on the assumption that, in such a case, there would not have been a shift in significance between intra-Community and extra-Community trade. The percentage of total exports accounted for by exports to non-EU states is therefore assumed to be constant. The final step, then, is to determine the notional total exports of the acceding country concerned - if it had not acceded seven years previously - by dividing non-European exports (in year t+7) by the assumed constant share of exports to non-EU states. The objection to this premise is that the regional shift in export structure is bound *not* to be ascribable *solely* to EU accession. Since our premise here is that EU accession has a dominant effect, however, we regard the assumption made as tenable.

The following table compares total exports, as calculated by means of the above formula, with actual total exports by the acceding states seven years after EU accession.

	Total exports	Notional total exports	
	After EU accession[1]	**Without EU accession**[1]	**Integration factor**
	1965	***1971***	
Germany	27308	25252	1.08
France	18437	15798	1.17
Italy	12116	11211	1. 08
Netherlands	10394	8526	1.22
Belgium / Luxembourg	9805	8089	1.21
	1980	***1980***	
United Kingdom	33710	24689	1.37
Ireland	3249	924	3.52
Denmark	6630	4244	1.56
	1988	***1988***	
Greece	3847	2751	1.4
	1993	***1993***	
Spain	38419	25790	1.49
Portugal	8193	4321	1.90
	1997	***1997***	
Austria	53068	59250	0.9
Sweden	66037	66482	0.99
Finland	36552	36654	1

[1] ECU m at accession year prices. 1968 (Commencement of Customs Union) has been taken as the reference year for founder members.

Source: Own calculations on the basis of basic Community statistics from Eurostat.

(3) *The 'integration factor'*

In the fourth column of the above table, in addition, we have set out the quotients derived from total exports after EU accession and notional total exports without EU accession. This value, which we term 'integration factor', indicates whether membership of the EU has led to an increase (> 1) or a decrease (< 1) in the level of total exports of a state. As the table makes clear, membership of the EU has led to a considerable expansion in total exports, in some respects, for all states apart from the most recently acceding former EFTA states Austria, Sweden and Finland. The corresponding value for Portugal and Ireland is particularly high, at 1.90 and 3.52 respectively, though, with regard to these states we must again point to the methodological problems, already outlined, concerning the simultaneous accession of an important trading partner to the Community, which, because exports to those states were then classified as intra-EU trade, exaggerates the export-promoting effects of EU membership. While the integration factor

Sweden are in fact less than 1 (0.9 and 0.99 respectively). Astonishingly, the shape of both states' total external trade accounted for by intra-Community trade during the review period has declined.

(4) *Additional exports or, as the case may be, a decline in exports attributable to EU membership*

By means of the '*integration factor*' values, the proportion of current export volume attributable to EU membership can be calculated with the following formula:

Additional exports = total exports - total exports/integration factor

From current total exports of the Member States in question, then, we subtract the quotient derived from current total exports and the integration factor. The higher the integration factor, the higher the additional exports resulting from EU membership. This calculation is based on the assumption that the '*integration factor*' calculated for the post-accession period is *time-independent*, i.e. it can be applied to present-day exports. The following table represents the additional export volumes calculated for the acceding states under consideration:

Table 12: Increase or decrease in exports and tax revenues as a result of EU membership

	Integration factor	Additional exports (1996)[1]	Tax ratio (%)	Change in tax yield (1996)[1]
Germany	1.08	30607	23.3	7131
France	1.17	34915	26.0	9078
Italy	1.08	14718	28.7	4224
The Netherlands	1.22	28914	27.1	7836
Belgium / Luxembourg	1.21	24109	31.6	7618
United Kingdom	1.37	55058	29.6	16297
Ireland	– 3.52	27248	29.7	8093
Denmark	1.56	14536	50.4	7326
Greece				
Spain	1.49	27895	22.4	6248
Portugal	1.90	8251[3]	24.7	2038[3]
Austria	0.90	-5095	29.7	-1513
Sweden	0.99	-676	39.9	-270
Finland	1	0	34.6	0

Note: [1]ECU m at 1996 prices; [2]1994 figures; [3]1995 figures.

All states apart from the former EFTA states clearly have additional exports as a result of EU membership. Because of their low integration factor, the most recently acceding States have recorded either no additional exports (as in the case of Finland) or a decline in exports.

After quantifying the additional exports, the additional tax yield resulting from EU membership can be estimated by multiplying this by the average tax rates in the individual acceding states (see third column in the above table). Because average values are taken into consideration, this can admittedly be no more than an approximation.

(6) *The 'corrected' net positions*

The last step consists in netting-off the external trade influence yield we have calculated against existing Member State payment streams in relation to the EU budget. This produces the final net integration gain. The following table shows the Member States' net positions from 1996 on the basis of net contributor calculations by the European Commission (1998) and by Busch (1998).

Table 13: 'Corrected' net positions

	1996 net position (European Commission)	1996 net position (Busch)	Change in tax yield (1996)[1]	1996 'corrected' net position (EU Commission)	1996 'corrected' net position (Busch)
Germany	-10528	-10895	7131	-3397	**-3764**
France	-138	-460	9078	8940	**8618**
Italy	-1153	-1402	4224	3071	**2822**
The Netherlands	-2332	-2447	7836	5504	**5389**
Belgium/Luxembourg	2204	-825	7618	9822	**6793**
United Kingdom	-2106	-2276	16297	14191	**14021**
Ireland	2316	2260	8093	10409	**10353**
Denmark	248	193	7326	7574	**7519**
Greece	4081	3933	499	4580	**4432**
Spain	6114	5972	6248	12362	**12220**
Portugal	**2850**	**2774**	**2038**	**4888**	**4812**
Austria	-214	-272	-1513	-1727	**-1785**
Sweden	-657	-753	-270	-927	**-1023**
Finland	88	27	0	88	**27**

Source: Busch, 1998, own calculations.

On the basis of the approach we have presented, there is an improvement in net positions, markedly so in some cases, for all the states which have acceded, with the exception of the most recently acceding former EFTA states, as a result of incorporating into the net position calculation the fiscal effects over and above direct EU payment streams. In absolute terms, the United Kingdom records the largest improvements: it moves from being the largest net contributor to become the largest net recipient amongst the States examined. In per capita terms, the main winners are Ireland and Denmark.

The above table makes it clear that, in terms of general trends, there is agreement between the results based on Busch's net contributor calculation (1998) and the European Commission's net calculation (1998). According to the EU Commission's calculations, however, there is a slight increase in net recipient positions and somewhat less of a burden for the net contributor states.

of spending directly attributable to individual Member States. Only in the case of Belgium and Luxembourg are there considerable deviations between the two net contributor calculations, which are principally accounted for by the EU administrative spending in those states - spending which primarily benefits those Member States, but was not included by Busch in his calculation (1998).

However, the results of the study must be qualified in a number of respects:

(a) Although the negative results for Austria and Sweden do indicate that they have fared less well, by comparison with the other EU states, they paint a gloomier picture than is actually the case. For instance, reference must be made to Austria's and Sweden's huge export boom in trade with non-EU States in the 1990s (see Table 9). Although both states significantly increased their intra-EU exports, too, they have been unable to keep pace with trends in total exports. For that reason, the share of Austria's and Sweden's global trade accounted for by EU trade declined in the period under review. The huge growth in non-Community exports thus outstripped the two states' volume of intra-EU exports during the review period, which also rose in absolute terms. As the correction factor we have used for the net contributor positions is ultimately based on movement in the relevant significance of intra-EU exports in relation to global exports, negative correction amounts are shown. If a further ten-year examination is carried out (1992-2002), as with the other EU enlargement processes, the situation could be reversed in just a few years' time, in favour of intra-Community trade, as a result of the introduction of EMU, in which Austria at least will have participated from the outset.

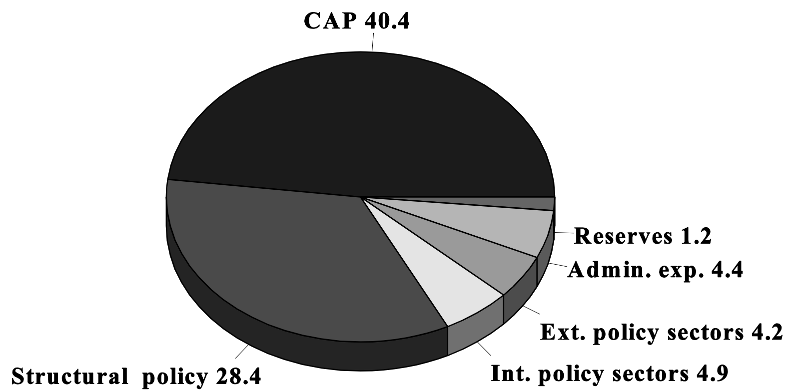
(b) Our assumptions are certainly open to examination: our reasoning is based, for instance, on the assumption that accession to the EU exerts considerable influence on the regional shift in acceding states' export structure (*trade creation and trade diversion*). Other factors are not taken into account in this study. In addition, reference must be made to the problems which have been outlined that occur if a state and its most important trading partner accede simultaneously to the Community (e.g. Ireland). Furthermore, the assumption that the integration factor is applicable to present-day exports is assuredly not entirely straightforward. After all, additional or lower tax receipts can only be approximated if use is made of average tax rates.

To sum up, our analysis has shown that, in terms of general trends, current net contributor calculations show net burdens which are too high and net receipts which are too low because the additional fiscal effects of the EU are ignored.

adjustment ideas on the expenditure side

4.1 Development of EU expenditure

The budget for 1998 provides for total payments amounting to 83.5 bn ecus. As mentioned in section 1 above, most of the expenditure in the EU budget is still concentrated on two areas, namely on the common agricultural policy and on structural policy, as the following diagram illustrates (Hutter and Zendron, 1997; Levermann, 1995).



Source: Based on Federal Ministry of Finance, 1997, pp. 14-15.

If we consider EU budgets for the period from 1988 to 1996, it emerges that EU expenditure rose over that period by 86%, which represents an average annual growth rate of 8.1% per expenditure category. This puts the growth of the EU budget above the rate of expansion of the aggregate nominal national product of the 15 EU Member States, which is estimated at about 5.4%. It should, however, be noted that, except in 1993, each of the budgets remained below the permissible expenditure ceiling.

	1988	1989	1990	1991	1992	1993	1994	1995	1996
Own-resources ceiling[(a)] as a % of GNP	1.15	1.17	1.18	1.19	1.20	1.20	1.20	1.21	1.22
Accounting ceiling[(b)] in bn ecus	46.8	51.8	56.1	61.8	65.2	65.8	68.8	77.3	81.9
Actual payments in bn ecus	41.3	41.1	43.3	53.8	58.6	64.2	60.3	66.9	76.8
% change in relation to previous year	16.9	-0.4	5.3	24.2	8.9	9.6	-6.1	11.0	14.8

(a) Own-resources ceiling as a percentage of GNP as per financial perspective

(b) Accounting ceiling: obtained by taking the percentage of the own-resources ceiling and the GNP figure for the Community of 12 and the Community of 15

Source: European Commission, 1997, p. 103.

The relatively rapid growth of the EU budget suggest that consideration should be given not only to reforms on the receipts side but also to specific reforms in particular policy areas on the expenditure side.

	1988	1990	1993	1996	1988-1996	1988-1996
	in m.ecus				Average annual % rate of change	% rate of change from 1988 to 1996
Agricultural guarantees	26 389.6	24 979.5	34 423.3	39 080.9	**5.0**	**48.1**
Structural measures and fisheries	7 101.8	10 368.1	20 337.6	24 614.5	**16.8**	**246.6**
Social measures	202.5	334.3	531.3	694.6	**16.7**	**243.0**
Energy, Euratom, environment and internal market	233.5	309.3	560.6	723.0	**15.2**	**209.6**
Research and technological development	963.0	1 429.4	2 273.2	2 939.0	**15.0**	**205.2**
Cooperation with non-EU countries	1 041.3	1 225.1	2 785.2	3 804.8	**17.4**	**265.4**
Administration	1 899.9	2 298.1	3 296.4	3 962.5	**9.6**	**108.6**
Refunds, reserves and guarantees	3 447.4	2 381.0	0.0	936.4	**-15.0**	**-72.8**
Total expenditure	**41 278.9**	**43 324.8**	**64 207.6**	**76 755.7**	8.1	85.9

Source: Busch and Berthold, 1998, p. 23, and our own calculations.

4.2 Description and evaluation of potential savings

The fact the European Commission opted in Agenda 2000 to retain the current methods of financing the Union has opened the floodgates to a vast assortment of reform proposals, not least because of the forthcoming eastward enlargement by up to eleven new Member States but also because of the net contributors' belief that the current distribution of burdens is unfair. Elementary reform models have been presented - by Germany, for example - with the principal aim of spreading the Member States' burden more evenly.

The so-called *capping model* devised by the German *Federal Ministry of Finance*, for example, seeks to limit Member States' net contributions to a specified percentage of GNP. Any contributions made over and above that figure would be partially refunded, the percentage to be refunded being the object of a political decision. The purpose of this capping method would be to ensure that the Member States pursued a prudent spending policy at the EU level. The model is essentially a correction mechanism in the sense of a generalisation of the British rebate, to which we shall return in more detail in the course of this section.

Another reform proposal has been mooted by the *Finance Ministers of the German Länder*. The difference between their approach and that of the Federal Ministry is that the regional ministers have targeted their correction mechanism on gross contributions. Payments to the EU should be in direct proportion to the Member States' GDP, while payments made by the EU should be in inverse proportion to GDP, measured in purchasing-power parities in both cases. This would mean that the Member States' payments would no longer be linked to their nominal incomes, which may be further distorted by exchange-rate movements, but to their real incomes. The application of this model would result in considerable changes in net positions. Section 5 below contains further remarks on the capping model and the regional Finance Ministers' model.

budget, which the Member States would finance in accordance with their share of total Union GNP. This supplementary redistribution of burdens is designed to link the distribution of burdens more closely to the relative strength of national economies.

