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Fiscal Relations within
the European Union

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FISCAL RELATIONS WITHIN THE EUROPEAN UNION

**by
Peter Hoeller, Marie-Odile Louppe and Patrice Vergriete**

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Fiscal relations within the European Union

This paper reviews fiscal relations within the European Union in the context of the theory of fiscal federalism and of the principle of subsidiarity. It analyses the fiscal policy implications of the introduction of the single currency, tax harmonisation and competition issues and spending at the EU level. It also speculates as to whether there are economic gains from centralising more expenditure functions at the EU level.

Le présent document examine l'organisation des finances publiques au sein de l'Union Européenne sous l'angle de la théorie du fédéralisme budgétaire et du principe de subsidiarité. Il analyse les implications de l'introduction de la monnaie unique en termes de politique budgétaire, les questions de concurrence et d'harmonisation fiscale ainsi que les dépenses communautaires. Il vise également à faire apparaître les éventuels gains économiques de la centralisation d'un certain nombre de fonctions de dépenses au niveau communautaire.

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Peter Hoeller, Marie-Odile Louppe and Patrice Vergriete¹

Introduction

1. This paper reviews fiscal relations within the European Union (EU) in the context of the theory of fiscal federalism and of the principle of subsidiarity. It draws on experience of federations, where relevant. The paper focuses on economic issues and largely ignores institutional and political aspects, which will play an important role in deciding the pace of further integration and the widening of the Community and which will dominate discussions at the EU's Intergovernmental Conference. The regulatory functions of the Community are discussed in Hoeller and Louppe (1994).

2. Fiscal relations in the EU differ considerably from those in mature federations. The EU's budget is very small relative to that of the Member States, as the Community does not provide core public services, such as defence. It is also not large or flexible enough to enable the Community to pursue macroeconomic stabilisation objectives. By contrast, most EU Member States have governments that are large by international comparison and Member countries have retained most of their fiscal powers. The theory of fiscal federalism provides many valuable insights on methods of allocating revenue and spending functions according to levels of government, and on the social and political aspects of the successful operation of economic unions. However, there are many specificities in the EU, which limit the applicability of this theory. Section I provides a short overview of the theory of fiscal federalism, while highlighting such specificities.

3. The internal market initiative, the world's most ambitious regional integration scheme, the Treaty on European Union, which provides a framework for ever closer union among Member countries, and the eventual widening of EU membership have raised many policy issues. At present the most topical of these is the introduction of a single currency, which has several fiscal policy implications (discussed in Section II): fiscal rules for safeguarding monetary policy credibility, for instance, are included in the Maastricht Treaty. In addition, monetary and fiscal policy co-ordination over the cycle and regional stabilisation may have to be strengthened after the introduction of a common currency. Section III focuses on taxation. Efficiency considerations suggest that tax neutrality for cross-border activities is important for a well-functioning internal market, while further integration and higher mobility point to the risk of excessive tax competition in the absence of tax harmonisation. Section IV reviews agricultural, regional and research and development spending at the EU level and policies constraining the use of subsidies by

1. The authors are grateful for helpful comments and suggestions by Stephen Potter, Val Koromzay, Herbert Raidl, Robert Ford, Wilfried Leibfritz, Jeffrey Owens, Odile Sallard, Kathryn Gordon and Deborah Roseveare. They would also like to thank their colleagues at the European Commission, especially Heinrich Matthes, Jan Schmidt, Christian Ghymers, Marco Buti, Manfred Teutemann, Peter Schonewille, Marc Vanheukelen and Claudia Ohly, for clarifying many questions.

Member States. It also speculates as to whether there are economic reasons for centralising more expenditure functions at the Community level. The last section summarises the paper's findings.

I. General Issues

4. The European Union has made considerable progress towards realizing economic and monetary union. The establishment of a monetary union implies freedom of capital movements and a single currency, while an economic union consists of two basic elements: liberalisation of intra-area trade and free movement of factors of production, flanked by a competition policy and other measures, such as public procurement rules. Macroeconomic policy co-ordination and measures to foster cohesion would also seem to be important in ensuring the long-term viability of an economic and monetary union. The need for centralising additional policies at the supranational level importantly depends on the degree of integration, which evolves over time.

5. The theory of fiscal federalism provides many valuable insights into the way expenditure functions and revenue raising responsibilities should be allocated between different levels of government in order to reach a high level of overall welfare. Apart from the provision of a few core public goods at the central level, a strong case is made for a decentralised supply of public services; and there is a strong presumption that macroeconomic policies and some redistribution functions should be carried out at the central government level. According to Oates (1972), each public good characterised by spatial benefit boundaries or for which an optimal consumption group exists, should be provided by a corresponding level of government and be financed by benefit taxes levied on the members of its jurisdiction. In practice, such a government structure is highly unlikely because it would lead to a large number of overlapping levels of government. However, this theorem provides a benchmark for developing a second-best government structure.

6. There are several arguments in favour of provision of services by lower levels of government:

- Lower levels of government are likely to know more about the preferences of their citizens and their willingness to pay for public services. They are accountable to their electorate, elected on a specific set of propositions and are likely to be better informed about practical conditions affecting implementation of policies than the central government. Electoral accountability and the possibility of migration to jurisdictions with different public service and taxation levels are likely to reduce government failure.
- Differences in local policies could provide valuable information about potential improvements in policy design.
- Centrally-determined policies are likely to be less flexible and responsive to local conditions, either because of rules of equal treatment across localities, or because central authorities prefer simple and relatively uniform policies.
- Decentralisation could protect citizens from excessive use of the taxing power of central governments as a result of tax competition.

7. Several reasons for centralising government functions also exist:

- Spillovers. Policies implemented by a local authority may have effects on the welfare of the population elsewhere. Individuals and businesses will be tempted to “free ride” by benefiting from the expenditure of other jurisdictions. Too much decentralisation could thus lead to a suboptimal size of consumer groupings.
- Economies of scale and indivisibilities. Some public goods may cost less, or be of better quality at the same cost, if provided by a single jurisdiction rather than by several separate ones, and provision by a region may be uneconomic because of indivisibilities.
- Negotiations. By adopting a common position, the negotiating power of a broader club of countries may be strengthened in international negotiations.
- Insurance. If regions are exposed to different cyclical developments, a pooling of risks could raise welfare. Pooling may be more easily achieved by means of transfers within a single jurisdiction than by transfers among independent localities.

Concerning the decision-making process, central decision-making could be superior to loose co-ordination, if rapid decisions are required.

8. The fiscal federalism literature also provides several basic principles for assigning taxes to different levels of government: i) taxes on highly-mobile tax bases should be allocated to higher levels of government in order to avoid locational decisions being based on tax considerations, while lower levels of government should use immobile tax bases; ii) tax bases that are very uneven across jurisdictions should be centralised in order to reduce inequities and a potential for allocative distortions; iii) 'regional arbitrariness' in allocating taxes to particular jurisdictions should favour centralisation; and iv) the use of taxes to internalise cross-border externalities would at least necessitate a high degree of tax co-ordination.

9. While useful in framing the discussion on the role of public finances in European integration, this literature has a number of important limitations, as it usually explores issues in mature federations with politically-sovereign governments. Fiscal flows at the EU level are very small as compared with central government spending in existing federations, though the EU has some responsibilities which have implications for revenue and expenditure decisions at the Member State level. In addition, while political institutions differ considerably across OECD countries, at this stage none of them bears much resemblance to the European Union's structure, which is characterised by joint-decision making by the Council under strong unanimity requirements, while the European Parliament plays only a limited role. Mature federations also show a fairly high degree of homogeneity in preferences for core public goods (for instance, defence or foreign policy), which is not yet the case in the EU. Finally, the literature has little to say about the evolution and dynamics of new federal-type structures.

10. Alongside a centralised monetary policy, the Maastricht Treaty sets out a model which leaves Member States formally independent with respect to fiscal policy. The Treaty contains a number of proposals for further federal development, but the principle of intergovernmental co-operation in fiscal matters has been maintained and the financial organisation and funding of the Community's activities has not been altered. The relevant Treaty passages are reproduced in Annex I and the EU's budget is discussed in Box I.

Box 1

The EU's budget

The EU's budget and budgetary procedures differ from national budgets and procedures in a number of respects. First, the Community budget is very small. Community outlays were just 1.2 per cent of EU-wide GDP in 1994, compared with an EU-wide share of central government expenditure in GDP of 27 per cent. This is largely because the Community has no responsibility for policies, such as defence, that are usually provided at the central government level. Second, since 1989, the budget has evolved in a medium-term framework, which lays down binding annual spending ceilings. The multiannual planning framework was renewed in Edinburgh in 1992 for the period up to 1999. The Edinburgh Agreement lifts the spending ceiling to 1.27 per cent of EU-wide GDP by 1999, and a clause stipulates that the share of spending on agriculture should decline over time to below 50 per cent. Third, the Rome Treaty rules out deficits at the Community level. Finally, any decision to expand or modify the financing of the Community requires the unanimous consent of the Member States.

The most significant item of expenditure is agriculture. Spending is guided by the Common Agricultural Policy (CAP) and executed by the European Agricultural Guidance and Guarantee Fund (EAGGF), created in 1962 (Table 1). The share of agricultural spending in total outlays reached 65 per cent in 1988, since when reforms have helped to rein in expenditure growth. However, the CAP still absorbed 48½ per cent of the EU's budget in 1995. Structural operations -- spending by the Structural and Cohesion funds -- have gained in prominence and their share in total outlays is budgeted to rise further, from 32 per cent in 1993 to 36 per cent in 1999. Expenditure levels on internal policies, external actions and staff and administration are much lower. Regional policies and agricultural and research and development spending at the Community level are discussed in Section IV.

Until 1970, the budget was financed by a system of contributions from Member States. Thereafter, "own resources" were introduced: the Community is legally entitled to them. They include customs duties and agricultural levies. More importantly, own resources comprise a percentage of VAT receipts, and VAT quickly became the major revenue source of the EU budget (72 per cent in 1992). A growing imbalance between financial means and needs resulted from the erosion of own resources and pressure for higher spending. In line with EU agreements and negotiated tariff reductions in the GATT, customs duties became less dynamic, while agricultural levies could no longer cover export subsidies and the VAT base did not expand in line with GDP. Thus the ceiling on VAT resources was raised from 1 per cent to 1.6 per cent in 1984. In 1988, faced with financing problems, a fourth revenue source based on GDP was introduced to cover the difference between expenditure and the receipts from the first three revenue sources.

11. According to the Maastricht Treaty, the Community should take action in accordance with the principle of an open market economy with free competition. In addition, in areas that do not fall under its exclusive competence the principle of subsidiarity should be applied. This principle is inspired by the theory of fiscal federalism, but goes beyond it in several respects. It is intended to contribute to the maintenance of the respect of the national identities of Member States and to safeguard their powers, and it aims at involving citizens as closely as possible in the decision-making process. Subsidiarity limits the action of the Community and implies that national or lower-level powers are the norm and those of the Community the exception. According to the Treaty, Community-wide action should occur only if an objective can be better attained at the EU-wide level, and Community action should be commensurate with the objective pursued. In addition, the implementation of EU-wide policies should be highly decentralised. At the Edinburgh Summit in late 1992, the European Council agreed on specific guidelines for the implementation of the subsidiarity principle -- largely involving the vetting of initiatives in line with the spirit of subsidiarity -- and the Commission withdrew several proposals for directives, revised a number of proposed directives, and

abandoned certain planned initiatives. However, the guidelines do not address the question under which conditions competences should be reassigned to lower levels of government.

12. The subsidiarity principle, the objective of “creating an ever closer union among the peoples of Europe” (Treaty on European Union) and the likely widening of Union membership raise a number of questions, which will be addressed by the Intergovernmental Conference in 1996. The Conference will decide on changes to European institutions and the decision-making process, and will also give a perspective on the future course of integration.

13. Several configurations for a further deepening and widening process are possible. One option is that all countries move together in certain policy areas. While in some areas such a joint movement may be a matter of choice, it is a necessity in domains where strong policy spillovers exist. This is the case for internal market and associated policies, as countries deviating from the common set of policies could distort competition. In the absence of changes to the stringent voting rules of the Council, attempting to move jointly on new initiatives could result in the Community developing very slowly. On the other hand, a core group of countries could push ahead with deepening integration, for example, by implementing a common defence policy earlier, but leaving the latter with the possibility of opting in later. The core group approach for defence policy would be feasible, as there are no strong spillovers to other policies. In other areas, neighbouring regions may want to co-operate in tackling common problems. This is likely to be the best option for environmental and transport policies, with regional and functional spillovers delineating the size of the participating country group. A final option would be to allow a Europe *à la carte* with countries free to choose the policy areas in which they want to participate. This option could be open to Member States for policies which do not create spillovers. However, allowing a wide degree of choice could make decision making and administration of programmes very cumbersome. It is also unlikely to be applicable as a general rule, because most EU-wide policies are those where spillovers are important. Given the diversity in Member countries' interests and histories, it is likely that the future set-up will permit a fairly high degree of institutional flexibility in the deepening and widening of the European Union. Arrangements allowing flexibility are not only in line with theoretical considerations, but also with current practice. Some countries, for instance, do not currently want to participate in a monetary union.

14. The course of widening and deepening could also require changes to the current decision-making process. Two alternative views have influenced the building of Europe. From one point of view, the main reason to deepen the Community is to shift certain national competences to the EU level, which requires a European-wide political authority. The European Parliament exists already, but its role and powers are limited. A European government, however, has not yet been established. On the other hand, if the EU is viewed mainly as a forum for fostering co-operation among European countries, an institution which allows national governments to meet and reach political decisions is sufficient: this is currently the role of the Council and little change to the current institutional set-up would be necessary². Public opinion concerning the future course of the European Union is split in two broad camps: 38 per cent of people prefer co-operation on an *ad hoc* basis, without relinquishing sovereignty to Community institutions, while 36 per cent want co-operation on a regular basis with part of national sovereignty being transferred to Community institutions. 19 per cent do not want any Community action, while 7 per cent would opt for a central European State (Eurobarometre, 1995).

2. In some areas the Council votes by majority. In this case its role is closer to a supranational authority.

II. Macroeconomic convergence and stabilisation

15. Monetary Union, which could be in place at the start of the next millennium, is seen as promoting trade and helping to create a stable financial environment. It also has fiscal policy implications not only for the transition period towards monetary union, which is currently underway, but also for policy during monetary union. The Maastricht Treaty provides, for example, for a period of macroeconomic convergence before the introduction of a common currency, to be accompanied by stronger surveillance and peer pressure. Most important in this context are the "excessive deficit procedure" and the "broad economic policy guidelines", and they both apply also to the countries, which will not participate in monetary union. Apart from the convergence process, the question has been raised, whether, after introduction of a common currency, stronger policy co-ordination or even a community-wide tax and transfer system would be desirable.

16. In federal systems, the central government takes care of macroeconomic stabilisation for the union as a whole. Monetary policy is conducted at the federal level and federal budgets are sufficiently large and flexible to make fiscal policies usable for macroeconomic stabilisation objectives. As the EU's budget is very small and lacking flexibility the establishment of economic and monetary union poses the challenge of macroeconomic policy co-ordination. There are major areas where the Community could play a role: the safeguarding of monetary policy credibility against imprudent fiscal policies by Member States; and fiscal stabilisation which comprises the co-ordination of monetary and fiscal policies over the cycle and regional stabilisation.

Fiscal prudence and central bank credibility

17. In the Treaty on European Union the signatories pledged to avoid excessive deficits. The Commission monitors the development of the budgetary situation and the stock of government debt with a view to identifying gross discrepancies and the Council decides on whether deficits are excessive. This so-called "excessive deficit procedure", which is described in more detail in Box II, has been applied since the start of Stage II of EMU in January 1994. Identifying appropriate deficit and debt targets posed a problem, as the optimality of any numerical deficit or debt/GDP ratio across countries and over time cannot be demonstrated theoretically, not to mention empirically. However, without widely accepted reference values, it would have been difficult to monitor budgetary discipline effectively³. Therefore, a set of indicators was chosen, which, apart from fixing numerical reference values for the deficit and debt/GDP ratios, leave a degree of flexibility for interpretation: for instance, the debt criterion also takes debt dynamics into account and, if one of the criteria is not fulfilled, the size of government investment is taken into account. The flexibility and pragmatic way of interpretation is demonstrated by the fact that Ireland was judged not to have an excessive deficit, despite its high debt/GDP ratio.

3. In the late 1980s, when the Treaty was negotiated, the average deficit and debt/GDP ratios in the EU were close to the reference values chosen. With a nominal income growth of about 5 per cent, a deficit/GDP ratio of 3 per cent implies a stable debt/GDP ratio of 60 per cent. In addition, government investment was close to 3 per cent of GDP in the EU countries on average.

Box II

The “excessive deficit procedure”

The examination of compliance with budgetary discipline by the Commission focuses on the planned or actual general government deficit/GDP ratio, which should not exceed 3 per cent. An exception can be granted if the ratio has declined substantially and continuously and reached a level that comes close to the reference value, or if the deviation is exceptional, temporary and remains small. In addition, the gross debt/GDP ratio should not exceed 60 per cent, unless the ratio is diminishing sufficiently and approaching the reference value at a satisfactory pace.

As part of its monitoring function, the Commission reports on Member countries that do not fulfil one or both criteria. In writing its reports the Commission takes into account whether the government deficit exceeds government investment expenditure, as well as the medium-term economic and budgetary position of the Member State. The convergence programmes submitted by Member States are an important input into the evaluation procedure. The programmes not only deal with fiscal convergence, but also cover the full range of policies to achieve the convergence criteria. If the Commission considers that deficits are excessive, it addresses an opinion to the Council which then decides by a qualified majority whether the deficit is excessive. If the deficit is judged to be excessive, the Council makes recommendations to the Member State on measures to redress the situation. In September 1994 excessive deficits were reported in Belgium, Denmark, France, Germany, Greece, Italy, the Netherlands, Portugal, Spain and the United Kingdom, and the first recommendations were handed down in November 1994. These recommendations have not been made public. The Council judged that, given its low deficit and favourable debt dynamics, Ireland did not have an excessive deficit, despite a debt/GDP ratio far above the reference value. The Council Decision on the existence of an excessive deficit in Germany was repealed in June 1995, as Germany's deficit fell below the reference value in 1994. On the other hand, in 1995, the new members -- Austria, Finland and Sweden -- were added to the list of countries having an excessive deficit. Currently 12 out of the 15 Member States show an excessive deficit, even though more recent developments, for instance, on German deficits have not yet been taken into account.

Should a Member State fail to put into practice Council recommendations, it can be asked to provide reports, including specific timetables for action. If it continues to fail to comply, the Council can decide -- with a two-thirds majority -- on one or more of the following measures: i) to require the Member State to provide additional information before it issues bonds and securities; ii) to invite the European Investment Bank to reconsider its lending policy to that country; iii) to require the Member State to make a non-interest-bearing deposit of an appropriate size with the Community until the excessive deficit has been corrected; and iv) to impose fines of an appropriate size. These sanctions will only be applied in the third stage of EMU on Member States participating in the monetary union.

18. In addition to the excessive deficit procedure, the Council issues recommendations⁴ on the "broad guidelines of the economic policies of the Member States and the Community" (EC, 1995a). These guidelines not only aim at better policy co-ordination (discussed in more detail below) but also at reinforcing fiscal prudence. For example, the European Council recommended that advantage be taken of

4. The Council recommendations are based on a recommendation from the Commission and an opinion from the Monetary Committee. The European Parliament, the Economic and Social Committee and the social partners also provide inputs.

growth opportunities to promote fiscal consolidation. Member States should bring their budget deficits below 3 per cent of GDP as soon as possible, as a first step towards the medium-term goal of moving government accounts close to balance. Countries facing adverse demographics should aim at a surplus⁵. These views are shared by the OECD. In the OECD's Economic Outlook 58, for instance, it is argued that deficit reduction is urgently needed in several European countries irrespective of the Maastricht process. Lower deficits should help in reducing risk premia against German rates and in lowering interest rates across Europe, thereby promoting growth and investment. In line with the EU's guidelines it is also stressed that, in this broader perspective, the Maastricht deficit limit is not sufficiently ambitious.

19. The Treaty's fiscal target provisions have led to a considerable amount of debate, focusing on the relative merits of a more stringent or flexible interpretation of the fiscal criteria. For example, it has been argued that they are too stringent -- given the current state of public finances in many EU countries -- and could jeopardise the move towards monetary union (*Herbstgutachten der deutschen Wirtschaftsforschungsinstitute*, 1995). Sharp cuts in deficits could cause a recession, while growth is needed in order to reduce deficits. On the other hand, with a common currency, the deficit target is to be interpreted as the maximum acceptable above which there is a "gross error" of policy. The deficit ceiling, thus, appears to be too high to be satisfactory as an average over the cycle (see the Council recommendation above), but could be too low to accommodate cyclical fluctuations. Recently, the German authorities proposed a "stability pact" in order to reinforce budgetary discipline among countries which join EMU. The pact also stresses the need to reduce deficits to below 3 per cent of GDP and proposes automatic sanctions should countries exceed the Maastricht fiscal limits⁶. While the propositions by the German authorities could reduce fiscal flexibility considerably, Crockett (1993) and the German Institutes argued (in their *Herbstgutachten* quoted above) in favour of focusing on cyclically-adjusted deficits of less than 3 per cent of GDP, but then leave more room for fiscal manoeuvre. While the interpretation of the Treaty leaves some question marks and decisions are based on the interpretation of the Treaty by the Council, it is clear that it has left room for a fairly high degree of cyclical flexibility: the violation of the constraints does not automatically trigger fiscal sanctions, but will prompt an examination of the causes and of remedial action that should be undertaken. This leaves time to redress fiscal imbalances due to unfavourable shocks. The Maastricht Treaty provides, thus, a considerable safety margin to cope with adverse cyclical developments, provided that budgetary positions were sound prior to a downturn.

20. It is argued by some that there is little need for fiscal policy surveillance during the transition towards monetary union⁷. Convergence of inflation (and price levels), rather than fiscal positions, appears to be much more important before introducing a common currency. Such a convergence can be achieved independently of fiscal policy, given an appropriate monetary policy stance, and Figure 1 shows that there is only little cross-country correlation between deficits and inflation. However, experience of some ERM

5. Simulations of the effects of ageing populations on budget balances presented in Leibfritz *et al.* (1995), for instance, illustrate the different impact of future pension payments on overall budget deficits across the major seven countries.

6. The sanctions include a deposit of ¼ per cent of GDP for each percentage point by which the deficit exceeds the 3 per cent reference value. Should the deficit exceed 3 per cent for more than two years, the deposit would change into a fine. In addition, the debt/GDP ratio should be reduced, even when it is below the 60 per cent ceiling. This proposal was discussed in the Ecofin Council in November 1995 and met with cautious support.

7. De Grauwe (1993) argues that the fiscal criteria serve largely the political objectives of Germany, which aims at restricting the size of the union in order to dominate the making of monetary policy.

countries has shown that the pursuit of an appropriate monetary policy stance can be difficult to sustain if not supported by a credible fiscal stance. There are additional reasons for establishing sound fiscal policies during the transition phase: i) the entry of countries with little fiscal policy credibility could lead to an area-wide risk premium, the cross-country correlation between deficits and real interest rate premia being fairly strong; ii) uncoordinated policies could lead to exchange-market turbulence and undermine the smooth functioning of the ERM and of the common market; and iii) sharp swings in financial positions can lead to demand pressure with spillover effects on partner countries. The last argument is well illustrated by the consequences of the sharp change in Germany's fiscal position following unification, and i) and ii) have received considerable attention recently. Finally, and presumably most important in this context, the fiscal limits aim at providing favourable conditions for the early phase of monetary union. At the beginning of stage three of EMU the newly established European Central Bank will have to acquire credibility. Fiscal discipline seems essential for establishing a healthy policy mix and for avoiding an overburdening of monetary policy in the start-up phase.

21. During monetary union a major concern is to safeguard monetary policy credibility and financial market stability in the event of unsound fiscal policies. The writers of the Maastricht Treaty have taken a very prudent approach on this matter: the European monetary authority will be independent, the Treaty forbids monetisation of government deficits and includes a no-bail-out clause for defaulting governments. The lack of a fiscal role for the Community reinforces the credibility of the no-bail-out clause by the central bank. The fiscal Maastricht limits provide an additional safety belt. Member States with high debt levels, for example, could be inclined to lobby for higher inflation rates, which would reduce their debt in real terms. In the worst case, if a country came close to the brink of bankruptcy, it may be tempted to no longer service its debt or to repudiate it altogether. In this case, the pressure for a bail-out *via* money creation could become irresistible.

22. Experience in federal countries might shed some light on these issues. Such rules imposed by the federal government exist in some, but not all, federal OECD countries (Spahn, 1991). They appear to be rather stringent in Australia⁸, weak in Germany and Switzerland and do not exist in Austria, the United States or Canada⁹. However, legislation by all but one State in the United States considerably limits the room for fiscal manoeuvre. Overall, the deficits of lower levels of government are much smaller than those of central governments in all OECD countries, and they also show a much lower variability (Table 2). Canada and, to a much lesser extent, the United States rely on market forces in enforcing fiscal prudence, with imprudent States or Provinces being penalised by a lower credit rating. While there is differentiation in the credit rating of States and Provinces¹⁰, there are doubts about the performance of financial markets in assessing sovereign risk. The debt crises of New York in 1975 and recently in Orange County illustrate this point. There are also doubts as to whether lower-level governments would react to a change in their credit rating as private borrowers would do, because high levels of debt are often not incurred in order to raise future growth potential, but because of difficulties in pursuing necessary reforms. However, these crises have not led to national spillovers and it is difficult to find evidence that "excessive deficits" of lower level

8. In Australia, each jurisdiction draws up a plan for the financing requirement of the government and public trading enterprises. The plans are considered by the Loan Council having regard to each jurisdiction's fiscal position and reasonable infrastructure requirements, as well as to the macroeconomic implications of the aggregate figure. If a jurisdiction expects to exceed the upper bound of the tolerance limit, it is obliged to provide an explanation and to make this explanation public (Commonwealth of Australia, 1995).

9. Vanheukelen (1994) provides an overview of arrangements in Canada and Europe.

10. Of some 40 basis points in the United States and 50 basis points in Canada on average.

governments had national spillover effects in general¹¹ and fiscal restrictions in mature federations have been put in place for reasons unrelated to the existence of monetary unions (Eichengreen and von Hagen, 1995). They are strongest in federations where sub-central governments have little revenue raising power to deal with fiscal problems.

23. Sovereign risk premia -- the difference between central and lower level government bond interest rates -- are much smaller for Canadian Provinces than interest-rate differentials among EU Member States, but rise considerably in relation to debt for Provinces in Canada¹² (Figure 2). The high interest-rate premia among European countries often reflect market doubts about the sustainability of macroeconomic imbalances and exchange-rate commitments, and provide a considerable incentive for governments to rectify imbalances. However, a significant part of the interest-rate differentials in Europe reflects exchange-rate risk and not sovereign risk. Only the latter will play a role after the introduction of a single currency. Sovereign risk in EU countries is small and even smaller than for the regional governments in Canada, presumably reflecting the greater fiscal powers of EU Member countries and the view of markets that the risk of default is very small.

Fiscal stabilisation during monetary union

24. The Maastricht limits on deficits and debt aim largely at safeguarding monetary policy credibility and, as yet, its Member countries have not planned a macroeconomic stabilisation role at the Community level¹³. Co-ordination of the fiscal policies of Member States in the context of the "broad economic policy guideline" exercises is seen as sufficient for guaranteeing the effectiveness of Community-wide stabilisation. Currently, the Community cannot undertake any centralised fiscal stabilisation as the EU's spending is small (1.2 per cent of area-wide GDP in 1994), it is not allowed to run a deficit, and spending flexibility is low due to multiannual financial planning. However, the importance of national fiscal policies in offsetting temporary output fluctuations could rise with the introduction of a common currency, as national monetary policy instruments will no longer be available. Reports by experts, such as the MacDougall Report (EC, 1977), the Forte Report (EC, 1979) and EC (1993a) have addressed the issue of strengthening Community-wide stabilisation mechanisms, all arguing in favour of more centralisation; and evidence from existing federations, as well as unitary states, shows that expenditure and revenue flows between levels of government can provide a substantial cushion against temporary regional output fluctuations.

25. There are two main reasons for favouring a central stabilisation role, be it by co-ordination of Member countries' policies or the centralisation of some spending and revenue functions: the pooling of risks against adverse cyclical developments and spillover effects of national policies. Given the openness of EU Member countries, a significant proportion of additional government spending flows into imports, thus

11. In a wide-ranging survey of experience in federal and unitary countries, Eichengreen and von Hagen (1995) provide only one example: the Australian central bank financed State deficits in the 1930s. However, the cause of the crisis was a deflation, not inflation.

12. The narrowness of interest rate differentials in Australia may have partly reflected market perceptions that the Commonwealth would assist any State running into serious financial difficulty.

13. The effectiveness of fiscal policy in stabilising aggregate demand is not discussed here. In an extreme case, if Ricardian equivalence were to hold, budget deficits would be irrelevant as households change savings in response to changes in government deficits. The empirical case in favour of Ricardian equivalence does not appear to be strong.

raising demand abroad. On the other hand, the country has to bear the full burden in terms of higher debt or tax rates¹⁴. The likely consequence is that governments, especially those of the smaller and more open economies, feel incapable of providing an adequate amount of stabilisation¹⁵. In addition, a fiscal stimulus in a large Member country could jeopardise inflation control and raise interest rates area-wide. A second reason for centralising stabilisation policy is the insurance principle. Insurance is based on pooling imperfectly-correlated risks over a large number of nations. Countries would, for instance, pay into a common pool when growth is above trend and receive transfers when income growth drops below trend.

26. In establishing a wider role for Community-wide fiscal stabilisation, it is useful to distinguish between permanent and transitory, common and regional and symmetric and asymmetric shocks. There is an extensive literature on the nature, frequency and size of such shocks (see Eichengreen, 1993 for an overview). The literature yields conflicting evidence on whether they are more important in the EU countries as compared with the regions in the United States, and the implications for fiscal policies in a monetary union are far from clear-cut (Buiter, 1995). On the other hand, most research agrees that the European economies are relatively rigid and adjustment to shocks is slower than in the United States. Most important in this context is the unsatisfactory operation of labour markets in most European countries. During monetary union, adjustment to permanent shocks will have to be largely achieved either by geographical mobility of labour or by more flexibility of regional wages and prices, and in the short-run greater flexibility would reduce the need to rely on fiscal policies to cushion adverse economic developments.

27. In the case of adverse permanent shocks, neither the insurance nor spillover arguments favour aggregate stabilisation, as countries are permanently worse off and changes in relative prices are needed in order to adjust to the new situation. Transfers or borrowing would only seem justified for financing the reallocation of resources. In the worst case, fiscal policy action could delay the necessary adjustment and reduce medium-term growth prospects further.

28. This leaves the case of transitory shocks. Fiscal measures to mitigate transitory asymmetric shocks have been intensively researched, usually by investigating the importance of regional fiscal stabilisation provided in existing federations. Goodhart and Smith (1993) provide an overview of research results and their own estimates. In a widely-cited study, Sala-i-Martin and Sachs (1992) estimate that federal taxes and transfers in the United States offset regional per-capita income deviations from the national average by between 35 and 44 per cent¹⁶. Their estimates suggest that regional stabilisation is an important element in fostering cohesion in monetary unions. Von Hagen (1991), on the other hand, finds that this offset amounts only to 10 per cent, pointing to a low degree of stabilisation provided by the central US government¹⁷. Other studies (Bayoumi and Masson, 1994; Goodhart and Smith, 1993; and Pisani-Ferry *et*

14. However, small open economies will find it easier to redress fiscal imbalances, because a significant part of the economic impact will be felt elsewhere.

15. However, in the absence of exchange-rate risk, the possibility to borrow in a common currency could reduce the budgetary costs of national fiscal policies.

16. The estimated tax and transfer elasticities show by what percentage a region's taxes and transfers change (relative to the rest of the country federal taxes and transfers) when its income changes by 1 per cent holding constant the changes in U.S. aggregate income.

17. The estimates of Sala-i-Martin and Sachs are in levels, while those of von Hagen are in first differences. The large difference in results points to the important issue of separating redistributive from stabilisation effects in such estimates. As the study by Sala-i-Martin and Sachs captures largely redistributive effects, their estimates are included in Table 16.

al., 1993) yield results which are in between these two estimates. According to similar exercises, interregional stabilisation is fairly low in Canada, intermediate in the United Kingdom and high in France and Germany (Table 3). In Germany, stabilisation is due to a considerable extent to interregional transfers. The German case shows that stabilisation need not arise necessarily out of the central budget.

29. Evidence on the importance of centralised stabilisation is inconclusive as estimates vary considerably across countries, and even vary significantly for the same country, as differences in data sets and estimation procedures have a strong influence on results. In addition, an important difference between existing federations and the EU is that EU countries have fiscal autonomy (apart from the Maastricht limits), while regions in federations have only limited possibilities to stabilise demand. Bayoumi and Masson (1994) present cross-country estimates for five EU countries, which show that stabilisation performed by national governments in the EU is comparable to that in the United States or Canadian federal fiscal systems. This suggests that there is no strong case for centralising stabilisation at the EU level¹⁸.

30. This finding is corroborated by OECD estimates on the impact of automatic stabilisers on government borrowing (OECD, 1993). These estimates show the change in taxes, transfers and unemployment benefits with respect to a 1 per cent change in GDP. The impact of the automatic stabilisers is much stronger in most continental European countries than in the United States, Japan, the United Kingdom or Australia (Figure 3). The differences reflect the considerable variation in the size of the public sector, and in particular the importance of tax and transfer revenues and the progressivity of tax schedules. However, while national budgets in most EU countries provide a high degree of income smoothing, the effects of automatic stabilisers on activity vary widely, depending on the size of trade flows, savings behaviour and the degree of flexibility in product and labour markets. Among the smaller European countries, the degree of output smoothing due to automatic stabilisers only matches those in the major countries when automatic stabilisers are very strong.

31. In addition, the experience of countries which have tied their currency to the Deutschmark for a long time -- Austria since 1974 and the Netherlands since 1979 -- does not provide compelling evidence of a need for an EU-wide stabilisation mechanism (Hochreiter and Winckler, 1993). While Austria, for instance, had to cope with asymmetric temporary shocks¹⁹, these were largely domestic fiscal shocks: following the first and second oil crises, fiscal policy in Austria was more expansionary than in Germany, leading to balance-of-payments problems, but these developments were reversed later on. Hochreiter and Winckler also argue that further trade integration and structural adjustment following the tight exchange-rate link have reduced the likelihood of asymmetric permanent shocks (for instance, wage shocks). In addition, greater flexibility of goods and labour markets has diminished the need for macroeconomic policies to cushion asymmetric disturbances.

32. While the case for a central stabilisation scheme does not seem particularly strong, it would depend importantly on the degree of flexibility left by the fiscal rules for safeguarding central bank credibility. Judging by the experience since 1980, the standard deviation of deficit/GDP ratios is fairly small in most large economies, but considerably higher in some of the smaller economies, especially in Nordic countries, Ireland and Portugal (Table 4). The table also suggests that, in addition to the automatic stabilisers, discretionary fiscal policies have contributed significantly to the overall variability in fiscal

18. Italianer and Vanheukelen (1993) show that, in order to achieve about the same amount of regional stabilisation as in the United States, fiscal flows to cushion asymmetric temporary output developments among EU countries need not be large.

19. In addition, there were instances of faster wage inflation in comparison with Germany and the collapse of the state-owned industries in the early 1980s.

deficits. Even if countries aim at budget balance over the cycle, they could have considerable problems in adhering to the Maastricht limits, if future recessions were to be as severe as those in the 1980s and early 1990s. A significant reduction in fiscal flexibility, as would be inherent in the German "stability pact", could make the case for a central stabilisation scheme more compelling.

33. Further integration in the EU could either strengthen or weaken the case for centralisation: i) it could limit the ability of EU Member countries to carry out stabilisation because of increasing tax harmonisation and factor mobility; ii) it could lead to less regional concentration of industries, implying stronger co-movements in economic developments and thereby provide more co-insurance; and iii) it could trigger greater industrial regional specialisation, which would make industry-specific disturbances more likely to be concentrated in single countries. Integration has led to strong regional concentration in the United States, while the opposite has generally been the case thus far in the European Union.

34. Common symmetric developments across the EU raise a different set of questions. The EU will be the only economic union with a common monetary policy, but a largely independent setting of fiscal policy by Member States (independent, apart from observing the Treaty criteria). As any role for the EU's budget in overall stabilisation can be ruled out in the foreseeable future, this poses the problem of co-ordination of fiscal and monetary policies over the cycle and in the face of common symmetric shocks. Procyclical fiscal policies, especially in a large country, could have strong spillover effects on other countries, as they would influence the course of EU-wide interest and exchange rates. The fiscal expansion in Germany following unification illustrates this point (Englander and Egebo, 1993) and Courchene (1993) argues that the fiscal expansion in Ontario in the early 1990s jeopardised Canada's inflation targets and federal macro-economic policy objectives, even though Ontario's debt and deficit would have remained below the Maastricht fiscal reference values. The rules on fiscal discipline may help in fostering monetary policy credibility, but do not ensure fiscal prudence over the cycle.