The proposed models, which we have only outlined briefly here, are all consequentialist rather than rational in their approach, in that the supplementary redistribution they propose takes particular account of the position of net contributors. Another common characteristic is that all three proposals fail to eliminate the real causes of the uneven distribution of burdens.

Among the Member States there is a quite formidable range of the most diverse ideas for reform of the expenditure side of the EU budget. A cross-section of the major trains of thought in the current debate is given in the paragraphs below on a policy-by-policy basis:

a. *Reform of agricultural policy:* There is a widespread lively debate about whether European agricultural policy should not perhaps be based on the principles of subsidiarity, market economics and deregulation. With minimum prices being guaranteed for many agricultural products and an appropriate income for farmers, there has hitherto been a tendency to overlook the fact that national economic resources are being misused to eliminate the free determination of price levels on the basis of supply and demand. As a result, output now exceeds demand for a wide variety of agricultural products, and surplus production is not unusual in this domain. When the EU buys this surplus produce, stores it and supports its exportation abroad and its marketing in the Community, all of these things cost a great deal of money, which is further increased by a fairly substantial bureaucratic input.

   There are also frequent complaints about the fact that a great deal of EU expenditure never actually reaches its target group, the farmers, but disappears into the coffers of exporters and processors of farm produce, for example. Furthermore, since the rate of subsidy increases with production levels, large efficient farms with no need of subsidisation frequently receive unwarranted support.

   Far-reaching reforms based on the principles of subsidiarity, market economics and deregulation are therefore considered indispensable by most of the participants in this discussion. They believe that the purpose of such reforms must be to have all aspects of agricultural production governed by the principles of the market economy in the medium-to-long term. The preservation of external safeguards is considered necessary for the time being to prevent an abrupt fall in prices to world market levels. The advocates of these reform efforts aim to bring EU prices back to a level at which an equilibrium could be achieved between supply and demand within the protected European market. In the long run, however, the goal would be gradual adjustment to the requirements of a liberalised international-trade policy, accompanied by direct income-support grants for farmers with low incomes.

   Some of the other reform ideas are based on the cofinancing of agricultural expenditure by the Member States as a means of ensuring a fairer distribution of budgetary liabilities. Under such a system, 25% of the cost of direct EU grants to farmers would be met by the farmers' own Member States - one of the principles of cofinancing that is already part and parcel of European structural policy (European Commission, 1998). The proponents of cofinancing see additional advantages in improved budgetary discipline, pressure for agricultural policy reform and the most extensive safeguard to protect the position of the

consensus but could be adopted by a qualified majority.

The basic idea behind this reform proposal is interesting: on the one hand, agricultural support would be modelled along similar lines to structural support, with the emphasis on complementarity and cofinancing; on the other hand, it can be used to achieve a restructuring of the finance burden for the benefit of the net contributors, in other words it is a 'two birds with one stone' model.

of GNP at current prices)

	Changes in the budgetary balance (prior to payment of UK compensation)		**Changes in the budgetary balance (after payment of UK compensation)**	
	m.euros	**GNP percentage**	**m.euros**	**GNP percentage**
Austria	43.8	0.02	53.2	0.02
Belgium	110.7	0.03	121.9	0.04
Denmark	-100.6	-0.05	-93.2	-0.04
Finland	22.8	0.01	28.1	0.02
France	-648.5	-0.04	-585.2	-0.03
Germany	678.2	0.03	733.5	0.03
Greece	-451.7	-0.30	-446.3	-0.29
Ireland	-195.8	-0.23	-192.8	-0.22
Italy	134.5	0.01	186.6	0.01
Luxembourg	11.6	0.05	12.4	0.05
Netherlands	168.8	0.03	185.7	0.04
Portugal	23.9	-0.02	-19.2	-0.01
Spain	-528.2	-0.07	-503.4	-0.07
Sweden	62.3	0.02	72.6	0.02
United Kingdom	429.6	0.03	164.1	0.01
Six new Member States	286.4	0.07	300.0	0.08
Total	0		0	

Source: European Commission, 1998

* Payment of 75% of direct aid under the CAP is equivalent to a reduction in the size of the EU agricultural budget by about 9.145 million euros or 17% of the entire CAP payments for the year 2000.

This, however, would only save Germany about 1.4 billion deutschmarks - far less than the figure of some eight billion marks that was called for by the outgoing Federal Minister of Finance, Theo Waigel. The European Commission and the European Parliament, for their part, stress the procedural advantage. The cofinancing model, they say, would be adopted if the Council approved it by a qualified majority, and it could therefore be quickly implemented. A change to the EU contributions system, however, would have to be adopted by consensus and ratified by every Member State. This also applies to the rebate first granted to the United Kingdom in 1984. What is, however, questionable, is whether this proposal can reduce the potential for conflict between the Member States. The cofinancing model, which Brussels is now indirectly advocating, produces too little relief to satisfy the German or Dutch demands. On the other hand, it means that France and Denmark, as well as Spain and Greece, would have to pay more to Brussels. For that reason, both France and Spain have already signalled massive reservations.

b. *Reform of structural policy:* As in the case of agricultural policy, the validity of the subsidiarity principle is under discussion as a yardstick for the practical organisation of structural aid (Peffekoven, 1994). One possible variant could be support in the form of block grants to those Member States where the problems are greatest, with the level of support to a country reflecting the seriousness of its regional problems. The financial

problems could also be taken into consideration (Karl Bräuer Institute, 1992). This would also accord with the principle of subsidiarity. The recipient countries would then be required to use the resources for the benefit of the stricken regions and/or to pass them on to these regions. According to the advocates of this approach, the proposed system would serve to ensure that those closest to the problems could choose the most appropriate solutions, without the need for the present expensive and time-consuming detailed bureaucratic coordination process between the Member States and the Community. These framework rules, however, would have to be supplemented by the creation of accompanying inspectorates.

c. *Internal policies, especially the promotion of research and development:* Extremely urgent appeals are being made for strict limitation of research and development support to the pre-competitive domain. The more market-related realm of business initiatives should be left to the private sector. EU support would also be restricted to areas of primary macroeconomic importance.

If the promotion of research and technology is to be effectively channelled, the various players deem it important that the European Commission be required to produce a periodic comprehensive statement and detailed explanation of the objectives and measures involved in its support effort. But the scope for savings seems to us to be very limited in a variety of areas. Moreover, cuts in this particular domain would not sit well with the aim of strengthening the competitiveness of Europe.

d. *Reducing administrative expenditure:* Two of the aims that are being canvassed in the realm of administrative reform are staff reductions and rationalisation measures within the administrative apparatus. To this end, consideration might be given, for instance, to a pragmatic approach, to focusing on the language service, reducing the number of members of the Commission and paring down the number of directorates-general. An obligation for the Commission to outline and explain its staffing policy would also be likely to increase the pressure for savings. Here too, however, the fiscal effect is limited.

d. *Greater budgetary discipline and more efficient financial control:* If expenditure is to be cut, there is a need on the one hand for stricter rules to enforce budgetary discipline and, on the other hand, for more efficient financial control, underpinned by greater respect for the principle of prudent housekeeping, by Parliament, the Court of Auditors and the general public. Especially in view of the recurring fraud scandals, from tourism to humanitarian aid, there is a definite need for action here. Another goal should be to provide the clearest and most comprehensive information possible about the finances of the European Union. There is talk, for example, of posting all financial activities of the EU in this domain, i.e. the European Development Fund, EU borrowing and lending activities and the ECSC operating budget would be included in the general budget. This is also regarded in many circles as an essential prerequisite of the effective control of all EU finances. (P. Altmaier et al, 1996).

. *Elimination of unwarranted special treatment of individual Member States:* Another potential saving on the expenditure side would be the complete renunciation by each Member State of any special status within the Community, such as the situation that currently applies with the British rebate.

had a relatively small agricultural sector compared with other Member States and imported large quantities of agricultural produce from countries outside the EU, which meant that the UK had to pay very high amounts of customs duties and agricultural levies to the Community budget. Since the low level of British agricultural production meant that only a limited amount of resources flowed back into the UK under the common agricultural policy, and since Britain made a relatively high contribution to the Community's own resources through VAT, the result was a considerable imbalance to the detriment of the United Kingdom. Just how unfavourable this situation was may be illustrated by the following numerical example: from 1981 to 1984, British net payments to the Community ranged from 1.38 billion to 1.95 billion ecus at a time when Britain's per capita GDP lay below the Community average (Working party of EU desk officers, 1997).

In the years from 1980 to 1983, Britain began to receive *ad hoc* compensatory payments. On the basis of a general compensatory arrangement concluded in 1984, a correction mechanism was developed which operated on the receipts side. The VAT-based contribution served as the starting point. Britain's percentage contribution to the Community's own VAT resources was reduced by the British share of the reckonable percentage reflux from the EU budget. The total reckonable expenditure was then multiplied by the difference between these two percentages to produce an absolute figure, the notional net British balance. This net balance serves as the basis for British refunds, the VAT contribution payable by the UK being reduced accordingly. (Peffekoven, 1994). The British rebate is financed at the expense of the other Member States, although it should be mentioned that the German contribution was cut by one-third, and, as with the British rebate, the additional load was spread among the other Member States (*Handelsblatt*, 1998).

The reform of the own-resources system, however, has made it necessary to restructure the British rebate, the declared aim being to stabilise the amount of the British rebate. The computation of the rebate has been altered on the basis of comparability between the old British rebate and the financial relief available under the new system. In the new system, the British rebate will still be financed by adjusting the other Member States' proportional contributions of VAT resources. The amount of the correction, however, is no longer based on the Member States' shares of total assessable VAT but on the aggregate GNP of the Community.

Nevertheless, the time has come to argue vigorously for the elimination of the rebate:

- Although such a rebate is open to all Member States in principle, it has remained a *lex Britannica*. This special arrangement no longer fits into the political landscape of Europe.

- Several States have budgetary imbalances today. These must be eliminated by means of a uniform system, something which the British rebate in all its complexity cannot provide.

- The share of the EU budget devoted to agriculture has dwindled from about 70% to the present level of around 50%. This at least weakens the foundations of the British rebate.

the first step in this process can be an adjustment to take account of the reduction in the percentage of the budget allocated to agriculture. Since the agricultural share of the budget has fallen by around 30%, our proposal would be a corresponding initial 30% cut in the amount of the rebate. The change in VAT would have to be administered accordingly.

Opinions on the desired savings in each of the policy areas are obviously determined by the Member States' own *cost-benefit analyses*. With regard to the British rebate, however, there is a wide degree of consensus among the Member States that the conditions which resulted in the granting of the rebate no longer obtain and that London could therefore contribute its full share to the Community budget once more.

4.3 *Excursus*: Arguments for a longer-term radicalisation of reform strategies in the domain of the Structural Funds[5]

In its efforts in the domain of structural policy, the EU has hitherto relied entirely on a vertical model, in which interregional redistribution has increasingly been carried out through the Brussels budget. This is also clearly reflected in the priorities set by the Community in its financial planning for the period from 1993 to 1999. Structural policy is undoubtedly the main growth area. A 40% increase in real terms in the amount earmarked for structural operations has been accompanied on the receipts side by a shift towards Member States' GNP figures as a basis for their contributions to the Union's own resources. The main brunt of this development has been borne by those countries which had previously paid disproportionately small contributions in relation to their share of total GNP. Because an increasing amount of expenditure is being channelled towards poorer regions and Member States, while the Union's own resources are being systematically linked to national income, the EU budget is generally creating more closely income-dependent interregional redistribution effects. This encourages vertically organised regional and structural policies. As a result, the EU is the dominant factor in regional policy in the beneficiary countries.

The regional and structural policy of the EU, with its aim of ironing out regional income disparities, is permanently confronted with the danger that, instead of achieving this aim, it will in fact create a 'transfer-seeking mentality' and 'transfer-dependency'. Transfers of resources relieve the acute need to eliminate regional weaknesses and to undertake essential adjustments. They actually help to finance and cement imbalances. They allow the beneficiary regions to enjoy higher levels of consumption and pay than regional GNP and productivity alone would warrant. Moreover, funding by means of public transfers tends to perpetuate and sometimes even increase the dependence of the supported regions. In economic terms, this is reflected in a permanent current-account deficit, which corresponds on the receipts side to the value of the transfers.

The Structural Funds do not provide for any suitable procedures whereby effective action could be taken in the event of unexpected economic problems which adversely affect particular regions or industries or which lead to a general decline in economic activity during a recession. Sectoral crises, which may result in a serious decline in economic activity and employment within specific regions, are not covered under EU policy by compensatory payments with which demand can be stabilised and jobs preserved. Once regions have been hit by such a crisis, it is very difficult for

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[5] See for example K. Gretchmann, E. Heitzer-Suša and R. Buchegger, 1998.

therefore wipe out any benefits that may have derived from long-term support under the structural programmes of the European Union. Consequently, the EU structural measures must be adapted to the economic policy of the relevant Member State as well as with the economic measures being implemented in the other Member States.

The aim of redistribution pursued by the EU through its regional and structural policies could be more efficiently achieved if wealthy regions of the Community allocated a certain amount of financial resources to assist poorer regions and made them freely available, i.e. with no strings attached. The existing Structural Funds are no substitute for a horizontal financial settlement between Member States. So consideration can certainly be given to the possibility of the EU withdrawing from the active pursuit of regional and structural policies (and from awarding special-purpose grants) and of replacing the present active, vertical, policy-related approach to the ultimate goal of horizontal redistribution with a no-strings-attached horizontal redistribution system, with the Community confining itself to a monitoring role (passive regional policy) with the sole aim of ensuring that State aid does not distort competition. A transfer system would thus be established between regions and/or Member States, and the supranational tier of government would no longer be involved as a redistributing authority. Desirable interregional redistribution effects would be achieved by direct transfers from the contributor to the recipient regions (through the Member States). Competence in matters of regional policy would henceforth be vested in the lower constituent parts of the federation.

This withdrawal from the active pursuit of regional and structural policies and the establishment of a horizontal redistribution mechanism would also curb policy overlaps and the associated trend towards unitarism, which are inconsistent with the demand for clear-cut definition of the responsibilities of the various tiers in terms of functions and policies. This reform would put an end to the unsystematic allocation of duties and would render untenable the inefficient system of seven objectives and three central funds that are so inextricably tangled up. A horizontal redistribution system could initiate an efficient process of competition among the Member States to establish their credentials as attractive business locations and as good places in which to live and work, which would be a first step towards a dynamic system of competing regions and a reorientation of EU legislation. A horizontal redistribution system with no strings attached (albeit limited in time and quantity) could be seen as evidence of the equal rights of all member countries, as a substitute for those many and various activities of the EU in the realm of structural policy which are not economically justifiable and which have therefore resulted in numerous misallocations and inconsistencies and a great deal of wastage.

A horizontal redistribution of resources is compatible with the principle of subsidiarity. By comparison, the decisive influence of the EU in the domain of regional policy which goes hand in hand with the present structural-policy model would only be compatible with subsidiarity if there were cogent reasons why the Member States and regions should not be responsible for their own regional policies. In order to answer this question, it is useful to make a distinction between distributive and allocative transfers. It is obvious that an underdeveloped region caught up in a downward spiral will scarcely be able to pursue a potentially successful growth policy, for wan of financial resources. If it is solely a matter of improving the basic financial position of such a region so that it can go on to pursue its own development policy, that purpose can be fully achieved by means of transfers within a horizontal structural-policy model without any need for a central body with overall responsibility for regional policy. The basic policy aim, namely the promotion of underdeveloped regions, is therefore likely to be achieved in a decentralised system if horizontal transfers enable the region in question to halt the spiral of regional depression. The objection that such redistribution of finances would inevitably be frustrated by a lack of solidarity

applied to either redistribution system, the vertical system operating through the EU budget as well as the horizontal system.[6] On the other hand, the principle of compensation - the idea that the losers in the integration process should be indemnified, so that integration can continue for the good of all - implies that even the net-contributor regions will be sure to back a certain degree of redistribution. The consent of the net-contributor regions is like a test to find out whether the compensation argument has been overstretched.

Decentralised powers are especially useful in cases where regional preferences and circumstances differ. This sort of divergence exists to a far greater extent in the EU, with its numerous different linguistic and cultural areas, than within federalist States and broadens with every enlargement. This heterogeneity seems particularly relevant to the sphere of regional policy. The specific aims of regional policy will take a variety of shapes in practice, depending on regional preferences. Besides regionally divergent aims, however, the main problem associated with an EU regional policy lies in finding appropriate starting points from which the specific deficits of underdeveloped regions can be addressed. Regional deficits can differ widely in character. They often take consist in a shortage of vital infrastructural facilities or insufficient availability of innovative technology and human resources. On the other hand, there may be structural reasons, such as insufficient regional competition. It is hardly likely that there is a uniform diagnosis which can be applied to every problem region in Europe. There are many different parameters that might have to be adjusted in order to improve the competitiveness of a region, and at the outset there is no way of knowing which measures will prove most suitable. It is hard to imagine that the supranational authorities, which are furthest removed from the regional problems, could be more successful than national or regional bodies in pinpointing specific weaknesses within a region.

Decentralised powers, along with a horizontal redistribution system, would eliminate the cost of coordination between Brussels and the regions. Horizontal transfers would tend to create a level playing field for the regions of Europe. In contrast to the present situation, development strategy would be the undivided responsibility of the decentralised authority. Such an arrangement may not only be expected to be more successful in identifying and tackling the precise causes of specific regional problems; in the search for solutions, regional innovation and competition will also come to the fore. Without a large-scale European coordination effort, an individual region would be able to test new elements of a growth strategy. Should it succeed, other regions would quickly follow its example. Should it fail, the adverse effects would be confined to the pioneering region, which would not be the case if a new version of EU regional policy were introduced. A flexible process of trial and error would be possible and could help to enhance the dynamism and efficiency of regional policy in Europe. Undivided jurisdiction for regional policy, coupled with the horizontal structural model, will accordingly create far better conditions for the disciplined and efficient use of incoming finances. Responsibility for the success or failure of efforts in the domain of regional policy would lie exclusively and unmistakably with the lower federal tier of government, which would make it easier for the electorate and the donor region to check on the performance of the task in hand.

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[6] Unless regional redistribution through the EU budget were concealed from the electorate in the net-contributor regions because of a lack of transparency, which would make it easier to push through politically. However, the cloak-and-dagger pursuit of a redistribution process that is not supported by the vast majority of Europeans can scarcely be a legitimate aim of EU regional and structural policy.

institutional distinction can be made between the distribution function (compensatory transfer of resources to assist poor regions) and the allocation function (provision of European public assets by the EU). At the present time, these two functions are starting to merge at the European level, which is liable to result in misallocations. EU policies are extended for the sake of their redistribution effects but without any particular allocative justification. The Cohesion Fund, for instance, has been administered for the primary purpose of assisting countries with low national incomes, yet on the other hand the resources from the Fund have been used in those countries to finance trans-European networks, in other words for a European infrastructure. To an analysis of the European cost and benefit of such an infrastructure is added the sympathetic consideration of its distributive effects, and the likely result is an inefficient and probably excessive allocation of these public assets. If the distributive and the allocative functions were separated, it would be easier to avoid such an excess burden for any given interregional distributive aim.

The implementation of a horizontal redistribution system to replace the regional and structural policies would mark the end of the present integration strategy, in which further integration is purchased by 'sideways payments', as well as requiring consensus on a new approach to integration and a new federalist ideal for the European level. Neither of these things are evidently on the European political agenda (yet). The pressure created by the various problems will undoubtedly increase, and we therefore believe that we cannot rule out lengthier and more fundamental consideration of the way in which we can cope with whatever the future holds: to be more precise, we believe that such consideration is indispensable.

In the following section we shall analyse concrete expenditure-side reform models, namely the capping model devised by the German Ministry of Finance and the model devised by the finance ministers of the German federal states.

German federal states and the capping model established by the German Federal Ministry of Finance

5.1 Presentation of the models

(I) *The model devised by the finance ministers of the federal states*

In the view of the finance ministers of the German federal states, Germany's position on both the expenditure and the receipts side of the EU budget is less favourable than the country's level of prosperity warrants. This is the assumption on which the finance ministers of the *Länder* base their proposal for reform of the EU finances (Working party of the EU desk officers from the *Länder* finance ministries, 1997):

1. The present resources of the EU from VAT and from GNP-based contributions would be replaced by a new third source of Union revenue with a prosperity-linked basis of assessment. Gross domestic product in purchasing-power parities (PPPs) would serve as the assessment criterion.

2. A correction element would be introduced on the expenditure side. Its function would be to adjust the total sum of return flows on the basis of prosperity-matching. In the view of the *Länder* finance ministers, return flows to a country are prosperity-matched if, in conformity with the cohesion principle, they are inversely proportional to that country's economic prosperity (GDP at PPP). The more prosperous States would accordingly receive less per capita in return flows than the less prosperous.

Point 1 of the proposal: The *Länder* finance ministers' proposal sees gross domestic product measured in purchasing-power parities as a suitable indicator of the economic prosperity of a country and hence as the basis for the determination of contributions to the EU (Working party, 1997). In order to eliminate the so-called Rotterdam-Antwerp effect (see section 2 above), this basis should not be applied to the traditional Community resources (customs duties and agricultural levies). This means that the transfer of such duties and levies would not be regarded as contributions by the collecting States and would be disregarded when the Member States' contributions are fixed. The use of purchasing-power parity, unlike calculations based on nominal exchange rates, would take account of differences in price levels between individual Member States. The effect of this conversion would be that two Member States with an identical per capita income (in euros) but with divergent domestic price levels would be assessed as having different percentage shares of the aggregate GDP of all Member States and would therefore be subject to different per capita rates of payment under the adopted measurement criterion. If such a conversion were not effected, while both of these States would pay the same nominal amount in euros per head of population, the payment of equal contributions would leave them with different levels of residual purchasing power per capita, which, in the opinion of the finance ministers, created an unfair situation on both the credit and debit sides. If such a yardstick were used, a Member State's burden would be 'prosperity-matched', in other words it would correspond to that State's economic capacity, because it would be paying a percentage of total contributions that corresponded to its percentage share of the aggregate GDP at PPP of all Member States (Working party, 1997).

Point 2 of the proposal: The economic capacity of the Member States should also be used as the basis for distributing return flows on the expenditure side of the EU budget (Working Party, 1997). This can be done, according to the finance ministers of the *Länder*, by distributing return

in purchasing-power parities. The result of this would be that a Member State whose per capita GDP (in purchasing-power parities) was twice the Community average would have to pay twice the average contribution, while the payments it received from the EU would only come to half the Community average. Conversely, a Member State with only half the average per capita GDP at PPP would only pay half the average contribution and would receive twice the average in return flows. The finance ministers believed that this distribution basis should be applied to all return flows. The idea that the use of the prosperity criterion could be restricted to structural operations on the grounds that they alone were intended to promote the convergence of living standards within the EU was rejected by the ministers. They believed that payments from the guarantee section of the EAGGF (European Agricultural Guidance and Guarantee Fund), which currently account for about half of all return flows, should not be exempted from the application of the prosperity criterion, because they also enhance the economic strength of the beneficiary States.

The strategy of the *Länder* finance ministers envisages that the return flows (based on an estimate of the probable GDP in purchasing-power parities and of the probable prosperity-matched contributions payable by the Member States) would initially be determined in the framework of the budgetary procedure in accordance with requirements for the various policy areas. At the end of the financial year, on the basis of the actual payments made and received by the Member States, a computation would be carried out to ascertain the amounts by which these actual payments diverge from the prosperity-matched figures. The differences would then be allocated to the following year's budget as adjusting figures (Working party, 1997).

For the year 1995 the authors of the paper, taking account of all payments made to and received from the EU, established that the Federal Republic of Germany had paid a net amount of 8.8 bn ecus more than the prosperity-matched figure calculated in accordance with the model outlined above. A total of 4.8 bn ecus of this amount was overpaid to the receipts side, the remaining sum of about 4 bn ecus being underpaid from the expenditure side of the Union budget (Working party, 1997).

If the prosperity-matched distribution based on the finance ministers' model is compared with the existing distribution structure of the European Union, it emerges that, besides Germany, the United Kingdom, Sweden, Austria, the Netherlands and Finland are all being unduly burdened. The other Member States, on the other hand, are benefiting, according to the finance ministers' model, from the current budgetary structure. The biggest winner is Spain, with a 'surplus' of 4.2 bn ecus for 1995 (Working party, 1997). The proposal for a reorganisation of the Union's finances would ease the burden of those Member States which, if the prosperity yardstick is applied, seem to be receiving a raw deal; the other Member States would have to carry that burden.

On the basis of figures published by the European Court of Auditors for 1996, the following table compares the net payments under the present system with the figures that emerge if we apply the model devised by the finance ministers of the German *Länder*:

federal states (in m.ecus)

	Payments 1996	Return flows 1996	Difference	Difference according to the *Länder* finance ministers	Difference compared with actual net position*
Austria	-1872.6	1600.4	-272.2	-363	+90.8
Belgium	-2743.0	1996.8	-746.2	-1182	+435.8
Denmark	-1359.9	1553.3	193.4	-373	+566.4
Finland	-961.3	988.4	27.1	-4	+31.1
France	-12410.9	11951.1	-469.8	-1427	+957.2
Germany	-20766.9	9872.0	-10894.9	-4247	-6647.9
Greece	-1107.1	5039.8	3932.7	1545	+2387.7
Ireland	-710.2	2970.5	2260.3	-116	+2376.3
Italy	-8935.2	7532.9	-1402.3	-94	-1308.3
Luxembourg	-163.2	83.9	-79.3	-76	-3.3
Netherlands	-4435.7	1988.9	-2446.8	-1683	-763.8
Portugal	-906.1	3680.4	2774.3	1242	+1532.3
Spain	-4538.9	10511.1	5972.2	3583	+2389.2
Sweden	-1957.4	1204.9	-752.5	-224	-528.5
United Kingdom	-8227.1	5951.1	-2276.0	-750	-1526.0

Source: Busch, 1998, p. 36, and our own calculations. * - = relief + = burden

Note: Since the calculation does not take account of expenditure that cannot be clearly attributed to individual Member States - administrative expenditure, for example - the sum of the assessed net balances does not equal zero.

When the prosperity yardstick devised by the finance ministers of the *Länder* is applied, Germany emerges as having paid almost 3.4 bn ecus too much and having received about 3.2 bn too little. Under this model, Germany would receive by far the greatest amount of relief. The heaviest burdens would fall on Ireland, Greece, Portugal and Spain, which are the leading net recipients. It should be noted, however, that the model used in the table above, unlike the one proposed by the finance ministers of the *Länder*, eliminates administrative expenditure from the equation.

The Federal Ministry of Finance has devised its own strategy for adjusting the way in which the burden of financing the EU is distributed. At the heart of the proposal is a correction mechanism that is designed to protect the net-contributor States from overburdening. The mechanism is not intended to be limited to individual countries but is specifically designed to apply to all Member States (Stark, 1996).