35. It is clearly difficult to judge the results of policy co-ordination, which has existed in principle since the Rome Treaty. For instance, policy co-ordination has not prevented a sharp rise in government indebtedness of EU countries since the early 1980s -- an experience also shared by many OECD countries outside the EU -- and there has been virtually no relationship between the primary budget deficit and the output gap for the EU-12 since the 1980s (Figure 4). If anything, policy appears to have been mildly procyclical. For example, many EU governments failed to consolidate budget deficits sufficiently in the strong growth period in the late 1980s and were then obliged to cut deficits in recent years, even during periods of weak economic activity. This was not only in order to satisfy the Maastricht fiscal criteria, but also out of a concern that budgetary positions are unsustainable. However, in some countries, tighter fiscal policies could not be offset by easier monetary conditions due to the exchange rate policies pursued in the ERM.

36. The awareness that the move towards EMU gives rise to greater interdependence led to the introduction of the "broad economic policy guidelines" exercise in 1993. The broad guidelines are a key reference document for the conduct of economic policy in the Community as they represent a synthesis of the Community's consensus on economic policy. They lay out a medium-term strategy for achieving the necessary degree of convergence to ensure a smooth transition to stage III of EMU and for generating strong non-inflationary growth. They cover both macroeconomic and structural policies, outline Community goals and also give country-specific recommendations. While it would seem important to co-ordinate EU-wide fiscal and monetary policies over the cycle, this is likely to be a difficult task: different countries will have a different appreciation of the state of the world and on the overall necessity to act; and it will not be easy to determine which country should act and to what extent. Given these difficulties, there is a risk that discretionary action will be too timid and too late. In this context, the "broad economic policy guidelines" exercise helps in achieving a policy consensus among Member States, but still has to prove that it is an

effective basis for policy co-ordination. However, Community surveillance is a learning-by-doing process, and the Maastricht procedures, which draw upon past experience, give more opportunities for improving the co-ordination process. In this respect it is worth noting that the broad guidelines, the essential document in the Community surveillance, as well as recommendations for countries not living up to these guidelines, can be adopted by qualified majority.

III. Taxation

37. There are currently no plans to raise Community revenues further than provided for by the Edinburgh Agreement or to assign new taxes to the Community (Box 1). As a result, discussion of taxation issues in the context of European integration mainly revolves around the need for greater co-ordination of national tax systems, particularly after monetary union is achieved. A major issue is the rising mobility of tax bases. Mobile factors, particularly financial services, have an incentive to move from locations with high levels of taxation and search for host countries with lower taxation and favourable economic conditions, although the direction of mobility will depend on many factors in addition to taxation. Differences in tax regimes can alter the direction of trade and of factor flows, and associated welfare losses are accentuated by increasing mobility. National governments have little incentive to take into account the cross-border spillover effects of their decisions, and tax competition could result in taxation of mobile factors at an inefficiently-low level. As well as altering trade and production patterns, differences in taxation will also have implications for tax revenue allocation across countries. Cross-border fiscal externalities can also arise due to limitations to the exchange of information, for instance due to bank secrecy laws. The Community could, thus, also play a role in the design of systems to disseminate an appropriate amount of tax information between national governments, and in ensuring that tax enforcement principles do not differ too much across countries.

38. The scale of the spillover effects from taxation is a function of the extent to which Member States' tax systems differ and the degree of market integration of different markets. In dismantling impediments to the functioning of the internal market, the European Union has faced important tax policy issues associated with greater economic integration. The potential for spillover effects is currently highest in the case of goods, some services sectors and capital taxation, as integration is already very high²⁰. On the other hand, labour mobility is still low in general, and considerable variation in taxation levels may not lead to high costs of distortions (Matthes, 1995), but is significant for some labour market segments, such as highly trained specialists. Any move towards a better co-ordination of the tax systems of Member States is constrained by the marked differences in taxation as a percentage of GDP and in tax structures (Figure 5). As long as priorities concerning expenditure levels differ markedly²¹, considerable differences in overall levels of taxation are inevitable. If factor mobility were to become high overall, stronger fiscal competition could weaken the fiscal powers of the nation state. The scope for redistribution via the tax system could be diminished, if tax competition would lead to a close link between public service provision and taxation and the overall capacity to finance the existing continental European welfare states could be reduced. If this were the case, the choice would be between maintaining a largely decentralised approach to tax policies, but with social spending substantially less extensive than at present, or co-ordination of tax policies within the Community, which would allow the provision of social insurance and services to be retained at the present scale. As fiscal competition does not stop at the borders of the EU, harmonisation might also have to be sought with other major players in global markets.

20. Many of these issues are discussed in detail in OECD (1994a). Also Valenduc (1994) provides a good overview of the issues.

21. In the early 1990s the expenditure/GDP ratio was 43 per cent in Ireland and 66 per cent in Sweden.

39. The arguments for EU-wide co-ordination of tax systems or for tax competition also depend on views about how extensive are the inefficiencies introduced by differences in tax systems as compared to the inefficiencies created by government failure. If governments are judged to be ineffective, tax competition will be welcome, as it would act as a brake on a government's capacity to appropriate and waste resources. It is, unfortunately, very difficult to quantify the aggregate costs due to these inefficiencies.

Tax harmonisation and co-ordination in the European Union

40. The main tax harmonisation measures adopted in the EU relate to tax rates on goods and services (VAT and excise taxes). An attempt to harmonise VAT tax bases was made in the sixth VAT directive adopted in 1977²², but a common tax base has not yet been established. Very little progress has been made in the co-ordination of taxation from capital income.

Commodity tax harmonisation

41. Prior to the completion of the internal market, there was considerable discussion about how indirect taxes on intra-EU trade flows should be treated. The destination principle (consumption taxes are levied where the good is consumed), which has been in operation since the mid-1970s in all Member States, ensures production neutrality, even if tax rates and bases differ across countries as indirect taxes do not discriminate between foreign and domestic producers, and exports are exempt from domestic taxation²³. The destination principle, thus, appears most appropriate for commodity taxation, but requires the monitoring of cross-border goods and services flows. Its continuation in an integrated economic area would involve a heavy administrative burden.

42. Under the origin principle goods and services are taxed where they are produced, regardless of where they are consumed. Imports are not taxed and there is no rebate for exports. The final tax burden at the consumption level is a weighted average of the effective tax rates in the various countries of production. Although the origin principle is often regarded as superior to the destination principle because it can be applied without border controls, it is difficult to administer under a credit-type VAT. In addition, without close harmonisation of rates and bases, it is likely that extra EU-imports would be channelled through the lowest-tax country, which leads to a considerable shift in taxation across countries. Without much better ex-ante harmonisation, the move from the destination to the origin principle could also lead to shifts in production patterns and tax bases²⁴.

22. The Directive defined the sectors which are exempt from the VAT, for instance, financial institutions and public and non-profit institutions and services in the public interest, such as postal services and medical care; in addition, there are special schemes for small businesses and farmers.

23. In practice, some distortions still arise in the European VAT systems for trade by tax exempt sectors.

24. Under the assumptions of no international factor mobility and the flexibility of either factor prices or the exchange rates, consumption and production taxes lead to equivalent outcomes, even with differing tax rates. When moving from one principle to the other, the exchange rate can adjust to offset differences in tax-inclusive prices at which goods are traded. Real incomes and the volume of trade will be unaffected. However, with most countries applying different tax rates and a number of exemptions, production patterns would be distorted. In addition, the restrictive assumptions of this simple model do not hold.

43. With the advent of the internal market, the Community adopted a dual system, which allows fiscal discretion and imposes few budgetary adjustments. As far as VAT is concerned, the destination principle remains intact for the business sector, but the origin principle applies to the purchases by individuals, except for some special schemes. In addition, tax rates have been harmonised to a certain extent: by the 1st January 1993, the luxury VAT rates were abolished, the standard rate set to at least 15 per cent and a maximum of two reduced rates were allowed, which must be equal to or greater than 5 per cent (Table 5). Transitional arrangements allow an intermediate rate of at least 12 per cent on goods previously taxed at -- but no longer qualifying for -- reduced rates. In addition, Member States may maintain super-reduced rates (1 to 4 per cent) and a zero rate on a limited number of products taxed at those rates before 1991. There are a few major exceptions to the current system. In order to avoid fiscal competition, special schemes were set up. For the purchase of new vehicles, the destination principle is kept. For distance sales, the origin principle applies up to an annual ceiling, but above that ceiling, tax is paid in the country of destination. The directives include provisions for a review of the VAT transitional arrangements every two years.

44. While ensuring the effective abolition of fiscal controls at borders, the VAT transitional arrangements rely on complex mechanisms in the application of the common VAT system to enterprises. Traders have encountered many difficulties, as the tax treatment of intra-Community transactions is still not homogeneous. Monitoring of goods and services is still necessary, and supplies for other Member States need to be identified separately. In addition, as arrangements relating to rates and bases differ across countries, a complex machinery of identification and declaration has become necessary (EC, 1994a). Any changes to current arrangements will depend on a number of factors :

- The degree of harmonisation achieved. The range of rates applied by Member countries has fallen markedly since 1987. The luxury rate was abolished and some convergence has been achieved at the standard rate, as shown by the fall in the cross-country standard deviation, from 3.9 per cent to 3.1 per cent, since 1987. However, at the beginning of 1996, standard rates still ranged from 15 to 25 per cent, while reduced and intermediate rates varied from 5 to 12.5 per cent. If the origin principle were to be applied also for businesses, further harmonisation of rates and bases is likely to be necessary. As budget deficits are high in some Member countries, an early change seems unlikely.
- The degree to which the transition period will have been successful in keeping fraud and administrative costs low. This is directly linked to smooth co-operation between the different tax authorities. Since January 1993, the VAT information exchange system (VIES), involving identification numbers and electronic exchange of data, has been operating, although it is too early to assess its impact on fiscal controls and their effectiveness²⁵ (Aujean, 1994).

45. In the first review of the transitional VAT arrangements -- based on information available some 18 months after their introduction --, the Commission concluded that the abolition of fiscal controls did not give rise to VAT-rate-induced distortions in competition or trade flows, as special schemes for distance selling were put in place (EC, 1994a). The review did not propose substantial changes to the level or structure of rates. While cross-border shopping was already important before the single market was created, the complexity of the transitional scheme became an impediment to reaping the benefits of the single market, and some smaller enterprises even stopped buying or selling in other Member countries (EC, 1994b).

25. Unexpected revenue short-falls were reported in Germany, France and the United Kingdom, but they cannot clearly be related to a rise in tax evasion.

46. Excise duties generate between 5 and 16 per cent of total tax revenues in EU Member countries (Table 6) and usually apply to goods with a low price elasticity. The taxation of alcoholic beverages and tobacco also aims at altering consumption patterns. Excise duties can affect trade flows and tax base flight could be large for high-tax countries. Trade effects can also arise if excise taxes affect inputs into the production of export goods, as occurs with taxes on mineral oils. In addition, as rates apply to specific goods, excise taxes can be used for protectionist purposes. The Commission proposed completely harmonised rates of excise duty on mineral oils, tobacco products and alcoholic beverages in 1987²⁶, as part of the preparation of the internal market. Ultimately, however, a system of minimum rates was adopted, which Member States had to respect from 1 January 1993. The new excise duty regime also includes harmonised structures for charging excise duty and common rules for holding and moving excisable goods. The regime also allowed Member States to maintain or introduce indirect taxes on other goods and services, provided that such taxes do not give rise to border crossing formalities. A common example of the operation of this provision has been the replacement of excise duties on cars by registration taxes.

47. Even after the progress towards harmonisation since 1993, the dispersion of excise rates has remained very wide. Differences are particularly marked for duties on alcoholic beverages, with Denmark, Ireland and the United Kingdom continuing to apply high rates whereas southern Member States such as Greece, Spain, Italy and Portugal impose very low rates. In general, Member States and traders agree that excise duty rates need to be further harmonised, but the extent of future harmonisation remains unclear. Difficulties with further harmonisation arise mainly because the industries concerned want to harmonise at a low level and Member States at their current level of taxation. But also industry-specific considerations may play a role: for cigarettes, for instance, the Northern Member States generally favour specific taxation, largely because budgetary forecasting is easier and because it is a better means of influencing behaviour. Multinationals also prefer specific taxation, as it applies equally to all cigarettes, regardless of the underlying prices. The Southern Member States, which are tobacco producers, prefer ad valorem taxation, as this tends to protect domestically produced cigarettes which are cheaper than imported Virginia tobacco (Cnossen, 1992).

48. Effective consumption tax rates, estimated by relating all indirect taxes to private consumption expenditure and non-wage government consumption outlays, are much higher in Europe than in North America or Japan and vary considerably in Europe -- from 13 per cent in Spain to 32 per cent in Denmark in 1993 (Table 7). Tax harmonisation measures taken so far have done little to reduce the dispersion of rates. However, Greece, Portugal and Spain raised rates significantly after accession in the 1980s.

49. Experience in federal countries can shed light on the eventual need to harmonise indirect taxes. For example, in the United States and Canada local governments levy retail sales taxes²⁷. Tax rate dispersion is small across most States of the United States, with the rate varying between 4 and 6.5 per cent²⁸. The exceptions are New Hampshire, Delaware, Montana, Oregon and Alaska, with no retail sales taxes at all. Most States have uniform rates, but some allow lower rates or exemptions on cars, food or pharmaceuticals and some States exempt services. In the United States, as in the EU, the co-ordination of State sales taxes, especially with the enforcement of the destination principle in interstate sales, has caused

26. The first attempt towards harmonising excise duties dates back to 1972.

27. The design of retail sales taxes and VATs is different. However, trade effects are similar.

28. Regional tax differences are larger than suggested by the rates applied by the States as also local retail sales taxes exist. Apart from the sales taxes, excise taxes on alcoholic beverages and tobacco exist. Their variation is much higher and poses more serious problems in terms of tax base migration.

concern. Given that differences in rates are small, the effects of cross-border shopping are only significant in smaller States. However, revenue lost through mail-order shopping, which is not subject to the destination principle, can be considerable²⁹ (Bovenberg and Horne, 1992). In Canada, a federal VAT system exists in tandem with a system of provincial sales taxes. Provincial bases and rates are not harmonised and the variation in rates is higher than in the United States: there is no tax in one province and in the others they range from 6.5 to 12 per cent. Despite the relatively large dispersion in tax rates, differential retail sales taxes have not attracted much attention in Canada, because the country is sparsely populated and there are few urban border regions, so that the volume of cross-border shopping is small³⁰. In addition, provinces have reached agreement with out-of-province firms (including mail-order firms) on the collection of taxes on sales to their residents.

Taxation of corporate income and of income from savings

50. Given the high mobility of capital, taxes levied on capital income are more vulnerable to tax competition and tax evasion than most other taxes, although highly skilled labour, particularly professional labour, may also be very sensitive to tax differentials. Variation in the effective rates of taxation can create distortions in the international allocation of capital and savings. Two principles provide a useful benchmark for evaluating whether taxation interferes with an efficient allocation of investment: capital import neutrality prevails if effective tax rates are the same, irrespective of whether the recipient of capital income is a resident or non-resident (source principle). Capital mobility will tend to equalise after-tax returns of investors across different countries³¹ and eliminate distortions to the supply of capital. Capital export neutrality aims at ensuring that taxation does not interfere with decisions on where to invest and investors face the same tax rates on investment, irrespective of where they invest³² (residence principle). Capital mobility will tend to equalise pre-tax rates of return and eliminate distortions in the demand for capital (OECD, 1994a and Daly, 1995).

51. Corporate tax systems differ markedly across EU countries and are far from ensuring export or import neutrality³³. Besides the differences in tax rates and bases, the tax treatment of cross-border income flows varies. The latter concern the imposition of withholding taxes at the source and the methods and extent of relief of double taxation for the recipient of capital income. In addition, methods of allowing losses incurred in one Member State to be offset against the profits in another Member State differ (EC, 1992a). Similar problems arise with income taxation of unincorporated enterprises and of portfolio investment income flows.

29. For car purchases the destination principle is enforced upon registration of a car in a similar way to the EU's special scheme.

30. However, the large difference in tobacco taxation between Canada and the United States, forced the Canadian government to lower tax rates considerably.

31. In order for the principle to hold, income from investment abroad needs to be exempt from taxation in the capital-exporting country.

32. It implies taxation of foreign sources of income, whether or not it is repatriated.

33. It is very difficult to judge the impact of distortions on locational decisions, as tax wedges depend on the type of investment, mode of financing and many other factors. In addition, differences in corporate tax wedges are just one among many factors influencing locational decisions.

52. The Commission was concerned about the potential effects of the wide divergences in Member countries' capital income tax systems and already put forward proposals for a more uniform tax treatment of income from capital at the end of the 1960s. A number of EC directives limiting the extent of double taxation were adopted, but attempts to harmonise³⁴ corporate tax bases and rates in the mid-1970s were not successful. However, the directive on mergers (1990) removed tax disadvantages associated with international mergers³⁵. In the early 1990s, the Ruding Committee's recommendations³⁶ (EC, 1992a) for a move towards harmonisation were only partially endorsed by the Council. In the Council's view, Community action on business taxation should be limited to the minimum necessary and follow a "pragmatic and progressive approach" (Council, 1992). The Council also recognised the importance of ensuring adequate and effective taxation.

53. Despite the absence of EC directives on corporate taxation, reductions in statutory tax rates coupled with base broadening has occurred in the EU and also elsewhere. Corporate tax rates have converged to a rate of between 30 and 40 per cent (Table 8). Given the base broadening and the absence of adequate data on tax bases, it is difficult to judge whether tax competition has led to lower effective tax rates and corporate taxes as a per cent of GDP have shown a trend decline in some EU countries, but have risen in others³⁷ (Table 9). Such data are unlikely to be adequate to judge this issue, because tax competition is strongest for new investment projects and may influence average ratios only with a considerable lag. For instance, many examples of preferential tax regimes in and outside the EU have caused concern, as they open up new avenues for tax avoidance and evasion and the success of certain preferential schemes in the Union suggests that the importance of tax competition is growing. Tax competition also exists in the United States and Canada, where subnational jurisdictions are quite free to compete for investment³⁸. However, the federal corporate tax rate puts a floor on tax competition and the incentive to compete (for instance, States or Provinces inducing companies to shift income in their favour) is reduced by federal transfers, which are designed to compensate lower levels of government for their different tax capacities.

54. The risk of tax competition is still more relevant in the case of withholding taxes on cross-border flows of interest from bank deposits and portfolio investments. There is ample evidence that the large current tax differences (Table 10) induce financial investment in countries which do not tax interest paid to non-residents or do not have comprehensive exchange of information agreements, as Member countries

34. Main proposals were as follows : a single statutory corporate income tax rate of between 45 and 55 per cent, a common partial imputation system coupled with the source principle, and a 25 per cent withholding tax rate on all dividends except those distributed by a subsidiary to a parent company in the EC.

35. The taxation of capital gains relating to the assets of the companies involved is deferred until they are realised, as is the case for domestic mergers.