The model envisages the following approach: the first step would be to calculate the difference between a country's net burden and a politically defined retention threshold (expressed as a percentage of gross national product). The amount of this threshold has yet to be determined but should lie between 0.3% and 0.4% of GDP. The second step would then be to refund the excess over and above the threshold - not the full excess, but only a certain percentage, which is assumed to lie in the 50-66% bracket. This is designed to ensure that the individual Member States go on endeavouring to promote budgetary restraint in the EU. The capping model may be expressed in the following formula (Busch, 1998):

Adjustment = (net contribution - retention threshold) x percentage rate of refund

The Federal Ministry of Finance capping model provides for the assessed adjustment to be financed by the remaining Member States on the basis of their respective shares of aggregate Community GNP. The result of this is that net-contributor countries which are granted relief on one side of the balance sheet under this model will themselves have to contribute on the other side to the relief of the other net contributors that have exceeded the retention threshold. On the basis of the Federal Ministry of Defence computation of net contributions for 1996 and a retention threshold of 0.3% of GNP as well as a refund rate of 66%, the main effects of this model would be its provision of relief to the Netherlands and Germany (see Table 18).

(in m. ecus)

	Divergence from actual net position, 1996 (BMF model)	Divergence from actual net position, 1996 (*Länder* finance ministers' model)
	After UK compensation, 0.3% variant*	
Austria	+130	+90.8
Belgium	+95	+435.8
Denmark	+38	+566.4
Finland	+78	+31.1
France	+564	+957.2
Germany	-2956	-6647.9
Greece	+84	+2387.7
Ireland	+20	+2376.3
Italy	+457	-1308.3
Luxembourg	-4	-3.3
Netherlands	-742	-763.8
Portugal	+1	+1532.3
Spain	+284	+2389.2
Sweden	+82	-528.5
United Kingdom	+1970	-1526.0

Source: Busch, 1998, p. 38, and our own calculations.   * - = relief; + = burden

If the BMF model were applied, France, Italy and the United Kingdom would have had to bear the main brunt of adjustments to the financing of the EU. In the case of the United Kingdom, it should be noted that, although the correction mechanism in the EU model would also benefit the UK, the improvement of its position as a net contributor would be less than that provided by the rebate it currently receives on its contributions. Unlike the present mechanism, the model described here would increase Britain's net contribution. In general terms, the comparison with the net positional changes under the model proposed by the *Länder* finance ministers shows that the relief provided to the net contributors and the additional burden on the net recipients would be considerably more limited under the Federal Ministry of Finance model.

5.2 Analysis and Evaluation

a. Both approaches are based on a general balancing mechanism which goes beyond the current United Kingdom rebate. Although the latter is also open in principle to other Member States, to date it has only been applied in favour of the United Kingdom. (The additional amount apportioned to Germany for funding the British rebate has, however, been cut back by one-third and allocated accordingly to the remaining member countries.) The demand for the abolition of the unilateral correction mechanism must therefore be expressly welcomed for reasons of equal treatment of the net contributor States.

b. At the heart of the Federal Ministry of Finance model is the introduction of a retention threshold which would have to be fixed politically. Once this was exceeded payments

the German Länder rejects the setting of such a threshold, preferring to tie the distribution of the receipts and expenditure to a measure of prosperity (per capita GDP in purchasing-power parities). The demand of the Federal Ministry of Finance for an explicit limit on net contributions or a general correction mechanism similar to the rebate on the British contribution is largely unconvincing for the following reasons: on the one hand, there is no scientific basis for setting a fixed ceiling; on the other hand, it makes no sense to postulate a more or less balanced EU net position as an objective as long as the expenditure of the Community is concentrated above all on two policy areas (agricultural and structural policy) in which variable allocation to the member countries is politically artificial. That is why the idea of the specific limiting of national net positions can be interpreted as an expression of pure equivalence thinking (Caesar, 1997).

c. The approach of the finance ministers of the Länder to make the allocation of the return payments from the EU budget inversely proportional to the relative prosperity of the EU States must be questioned critically: such a procedure appears defensible for the area of structural political expenditure, since the aim of the latter, as specifically emphasised in the EC Treaty, is to strengthen economic and social cohesion between the regions and States of the Community. Agricultural expenditure, however, must be seen in the proper perspective, as it does not primarily serve the purpose of strengthening cohesion within the European Union but of supporting incomes in the agricultural sector. Although such promotion is always associated with interregional redistribution, these distribution effects must be regarded merely as a side effect and not as an primary goal of EU agricultural policy. The goal of solidarity and redistribution between the States and regions of the European Union should not be pursued via the 'roundabout route' of agricultural policy (Busch, 1998).

d. One argument against the use of purchasing-power parity as proposed in the *Länder* finance ministers' model is the limited reliability of their calculation. Although the reliability of purchasing-power parity is considerably greater in industrialised countries than in developing countries (Strack et al., 1997), we should not overlook the difficulty of putting together a basket of commodities which is applicable to all the countries of the EU (Walter, 1996).

e. However, more fundamental doubts may be raised about the use of purchasing-power parity. It can be argued, for example, that the current EU revenue system guarantees that each country waives the same percentage of the purchasing power of its gross national product – in exactly the same way as the same percentage in purchasing power is paid over to the tax authorities in the German value-added tax system (Deffaa, 1997). What is implicitly intended by the use of the purchasing-power approach, therefore, is a change in the distribution of the burden. Underlying this intention is the fact that the purchasing-power parity (PPP) exchange rate frequently differs from the nominal exchange rate which is created on the foreign exchange markets. Thus, for example, in 1996 the average exchange rate of the deutschmark against the ecu was DM 1.91. However, when purchasing-power parity is used as a comparative yardstick, an exchange ratio of 2.173 DM to the ECU resulted. Therefore, on the basis of the nominal exchange rate compared with the PPP exchange rate, the DM was overvalued against the ECU by almost 14%. On the other hand, the position was reversed between the ECU and the Greek drachma: whereas the nominal ECU exchange rate was 305.5 drachmas, the PPP exchange rate was 235.1 drachmas. In relation to the ECU,

purchasing power parities as an indicator of prosperity, the German finance ministers are therefore attempting to correct the German contribution charges (VAT and GNP-based resources) which, in the view of the ministers, are too high because of the latent overvaluation of the deutschmark.

f. The model devised by the finance ministers of the Länder has the greatest effect with regard to the reduction in the German net balance. Had the model been applied in 1996, the German net balance would have been reduced to barely 40% of its actual value. The use of the Federal Ministry of Finance capping model would have reduced Germany's net balance 73% of its actual value. Both models provide for the cost of this considerable reduction in the German net contribution to be borne by the other EU Member States. Given the requirement for a unanimous resolution of the European Council, it is very difficult to see how the two models could be carried through politically. The odds against their implementation are surely very high.

g. The basic problem of both approaches is their one-sided attitude towards the net balance. Chapter 2 has clearly shown the limited value of examining net balances. On the one hand, an exact allocation of the payment flows to the individual states both on the receipts and on the expenditure side of the EU budget is only possible to a limited degree. On the other hand, it is not enough to focus solely on net positions when assessing the benefits of EU membership: both the political advantages of EU membership and the prosperity-enhancing effects of being part of the European internal market remain unconsidered when attention is focused purely on payments in and out of the EU budget.

h. In view of the challenges with which the EU is faced in terms of the implementation of economic and currency union and enlargement at the beginning of the next millennium, application of both the capping model and the model of the finance ministers of the Länder would prove inflexible. Without reform of the policies which have led to the existing distribution of receipts and expenditure, an across-the-board restriction of the burden on the net-contributor States would make it more difficult to sustain the EU's fields of operation. It would unduly restrict the continued pursuit of the Union's structural and agricultural goals.

6. Analysis of proposals for reforms on the revenue side

6.1 The status quo

Since 1970 the funding system of the EU has been an own-resources system in which, on the current legal basis (Council Regulation of 31 October 1994[7]), the following types of receipts are included (Bladen-Hovell et al, 1994; Böker, 1994; European Parliament, 1997):

1. *Agricultural levies, customs duties and sugar levies:* Agricultural levies and customs duties are regarded as traditional own resources. These resources are levied on imports from other States outside the borders of the EU. The Union has the authority to set and

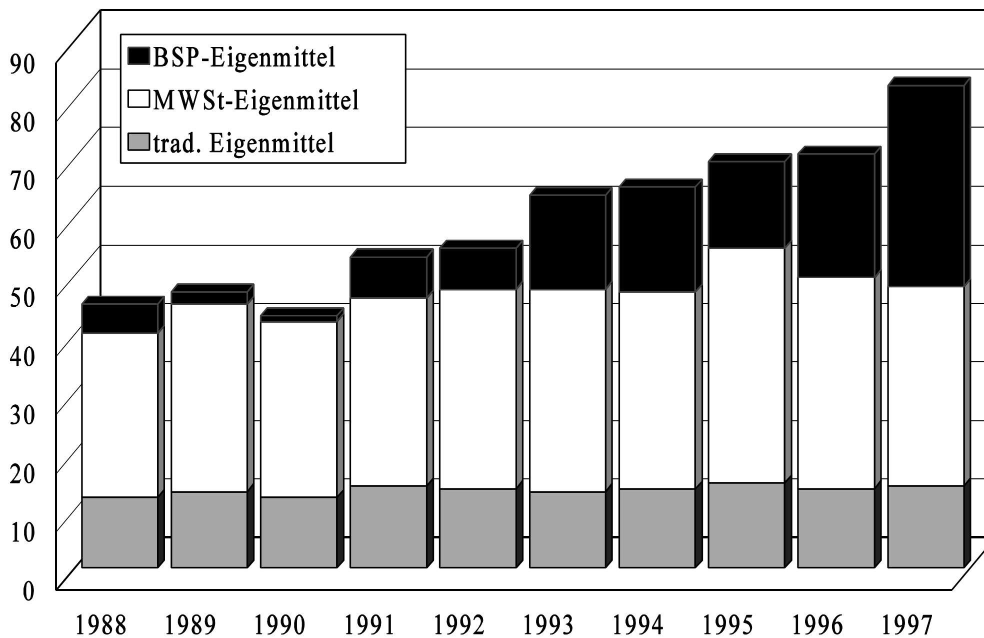
[7] The Member States previously made their contributions on the basis of a formula laid down in Article 203 of the EEC Treaty.

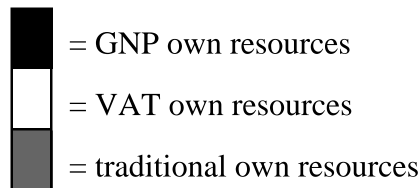
In addition, within the framework of the common agricultural policy, the EU also sets the levies used for external protection on the import of agricultural products. Furthermore, the duties to be paid by manufacturers in the context of the common market organisation for sugar are included among traditional own resources. Since the fiscal reform of 1988 the Member States have continued to pay 90% of their traditional own resources. Ten per cent is retained as a standard collection allowance by the Member States.

2. *VAT own resources:* In accordance with the Council Decision of 31 October 1994, the EU is entitled, through the own-resources system, to receipts resulting from the application of a standard charge for all Member States on the standard VAT own-resources ceiling of each member country determined in accordance with Community regulations. Value-added tax receipts do not therefore consist of a proportion of VAT revenue, i.e. the Member States cannot influence the level of national payments to the EU budget via the level of national VAT rates.

3. *GNP-based own resources:* Under the own-resources decision of 31 October 1994, the GNP-based own resources are used to cover the requirement for resources not funded by the other sources of revenue, and are therefore a contingency reserve. A fiscal charge in terms of a percentage of GNP for each Member State is laid down in the budget procedure.

Figure 2: Structure and development of the Union's own resources (in bn ecus)





Source: M.C. Lödl, 1997.

A steady, proportionate fall in traditional own resources has been observable. While in 1988 these still exceeded 29%, over the course of time customs duties, agricultural levies and sugar levies - strongly influenced by the worldwide trade liberalisation measures introduced by GATT and the WTO – fell to around 17% in 1997. It is clear that the proportion of VAT own resources is also tending to fall, very largely as a result to political decisions. Whereas in 1988 approximately 60% of total EU receipts were still drawn from this source, by 1997 the proportion had declined to around 42%. On the other hand, GNP receipts have gained sharply in importance. The growth in receipts in the EU is – for primarily political reasons – being sustained essentially by GNP-based own resources (Diekmann, 1998).

If the decrease in traditional receipts took place to a certain extent automatically, notably in the face of the above-mentioned efforts at liberalisation, the reduction in the VAT share was initiated principally by two elementary measures: on the one hand, the VAT assessment limit was capped at 55% of GNP. By 1999 it is due to be brought down gradually to 50%; on the other hand, a step-by-step reduction in the standard rate to 1% in 1999 was prescribed.

6.2 Aims, methods and limitations

In view of the extensive tasks and major challenges confronting the EU as the millennium approaches – enlargement to the East, creation of an economic and monetary union, common foreign and security policy and reinforcement of internal political co-operation, strengthening of global competitiveness and the new position in the world economy, etc. – a continuation of the status quo in relation to the level of expenditure (capping) and the funding mechanism (own-resources pillar), as the Commission suggests in its report of 7 Oct. 1998, appears to be unworkable.

It is therefore necessary not only to *think about* alternatives but also *to think ahead*.

At the same time, on the receipts side of the EU budget essential reforms are on the agenda. As far as new sources of EU revenue are concerned, these are discussed in detail in the Commission report (European Commission, 1998) and in Begg et al. 1997. In both studies – with varying criteria and with a different ranking of the recommendations – the following potential sources of EU revenue are examined: (a) income tax (surcharge), (b) taxation at source on investment income, (c) corporation tax, (d) VAT (shares), (e) tobacco and alcohol taxes, (f) central bank profits, (g) environmental taxes, (h) taxation of communications and transport services.

While Begg in his examination establishes a very broad basis of assessment from a micro- and macroeconomic, fiscal and finance policy, psychological/financial and revenue-specific perspective, the European Commission bases its analysis of the proposals on the criteria of horizontal equality of the Member States, public transparency (incidentally, this can be strictly contrary for acceptance), relation to Community policies, existence of a harmonised assessment basis and the productivity or efficiency of the respective taxes.

The analysis we have carried out below examines the same proposals but stresses in particular those aspects and arguments (highlighted) which are either not addressed at all or are addressed inadequately in the above reports. Moreover, both in Begg et al. and in the Commission report, there is an absence of any appraisal of the effects of the individual proposals on the relative distribution of the burden among the Member States.

economic discussion of the pro and contra arguments is practically impossible without an analysis of differences in the burden and ultimately of gains or losses in the net position. Unfortunately, within the chronological and physical framework of the existing paper a detailed calculation of the net positions following the introduction of various new own resources is not possible. What it has been possible to achieve, however, is an analysis of the relative shifts in the burden. For this, original records and raw data have been edited which could often only be investigated with great difficulty. This may influence the precision and validity of the calculations in detail, but the direction and order of magnitude of the results remains unaffected. We have also fallen back partly on approximate dimensions (proxies) and indicators which remain to be specified in the course of further research.

Against this background we have carried out the following comparative analysis:

1. What are the characteristic features and history of the proposals?

2. Who are the taxpayers in each case?

3. What is the underlying principle?

4. Which type of modelling is being proposed?

5. What advantages, and

6. what disadvantages does the proposal have?

7. What is the position regarding the achievable fiscal revenue?

8. What degree of acceptance can be expected?

9. How does the relative burden look for individual Member States?

As far as question 8 is concerned, we shall turn to the results of a dissertation, as yet unpublished, by Armin Rolfink, a graduate in business studies, on the funding of government in the light of public preferences (Aachen, 1998). In his dissertation, Mr Rolfink examines popular preferences and the level of public acceptance of various types of taxation as sources of government finance (see following table). He finds that income tax and the solidarity tax levied in Germany to finance the rehabilitation of East Germany are very unpopular (high preferred rate of adjustment), that VAT is accepted, although any increase in the VAT rate is considered undesirable, but that there is some limited scope for increases in corporation tax and the taxation of motor vehicles and considerable scope for increased tobacco duty and environmental taxes.

Table 19: Taxation preferences

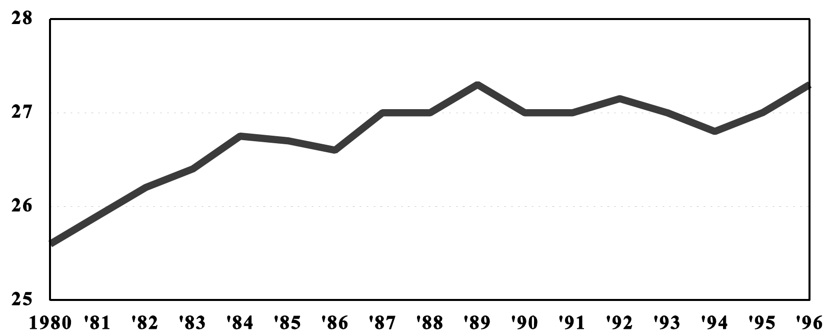
Type of tax	Preference for increased or decreased reliance on each form of taxation	Preferred adjustment (in %)	Average resistance factor
Income tax	-	- 10.1	3.931
Value-added tax	+/-	- 0.1	3.003
Solidarity surcharge	-	- 11.8	4.003
Excise duty on mineral oil	+	+ 1.2	2.881
Corporation tax	+/-	+ 1.9	2.848
Business tax	+/-	+ 1.9	2.842
Excise duty on tobacco	+	+ 12.9	1.931
Road tax	+/-	+ 0.3-	2.968
Property rates	+/-	- 3.5	3.320
Insurance tax	+/-	- 3.8	3.355
Ecotaxes	+	+ 5.3	2.521

Source: Armin Rolfink, 1998, p. 233.

Applied to our testing of potential new sources of Union revenue, this indicates that models based on income tax and surcharges are likely to prove unpopular. Increases in VAT would not exactly be a popular choice either, although the level of resistance to them is lower. Excise duties on tobacco products (and on wines and spirits) and environmental taxes ('ecotaxes') do not pose any problems and could be useful alternatives to the present financing system; this also applies, albeit to a lesser extent, to the corporation-tax option. The use of seigniorage, the communications tax and taxes deducted at source on interest and dividends were not included in the survey. While we are inclined to believe that a tax on central-bank profits (seigniorage) would be quite readily accepted because of its imperceptible immediate effect on people's pockets, and while we believe that a tax at source on interest would enjoy little popularity, being essentially a tax on *income* from interest, which might well be equated with income tax, we cannot pronounce on a communications tax, since such a tax does not yet exist.

Before analysing the various proposals, we shall begin by presenting the tax-to-GDP ratios of the various EU Member States. In 1996 the tax-to-GDP ratio in the Union rose by 0.2% to 27.2% of aggregate GDP. This puts it just below the previous peak of 27.3%, recorded in 1989, as the following diagram illustrates:

Figure 3: Tax as a percentage of Union GDP, 1980-1996 (Source: Eurostat, 1997)



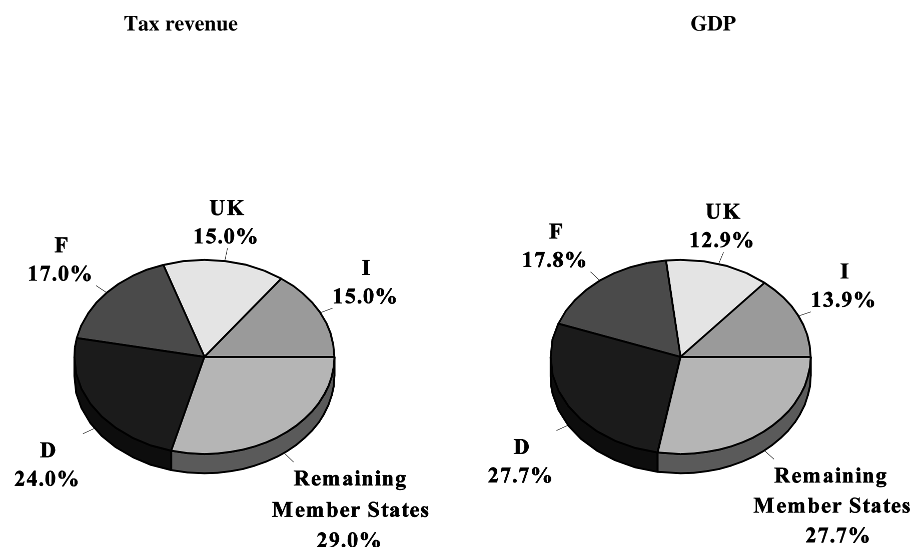
The peak level of 1989 marked the climax of an almost constant long-term rise in the tax ratio through two full percentage points. At the start of the nineties the tax-to-GDP ratio hovered within a 0.5% margin. The annual tax-to-GDP ratios in the Union over the period from 1980 to 1996 were as follows:

Year	Tax-to-GDP ratio in the Union (in %)	Burden of taxes and charges (% of GDP)
1980	25.5	38.7
1981	26.0	39.2
1982	26.2	39.8
1983	26.5	40.3
1984	26.8	40.5
1985	26.8	40.6
1986	26.7	40.5
1987	27.0	41.0
1988	27.0	40.8
1989	27.3	40.9
1990	27.0	40.7
1991	27.0	41.1
1992	27.1	41.6
1993	27.0	41.9
1994	26.8	41.6
1995	27.0	42.0
1996	27.2	42.4

Source: Eurostat, 1997, p. 2.

Since the national burdens of taxes and charges are weighted in accordance with the national share of total Union GDP, the largest Member States account for a correspondingly larger part of the Community total. Accordingly, the various changes in the smaller Member States have a very limited effect on the Union average. The weighting assigned to the various Member States on the basis of relative size may be represented as follows:

Figure 4: **Comparison of tax revenue and GDP, 1996**



Source: Eurostat, 1997, p. 1.

It emerges from the above illustration that the large Member States Germany, France, the United Kingdom and Italy together account for about three-quarters of all tax revenue as well as of total Union GDP.

provided in the following table:

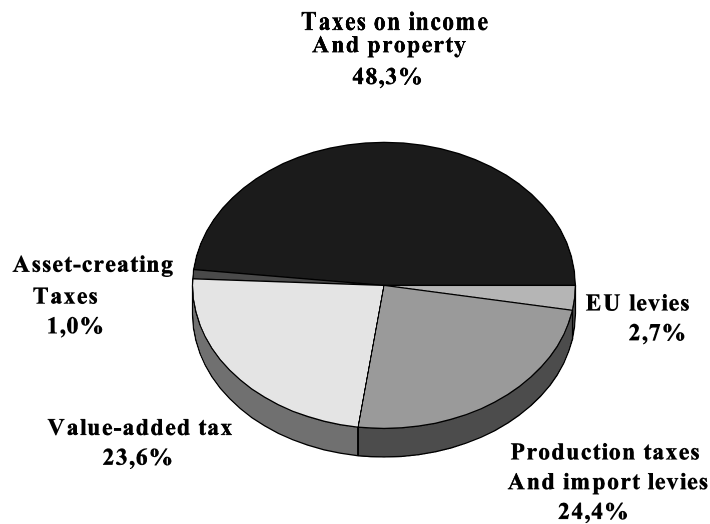
Table 21: Tax structure and tax ratios in the Member States (in % of GDP)

	Taxes on income and property				Production taxes and import levies				Value-added tax				Total taxation			
	1985	**1994**	**1995**	**1996**	**1985**	**1994**	**1995**	**1996**	**1985**	**1994**	**1995**	**1996**	**1985**	**1994**	**1995**	**1996**
Austria	13.0	11.7	12.5	13.6	7.4	7.8	7.5	7.3	9.3	8.2	7.5	8.0	29.8	28.0	28.3	29.7
Belgium	19.6	17.8	18.3	18.2	4.2	5.2	5.0	5.4	6.8	6.5	6.4	6.5	32.0	31.1	31.2	31.6
Denmark	28.6	31.7	31.4	31.6	8.2	7.9	7.9	8.1	9.2	9.5	9.4	9.7	47.2	50.1	49.7	50.4
Finland	17.2	17.7	17.8	19.7	14.4	14.6	6.3	6.2	0.0	0.0	7.6	8.4	31.7	32.5	32.1	34.6
France	9.1	9.4	9.5	10.0	6.9	7.4	7.4	7.6	8.1	6.7	6.8	7.2	25.2	24.9	25.2	26.0
Germany	12.6	11.1	11.3	10.4	5.8	6.0	5.9	5.8	5.9	6.4	6.1	6.1	25.3	24.5	24.3	23.3
Greece	5.4	6.8			14.2	7.9			0.0	6.2			20.6	22.1		
Ireland	14.3	15.5	14.0	14.6	9.6	7.7	7.4	7.3	7.3	6.6	6.5	6.5	32.6	31.2	29.3	29.7
Italy	13.1	15.1	14.9	15.3	4.2	6.6	6.6	6.8	4.8	5.1	5.2	5.1	22.8	27.7	27.8	28.7
Lux.	18.3	15.4	15.2	14.7	9.9	10.8	10.5	10.3	5.0	5.2	5.4	5.9	34.5	32.5	32.2	31.7
NL	12.7	14.0	13.1	13.5	4.2	5.6	5.6	5.8	6.8	6.2	6.1	6.5	25.0	27.2	26.2	27.1
Portugal	7.7	8.6	9.4	10.5	13.2	7.0	7.1		0.0	6.2	7.2		21.1	23.1	24.7	
Spain	8.5	11.5	11.4	11.5	9.5	5.1	4.9	4.8	0.0	5.1	5.1	5.2	18.2	22.7	22.4	22.4
Sweden	21.0	21.2	21.6	22.5	9.5	6.8	7.3	8.6	7.0	8.1	7.1	8.1	37.5	36.2	36.8	39.9
UK	15.5	13.7	14.6	14.6	9.7	7.2	7.6	7.5	5.3	6.6	6.5	6.6	31.7	28.4	29.7	29.6
EUR	13.1	12.8	13.0	13.1	7.1	6.7	6.5	6.6	5.7	6.3	6.3	6.4	26.8	26.8	27.0	27.2

Source: Eurostat, 1997, and our own calculations. - = data not available.

A look at the tax-to-GDP ratio reveals the following picture: Denmark has the highest tax ratio, at 50.4%, followed by the other Nordic countries as well as Belgium, Ireland, Italy, Luxembourg, Austria and the United Kingdom, all of which exceed the EU average of 27.2%.

The following diagram illustrates the composition of the tax structure in average Member States:



Source: Eurostat, 1997, p. 6.