36. The report argued for adopting a minimum and maximum corporate tax rate of 30 and 40 per cent, respectively, the elimination of double taxation and stronger tax base harmonisation.

37. These data need to be interpreted with care, as they are influenced by stronger profitability since the early 1980s and a rising number of businesses that are incorporated.

38. However, instances of cross-jurisdictional double taxation and possibilities for profit shifting are rare and tax bases are largely harmonised. In addition, the tax systems are much simpler due to common accounting and legal practices and a single currency.

compete to attract or retain financial institutions and funds³⁹. In 1989, the Commission proposed a directive to establish a common minimum withholding tax of 15 per cent for interest earned on savings within the EU. The directive is still before the Council.

Tax competition and the size of governments

55. With the freeing-up of trade, differences in taxation and ways of financing welfare benefits could have an impact on location decisions. By influencing wage, employment and tax revenue developments this could lead to "social dumping" and lower social expenditure. While the Maastricht Treaty includes an Agreement on Social Policy -- signed by all Member States except the United Kingdom -- it largely concerns issues such as health, safety and working conditions. However, the Commission's White Paper on Growth, Competitiveness and Employment (EC, 1993b) found that the high level of non-wage labour costs is prejudicial to employment, and recommends to reduce them by 1 to 2 per cent of GDP for the EU as a whole in order to promote employment. Three major questions arise in this context: Will rising labour mobility lead to a significant shift in tax bases? Should the way in which social outlays are financed be harmonised? Could competition for non-labour tax revenues reduce the scope of the welfare state?

56. As often documented, migration flows in the EU are low compared with North America and have not risen much with the internal market. Developments in Switzerland, a long-standing European federation with linguistic barriers, provide evidence that tax-induced migratory flows are likely to remain low. In Switzerland a strong link between the provision of public services and the associated tax burden is widely accepted, and the fiscal system of the "*cantons*" is largely unconnected with that of the central government (Blöchli and Frey, 1993 and King and Owens, 1991). Each *canton* sets its own household income taxes and decides on the public services to be provided. This leads to some competition between cantons (and municipalities), but household income and property taxation continues to vary considerably across cantons. Setting the average for Switzerland at 100, the index of personal and property taxation of cantons relative to the average varied between 75 for Zürich and 131 in Fribourg in 1994. Given the low mobility of individuals in Europe, there appears little risk that divergent national progressive income taxes will prompt massive migration, at least in the medium term (Maré, 1994). However, in Switzerland, too, the social security system is unitary.

57. Theory would suggest that wide differences in social security contribution rates (and indirect labour costs in general) can be sustained as long as mobility remains low. From the point of view of a producer, indirect labour costs are no different from any other cost component. With trade integration, differences in non-wage costs do not matter, if wages are sufficiently flexible. Data on levels of unit labour costs suggest that the large differences in wage and indirect labour costs in the EU are partly compensated by differences in productivity levels and other cost components (Table 11 and Table 12). However, problems are likely to arise if wages show little flexibility or no flexibility at all, as is the case with minimum wages. Trade integration and fiercer fiscal competition could make it more costly to achieve a given equity objective.

58. With competitiveness considerations increasing in importance as trade becomes more intense, countries are likely to think harder about raising labour costs further so as not to induce rises in unemployment; and they may resort to cuts in indirect labour costs so as to reap growth and employment

39. Valenduc (1994) shows that effective rates of taxation are often low in countries with high statutory tax rates due to tax exemptions and deductions.

stimuli or to speed up a move towards labour market equilibrium⁴⁰. This has apparently happened in Australia, where States in good budgetary shape have led a move towards reducing pay-roll taxes (Ryan, 1995) with the result that the share of pay-roll tax receipts in total tax receipts of the States fell from 35 per cent in the mid-1970s to 25 per cent in 1992/93⁴¹. Even though there is anecdotal evidence that tax competition in the EU has become stronger, it is difficult to come up with solid evidence that it has led to a fall in effective rates of taxation in Europe. Fiscal competition with countries outside the EU has not posed much of a problem yet, except for the taxation of income from financial savings. However, it may have reduced the revenue-raising power of EU Member States, and government revenue as a per cent of GDP has hardly changed since the early 1980s (Figure 6). Together with a continuing rise in expenditure, this has meant that the average budget deficit of the EU's Member countries has risen to unsustainable levels and government debt has increased sharply. It has, on the other hand, focused attention on expenditure reforms, which had often been delayed for too long.

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40. The OECD's Jobs Study (1994b) summarises the empirical evidence on this issue as follows: Increases in taxation are often -- but not universally -- found by econometric studies to affect real wages and unemployment.
41. Fiscal competition reduced the share of receipts from estate and gift duties from 10 per cent in 1970 to zero in the early 1980s.

IV. A review of some spending functions

59. At 1.2 per cent of the EU-wide GDP, spending by the Community is very small when compared to central government and social security spending by OECD Member countries (Table 13). Even in the most decentralised countries, central government spending (excluding social security and interest payments) is higher than 10 per cent of GDP. Most of the spending at the Community level is on agriculture, with the primary goals of stabilising internal markets and providing farm income support, and on regional funds, which aim at strengthening economic and social cohesion. The Community also provides funds for research and development, largely in order to promote cross-country research co-operation. In the following paragraphs, the reasons for the centralisation of these spending items will be discussed as well as whether Community spending is in line with the spirit of subsidiarity. This is followed by an overview of Community policies constraining national subsidisation, which aim at ensuring undistorted competition in the internal market.

60. The Maastricht Treaty has laid out several objectives, which may widen the responsibilities of the Community. Among these objectives are the implementation of a common defence and security policy. According to opinion polls (Eurobarometre, 1995), 51 per cent of EU citizens are in favour of an EU policy in this field and 78 per cent are in favour of close co-operation (Figure 7). Foreign policy also ranks high as an EU-wide concern. Closer co-operation or EU decision making in these areas may not have implications for the EU budget, as long as implementation remains at the Member State level, but could affect spending in Member States. Defence and foreign policies are government functions typically carried out at the central government level, also in mature federations (Table 14). Major reasons for centralisation in the defence area are scale economies and the avoidance of free-riding. Scale economies could also be present in providing foreign policy services. In addition, a common position is likely to strengthen negotiating power in external affairs.

61. Apart from defence and foreign policy, there are few other expenditure functions, which are highly centralised in all federations and in many cases competences are split between the federal and sub-federal levels of government. Again, spillovers and economies of scale are major reasons for centralisation. While it is impossible to cover all spending programmes typically covered by central governments in federal countries, the rest of this Section illustrates with two examples -- environmental policies and social spending -- whether partial centralisation would make economic sense. Community involvement in environmental policies may help in internalising cross-border environmental externalities, while differences in social spending by member governments could lead to migration. A report by experts (EC, 1993a) concludes that Economic and Monetary Union is sustainable with some additional outlays. A rise of EU expenditure to 2 per cent of GDP would be sufficient, which would leave expenditure levels considerably below central government spending in federations.

Spending under the umbrella of the Community

Spending on agriculture

62. While its original mandate also included allocative goals, the Common Agricultural Policy (CAP) has increasingly shifted towards supporting farmers' incomes, providing adjustment assistance to a declining sector. Debate about reform focused on the idea of separating income and social objectives from policy measures aimed at output price support. A start in this direction was made with the 1992 CAP reform package, to be progressively implemented over three years. A main feature of the reform was a decrease in support prices for cereals, combined with compensatory payments to farmers that enrolled in a set-aside scheme. Environmental measures, structural fund initiatives and national programmes have become prominent accompanying measures to the CAP reform. Although the CAP reform has led to an overall increase in budgetary expenditure, the partial switch to direct payments from general price support has reduced consumer transfers and improved transparency in farm support. Combined with the Uruguay Round Agreement on Agriculture, especially in relation to reducing export subsidies, the changes represent an improvement in the market orientation of the CAP. Even after these reforms policy still relies on price support measures to a considerable extent and distortions remain very significant in sectors that have been less affected by the CAP reform (for instance, dairy products and sugar).

63. Discussions have continued about further reform of the CAP, particularly in the context of the anticipated enlargement of the EU and the prospect of a new round of agricultural trade negotiations at the end of the 1990s. The Commission adopted an Agricultural Strategy Paper in November 1995, which endorsed the concept of deepening the reform and extending it to other commodity sectors. This paper envisages a clearer distinction between the price and income objectives of the CAP and a greater emphasis is placed on environmental and rural development objectives. While a complete phase-out of market support is not envisaged in the Commission paper, further reform along these lines should allow a better use of resources. The EU's responsibilities concerning agriculture would then become more closely aligned with those for other sectors, that is to establish a common framework within which resource allocation responds to market forces and competition, domestically as well as at the international level.

Cohesion and interregional equity

64. Whether integration leads to convergence in per-capita incomes is a subject of debate and an important issue in determining whether there is a role for the Community to play in interregional redistribution. In the traditional trade model, trade liberalisation and higher factor mobility lead to a convergence in factor prices and per-capita income, and there would seem to be no need for redistributive measures, except perhaps if market mechanisms operate very slowly. However, if scale and external economies are important for the growth process, regional disparities could be self-perpetuating in the absence of intervention. In this case, efficiency considerations could favour interregional transfers, especially if low income levels are due to a lack of infrastructure or education. There would, on the other hand, appear little reason for providing regional funds to richer countries.

65. National income disparities across EU countries are relatively small among the richer Member States, but have remained considerable against the other countries, the rate of catch-up of poorer countries being slow. Per-capita GDP differences at the European national level are much higher than among the regions in the United States and Canada. Evidence on whether integration promotes convergence is mixed: regional disparities in the European Union shrank considerably in the 1960s and early 1970s, but further progress was much more limited thereafter, despite the fact that growth in three of the four lagging Member States has outpaced that of the EU on average (Cingolani, 1993). On the other hand, regional income

differences have shown a considerable trend decline in the United States since the 1920s, even though the redistributive effort is fairly small; and in Canada, union did not generate convergence between 1880 and 1939 and convergence has been limited since then, despite a sharp rise in redistributive effort. Comparisons with federations have clear limitations in this case, because the EU is not a nation state and the EU has been expanding, which has often implied the inclusion of regions with lower than average per-capita incomes.

66. Concern that the creation of the internal market could lead to divergent regional developments was raised in the mid-1980s and the Single Act stressed the need to “strengthen economic and social cohesion”. The accession of relatively less developed Member States also provided an impetus to give increasing attention to regional policies. Structural funds, which comprise the European Social Fund (ESF), the European Regional Development Fund (ERDF) and the Guidance component of the European Agricultural Guidance and Guarantee Fund (EAGGF), were introduced in 1975⁴². They have been considerably changed with the Single Act in order to strengthen the effectiveness of the Community's structural measures (EC, 1992b) and in 1993, a new fund, the Cohesion Fund, was added. In 1989, five priority goals for the Structural Funds were adopted: development and structural adjustment of lagging regions; conversion of areas affected by industrial decline; combating long-term unemployment, occupational integration of young people; facilitating workers' adaptation to industrial change and to changes in the production system; adjustment of agriculture and fisheries and the development of rural areas. The amount of money disbursed for interregional redistribution doubled between 1987 and 1993, rising from about 15 to 25 per cent of total EC spending, though remaining small as a percentage of the EU's GDP (0.3 per cent). However, spending is rather important for Portugal and Greece, reaching 3 per cent of GDP. Some basic features of regional spending are summarised in Table 15.

67. The funds aim largely at fostering growth of lagging economies in a particular area. They do not seek to compensate for inequality but to improve prospects that inequality will be lower in the future. In this respect the EU is rather different from mature federations and, at this pre-federal stage it is unlikely to have the political legitimacy to get more than marginally involved in interregional distribution. In mature federations, solidarity is typically a key part of the federal contract, and regional redistribution schemes aim at reducing the effect of differences in taxing capacity of lower levels of government and at reducing regional income inequality. Mature federations show a high degree of political homogeneity and the stronger the feelings of common citizenship, the more acceptable will be the idea that individuals should be entitled to a certain minimum living standard throughout the union. The importance of interregional income redistribution is illustrated in Table 16.

68. Experience in federations shows that the design of such schemes is very important: Courchene (1993), for example, argues that in Canada the generous levels of federal-provincial welfare support and interprovincial equalisation schemes have led to transfer dependency and slowed necessary adjustment. For instance, the trade deficit of the Atlantic regions with the rest of Canada is very large and, in the absence of massive transfers and their accompanying distortions, the equilibrium exchange rate for these regions would probably be much lower. However, even though wages are lower in Atlantic Canada, they are not falling relative to the rest of Canada. Indeed, over the last decade, wages were moving towards the national average and unemployment has remained very high.

Spending on research and development

69. While small in relation to EU-wide GDP, the Community's role in civilian research and development (R&D) is not negligible as EU spending in this area accounts for 16 per cent of total national

42. The European Social Fund was created in 1960.

public R&D outlays. The Framework Programme and the European Space Agency both contribute 6 per cent to civilian research spending of the Member States, while EUREKA projects, which aim at industrial R&D co-operation, and equipment outlays for fundamental research account for between 1½ to 2 per cent of the total. For the poorer Member States the Community's contribution is higher than 30 per cent, and, in co-ordination with the structural funds, were instrumental in boosting R&D outlays in these countries. The Framework programme stimulates co-operation among researchers by financing part of numerous joint projects between public and private laboratories⁴³. Spending is highest in the telecommunications, industrial and nuclear research areas.

70. Co-operation by Member States in this area helps to avoid wasteful duplication and to overcome market imperfections, when high-risk capital is involved, when R&D costs are high and when economies of scale play a role. In addition, the common market is still segmented in a few sectors, despite the Single Act. Action by the Community finds its limits by the fact that the “innovative climate” in Europe is not as favourable as in the United States or Japan, because, for example, the venture capital market is underdeveloped.

Subsidisation

71. In 1958 the Treaty of Rome laid down the objective of creating a common market, and internal barriers to trade have been largely eliminated with the completion of the internal market initiative in the early 1990s. An efficient functioning of the internal market requires *inter alia* free and undistorted competition. National competition authorities typically do not take into account transnational spillover effects of uncompetitive behaviour or subsidies, and differences in national competition laws can lead to an uneven competitive playing field. There is, therefore, a clear case for centralising competition rules, for a centralised vetting of subsidies to see whether they have community-wide implications and for a centralised mechanism for granting derogations.

72. A role for the Community in this area was established in the Treaty of Rome in two broad spheres: enterprise conduct and state intervention. State intervention includes national subsidies that might distort competition and affect intra-EU trade. Subsidies, which fall under this category, are defined by Community law, the decisions by the Commission and the Court of Justice. Member States must notify the Commission of any measures that could constitute a subsidy. The Commission then decides whether Community control applies and whether a derogation should be granted. Derogations can be granted for horizontal objectives (for instance, subsidies for research and development or environmental protection), for particular sectors (for instance, coal, fisheries and railways) or regional objectives.

73. State aids by Member States, as defined by the EC's subsidy report, amounted to 1.9 per cent of EU-wide GDP in 1990-92 on average (Figure 8), marginally lower than the 2 per cent measured over 1988-90. Intensity of subsidisation varies considerably across countries, ranging from 0.6 per cent of GDP in the United Kingdom to 3.9 per cent of GDP in Luxembourg. In its latest subsidy report the Commission expressed satisfaction that subsidies have come down somewhat despite the difficult economic situation, but stressed that the level of subsidisation is still too high for the Commission's objectives to be attained.

43. For instance, in the early 1990s, more than half of the researchers in the public sector in France took part in a project financed by the Framework Programme.

Subsidies as a per cent of GDP -- as defined in the National Accounts -- remain considerably higher than in North America and Japan, despite the Community's effort to level the playing field⁴⁴.

Should more spending functions be centralised?

Defence and security policy

74. The Maastricht Treaty sets the objective of moving towards a common implementation of foreign and security policies, including the eventual framing of a common defence policy. A major reason for close co-operation or centralisation in the defence area is the presence of economies of scale. They can be related to lower costs due to sharing the burden of providing defence internationally and to diminishing marginal costs of producing weapons. Indivisibilities could also be important (Fontanel and Smith (1991) and Teutemann (1993)): below a certain threshold, which depends on the military potential of the likely aggressor, little benefit is obtained by providing an army. In other words, an army (or a military alliance) requires a minimum size in order to be effective⁴⁵.

75. National defence capacities may be pooled either through an alliance or through centralization. Even if an alliance does not lead to the exchange of secret information or military research (so that countries duplicate intelligence gathering or research effort), the additional gains of complete centralisation in terms of economies of scale are presumably low. However, the effectiveness of co-ordination can have limitations. For example, it is unlikely to be effective if a fast military response is required. In addition, the provision of defence at the national level could give rise to significant spillovers. A country which invests heavily in its army, and is a buffer between a potential aggressor and other countries, allows the latter to devote fewer resources to their defence, thus giving an incentive to free-ride.

76. Relatively homogeneous preferences, which imply low co-ordination costs, a desire to reap the gains from scale economies and the avoidance of free-riding largely explain why defence spending is a central government function in all OECD countries. Even in Switzerland, the amount of defence spending by the cantons is negligible. On the other hand, apart from the United States, which spent close to 6 per cent of GDP on defence during the 1980s and acts as a buffer country, empirical evidence of any systematic spending differences between large and small countries, between buffer and non-buffer countries, or free-riding of smaller allied countries is very weak (Teutemann, 1993). Most European countries spend between 2 and 3 per cent of GDP. The exception were Greece and the United Kingdom, where expenditure amounted to more than 4 per cent of GDP. However, with the East-West *détente* in the late 1980s, the security threshold has diminished and defence spending been reduced significantly in many countries.

77. Most EU Member States have so far opted for a co-ordination of defence policies under the umbrella of the NATO, which provides a much larger defence club than EU-wide co-operation. No European-wide army has been created so far, even though some countries have established joint forces. These are limited in size, however. EU-specific defence policy questions are discussed in the 10-member

44. The OECD's Directorate for Science, Technology and Industry is currently investigating public support to industry. Data, which would allow comparisons between the EU, the United States and Japan, are not yet available.

45. Two basic functions of defence policy should be distinguished: a deterrent function, which aims at preventing aggressive military cross-border actions, and a roll-back or bailing-out function, which aims at restoring the *status quo* as it was prior to the act of aggression. For the roll-back function, the probability of winning is a function of the size of the army, but, for the deterrent function, the important factor is that the size of the army exceeds the threshold.

Western European Union which is still independent of the Community. A recent initiative to move the Western European Union closer to the Maastricht Treaty objective of creating a common defence policy was blocked. However, the creation of a European peace-keeping and rapid deployment force remains under discussion. Such forces would interfere only slightly with existing national defence policies and would have a limited budgetary impact outside crisis periods.