6.5 Qualitative and quantitative assessment of proposals for reforms in the domain of the Union's own resources

Against this background, the following pages contain analyses of the various proposals in tabular form; each of the analyses is followed immediately by a statistical table showing the calculated burden of the tax in question in each of the Member States:

European corporation tax

Characteristics	• The precursors of this proposal are the Spinelli report, the 1978 Green Paper on financing the Community and the Colom i Naval report of 1990. • Attempts to harmonise company taxation: Neumark Committee (1963), Van den Tempel report (1977), Commission proposals (1975, 1990), Ruding report (1992)
Principle	***• Taxation of large companies (multinational and supranational)***
Taxpayers	***• Companies legally liable for corporation tax***
Models	• Alternative 1: EU-wide corporation tax levied and collected nationally. Precondition: uniform definition of taxable income and application of harmonised tax regulations • Alternative 2: Uniform corporation tax to be levied and collected at EU level
Acceptance	***• good***
Advantages	• Sufficiently large volume of revenue • Avoidance of arbitrary allocation of tax revenue • Minimisation of scope for companies to avoid taxation • Simpler administration of company taxes possible (with regard to manipulation of transfer prices and inadequate capital resources) ***• The tax would be levied on those who gain most from the single market*** ***• Large companies create few jobs***
Disadvantages	• Absence of a harmonised basis of assessment and different underlying systems - system with split-level tax rates, separate levying or offsetting procedure • Administrative problems for those countries which have integrated the taxation of business profits into the system of personal taxation. • Highly susceptible to cyclical fluctuations • Little transparency and therefore a lack of consideration of the responsibility principle ***• International tax competition would decrease in the EU because of uniform taxation rates, but competition with other economic areas would stiffen*** ***• Not all businesses would be affected, only companies in the corporation category*** ***• A general business tax would be neutral in its effect*** ***• Distributive effects are somewhat blurred*** ***• Rates and systems / basis of assessment are not harmonised***
Calculation of burden	***• Comparison of corporation-tax burdens: see following table***
Positional changes	***• Four of the present net contributors (Germany, Austria, France and Italy) would obtain relief because of their relatively small corporation tax-to-GDP ratios; the Netherlands, though also a net contributor, would have a heavier burden to bear than the others. As far as the largest net recipients are concerned, the introduction of an EU corporation tax would not alter their net positions very significantly.***
Yield	• If a uniform corporation tax were levied by the EU, it might be expected to yield about 6% of the GNP of all Member States. Slightly less than one-sixth of this amount would suffice to meet the financial needs of the EU, so the funds would be split between the EU and the Member States.

Table 22:Comparison of corporation-tax burdens in the 15 Member States

	Corporation tax (as a % of national GDP)	Ranking*
Germany	0.96	1
France	1.6	2
Italy	1.72	3
Austria	1.8	4
Spain	2.01	5
Portugal	2.07	6
Denmark	2.34	7

Sweden	[illegible]	[illegible]
Belgium	3.18	9
United Kingdom	3.21	10
Ireland	3.26	11
Netherlands	4.16	12
Luxembourg	4.23	13
Finland	18.51	14
Greece	no data available	-

Source: Our own calculations; see appendix for basic statistics.
* Note: First place in the table is assigned to the Member State with the smallest burden.

Characteristics	• Seigniorage is an important source of revenue for the Member States • Different methods are used to ascertain the amount of this revenue: (1) taking the country's money supply as a basis (notes and coins in circulation and cash holdings of the commercial banks); (2) calculating the difference between market interest rates flowing into the central bank from accounts receivable and the interest on liabilities put into circulation • When the euro is introduced as the European single currency the Member States will lose their revenue from seigniorage.
Principle	***• Partial transfer of profits***
Taxpayers	***• Institutions rather than individuals (ECB/finance ministries of Member States)***
Models	• Simple to administer; the ESCB would merely have to pass on the profits
Acceptance	***• high***
Advantages	• In a unified monetary area there is no useful key for the distribution of seigniorage revenue among the Member States • If seigniorage is used for any other purpose, e.g. distribution among the Member States, a similar phenomenon could occur to the 'Rotterdam-Antwerp effect' that is observable in the domain of customs revenue • No levying and collection costs • Little perceptible effect on people's lives • Fiscal result of European economic and monetary union ***• No new taxes*** ***• No additional burden that would be perceptible at the first stage (possible revenue shortfall that will have to be made up in Member States)*** ***• Resources related to EU policy (EMU)*** ***• Some States will lose part of their seigniorage revenue in EMU, so a new arrangement is necessary in any case***
Disadvantages	• Relatively low revenue => could only be used to top up existing Union resources • It is conceivable that revenue could become degressive if the introduction of EMU leads to an increase in non-cash payments and public cash holdings diminish • Unclear distributive effects • Political problems could arise because not all Member States are taking part in EMU • Lack of transparency for the taxpayer; responsibility principle disappears ***• Not all Member States are taking part in EMU*** ***• Potential for political problems, since the Member States rely on return flows to their budgets on the basis of a distribution key***
Calculation of burden	***• See following table***
Positional changes	• Present net contributors Germany, the Netherlands, Austria, Italy and Sweden would be more heavily burdened, because their shares in the initial capital of the ECB are disproportionately smaller than their shares of the monetary basis of the EU. France and the United Kingdom would be the main winners.
Yield	***• Relatively small yield compared with EU requirements => only suitable as supplementary source of revenue*** • Estimates suggest about 0.4% of Union GDP, with regressive development if inflation can be effectively curbed by EMU.

Table 23: Redistribution of newly created money

	Percentage of GDP	Percentage of total EU monetary basis	Column 1 ÷ Column 2	Percentage of initial capital of the ECB	Cumulative balance in bn euros	Ranking
United Kingdom	14.63	6.86	0.47	14.75	12.1	1
France	17.37	8.96	0.52	16.73	11.91	2
Portugal	1.02	1.26	1.24	1.95	1.02	3

Belgium	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4
Luxembourg	0.19	0.03	0.16	0.15	0.19	5
Ireland	0.94	0.77	0.82	0.84	0.11	6
Finland	1.91	1.48	0.77	1.40	-0.12	7
Greece	1.28	2.48	1.94	2.01	-0.72	8
Denmark	2.10	2.2	1.05	1.68	-0.8	9
Sweden	3.21	3.25	1.01	2.67	-0.89	10
Netherlands	4.45	5.13	1.15	4.3	-1.28	11
Austria	2.41	3.33	1.38	2.38	-1.46	12
Italy	15.64	17.53	1.12	15.03	-3.83	13
Spain	7.36	11.36	1.54	8.79	-3.95	14
Germany	24.61	32.91	1.34	24.48	-12.92	15

Source: K. Gretschmann, 1997, and our own calculations.

* Note: First place in the table is assigned to the Member State with the smallest burden.

Excise duties on tobacco, wines and spirits

Characteristics	• Harmonisation of excise duties on tobacco, wines and spirits was part of the original single-market programme but made slow progress as a result of resistance from the Member States. However, in the 1997 report on the single market, it was once more accepted as a minimum taxation target.
Principle	***• Taxation of specific (undesirable) consumption***
Taxpayers	***• Consumers of tobacco products, wines and spirits***
Models	• A share of the Member States' revenue from these duties to be paid to the EU. Precondition: further progress towards an agreement on a harmonised basis of assessment for the entire EU
Acceptance	***• high***
Advantages	• Low introduction costs, since these excise duties are already levied by the Member States. • Guaranteed adequate and stable revenue • Educational function, since the tax curbs the consumption of demeritorious products with high social costs ***• Linkage with health education*** ***• No price elasticity - stable yield***
Disadvantages	• Doubtful accordance with the principle of fair taxation • Tax rates would have to be adjusted periodically to take account of the rate of price increase or of changes in spending patterns • There tends to be a negative correlation between the consumption of these products and per capita income, which makes them regressive taxes. • Differing preferences could lead to strong resistance from individual Member States ***• Narrow tax base, so high rates are required*** ***• Varying national taxation levels in the Member States***
Calculation of burden	***• (Tobacco, wines and spirits duty) / ratio of national GDP to Union GDP; see following table***
Positional changes	***• The net contributors Italy, Austria and the Netherlands would benefit from this type of EU funding; States like Finland, the UK and Ireland would be disproportionately burdened***
Yield	• If 0.15 euro were levied on every packet of cigarettes, the yield would be equivalent to 0.3% of total Community GDP • If the revenue from all tobacco duties were to flow into the coffers of the EU, the yield would be equivalent to 0.6% of total Union GNP.

	Tobacco duty as a % of GDP	Wines and spirits duty as a % of GDP	Total % of GDP	Ranking*
Belgium	0.51	0	0.51	1
Italy	0.07	0.6	0.67	2
Austria	0.53	0.15	0.68	3
Netherlands	0.47	0.23	0.70	4
Spain	0.55	0.19	0.74	5
France	0.74	0.04	0.78	6
Germany	0.58	0.22	0.80	7
Portugal	0.77	0.16	0.93	8
Sweden	0.42	0.68	1.10	9
Denmark	0.73	0.44	1.17	10
Luxembourg	1.51	0.18	1.69	11
Finland	0.56	1.23	1.79	12
United Kingdom	1.09	0.82	1.91	13
Ireland	1.21	1.25	2.46	14
Greece	no data available	no data available	no data available	-

Source: Our own calculations; see appendix for basic statistics.
* Note: First place in the table is assigned to the Member State with the smallest burden.

European interest and capital-gains tax (deducted at source)

Characteristics	• Levied on income from dividends and interest • European Commission proposal, 1989: Community tax to be levied at source on income from interest payments and investments. Thwarted by the resistance of the United Kingdom and Luxembourg.
Principle	***• Taxation of a specific type of income***
Taxpayers	***• Recipients of unearned income***
Models	• Tax rate: 15% on interest from bonds and from bank and savings deposits, where the debtor is a resident of a Member State • Exception: Eurobonds
Acceptance	***• Tends to be fairly low***
Advantages	• Reduces the existing distortions in the flow of portfolio investments in Europe, which is caused by the current differentials in the taxation of unearned income • Accords with the principle of fair distribution of burdens • Standardises European capital transactions • Minimises the risk of speculative capital movements and tax avoidance ***• Able to attract consensus at EU level (Commission proposal of 20 May 1998 - 20% minimum rate)*** ***• Progressive redistribution effect (owners of capital are generally in higher income brackets)*** ***• Can be linked to further liberalisation of the rules governing capital***
Disadvantages	• Would handicap European financial centres in the acquisition of foreign capital for portfolio investments => incentive for EU citizens to incest their money elsewhere. • Unwanted effects on the supply of financial resources in the EU and hence on long-term economic growth, i.e. higher taxation of interest => higher cost of capital => lower investment levels • These taxes would not suffice to meet the financial requirements of the EU unless high rates were imposed • Since investments and savings fluctuate considerably, they do not constitute a stable source of revenue. ***• Denmark, Luxembourg and the Netherlands do not have such taxes.*** ***• Capital is extremely mobile - avoidance reactions will erode the yield***
Calculation of burden	***• Comparison of national savings rates / GDP; see following table***
Positional changes	***• The present net contributors Germany and Austria would have to bear an unduly heavy burden if a European tax on interest and capital gains were introduced, because the average propensity to save is relatively high in both countries. However, other net contributors - the UK and, more especially, Sweden - would have their burdens eased somewhat by this type of tax.***
Yield	***• A fairly low yield in relation to the needs of the EU => would only be suitable as a supplementary source of income***

Table 25: Comparison of interest and capital-gains tax burdens in the 15 EU Member States

	APS**	Ranking*
Sweden	14.3	1
Denmark	14.8	2
Finland	14.9	3
Ireland	14.9	3
United Kingdom	15.1	5
Italy	17.1	6
Belgium	17.8	7
France	19.1	8
Netherlands	19.7	9
Spain	19.8	10
Greece	20.9	11
Germany	22.2	12
Austria	24.1	13
Luxembourg	24.4	14
Portugal	25.8	15

Source: Eurostat and our own calculations.

* Note: First place in the table is assigned to the Member State with the smallest burden.
** For want of statistical data, we have used the investment ratio as an approximation to the average propensity to save (APS).

Percentage of value added tax

Characteristics	• VAT is the core of the present EU own-resources system • Aim: replacement of the third and fourth sources of revenue by an EU-wide VAT • The basis of this proposal is the Langes report, tabled by the Committee on Budgets of the European Parliament in 1994. It provides for the VAT levied on consumers in the Member States to be split into an EU component (for which the Commission and Parliament would be responsible), comprising a 1.5% VAT rate on consumer goods and 3% on all other goods and services, and a national component (for which the national parliaments would be responsible).
Principle	***• Taxation of the use of income*** ***• Technical collection method: levied on economic transactions***
Taxpayers	***• Consumers and service users***
Models	• Basic features as proposed in the Langes report • Accompanied by various optional correction mechanisms to ensure a fair distribution of burdens: (1) Mechanism for graduating VAT or adapting it to GNP (European Commission, 1978, which draws on the 1977 McDougall report) (2) Proposal for 100% adjustment to eliminate distortions (Denton, 1983) (3) Correction on the basis of GNP or size of population
Acceptance	***• neutral, but scarcely any scope for increases***
Advantages	• Elasticity of yield • Basis of assessment is largely harmonised throughout the EU • No additional administrative costs => can be directly levied on the basis of tax returns • High degree of public acceptance within the EU, since VAT is already a familiar tax ***• Taxing consumption and encouraging savings = capital formation*** ***• Clear link to the single market*** ***• old tax = good tax***
Disadvantages	• Regressive effects of taxation • Dependence on a number of influencing factors: on the ratio of private consumption to GDP, on the ratio of public to private consumption and, in the case of industrial goods, on the net balance of trade • Fundamental problems inherent in the compound system may militate against the splitting of VAT revenue ***• Regressive distribution effects*** ***• Rates and bases of assessment are not fully harmonised*** ***• Negative multiplier effect*** $D \Downarrow \Rightarrow Y \Downarrow$ ***• Cyclical variability***
Calculation of burden	***• VAT assessment basis / GDP; see following table***
Positional changes	***• Our comparison reveals that the major net contributors to the EU would again be the main losers if the VAT-based contribution were increased. The desired change in their net position would not materialise; on the contrary, the existing structures would be more firmly cemented.***
Yield	***• Relatively high yield***

	Ranking of Member States in terms of the basis of VAT assessment as a percentage of GDP
Italy	1
Greece	2
Belgium	3
France	4
Sweden	5
Spain	6
Ireland	7
Netherlands	8
United Kingdom	9
Finland	10
Denmark	11
Luxembourg	12
Austria	13
Germany	14
Portugal	15

Source: Our own calculations; see appendix for basic statistics.
* Note: First place in the table is assigned to the Member State with the smallest burden.