Foreign policy

78. In general, a reduction in the number of borders should reduce the need for foreign policy services, while a rise in cross-border transactions should increase it. It is useful to distinguish two components of foreign policy: the negotiation of bilateral and multilateral treaties, rules and codes; and the provision of individual services through embassies. The centralisation of the competence to negotiate international treaties could yield economies of scale due to lower negotiation and decision-making costs, and should strengthen the negotiating position through an increase in the number of members backing it. In addition to the size of a negotiating club backing a particular position, its 'quality' is important. Quality relates to the political homogeneity of the club members. In a weak club, there is a risk of opting-out or paralysis.

79. In the sphere of foreign affairs, the Community plays a very important role in setting foreign trade policy. A central foreign trade regime is necessary to ensure the functioning of the internal market. All decisions which are general in scope or considered important in policy terms, are taken by the Council, usually based on a proposal by the Commission and the Commission is responsible for implementation and day-to-day management, which takes place in close co-operation with the Member States. In the case of negotiations with third countries, a Council decision is required. Negotiations with third countries are based on a Council directive, which may be more or less specific. Qualified majority voting in this area has contributed to a more rapid and effective decision-making process than in many other areas. However, negotiation costs remain considerable, as the divergent opinions of Member States need to be forged into a compromise. For example, despite the fact that transport policy is a common policy, the Commission has never been given a mandate to negotiate international airline agreements.

80. As regards the provision of individual services through embassies, economies of scale can be realised by replacing the embassies of EU Member States with an EC embassy. In practice, two solutions may be advanced. First, Member States may share a common embassy, as Belgium and Luxembourg do already. However, larger countries generally prefer to have an embassy in every country, rather than to share an embassy with another country. Co-ordination in this area has been difficult so far, but any gains from scale economies are likely to be very small overall.

81. Closely related to foreign policy are international transfer payments. Transfer payments to third countries are partly designed to compensate other countries for committing themselves to reducing negative international externalities (for instance, carbon abatement in developing countries) or to continue to provide a sufficient amount of global public services (for instance, keeping rainforests intact). Centralisation and co-ordination could again reduce negotiation and decision-making costs and strengthen a common position. Such transfers may also serve as mechanisms for international redistribution. In this perspective, rich countries could act through altruistic motives. More important perhaps is the objective of avoiding large international migratory movements. As the cost of managing large migratory flows could be large and absorption capacity is limited, an internationally co-ordinated or managed system of transfers could be most effective. The most recent Community agreement on this topic, which aims at establishing a Euro-Mediterranean partnership, points out that the Union has strong interests in this geographical area in terms of security and social stability (EC, 1995b). The agreement contains proposals for wide-ranging co-operation and increases financial assistance to the Mediterranean countries outside the EU.

Environmental policies

82. Three types of environmental externalities should be distinguished: first, those affecting the territory of individual countries, such as regulations on drinking water quality; second, those located in one country of the Community, which affect other countries, such as the pollution of the River Rhine; and third, those affecting the world as a whole, such as the burning of fossil fuels or the emission of chlorofluorocarbon (CFC) gases. The reasons for any Community involvement in these three cases are different. Local environmental externalities have no cross-border spillover. Nevertheless, disparities between national environmental standards, effluent taxes or subsidies to tackle environmental problems could distort competition within the EU, even if there is no environmental spillover. Member States may be tempted to give their firms a competitive advantage by lowering standards, and decentralisation could lead to an underprovision of environmental amenities, whereas co-ordination or centralisation might raise standards. However, distortions will only arise for mobile factors. In addition, the attitudes of countries towards ecological problems should be respected, and a central setting of undifferentiated standards and taxes could be inefficient.

83. As far as the environmental problems which affect several European countries are concerned, centralisation or co-ordination among them is more efficient than decentralised action. However, the choice between centralisation or co-ordination is more complex. On the one hand, without a supranational environmental agency, a Member State could have difficulties in monitoring the environmental policy of other countries, and a country might be tempted to act as a free-rider or renege on its commitments. On the other hand, an important argument in favour of centralisation -- rapid action -- does not apply in most cases. The Community could still play a useful role by disseminating information about environmental trends and policies in Member countries. Recently a European Environmental Protection Agency was created, which will monitor environmental developments in the EU, but will have no executive powers.

84. There are no good examples of environmental externalities, for which the current geographical area of the community would be the optimum club size for tackling environmental externalities, and bi- and multilateral agreements still dominate decision-making. However, the Community has played an increasing role in framing EU-wide environmental policies since the Single European Act, which impinge on private and public sector outlays for abatement. Many directives have been adopted in the areas of atmospheric, water and noise pollution, which leave little discretion of implementation at the Member State level. The Community has also encouraged international agreements like the conventions on the Rhine, the Baltic and the Mediterranean and is involved in negotiating international conventions in a way which is similar to trade negotiations (see above). The OECD's Environmental Data Compendium 1995 lists 45 multilateral conventions signed by the EU.

85. At the Community level a regulatory approach has been preferred in all cases so far, even though Member States make increasing use of economic instruments (OECD, 1995). The principle of subsidiarity has generally been interpreted as leaving implementation of centrally-determined policies to Member States, often with the flexibility of imposing more stringent regulations. However, the implementation of an EU-wide carbon/energy tax has been under discussion for several years, the latest proposal for a Council Directive dating from May 1995. Depending on its level it could generate a sizeable amount of tax revenues for Member States. As the greenhouse gas problem is an international one, its implementation also depends on implementation elsewhere and no international agreement has been negotiated yet. In addition, it is not easy to reach an agreement among EU-Member governments because of the difficulty to agree on a tax base, as energy consumption patterns differ considerably across Member States. Apart from the carbon/energy tax proposal the Commission revised the framework for state aids in 1993 in order to broaden the opportunities for providing subsidies to firms for environmental projects. For Member States which apply for Commission approval of state aids, guidelines are provided, which aim at ensuring that state aid

is in line with the “polluter pays” principle and at the same time consistent with the internal market and competition policy. Recently the Commission proposed the creation of the first Community spending programme (called Life), which would be specifically geared towards providing support for environmental measures.

Social expenditure

86. The internal market initiative has given new impetus to the idea of developing an EU-wide social policy. In 1989, 11 Member States agreed on a Social Charter which includes a number of non-binding declarations and the Maastricht Treaty includes an Agreement on Social Policy signed by all Member States except the United Kingdom. Directives in this context, which have come into force so far, are largely of a regulatory nature. They concern, for instance, such important areas as the co-ordination of social security benefits for migrant workers. Spending by the Community *via* the European Social Fund or under objective 3 of the regional funds on unemployment is small (less than 0.1 per cent of EU-wide GDP).

87. A central idea underlying a nation state is mutual assistance, government institutions providing social insurance and income redistribution. As noted above, redistribution from richer to poorer countries across the EU is limited in size, largely because the Community lacks the political legitimacy to become involved in social justice questions and a broader role in interpersonal redistribution of the Community will only be possible when nationality has become irrelevant for solidarity purposes and preferences for redistribution have become much closer. Such conditions may not be fulfilled for a long time. The current diversity in social security and assistance systems and the large differences in generosity between the richer and poorer countries pose little problem as long as migration remains low and as long as benefit payments depend on residency or adherence to a national social security system, which is usually the case. Currently, the major issue concerning social expenditure is not migration of individuals, but whether competition for non-labour tax revenues could reduce the scope of the welfare state (see above).

88. Should a homogeneous European labour market develop, migration could jeopardise the budgetary sustainability of national redistributive schemes. People with a high need of social protection (often those with low productivity) would tend to choose countries with high benefit levels and *vice versa*. Migration being motivated by transfer considerations would follow an inefficient pattern and if migration takes on economically significant proportions, the initial degree of redistribution may become unaffordable. For example, many European countries have pay-as-you-go old age pension systems. With an ageing population, these countries are facing severe funding problems over the next 50 years. Increased mobility could exacerbate the situation as countries with slowly growing populations offer low returns on future social security benefits and migration of young people in order to avoid a sharp rise in contribution rates could raise contingent liabilities further (CEPR, 1993). Such problems may arise, even when countries spend about the same amounts on social expenditure, if they offer different bundles of benefits.

89. The avoidance of spillovers due to fiscally-induced migration is the standard argument for assigning a primary responsibility for redistribution policies to the central government level. Indeed, in many federal states (Australia, Austria, Germany and Switzerland) the social security system (including health, pension and unemployment benefits) is centralised, although social assistance is largely provided by lower levels of government. However, the example of the United States and Canada, where inter-state and inter-provincial mobility is high, shows that centralisation is not inevitable as important competences for health, unemployment and social assistance spending are sub-federal responsibilities.

V. Summary

90. Current fiscal relations in the EU differ considerably from those in OECD countries that are federations. The EU's budget is much smaller than central government budgets in federal countries, largely because the Community's institutions have no responsibility for the provision of core public goods. Community finances can only be changed with the unanimous consent of Member countries and the budget must be balanced, which impedes budgetary flexibility. Fiscal matters among Member States are guided by the principles of intergovernmental co-operation -- joint decision-making by the Council under strict voting requirements -- and of subsidiarity. The latter implies that national responsibility for fiscal affairs is the norm and Community responsibility the exception. The rigorous voting rules and the subsidiarity principle, on the one hand, and the aim of creating an ever closer union among the European nations, on the other, raise questions about the future course of integration in Europe. These questions will be addressed at the Intergovernmental Conference, which started recently. Many configurations for future development have been suggested. Given the diversity in Member countries' interests and histories and the fact that the costs and benefits of public policies can vary widely in such a large economic area, only flexible arrangements will allow economically-sound progress in the deepening and widening of the EU.

91. While fiscal flows at the EU level are small, the Community has currently some responsibilities which have implications for fiscal policies in Member States. For example, the signatories of the Maastricht Treaty pledged fiscal prudence in the run-up to, and during, monetary union, with the Commission reporting on deficit and debt developments, and the Council deciding whether deficit and debt levels above the Maastricht limits are excessive. The limits leave room for interpretation and provide for a fairly high degree of cyclical flexibility, provided that budgetary positions were sound prior to a downturn. The deficit and debt constraints on Member States were put in place in order to guarantee a smooth transition to monetary union -- especially, to avoid an overburdening of monetary policy in the start-up phase --, and to foster monetary policy credibility following the introduction of monetary union. The major fear was that fiscal profligacy in some countries could lead to a risk premium for the area as a whole and, in the worst case, that default by a Member State could wreak havoc in financial markets, leading to serious spillovers to other countries. Given that many EU countries have currently sizeable deficits, the need for fiscal prudence on purely domestic grounds has frequently been underlined in, for example, numerous OECD documents.

92. The fiscal limits come on top of other Treaty provisions, which aim at safeguarding monetary policy credibility and at reducing the likelihood of spillovers. While these safeguards appear to be adequate, they may not be sufficiently tight under all circumstances and the fiscal limits provide an additional safety belt. It is clearly difficult to decide how tight the additional safety belt should be, as the benefits of the fiscal limits need to be balanced against the cost of losing fiscal flexibility. The importance of national fiscal policies in offsetting temporary output fluctuations could rise during monetary union, as national monetary policy instruments will no longer be available. Another major concern in Europe is that fairly rigid labour and product markets slow adjustment to structural and cyclical changes. Evidence on the importance of fiscal flows in mitigating transitory asymmetric developments in federations is mixed, some studies showing that regional stabilisation is important in fostering cohesion in monetary unions, while others demonstrate the opposite. However, in contrast to federations, European governments are large when compared to lower levels of government in federations, they enjoy fiscal autonomy and are capable of providing stabilisation comparable to that of central governments in federal countries. The case for an EU-wide stabilisation scheme could become more compelling, however, if fiscal rules were to become more stringent, as proposed in the German "stability pact", or if increased tax harmonisation and mobility were to limit the fiscal room for manoeuvre.

93. The EU could soon be the only economic union in which monetary policy is centralised, but in which fiscal policy by Member States is set independently. Discretionary fiscal policies, especially in a large country, could have strong spillover effects because of their influence on EU-wide interest and exchange rates. Policy co-ordination has, in principle, been in place since the Treaty of Rome. However, experience over the last twenty years demonstrates that it is difficult to forge a consensus among Member States as to what constitutes a healthy EU-wide monetary/fiscal policy mix, and which Member State should take fiscal action and to what extent. However, co-ordination was strengthened in 1993 with the regular issuing of the "broad economic policy guidelines". They aim at macroeconomic and structural policy co-ordination, outline Community goals, and also include country-specific recommendations. Concerning fiscal policy, they set the goal of moving government accounts close to balance over the medium term. The guidelines help in achieving a broad policy consensus among Member States, but it is too early to assess their effectiveness as an instrument for policy co-ordination.

94. The discussion of taxation issues has been shaped around two major topics: tax co-ordination and tax competition. Both have gained prominence due to the rising mobility of tax bases. Tax co-ordination, which is not a Community goal per se, is warranted when taxation has the potential to alter the direction of trade and factor flows. In addition, changes to the indirect tax systems became necessary with the dismantling of border controls, and the Community opted for a dual system: the destination principle was retained for the business sector, while the origin principle was adopted for purchases by individuals. However, the new system for the business sector is complex, as monitoring is still necessary and tax treatment continues to differ across countries. Further changes to the current system will crucially depend on whether a stronger convergence in tax rates can be achieved. The dispersion of excise taxes remains very high and, while the need for better co-ordination is generally agreed, there is little agreement on specific rate structures and rate levels. Experience in federations shows that some differentiation in rates is sustainable, but that significant differences induce shifts in tax bases.

95. Little progress has been made in the co-ordination of corporate tax systems and the taxation on income from financial assets. Financial capital is the most mobile and there is ample evidence that even fairly small differences in taxation levels have led to large shifts in investment. While the Commission has proposed a minimum rate of taxation, the proposal has not yet been adopted by the Council. Measures to co-ordinate corporate tax systems have also been limited and they still differ widely across the EU. Such differences distort the international allocation of capital and savings, but the overall cost of such distortions is difficult to evaluate. Despite the co-ordination effort, taxation of cross-border transactions (goods and capital) remains far more complex in the EU than in federations, and gives rise to high compliance costs.

96. Largely reflecting the low mobility of labour in the EU, the differences in the way individuals are taxed have not yet raised serious concern and, apart from highly skilled workers, a sharp rise in migratory flows is unlikely in the foreseeable future. However, the high and rising level of indirect labour costs is seen as a problem because it could adversely affect labour market outcomes. Trade integration is important in this context because rising labour costs will lead to a loss in competitiveness, the consequences of which will be the stronger the higher the degree of integration. Rigid labour standards, such as minimum wages, could lead to permanent job losses, and labour market rigidities could imply fairly persistent employment problems.

97. Corporate taxation is vulnerable to tax competition, and statutory rates have indeed come down in many OECD countries since the early 1980s. In addition, preferential tax regimes have been created, which provide new avenues for tax avoidance and evasion. However, the debate on the strength of tax competition in this area is still open, as corporate EU-wide tax receipts as a per cent of GDP were as high in the early 1990s as they were in 1960. Tax competition could also lead to a closer link between taxation and the provision of public services, which could reduce the scope for redistribution via the tax system.

Overall, there is not much available evidence that tax competition has been widespread so far, with the share of government revenues of EU countries in GDP changing little since the early 1980s and remaining high in international comparison. However, tax competition is likely to have reduced the power to raise additional tax revenues, and the upward trend in expenditure since the early 1980s has been accompanied not by rising revenues, but by higher government deficits.

98. Spending by the Community is very small -- 1.2 per cent of EU-wide GDP -- compared to central governments in federations. Currently, close to half of the spending is going to the Common Agricultural Policy. The CAP was reformed in 1992, with a view to reducing its high budgetary and welfare costs. Reform is likely to be pursued, which should improve the market orientation of the CAP further and make entry of new EU applicants easier. The move towards greater reliance on market forces makes the rationale for pursuing agricultural policy at the EU level less evident. However, even in a system consisting of income support instead of price support, it will be necessary for the EU to ensure a level playing field. For that purpose, a framework for the monitoring of Member States' spending may be necessary. The case for an EU role is stronger for the regional funds, the second largest spending item. Interregional income redistribution schemes exist in most federal and unitary countries, as solidarity among the different parts of the country is part of a nation's contract and also the EU's funds aim at fostering cohesion among Member States. However, EU funds are largely geared towards the speeding up of growth in lagging regions, rather than the reduction in income inequality. The existence of market imperfections provides a rationale for Community involvement in providing funds for research and development and in fostering research co-operation across countries. Apart from its own spending functions, the Community constrains subsidies in Member countries, which could distort intra-EU competition. Efficient working of the single market hinges on free and undistorted competition. There is a clear role for the Community to play in this area, as national authorities do not take into account transnational spillovers from subsidisation. Overall, the level of subsidisation has shown some trend decline in the EU, but remains high in international comparison.

99. The Maastricht Treaty sets the objective of moving towards the common implementation of security and foreign policies -- two policies typically carried out at the federal level in federations. In both areas economic arguments for centralisation include the strengthening of a common position and scale economies in the provision of these services. In the case of defence, indivisibilities and avoidance of free riding also play a role. On the other hand, the differences in preferences are still wide and likely to hamper centralisation and overall economic gains have already been reaped to a considerable extent by a high degree of co-operation. Clearly, any move towards further integration in those areas is motivated more by political than economic considerations. The Community also plays a role in other areas. For instance, in the environmental area, spillover effects exist, which can range from the local to the global level. Community spending is very small, but it is party to many international agreements on cross-border pollution abatement. The need for more centralised decision-making regarding social expenditure appears to be currently very small, the low level of mobility limiting spillover effects from fiscally-induced migration. While many social programmes are also centralised in most federations, the examples of the United States and Canada show that this is not inevitable, even in countries with high labour mobility.

Table 1. The EU budget
Per cent of total appropriations

	1994	1999
Agricultural policy	50.2	45.6
Structural operations	31.3	35.7
Internal policies	5.8	6.1
External action	5.7	6.7
Administration	4.8	4.6
Reserves	2.1	1.3
Total appropriations	100	100
Per cent of GDP	1.19	1.26
Own resources ceiling		
Per cent of GDP	1.20	1.27

Source: EC (1993c).

Table 2. **Deficits of lower levels of government**
(Average 1980-93, per cent of GDP)

	Average					Standard deviation				
	General government	Central government	State government	Local government	Social security	General government	Central government	State government	Local government	Social security
Germany	-2.2	-1.7	-0.8	0	0.3	1.0	0.7	0.4	0.2	0.3
France	-2.5	-2.1	..	-0.4	0	1.4	1.0	..	0.2	0.6
Italy	-10.7	-10.1	..	-0.8	0.2	1.1	1.2	..	0.6	0.2
United Kingdom	-3.0	-2.8	..	-0.3	0	2.1	1.9	..	0.5	0.5
Austria	-2.9	-3.7	0.8	0.1	-0.1	0.9	0.9	0.1	0.2	0.2
Belgium	-8.5	-8.3	..	-0.4	0.3	2.2	2.1	..	0.6	0.5
Denmark	-2.7	-3.6	..	-0.2	1.1	3.6	3.8	..	0.6	0.1
Finland	1.6	-1.4	..	0	3.0	4.1	3.9	..	0.4	0.6
Sweden	-2.4	-5.0	..	-0.1	2.7	5.4	5.6	..	0.5	0.5
United States	-3.6	-3.7	..	-0.1	0.1	1.2	1.1	..	0.4	0.6
Japan	-0.6	-3.0	..	-0.5	3.1	2.6	1.9	..	0.7	0.4
Canada	-5.0	-4.5	-1.1	0.1	0.5	2.0	1.4	1.0	0.1	0.4

Source: OECD National Accounts.

Table 3. **Estimates of regional stabilisation**

Germany	33 to 42 %	(Pisani-Ferry <i>et al.</i> , 1993)
France	37 %	(Pisani-Ferry <i>et al.</i> , 1993)
United Kingdom	34 %	(Goodhart and Smith 1993)
United States	10 %	(Von Hagen, 1991) ¹
	30 %	(Bayoumi and Masson, 1994)
	20 %	(Goodhart and Smith, 1993)
	17 %	(Pisani-Ferry <i>et al.</i> , 1993)
Canada	17 %	(Bayoumi and Masson, 1994)
	24 %	(Goodhart and Smith, 1993)
Five EU countries ²	31 %	(Bayoumi and Masson, 1994)

1. Tax side only.

2. Pooled regression.

Sources: EC (1993c) and Bayoumi and Masson (1994).

Table 4. **The structural and cyclical components of government balances**
(1980-95 as a per cent of GDP)

	Total deficit				Structural deficit				Cyclical deficit			
	Average	Maximum	Minimum	Standard deviation	Average	Maximum	Minimum	Standard deviation	Average	Maximum	Minimum	Standard deviation
Germany	-2.4	0.1	-3.7	1.0	-2.1	0.1	-4.6	1.5	-0.3	1.4	-1.8	1.0
France	-2.9	0	-6.1	1.7	-2.2	-0.4	-4.1	1.1	-0.7	0.6	-2.4	0.9
Italy	-10.4	-7.4	-12.6	1.3	-10.1	-6.1	-12.2	1.7	-0.3	1.1	-1.7	0.9
United Kingdom	-3.1	1.0	-7.8	2.5	-2.8	-0.1	-5.7	1.5	-0.3	2.9	-2.3	1.8
Austria	-3.2	-1.7	-5.6	1.1	-2.8	-1.3	-5.1	0.9	-0.4	1.2	-1.3	0.9
Belgium	-8.1	-4.4	-13.0	2.4	-7.7	-2.8	-13.8	3.0	-0.3	2.3	-1.8	1.2
Denmark	-2.7	3.4	-9.1	3.3	-2.2	1.7	-8.0	2.8	-0.5	1.7	-2.2	1.1
Finland	0.5	6.3	-8.0	4.5	0.8	3.6	-3.8	2.6	-0.3	2.9	-4.3	2.1
Greece	-10.2	-2.6	-14.7	3.0	-9.6	-3.8	-15.4	3.0	-0.6	1.2	-1.7	0.8
Ireland	-6.8	-1.8	-13.1	4.6	-5.5	-0.3	-13.6	4.8	-1.3	0.8	-3.2	1.2
Netherlands	-4.5	-2.9	-6.5	1.1	-4.3	-2.2	-6.4	1.2	-0.2	1.3	-2.1	1.0
Portugal	-5.6	5.6	-10.8	3.7	-5.5	4.7	-11.9	3.7	-0.1	1.8	-2.2	1.4
Spain	-4.8	-2.2	-7.4	1.6	-4.4	-1.0	-7.1	1.6	-0.3	2.6	-1.8	1.7
Sweden	-3.2	5.4	-13.4	5.5	-3.6	2.1	-9.7	3.5	0.4	3.3	-3.7	2.1
United States	-2.6	-1.0	-4.3	1.0	-2.5	-0.6	-3.8	0.9	-0.1	0.7	-2.0	0.7
Canada	-5.0	-1.5	-7.4	1.9	-4.3	-1.5	-6.7	1.3	-0.7	1.9	-3.3	1.6
Japan	-1.0	3.0	-4.4	2.7	-0.9	2.0	-4.7	2.3	-0.1	1.5	-1.8	0.9
Australia	-1.9	1.0	-4.4	1.9	-1.5	0.6	-4.1	1.4	-0.4	0.7	-1.9	0.8

Source: OECD Analytical Data Base.

Table 5. VAT rates in the European Union

Per cent

	Reduced and intermediate rates		Standard rate		Increased rate	
	April	January	April	January	April	January
	1987	1996	1987	1996	1987	1996
Germany	7	7	14	15	-	-
France	2.1;4;5.5; 7;13	2.1;5.5	18.6	20.6	33	-
Italy	2;9	4;9;13	19	19	38	-
United Kingdom	0	0	15	17.5	-	-
Austria	(8)	10	(16)	20	32	-
Belgium	1;6	1;6;12	19	21	25;33	
Denmark	-	-	22	25	-	-
Finland ¹	-	6;12	-	22	-	-
Greece	3;6	4;8	18	18	36	-
Ireland	1.7;10	2.5;12.5	25	21	-	-
Luxembourg	3;6	3;6;12	12	15	-	-
Netherlands	6	6	20	17.5	-	-
Portugal	8	5	16	16	30	-
Spain	6	3;6	12	15	33	-
Sweden	(12)	12;21	23.5	25	-	-

1. VAT was introduced in Finland in October 1990.

Sources: European Commission and OECD(1995), Consumption Tax Trends.

Table 6. **Excise duties in the European Union**

	Harmonized excise duties as a per cent of:					
	GDP		total tax revenue		total excise duties	
	1992	1994 ¹	1992	1994 ¹	1992	1994 ¹
Germany	2.6	2.6	6.7	6.6	93.4	..
France	2.1	2.7	4.9	6.0	81.6	88.7
Italy	2.7	..	6.4	..	79.8	..
United Kingdom	3.8	4.0	10.8	11.7	90.4	94.9
Belgium	2.2	2.2	5.0	4.9	96.5	93.7
Denmark	2.6	2.4	5.3	4.8	54.0	51.6
Greece	4.4	..	13.2	..	84.7	..
Ireland	5.0	4.9	13.8	13.6	87.9	93.3
Luxembourg	5.6	7.2	11.1	13.3	88.1	..
Netherlands	2.0	2.1	4.2	4.6	67.6	..
Portugal	3.7	..	11.2	..	78.0	..
Spain	2.4	2.5	6.6	7.1	95.7	..

1. 1993 for Belgium, Denmark, Greece, Ireland, Italy and Portugal

Source: OECD Revenue Statistics.

Table 7. **Effective consumption tax rates**¹

	1980	1985	1990	1991	1992	1993
Germany	15.9	14.9	15.8	15.8	16.0	16.5
France	22.0	21.4	20.4	19.2	18.7	18.4
Italy	11.4	11.6	15.1	15.3	15.1	14.9
United Kingdom	15.1	17.4	16.4	16.9	17.6	16.6
Austria	22.6	23.3	22.2	21.8	22.5	21.7
Belgium	17.1	16.1	16.8	16.6	16.7	16.8
Denmark	32.4	33.7	34.3	33.6	33.1	31.9
Finland	24.9	27.0	30.5	27.8	26.5	26.5
Greece	9.4	14.9	17.9	19.5	21.2	20.3
Ireland	21.5	27.2	26.8	25.6	25.5	25.2
Netherlands	17.0	17.5	18.5	18.4	18.4	18.1
Portugal	13.4	12.7	18.5	18.5	21.3	19.5
Spain	5.8	9.3	12.7	13.2	14.1	12.8
Sweden	20.7	24.1	26.1	25.7	23.3	24.2
United States	5.2	5.3	4.9	5.0	5.1	5.2
Japan	4.8	5.0	6.1	6.1	6.0	6.0

1. Indirect tax on goods and services divided by pre-tax aggregate private and non-wage public consumption.

Sources: OECD National accounts and OECD Revenue Statistics.

Table 8. **Central and local corporate tax rates**¹

Basic rates, per cent

	1980	1985	1991	1993	1994
Germany	61.5/44.3	61.7/44.3	56.5/44.3	58.6/46.0	45/30
France	50	50	34/42	34	33.3
Italy	36.3	47.8/36	47.8/36	47.8/36	52.2
United Kingdom	52	40	34	33	33
Austria	61.5/38.3	61.5/38.3	39	39	34
Belgium	48	45	39	39	39
Denmark	37	50	38	38	34
Finland			40	25	25
Greece		49	46(40)	46(35) ²	40(35)
Ireland	45	50(10)	43(10)	40(10) ³	40
Luxembourg	45.5	45.5	39.4	39.4	39.4
Netherlands	46	42	35	35	35
Portugal	51.2/44	51.2/44	39.6	39.6	39.6
Spain	33	33	35	35	35
Sweden	40	52	30	30	28
EU 15 Average ⁴	46.7	48.5	39.8	38.6	36.9
EU 15 Standard deviation ⁴	8.5	7.3	6.3	7.7	6.4
United States	49.2	49.5	38.3	38.3	39
Japan	52/42	55.4/45.4	50	50	33.9/37.5

1. Where two rates are given the former reflects the tax rate on retentions, the latter the tax rate on distributions.
2. A lower tax rate (40 per cent in 1991) applies where companies are quoted on the Athens Stock Market.
3. Figure in brackets is the tax rate applied in the manufacturing industry.
4. Calculated on the basis of retained profits.

Source: OECD/CFA/Tax Data Base.

Table 9. **Corporate taxes as a per cent of GDP**

	1960	Average 1980-84	Average 1990-94
Germany	2.9	2.0	1.5
France	..	2.1	1.8
Italy	1.6	2.9	3.6
United Kingdom	2.9	3.8	3.0
Austria	1.8	1.3	1.5
Belgium	1.2	2.7	..
Denmark	1.2	1.6	1.8
Finland	2.5	1.5	1.7
Greece	..	0.9	1.6
Ireland	1.4	1.5	2.5
Luxembourg	..	7.6	7.7
Netherlands	3.0	2.9	3.3
Portugal	..	..	2.5
Spain	2.3	1.3	2.4
Sweden	2.4	1.6	1.8
EU	2.4	2.4	2.4
United States	4.4	2.2	2.1
Japan	5.2	5.5	5.3
Canada	4.2	3.0	2.2
Australia	3.8	3.2	4.1
OECD	3.8	2.8	2.7

Source: OECD Revenue Statistics and Analytical Database.

Table 10. **Marginal effective tax rates by asset for individuals¹**

	Bank deposits	Government bonds		Direct share purchases
		Long-term issued at deep discount ²	Short-term issued at par	
Germany	53.6	42.9	53.6	9.7
France	38.8	20.7	25.9	10.0
Italy	56.9	19.0	23.7	11.8
United Kingdom	33.4	32.3	33.4	10.0
Austria	39.3	32.2	40.1	6.9
Belgium	15.5	15.4	18.3	10.6
Denmark	67.6	54.1	67.6	18.6
Finland	28.2	28.4	28.2	29.0
Greece	52.8	0	0	0
Ireland	39.1	31.3	39.1	34.7
Luxembourg	0	0	0	10.2
Netherlands	57.1	45.7	57.1	12.8
Portugal	51.0	40.8	51.0	7.2
Spain	49.6	47.3	49.6	21.6
Sweden	56.9	54.6	56.9	40.8

1. The effective tax rate is defined as the difference between the real pre-and post-tax rate of return on an investment (relative tax-wedge). It is calculated for the average production worker at each country's rate of inflation and on the basis of the 1995 tax code.
2. Under the assumptions that the turnover rate is 20 per cent per annum and that nominal returns consist of 8 per cent interest and 20 per cent capital gain.

Source: OECD (1995), Taxation and Household Saving.

Table 11. The taxation of labour income
1991

	Social security contribution rate		Average income tax rate	Marginal income tax rate	Total tax rate	
	Employers	Employees			Average	Marginal
	Per cent of average earnings					
Germany	18.2	18.2	8.7	17.6	38.1	45.6
France	43.8	17.1	1.0	6.7	43.1	47.0
Italy	50.1	9.0	14.2	23.7	48.9	55.2
United Kingdom	10.4	7.6	15.5	25.0	30.3	38.9
Austria	22.6	16.4	4.8	32.0	35.8	58.0
Belgium	41.9	12.1	11.6	50.4	46.2	73.6
Denmark	0.0	2.5	36.0	51.8	38.5	54.3
Finland	3.6	2.6	21.8	37.6	27.1	42.3
Ireland	12.2	7.8	16.4	29.0	32.4	43.6
Netherlands	10.8	10.7	32.5	47.8	48.8	62.5
Norway	15.2	7.8	17.8	33.5	35.4	49.0
Portugal	24.5	11.0	0.9	15.0	29.2	40.6
Spain	30.2	6.0	6.4	24.0	32.7	46.2
Sweden	33.2	0.0	28.0	31.2	46.0	48.4
United States	7.7	7.7	11.3	22.6	24.8	35.2
Canada	5.8	4.6	12.5	40.3	21.6	47.9
Japan	7.6	7.0	2.4	11.0	15.8	23.8
Total of above countries ¹	17.4	8.0	14.3	28.8	32.9	45.4

1. Simple average of country figures.

Sources: OECD (1992), *The Tax and Benefit Position of Production Workers*.

Table 12. **A decomposition of unit labour cost levels**
 (US dollars, average 1990-93, manufacturing sector)

	Compensation (per hour)	Productivity (per hour)	Unit labour cost (X 100)
Germany	25.4	22.6	112.5
France	22.4	19.2	116.7
Italy	18.1	22.0	82.6
United Kingdom	11.3	9.9	114.4
Belgium	24.7	24.3	101.8
Denmark	19.4	13.2	147.9
Netherlands	22.9	25.8	88.8
Spain	10.4	13.2	79.0
Sweden	22.6	20.0	113.2
United States	19.3	25.9	74.4
Canada	18.6	21.7	85.7
Japan	17.3	16.6	104.0

Source: OECD.

Table 13. **Centralisation ratios**

1991-93

	Central government expenditure ¹		Central government revenues ²	
	Per cent of total expenditure	Per cent of GDP	Per cent of total revenue	Per cent of GDP
Germany	74.1	35.5	69.9	31.4
France	83.3	42.2	89.8	31.4
Italy	91.8	50.1	92.1	41.3
United Kingdom	79.5	34.6	96.1	36.5
Austria	81.8	41.6	76.6	36.8
Belgium	95.5	53.9	94.1	46.7
Denmark	60.7	36.7	70.8	40.6
Finland	78.4	45.4	79.6	42.0
Sweden	65.8	43.9	68.1	40.4
United States	63.4	23.3	65.6	20.9
Canada	44.3	22.2	51.1	22.0
Japan	66.0	21.6	76.3	25.7
Australia	55.6	21.0	71.6	23.9

1. Expenditure of central government and social security net of transfers to other levels of government.
2. Revenues of central government and social security net of transfers received.

Source: OECD National Accounts.

Table 14. Spending by level of government

Per cent

	Australia (1992)			Austria (1992)			Canada (1991)			Switzerland (1984)			United States (1992)			Germany (1990)		
	C	S	L	C	S	L	C	S	L	C	S	L	C	S	L	C	S	L
1. General public services, public order and safety	42	48	10	75	25	..	44	35	21	25	42	33	51	17	32	45	36	19
2. Defence	100	0	0	100	0	..	100	0	0	84	9	7	100	0	0	100	0	0
3. Education	30	70	0	67	33	..	7	51	42	10	55	35	5	44	51	5	73	22
4. Health	53	46	1	77	23	..	14	80	7	43	35	22	55	34	11	72	13	15
5. Social security and welfare, housing and community amenities	83	13	5	90	10	..	60	31	9	74	13	13	72	19	9	69	13	18
6. Recreation, culture, religious affairs	28	36	36	64	36	..	18	26	56	7	30	63	13	13	73	4	29	67
7. Economic affairs and services	40	45	15	76	24	..	34	45	21	42	38	20	44	36	20	48	30	22
7.1. Fuel and energy/mining and manufacturing	70	24	6	71	29	..	30	70	0	87	13	0	86	4	10	80	18	2
7.2. Agriculture, forestry, fishing	55	45	1	70	30	..	44	56	0	53	34	13	60	31	9	21	66	13
7.3. Transport and communications	23	52	25	82	18	..	28	38	34	37	39	23	29	43	28	51	23	26
7.4. Other economic affairs and services	60	35	5	70	30	..	37	44	19	34	44	22	68	24	8	47	25	28
8. Other expenditure	71	27	2	96	4	..	63	31	6	42	28	29	62	20	18	54	38	8
Total	58	36	5	83	17	..	42	42	16	48	30	22	55	25	21	59	24	17

Note: C = Central government; S = State government; L = Local government.

Source: IMF (1994), *Government Statistics Yearbook*.

Table 15. **Structural fund spending**

Financial allocations by objective and country (1994-99)

	Allocation					GDP per capita 1993, in PPS ¹	
	By objective						By country
	1	2	3 and 4	5a	5b		
Belgium	45	10	29	12	5	1.3	106
Denmark	..	9	45	39	8	0.5	106
Germany	73	4	10	6	7	14.8	104
Greece	100	..	..	..	..	11.1	49
Spain	87	4	6	1	2	24.1	76
France	19	16	28	17	20	9.0	109
Ireland	100	..	..	..	..	4.5	78
Italy	78	4	9	4	5	15.0	104
Luxembourg	..	9	31	52	8	0.1	132
Netherlands	8	16	59	9	8	1.5	101
Portugal	100	..	..	..	..	11.0	60
United Kingdom	26	23	37	5	9	7.2	99

1. EC average = 100.

Source: EC (1994), Competitiveness and Cohesion: Trends in the Regions.