CO_2/energy tax

Characteristics	• The idea of an energy tax was first mooted in the Commission Green Paper of 1978 on financing the Community • There is a very wide range of options, from extensive taxation of energy use and demonstrable forms of environmental pollution to the far more selective taxation of particular pollutant emissions
Principle	***• Taxation of the consumption of environmental resources***
Taxpayers	***• Users of scarce environmental assets (energy sources)*** ***• Emitters of pollutants***
Models	• Commission proposal on the introduction of a CO_2 tax: US $3 to be raised on the energy produced by one barrel of crude oil, rising to $10 in the year 2000 Equal consideration to be given to energy content and CO_2 intensity
Acceptance	***• high***
Advantages	• Avoidance of external effects on neighbouring areas (restriction of 'freeriding') • Exertion of influence on the environmental behaviour of the population => reduction of excessive use of pollutant energy sources ***• Internalisation of external effects*** ***• Creation of environmentally acceptable behaviour*** ***• Capable of attracting political consensus***
Disadvantages	• Possible incompatibility with the objectives pursued by the Member States • Regional distribution of eco-tax revenue would be highly random • High introduction costs resulting from the need to provide measuring installations • Probable degressive revenue pattern, i.e. tax yield will decrease in the course of time. ***• European energy costs will increase in relation to those elsewhere (effect on competitiveness*** ***• New tax*** ***• Conflict between fiscal and environmental aims may lead to a reduction in the basis of assessment***[8]
Calculation of burden	• CO_2 tax amounting to US $10 per barrel of crude oil would raise about 1.1% of GNP ***• (CO_2 emissions + energy consumption / ratio of national GDP to Union GDP: see following table)***
Positional changes	***• Sweden, France, Austria, Italy and, to a lesser extent, Finland would be better placed because of their CO_2 levels, which are lower than the average for the 15 EU Member States. Luxembourg and Portugal would be hardest hit by this tax, as their CO_2 emissions are by far the highest of all the Member States.***
Yield	***• The erosion of the basis of assessment would lead to diminishing revenues unless the rate of taxation were increased. A CO_2 tax would therefore be of limited value as a source of revenue.***

[8] If the ecotax is effective, taxpayers will reduce their consumption of environmental resources, as is intended, but that will reduce the basis of assessment, which is fiscally disadvantageous. Given that t (tax rate) x B (basis of assessment) = T (tax yield), if B and T are reduced, t must increase. This would mean massive rises in the rate of taxation.

Table 27:Comparison of CO_2/energy tax burdens on the 15 EU Member States

	CO_2 burden indicator	Ranking
Sweden	16.82	1
France	20.03	2
Austria	23.65	3
Italy	25.90	4
Denmark	28.57	5
Finland	29.32	6
Spain	32.34	7
Ireland	34.04	8
Germany	34.50	9
United Kingdom	36.36	10
Netherlands	38.43	11
Belgium	38.54	12
Portugal	47.06	13
Luxembourg	47.37	14
Greece	60.94	15

Source: Our own calculations; see appendix for basic statistics.

* Note: First place in the table is assigned to the Member State with the smallest burden.

Income-tax surcharge

Characteristics	• Most common method of raising revenue
Principle	***• Economic capacity expressed in 'comprehensive income'***
Taxpayers	***• Natural persons*** ***• Partnerships, businesses and self-employed persons***
Models	• In principle, two different approaches are conceivable: (1) Surcharge on the income tax levied by the various Member States, or (2) Yearly payments to the EU by every Member State in accordance with its own percentage of total Union GDP.
Acceptance	***• poor***
Advantages	• Provides adequate revenue • High elasticity of yield • Member States' contributions linked to economic capacity ***• Transparency; EU component would be identifiable***
Disadvantages	• Considerable obstacles as a result of widely diverging national objectives (e.g. in relation to redistribution) • Lack of a harmonised basis of assessment could result in an uneven distribution of burdens among the Member States • Loss of national sovereignty • Restriction of the fiscal autonomy enshrined in the Stability Pact ***• High resistance to and evasion of tax*** ***• Tax avoidance (cross-border)*** ***• Tax rates and basis of assessment differ between Member States*** ***• Coordination with national income tax difficult*** ***• Overlapping interpersonal and interregional incidence***
Calculation of burden	***• Comparison of income tax with ratio of taxation to GDP; see following table***
Positional changes	***• On the basis of the aforementioned ranking, the surcharge would have different effects on different Member States. Whereas the burden of a supplementary tax on income and property would be relatively light for the net contributors France and Germany, Finland and Sweden would be very heavily burdened; the other net contributors - Austria, Italy and the UK - would be somewhere in the middle.***
Yield	***• Relatively high yield***

	Income and property taxes as a percentage of GDP	Ranking
Greece	6.8	1
France	10.0	2
Germany	10.4	3
Portugal	10.5	4
Spain	11.5	5
Netherlands	13.5	6
Austria	13.6	7
United Kingdom	14.6	8
Ireland	14.6	8
Luxembourg	14.7	10
Italy	15.3	11
Belgium	18.2	12
Finland	19.7	13
Sweden	22.5	14
Denmark	31.6	15

Source: Our own calculations; see appendix for basic statistics.

* Note: First place in the table is assigned to the Member State with the smallest burden.

New forms of communications and transport tax

Characteristics	• One of the effects of the creation of the single market has been an increase in the volume of transport and communications in the EU. • The legal framework governing the domain of transport and communications is being established to an increasing extent at the European level.
Principle	***• Securing a new and sustainable source of taxable added value***
Taxpayers	***• Users of transport and communications services***
Models	• The objects of an EU-wide communications tax could be air transport and telecommunications, for example. • 3 possible communication taxes: (1) Taxation of telephone connections (including mobile phones), (2) Tax on air transport, (3) Tax on use of computers/Internet
Acceptance	***Unknown, but we suspect it will be rather low***
Advantages	• High elasticity of yield; could cover the entire financial requirement if properly structured • Positive correlation with economic capacity and low initial costs for new Member States from Central and Eastern Europe. • Low assessment and collection costs. • Very low risk of tax evasion and fraud • High degree of transparency • Relation to EU policy: cross-border mobility of goods, currency and persons ***• Cross-border and mobility-orientated benefit (European single market)***
Disadvantages	• Unclear distribution of tax revenue • Receipts will be difficult to attribute to individual Member States • Contrary to the principle of free movement within the internal market • Inconsistent with the long-term EU goal of strengthening European competitiveness for the 21st century ***• Tax on communication and transport is undesirable from an allocative point of view, because it restricts both of these activities*** ***• Unclear whether value or quantity is being taxed here*** ***• High introduction costs***
Calculation of burden	• Average annual taxation of about 40 euros per telephone connection would yield 10 bn euros (at 1997 prices) • Estimates of the yield from airport departure taxes run at about 10 bn euros (at 1997 prices) ***• Number of telephone connections / ratio of national GDP to Union GDP*** ***• Number of flights / ratio of national GDP to Union GDP: see following table***
Positional changes	***• Air transport: With regard to the burdening of Member States in the event of a transport tax being introduced, an examination of the air-transport situation does not produce a uniform picture. While the net contributors UK and Italy would obtain some relief, the Netherlands - also a net contributor - would be one of the losers. Similarly, among the net recipients there are winners (e.g. Ireland) and losers (e.g. Greece).*** ***• Communication: No clear pattern is identifiable in this domain either between net recipients and net contributors. The burdens are distributed heterogeneously.***
Yield	***• Suitable only as a supplementary source of revenue***

Member States

	Air-traffic indicator	Ranking
United Kingdom	-65.55	1
Italy	-49.23	2
Finland	-15.71	3
Ireland	0.00	4
Austria	0.00	5
Sweden	0.00	6
Denmark	0.00	7
Spain	14.13	8
France	26.60	9
Belgium/Luxembourg	34.20	10
Germany	68.26	11
Portugal	73.53	12
Netherlands	760.90	13
Greece	792.19	14

Source: Our own calculations; see appendix for basic statistics.

* Note: First place in the table is assigned to the Member State with the smallest burden.

	Communication indicator	Ranking
Luxembourg	531.58	1
Ireland	1127.66	2
Sweden	1264.80	3
Denmark	1319.05	4
Finland	1324.61	5
France	1341.39	6
Austria	1549.79	7
Italy	1556.91	8
Belgium	1572.92	9
Greece	1601.56	10
Netherlands	1662.92	11
United Kingdom	1715.65	12
Germany	**1820.40**	**13**
Portugal	1823.53	14
Spain	2133.15	15

Source: Our own calculations; see appendix for basic data.

* Note: First place in the table is assigned to the Member State with the smallest burden.

(1) The structure of tax revenue varies from one Member State to another. Which Member States will be primarily affected by which of the aforementioned tax changes? Can a fundamental distinction be made between northern and southern countries or between net contributors and net recipients, or will the effects be felt equally, irrespective of tax structures? Can they attract political consensus?

(2) Should a separated or linked system be chosen for a future EU funding system? As far as the financial autonomy of the EU is concerned, a separated system (i.e. independent and exclusive sources of revenue) is preferable. For reasons of practicality and acceptance, a linked system would be preferable, since it is a recursive approach to reform which depends on existing structures. The changeover would thus create fewer shock waves.

The following table provides a general comparison between our evaluation of the individual proposals for reform of the own-resources system and previous evaluations:

Table 30:Ranking of potential sources of Union revenue: results of four studies

	European Economy	Begg et al.	Keerl	Gretschmann et al. (quantitative)	Gretschmann et al. (qualitative)
CO_2/energy tax	1	6	2	**2**	**6**
Revised VAT	3	1	1	**8**	**5**
Excise duties on tobacco, wines, spirits and mineral oil	4	3	4	**4****	**3****
Corporation tax	2/3	4	3/4	**1**	**1**
Tax on transport and telecommunications services	-*	2	-*	**5**	**8**
Income tax	5	5	5	**6**	**7**
Tax on interest, levied at source	4	7	2	**7**	**4**
ECB profits from note issues	2	8	3	**3**	**2**

Compiled on the basis of the European Commission own-resources report (1998) and our own calculations.

*- = Data not available.

** Ranking is based exclusively on examination of tobacco, wine and spirit consumption.

The quantitative assessment (second-last column) focuses chiefly on the redistribution effects of the various forms of revenue in terms of the relief they might bring to net-contributor States. Our analyses put corporation tax in first place, followed by a CO_2/energy tax and the allocation of ECB profits to the EU budget. Our final qualitative general assessment (last column) goes beyond the quantitative aspects to consider factors such as acceptance, yield and general advantages and disadvantages (see previous tabulated analysis). This alters the ranking slightly: while corporation tax and the transfer of ECB profits are still favourably assessed, the CO_2/energy tax can only be given a limited vote of confidence after all the pros and cons have been weighed up. By contrast, the specific excise duties come out better than in the purely quantitative ranking.

The option of introducing a European corporation tax ranks considerably higher in our study than in the other studies included in the table, whereas we cannot unreservedly recommend the introduction of a European value-added tax, unlike the other studies.

6.6 New ground II: a European Tobin tax?

The proposal in 1978 by James Tobin, that doyen of Keynesian economics, to subject short-term capital movements in particular speculative capital regaining its topicality despite being a comparatively old proposal. Given (a) the pronounced global financial market crisis since mid-1998, (b) the collapse of a major hedge fund (LTCN) and the jolt received by at least one other major hedge fund (Tiger Fund), (c) a change of outlook by leading economists, such as Paul Krugman or Joseph Stiglitz, and institutions, such as the IMF and World Bank, and (d) a new social democratic basic consensus in the EU Member States on bringing ultra-liberalised capital markets under control, the so-called Tobin tax is experiencing a renaissance. While earlier assessments, for instance in 1995 and by the OECD and by the IMF, tended to be

proposal in the light of the recent crisis.

What is at stake here, and what might the Tobin tax yield if it were an EU own resource?

Given a trading volume of some US$ 1.3 trillion *per day* on the international financial markets and a global trading volume of some US$ 4 trillion *per year*, turnover on the financial markets in only three days is equivalent to total annual global trade. This implies dangerous volatility concerning *short-term* capital movements in particular (portfolio investments). That such capital outflows can have a fatal impact on entire economies can be seen from the Mexico crisis, the Asia crisis and the dangers currently lurking in Brazil, which impose either dramatic devaluations or, on the other hand, untenably high interest rates. At present it is becoming increasingly clear that hedge funds in particular, with their incredible leverage effects, import huge risks for the world economy into the system.

Against this backdrop, the Tobin tax on international transactions seeks to put a spanner in the works of international financial markets, but not fundamentally to reverse capital market liberalisation. The intention is to make foreign exchange transactions more expensive: a premium would be payable on the nominal value of transactions, i.e. a tax rate of between 0.5% and 1%. In particular the time frames are important, however: long-term capital investment would be largely spared; short-term investment would be hit particularly hard. This would:

1. increase the importance of long-term underlying data for players' investment decisions,

2. permit greater monetary and fiscal autonomy,

3. considerably scale-down speculative capital movements, and

4. permit a significant yield to be generated by a genuinely international tax (estimates range from approx. US$ 150 bn to 500 bn).