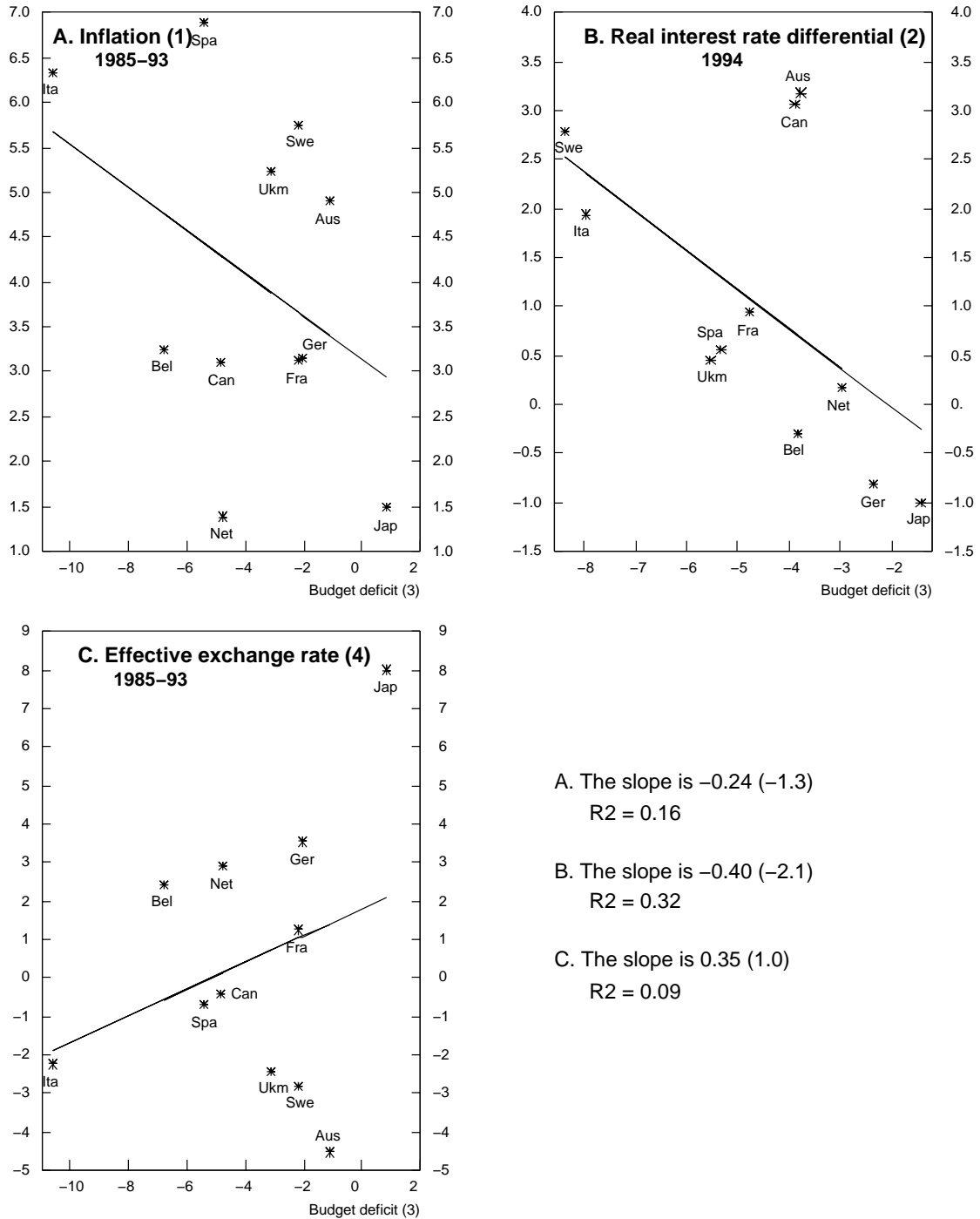
Table 16. **Estimates of interregional income redistribution**

Germany	35 %	(MacDougall, 1977)
France	53 %	(MacDougall, 1977)
United Kingdom	34 %	(MacDougall, 1977)
United States	35 to 44 %	(Sachs and Sala-I-Martin, 1990)
	25 %	(MacDougall, 1977)
	22 %	(Bayoumi and Masson, 1994)
Canada	30 %	(MacDougall, 1977)
	39 %	(Bayoumi and Masson, 1994)
Australia	50 %	(MacDougall, 1977)
Switzerland	15 % ¹	(MacDougall, 1977)

1. Incomplete data.

Sources: EC (1993c) and Bayoumi and Masson (1994).

Figure 1. BUDGET DEFICITS, INFLATION AND INTEREST RATES



A. The slope is -0.24 (-1.3)
 $R^2 = 0.16$

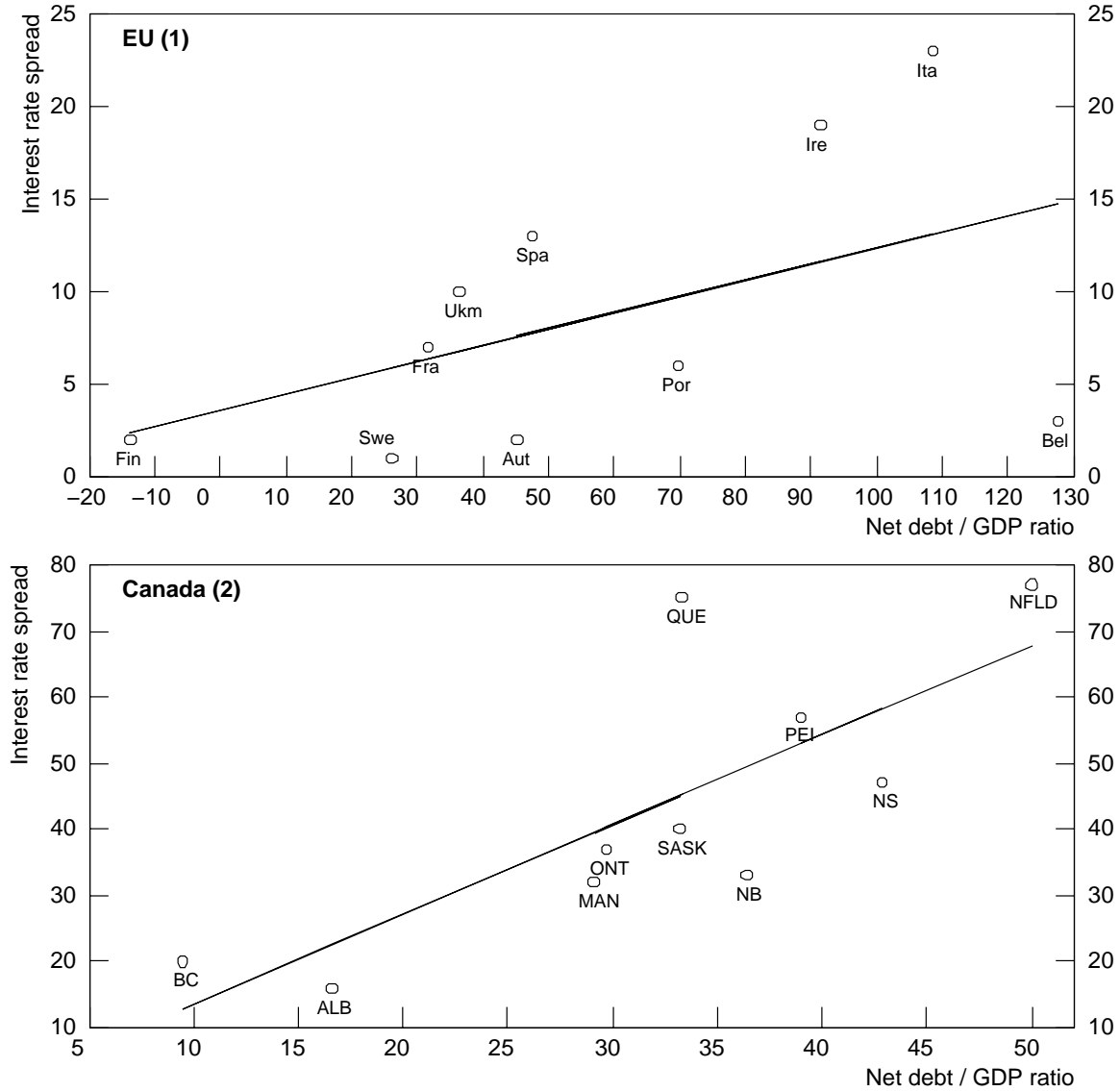
B. The slope is -0.40 (-2.1)
 $R^2 = 0.32$

C. The slope is 0.35 (1.0)
 $R^2 = 0.09$

1. Average annual rate of change in the GDP deflator.
 2. Real interest rate differential vis-à-vis the United States.
 3. Structural deficit as a per cent of potential GDP.
 4. Average annual rate of change in the effective exchange rate.
- Source: OECD.

Figure 2. SOVEREIGN RISK AND GOVERNMENT DEBT LEVELS

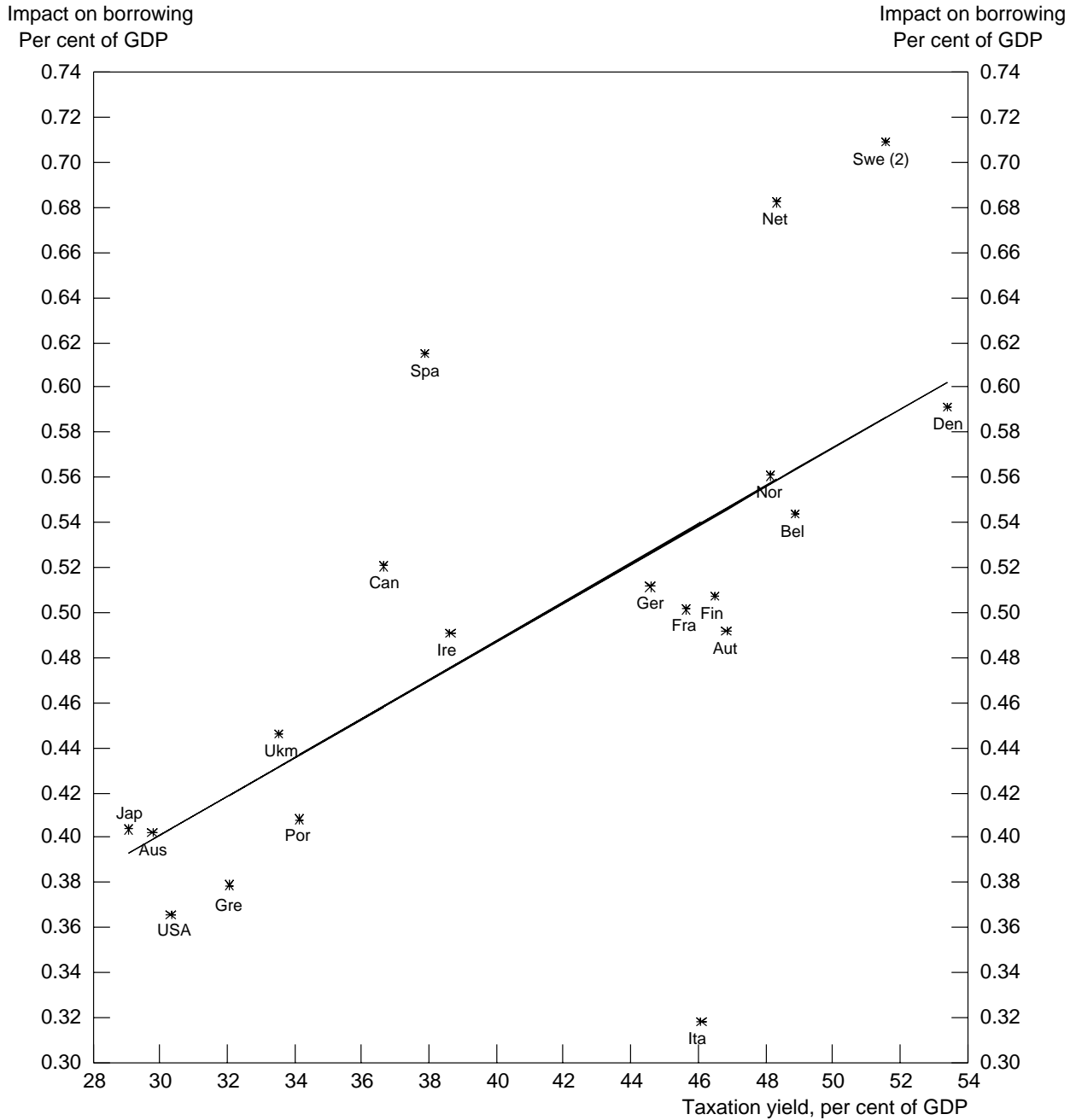
1994



1. Sovereign risk for EU countries is measured as the yield spread between Deutschemark or ECU bond issues by the World Bank or the IBRD and that of EU countries in the same currency. Except for France, the United Kingdom and Ireland, the data were provided by the Financial Times and the International Securities Market Association and concern bond issues , for which an adequate secondary market exists. The spreads were measured in mid-February 1996. For France, the United Kingdom and Ireland, data are from Datastream for the average of 1994. The data are likely to be affected by market imperfections and the spreads too high: France and the United Kingdom are triple A borrowers as the World Bank and the IBRD. The net debt/GDP ratios refer to 1994.
2. For Canada, sovereign risk is measured by the difference between yields on provincial and federal bond issues. Data refer to 1994. ALB = Alberta, BC = British Columbia, MAN = Manitoba, NB = New Brunswick, NS = Nova Scotia, PEI = Prince Edward Island, ONT = Ontario, SASK = Saskatchewan, QUE = Quebec NFLD = Newfoundland.

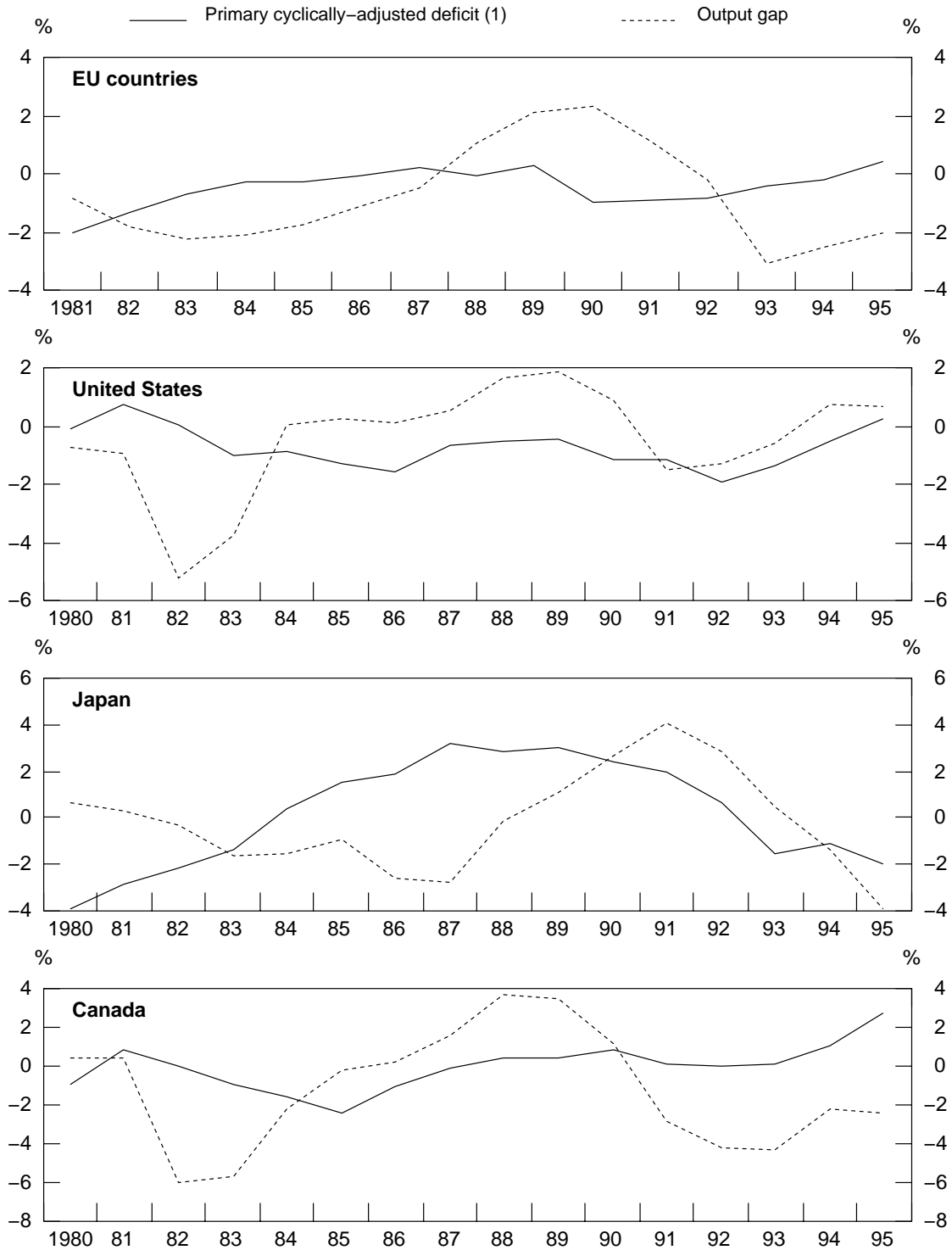
Source: Department of Finance of Canada, DATASTREAM, Financial Times and OECD.

Figure 3. AUTOMATIC STABILISERS AND GOVERNMENT BORROWING (1)



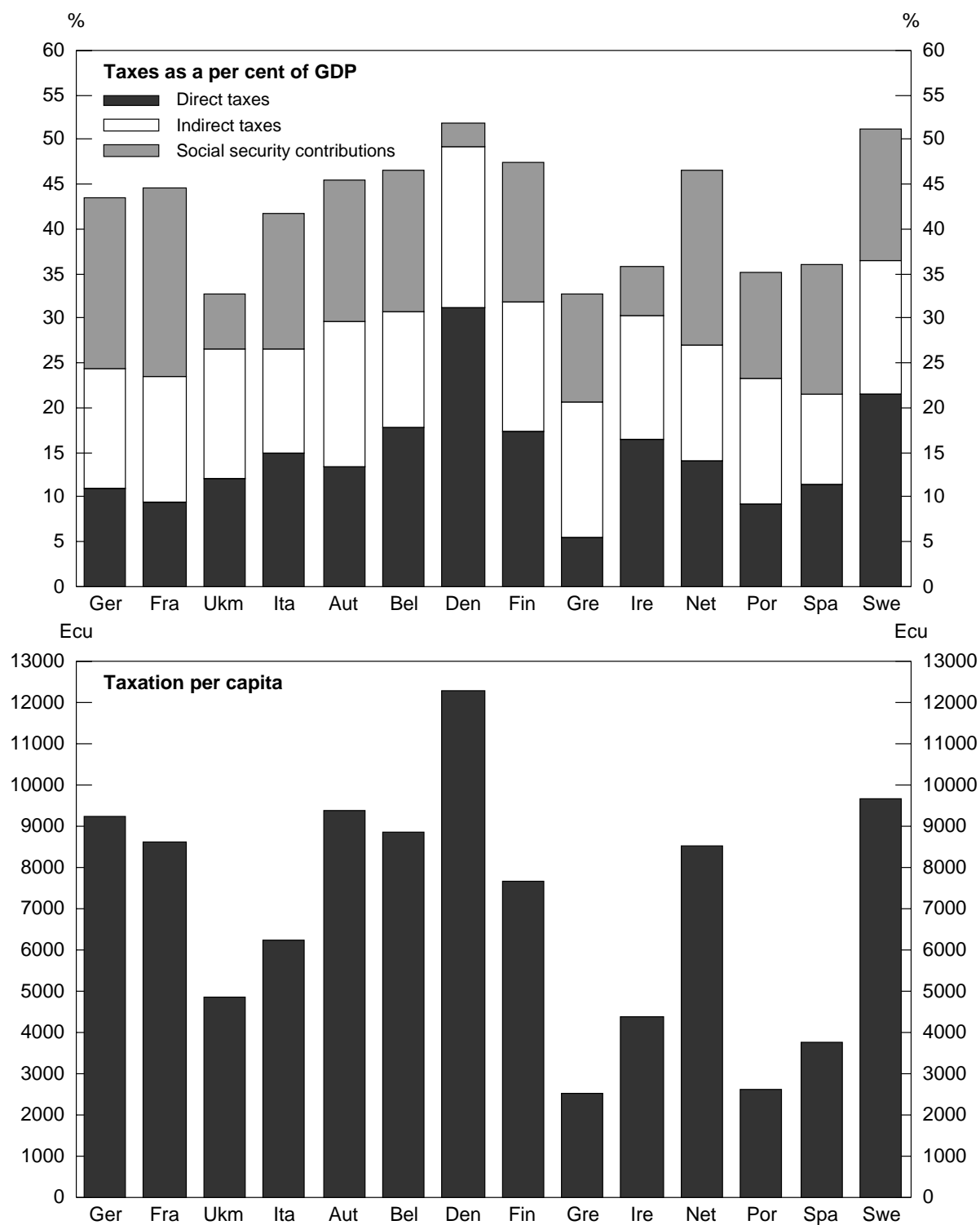
1. The figure shows the relationship between the sensitivity of government borrowing to a 1 per cent change in GDP and the tax share.
 2. The calculations for Sweden are particularly uncertain due to the changes in fiscal rules in recent years.
- Source: OECD.