The notion of containing financial market speculation by raising transaction costs originated with Keynes. Tobin put this thinking into more specific terms by proposing a uniform international rate of tax on all foreign exchange turnover which would be dependent on volume (assessment basis). The tax would be payable on all exchange operations. This would hit short-term capital movements per se significantly harder than long-term movements. This is impressively substantiated by Table 31.

interest earnings in the home currency

Period	0.5% tax rate
1 day	551.3
3 days	90.7
1 week	35.6
1 month	11
1 year	6.6
5 years	4.6

Source: IMF, 1995, p. 3

This makes the special burden on short-term capital movements apparent. Non-monetary financial movements and physical asset investments are not affected.

Instead of financing global development programmes, as has been proposed on various occasions, e.g. at the UN Social Development Summit in Copenhagen in 1995, the yield from a 'hemispheric Tobin tax' levied in the EU, for instance with the assistance of the European Central Bank (ECB) could at least partly finance the EU budget.

Assuming, by way of an initial rough estimate, the two benchmark figures of ECU 120 bn and ECU 350 bn (if derivates are included) as the global yield from the Tobin tax, and allowing for the fact that the EU accounts for some 21.5% of total world GNP but for a far higher proportion of world financial and capital resources (some 33%), the annual yield would be between about ECU 30 bn and ECU 80 bn.

In addition to high fiscal yield, there would be a comparatively high degree of *popularity* as a crisis management instrument, a *progressive distributive effect*, a *high level of transparency* for the public, a role in reflecting a *unique European interest* - stabilisation of the financial markets - and a uniform assessment base for all EU Member States. The main drawbacks are regarded as technical ones (OECD, 1995; IMF, 1995).

Admittedly, this study cannot conduct a detailed analysis of such a new own resources pillar. That should be the task of a more far-reaching study, however, as the model overall can be regarded as eminently promising.

1. Against the backdrop of (a) the challenges facing the EU's financial rules and regulations in the transition to the 21st century and (b) the continuing debate on burden sharing, this study analyses the imperative action to be taken and models for reform in connection with the EU's finances.

2. An initial perusal of proposals and discussions reveals (a) that Agenda 2000 is burdened by considerable uncertainties regarding its premises and, accordingly, harbours financing risks, (b) that the Commission report of 7 October 1998 has given a new twist to the burden-sharing debate in that the existence of persistent budgetary imbalances has definitely been acknowledged, (c) that preference is being given to expenditure-side reforms, without a convincing case being made for this, over changes on the revenue side, and (d) that the dominant approach is reactive rather than rationalistic.

3. Our examination of own-resources bears out the fact that traditional own resources (TORs) are in continuing, inherent decline. This is the result of increasing EU liberalisation of imports - lower tariff rates - and as such must be welcomed. However, this development is having two major effects: (a) in terms of methodology, TORs should be completely disregarded in analyses of net balances, since they are a declining self-balancing item and do not burden the Member States, and (b) in substantive terms, the constant decline of the only genuine own resources must be compensated by the introduction of a new *genuine* source of own resources, *at least to preserve the status quo*. It is therefore entirely sensible to call for a Euro-tax.

4. In our view, the much-invoked regressive nature of VAT own resources is not tenable. On the one hand, marginal propensity to consume declining in relation to national income cannot be established. The calculated correlation for all EU Member States is -0.274 and is not significant. The accusation of regression against the proposal from the Committee on Budgets of the European Parliament, and its preference for a VAT model, is therefore unfounded.

5. There are also problems with regard to incorporating GDP as an affluence indicator or a criterion for national contributive capacity. In future - in the light of the single currency and *one* downwardly converging inflation rate for Euroland - the issue of assessing purchasing-power parities and/or determining exchange rates will no longer be of any particular significance. What is much more important, in our view, is the correction of GDP/per capita figures for unreported value added from the informal economy, ranging from 3% in Luxembourg to 26% in Italy, which are insufficiently allowed for by Eurostat.

6. The study also examines productive capacity and constraints in terms of considerations of net position, focusing on the Rotterdam Antwerp Gateway Effect. We have established that, although this effect markedly exaggerates the Netherlands' net contributor position and underestimates Belgium's net inflow position, at the same time it (a) tends to be offset by an inverse Gateway Effect (agricultural compensatory payments) and (b) will become less important in quantitative terms, because of the decline of TORs. Nonetheless, the Gateway Effect must be viewed as an indication that, on the revenue side of the EU budget, between 15 and 25% of resources are *not attributable*. We therefore propose that both the Rotterdam Antwerp Effect and the TORs overall be completely removed from net calculations.

generally regarded as not being quantifiable in budgetary terms. However, it can be assumed that benefits in terms of external trade, direct investment relief, freedom of establishment, internal market etc. (a) vary between the EU Member States and (b) produce budgetary effects. The latter also holds true for the opportunity cost of non-membership of the EU. In this instance, additional national budget funding is needed for agriculture, regional policy or structural assistance. Our conclusion is that, in the light of such problems, calculations of net positions must be interpreted with caution: on the one hand, false precision is misleading; on the other, however, generalisations may be lent support and budgetary imbalances detected.

8. Nonetheless, the first attempt ever is being made in this study to translate value added from EU-dependent external trade gains, multiplied by average national overall tax ratios, into budgetary effects. On the basis of specific assumptions, we have been able to show that EU trade gains produce differing volumes of additional national tax revenues, ranging from ECU 1.5 bn for Sweden to ECU 7.3 bn for Denmark, ECU 7.8 bn for the Netherlands, ECU 9 bn for France and as much as ECU 16 bn for the United Kingdom. This, of course, puts a different complexion on the question of justifying the contribution rebate. Germany makes a gain of ECU 7.1 bn and considerably modifies its net contributor position to ECU - 3.3 bn. To sum up, because the fiscal effects of increased intra-EU trade are ignored, current net position calculations show net burdens which are too high and net inflows which are too low.

9. With regard to the proposals for reform on the expenditure side, the study examines and reports above all on proposals for reorganisation in the areas of agriculture and the Structural Funds. Although it can be shown that the CAP co-financing model proposed by the Commission and Parliament both is in keeping with the system and reduces the burden on net contributors, it is our view (a) that the approach is more reactive than systematic and (b) that this variant for a solution is potentially the source of considerable conflict in that winners and losers find themselves in a zero-sum game. Political opposition is therefore inevitable and can probably be overcome only by making new 'side-payments' in other areas.

10. In our judgment, savings and the beginnings of reforms in other areas such as, for example, R&D, administrative expenditure, financial control etc. will not yield a sufficient volume of financial resources. The only useful element we see is the dismantling of the British special rebate, with a phasing-out model operating in parallel with the scaling-down of the EU budget share accounted for by agriculture.

11. We would furthermore argue that the reform of the Structural Funds must be analysed from a fiscal point of view and in terms of financial rules and regulations. In the interests of making for more radical lines of reasoning, we propose that the burden of acting as a concealed financial compensation mechanism be removed from the Structural Funds and that a separate system of compensatory transfer payments be established.

12. The study carries out a detailed examination with reference to two specific German proposals for reform: the Land finance ministers' model and the capping model of the Federal Ministry for Finance. In our assessment, neither model appears to be entirely suitable for meeting the challenges of the EU finance system *and* coping with the problem of burden sharing. Both go for ex-post compensation mechanisms which are not transparent and politically controllable. These proposals also suffer from their exclusively

contribution.

13. Lastly, this study attempts to carry out an in-depth comparative analysis of the reform-side proposals which have been made. We submit *our own quantitative and qualitative* assessment of the proposals for own-resources reform. The following potential sources of own resources are examined: (a) income tax (surcharge), (b) taxation of interest earnings at source, (c) corporation tax, (d) VAT (pro rata), (e) taxes on tobacco and alcohol, (f) central bank profits, (g) eco-taxes and (h) taxing of communications and transport services.

14. We have included European citizens' preferences for the various own-resources proposals in the analysis. While the income tax (surcharge) option is comparatively unpopular, and cooperation and eco-taxes are very much accepted, there is very little latitude as far as VAT is concerned.

15. We also analyse the differing effects, in terms of burdens, of the various own-resources proposals on the EU Member States. While (a) the corporation tax models ease the burden on the current net contributors (Germany, France and Italy) but present the Netherlands with additional burdens, (b) Germany, the Netherlands, Austria, Sweden and Italy would be additionally burdened by 'seigniorage' financing. France and the United Kingdom were winners. (c) Denmark's proposals concerning tax on alcohol and tobacco would ease the burden on Italy, Austria and the Netherlands, but would involve new burdens for France, the United Kingdom and Ireland. (d) Germany and Austria in particular would be hit hard by a tax on interest at source, but the burden on the United Kingdom and Sweden would be eased. (e) The VAT component would produce an even greater burden for the current net contributors, while (f) a CO_2 tax would ease the burden for Sweden, Austria, France and Italy. (g) An income tax surcharge would have positive effects for Germany but would impose greater demands on France and Sweden. The effects of (h) a communications and transport tax are comparatively vague.

16. In the light of this outcome, we have drawn up a list of own-resources alternatives, in order of merit, the three best in purely quantitative terms (net burden) being corporation taxes, CO_2 taxes and 'seigniorage', while in a general analysis including qualitative criteria, some of which we have developed ourselves, corporation taxes and 'seigniorage' maintain their position but CO_2 tax markedly loses ground.

17. Last but not least, the study discusses the appropriateness of a Tobin tax (anti-speculation tax) as a source of own resources for the EU. Although it was not possible, as part of this work, to make a large-scale quantitative estimate of the likely effects, the qualitative benefits would appear to warrant a more precise examination. We therefore recommend that this own-resources alternative be looked at more closely.

18. From this we derive a number of recommendations:
    (a) In our view, further research would be useful in the area of the Tobin tax, own-resources acceptance (citizens' preferences in the individual Member State) and the changes in net positions, which can be quantified to an even greater extent, resulting from the own-resources proposals;
    (b) There should be a further, detailed examination of the VAT proposal from the Committee on Budgets of the European Parliament; it does not seem optimal to us;

examined in greater depth;

(d) It is essential that declining genuine own resources (TORs) be offset, which justifies the further quest for a Euro-tax;

(e) With regard to that quest, we would give utmost priority to putting corporation tax on a European footing and to the ECB's central bank profits;

(f) In the medium and long term, the Committee on Budgets and Parliament should develop a reasoned system for horizontal and vertical compensatory transfer payments without hypothecation.

Selected tax revenue by Member State (1996 in m.ecus)

	VAT	Tobacco duty	Excise duty on wines and spirits	Excise duty on mineral oil	Corporation tax
Austria	14 217.1	916.3	266.5	2 694.6	3 126.7
Belgium	13 614.02	1 071.95	0.0	3 184.59	6 620.49
Denmark	13 734.0	977.0	599.0	1 968.0	3151.0
Finland	7 920.15	543.22	1 202.44	2 222.48	18 080.11
France	88 733.25	9 028.03	432.93	22 877.09	19 467.58
Germany	112 749.0	10 839.26	4 158.07	35 744.21	17 716.3
Greece	5 139.68	0.0	0.0	0.0	0.0
Ireland	3 518.43	653.11	678.42	978.38	1 757.93
Italy	48 691.65	664.64	5 739.27	23 444.58	16 438.82
Luxembourg	809.32	209.35	25.35	447.90	585.29
Netherlands	20 067.95	1 462.80	602.88	5 935.33	12 875.45
Portugal	4 797.5	602.73	125.36	2 083.98	1 606.91
Spain	22 176.69	2 341.11	825.06	-	8 592.21
Sweden	14 865.3	832	1 356.1	2 792.5	5 253.1
United Kingdom	54 025.75	9 142.24	6 841.29	19 433.6	27 032.18

Source: Eurostat, 1996, and our own calculations.

Selected tax revenue by Member State (1996, as a percentage of each country's GDP)

	VAT	Tobacco duty	Excise duty on wines and spirits	Excise duty on mineral oil	Corporation tax
Austria	8.18	0.53	0.15	1.55	1.80
Belgium	6.53	0.51	0.0	1.53	3.18
Denmark	10.19	0.73	0.44	1.46	2.34
Finland	8.11	0.56	1.23	2.27	18.51
France	7.29	0.74	0.04	1.88	1.6
Germany	6.08	0.58	0.22	1.93	0.96
Greece	6.38	0.0	0.0	0.0	0.0
Ireland	6.53	1.21	1.25	1.81	3.26
Italy	5.09	0.07	0.6	2.45	1.72
Luxembourg	5.85	1.51	0.18	3.24	4.23
Netherlands	6.49	0.47	0.23	1.92	4.16
Portugal	6.16	0.77	0.16	2.68	2.07

Spain	[illegible]	[illegible]	[illegible]		[illegible]
Sweden	7.54	0.42	0.68	1.42	2.67
United Kingdom	6.42	1.09	0.82	2.31	3.21

Source: Eurostat, 1996, and our own calculations.

	Air-transport services*	Passenger traffic*	Cargo traffic*	Other air-transport services*
Austria				
Belgium / Luxembourg	53	31	43	-22
Denmark				
Finland	-15	7	-24	2
France	231	-404	166	469
Germany	840	194	667	-21
Greece	507	336	108	63
Ireland				
Italy	-385	-367	191	-209
Netherlands	1693	1198	389	106
Portugal	37	110	-88	16
Spain	52	-70	69	53
Sweden				
United Kingdom	-479	260	-12	-728

Source: Eurostat, *Basic Statistics of the European Union*, 1995.

* Data basis: 1994

	No of main telephone lines in 1000s
Austria	3466
Belgium	4264
Denmark	3003
Finland	2742
France	29905
Germany	35421
Greece	4497
Ireland	1096
Italy	23709
Luxembourg	207
Netherlands	7395
Portugal	3014
Spain	13792
United Kingdom	26084
Sweden	5922

Source: Eurostat, *Basic Statistics of the European Union*, 1995.

* Data basis: 1994

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