Figure 4. FISCAL STANCE AND OUTPUT GAPS



1. As a per cent of potential GDP.
Source: OECD.

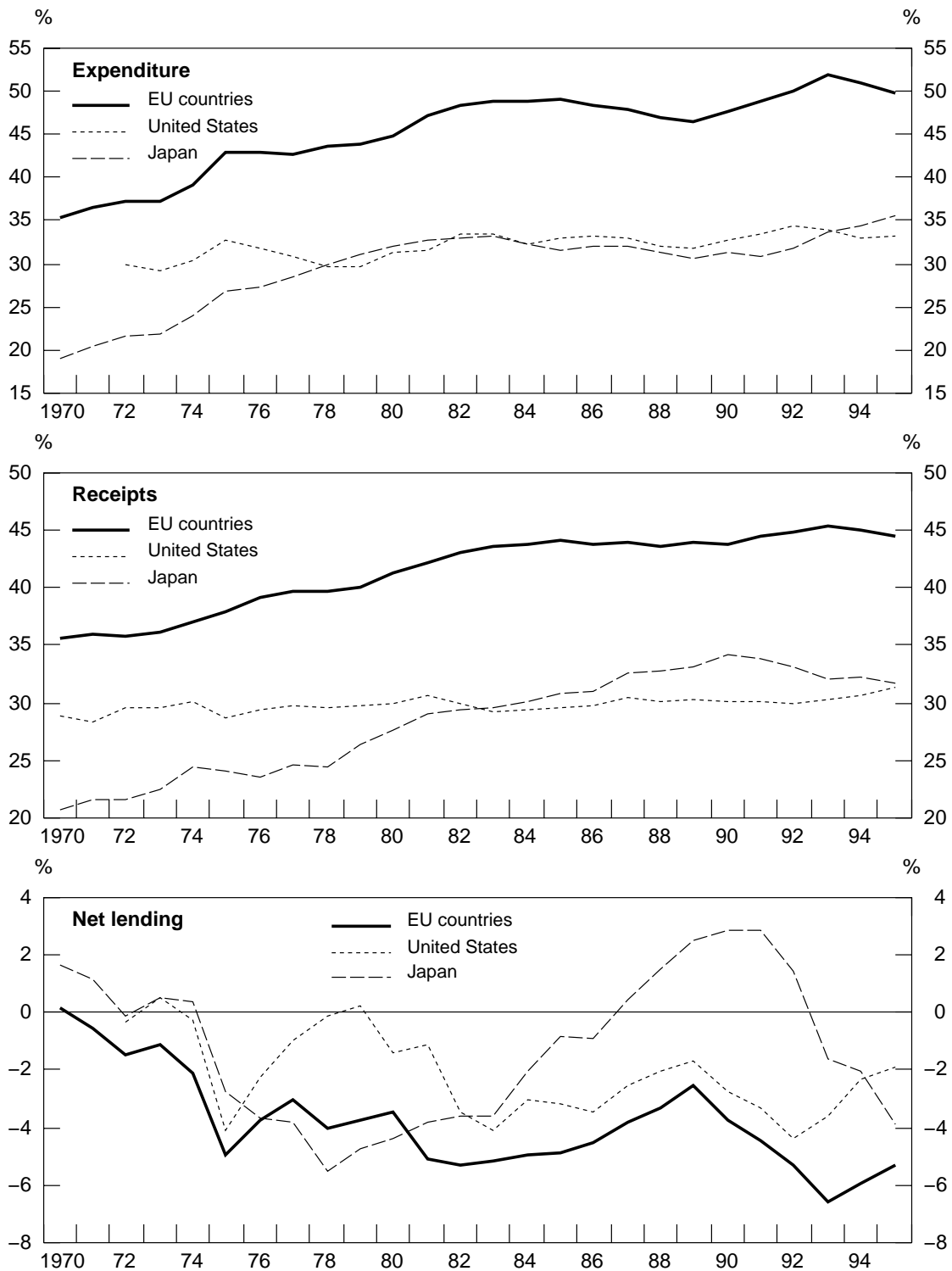
Figure 5. TAXATION IN THE EUROPEAN UNION
(1994)



Source: OECD.

EC96.TAXATION / 17 APR 96 (12:36)

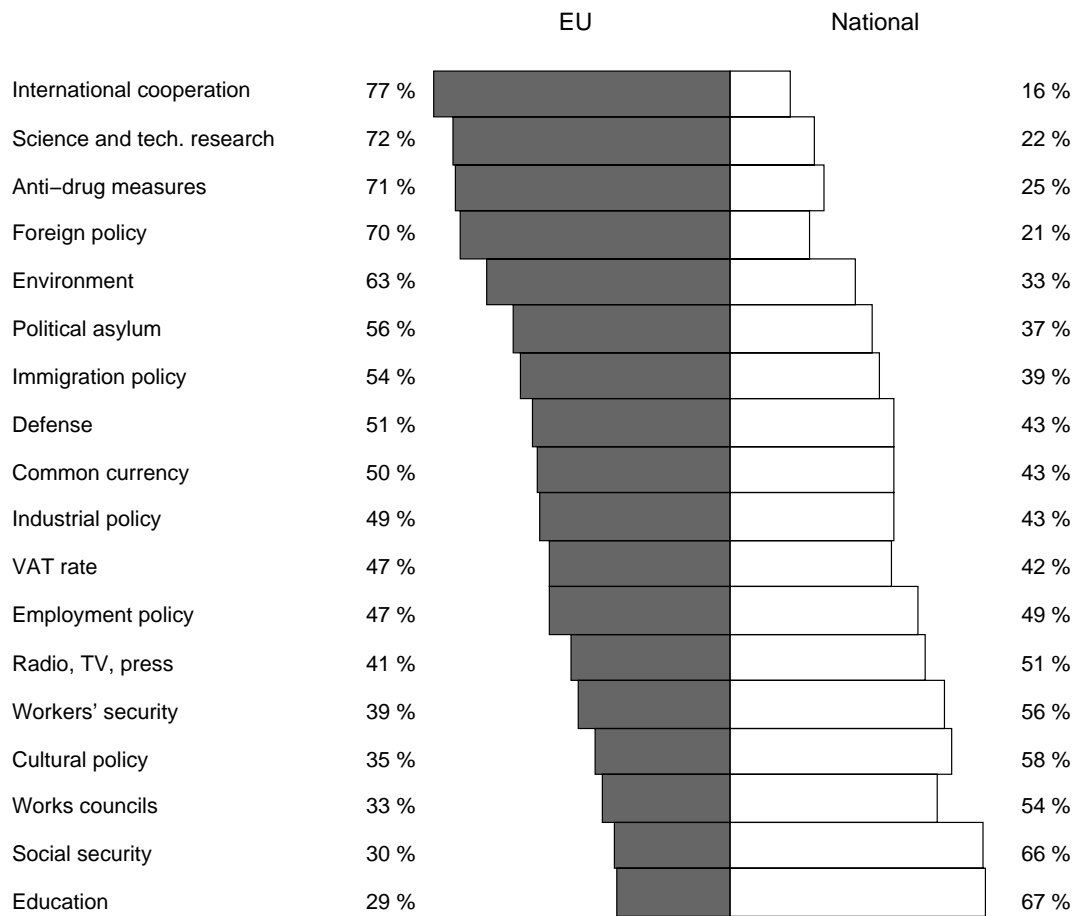
Figure 6. GOVERNMENT EXPENDITURE, REVENUE AND NET BORROWING
Per cent of GDP



Source: OECD.

EC96.GOV.GDP / 17 APR 96 (12:37)

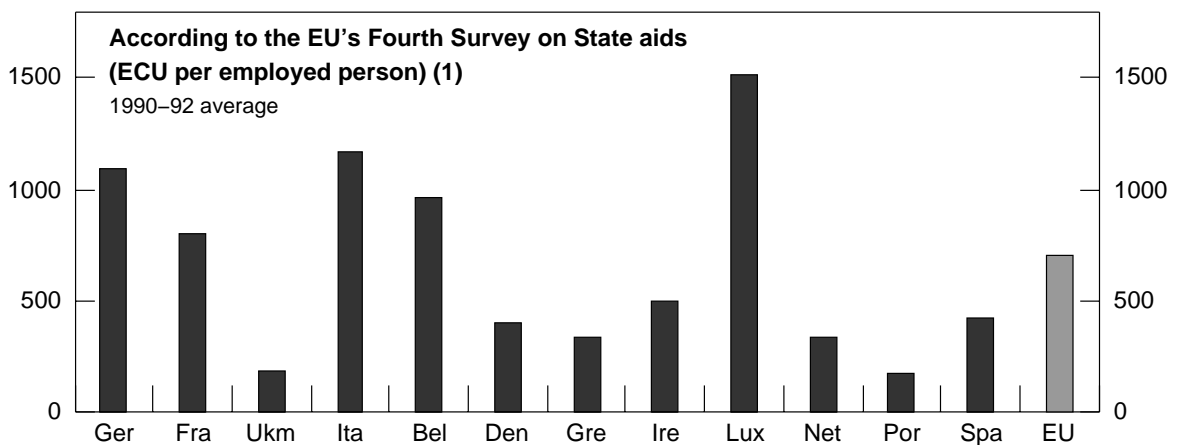
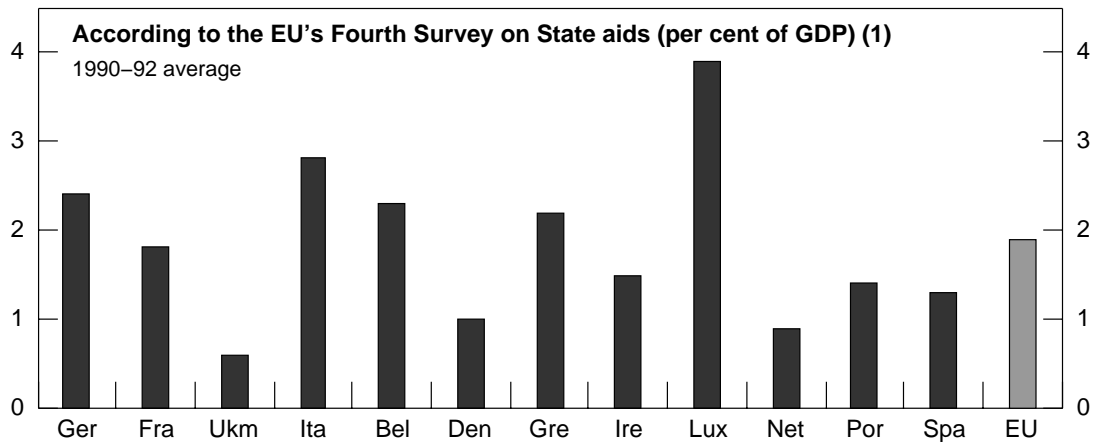
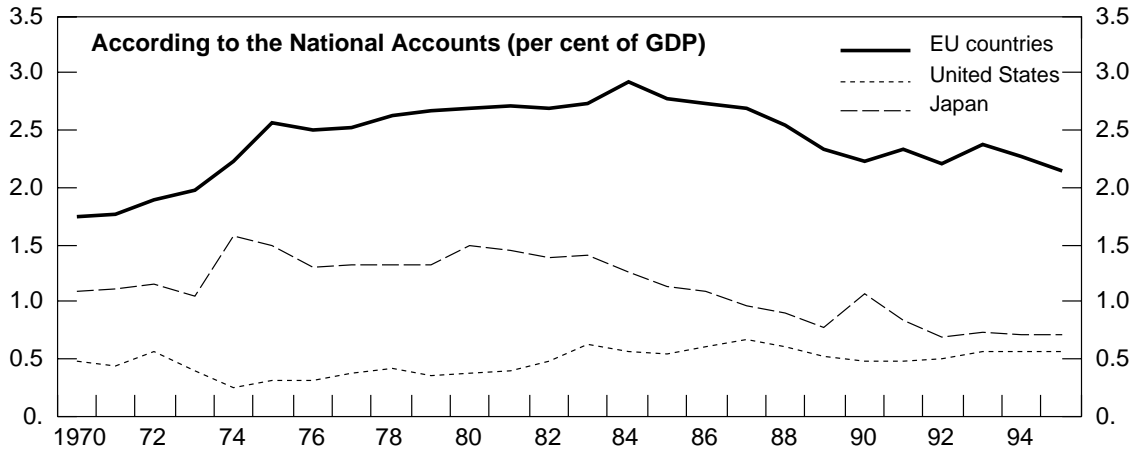
**Figure 7. NATIONAL OR EU LEGISLATION:
THE OPINION OF EU CITIZENS**



Source: Eurobarometre.

EC96.LEGISLATION / 17 APR 96 (12:38)

Figure 8. SUBSIDISATION



EC96.SUB / 17 APR 96 (12:40)

1. Including direct grants, tax reductions, equity participations, and aids elements contained in soft loans, tax deferrals and State guarantees, but excluding EU subsidies.

Sources: OECD; EU (1995), Fourth Survey on State aids.

Bibliography

- Aujean, M. (1994), "VAT in the Single Market: A First Assessment", *Internal Information Document of the European Commission*, October 1994, Brussels.
- Bayoumi, T.A. and Masson, P.R. (1994), "Fiscal Flows in the United States and Canada: Lessons for Monetary Union in Europe", *CEPR Discussion Paper*, No. 1057.
- Blöchliger, H.L., and Frey, R.L. (1993), "The Evolution of Swiss Federalism: A Model for the European Community?", *The Economics of Community Public Finance, European Economy* No. 5, 1993.
- Bovenberg, L. and Horne, J. (1992), "Taxes on Commodities, A Survey", *Tax Harmonization in the European Community : Policy Issues and Analysis*, G. Kopits (ed), Occasional Paper, IMF.
- Buiter, W. H. (1995), "Macroeconomic Policy during a Transition to Monetary Union", *CEPR Discussion Paper*, No. 1222.
- CEPR (1993), "*Making Sense of Subsidiarity. How much Centralisation for Europe?*", London.
- Cingolani, M. (1993), "Disparités régionales de produit par tête dans la Communauté Européenne", *European Investment Bank Paper No. 19* (février).
- Cnossen, S. (1992), "Intrigues around the tobacco excise in the European Community", *Intertax*, No.2.
- Commonwealth of Australia (1995), "Commonwealth Financial Relations with other Levels of Government, 1995-96", *Budget Paper*, No. 3.
- Council (1992), Guidelines on Company Taxation Linked to the Further Development of the Internal Market, Press release by the Council of the European Communities, 10088/92.
- Courchene, T. J. (1993), "Reflections on Canadian Federalism: are there Implications for European Economic and Monetary Union?", *The Economics of Community Public Finance, European Economy*, No. 5, 1993.
- Crockett, A.D. (1993), "The Role of Convergence in the Process of EMU", Paper presented at the European Investment Bank Conference on "30 years of European Monetary Integration from the Werner Plan to EMU", published in *BIS Review*, No. 220.
- Daly, M. (1995), The Future of Capital Income Taxation in the European Union, Paper presented at a CEPR Conference in September 1995, Bergen.
- De Grauwe, P. (1993), "The Political Economy of Monetary Union in Europe", *The World Economy*, Vol. 16, No. 6, (November).
- Eichengreen, B. (1993), "European Monetary Unification", *Journal of Economic Literature*, Vol. XXXI, (September).

- Eichengreen, B. and von Hagen, J. (1995), "Fiscal Policy and Monetary Union: Federalism, Fiscal Restrictions and the No-Bailout Rule", *CEPR Discussion Paper*, No. 1247 (September).
- Englander, A. S. and T. Egebo (1993), "Adjustment under Fixed Exchange Rates: Application to the European Monetary Union", *OECD Economic Studies*, No.20, (Spring).
- EC (1977), *Report of the Study Group on the Role of Public Finance in European Integration* (MacDougall Report).
- EC (1979), *Report of the Study Group on the Economic Effects of Budget and Financial Transfers in the Community* (Forte Report).
- EC (1992a), Conclusions and Recommendations of the Committee of Independent Experts on Company Taxation, Luxembourg.
- EC (1992b), "Community structural policies: Assessment and outlook", COM(92) 94 Final, Brussels.
- EC (1993a), "The Economics of Community Public Finance", *European Economy, Reports and Studies*, No. 5.
- EC (1993b), "Growth, Competitiveness, Employment. The Challenges and Ways forward into the 21st Century", White Paper by the Commission of the European Communities.
- EC (1993c), "Stable Money-Sound Finances", *European Economy*, No. 53.
- EC (1994a), "The Harmonization of the Laws of the Member States relating to Turnover Taxes - Common System of Value added Tax: Uniform Basis of Assessment", Commission of the European Communities, COM(94)584 final, Brussels.
- EC (1994b), "The Operation of the Transitional Arrangements for Charging VAT in Intra-Community Trade", Commission of the European Communities, COM(94)515 final, Brussels.
- EC (1995a), "1995 Broad Economic Policy Guidelines", *European Economy*, No. 60.
- EC (1995b), *Strengthening the Mediterranean policy of the European union: Establishing a Euro-Mediterranean Partnership*, Bulletin of the European Union, Supplement 2/95.
- Eurobaromètre (1995), "L'opinion publique dans l'Union Européenne", Commission Européenne.
- Fontanel, J. and Smith, S. (1991), "A European Defence union?", *Economic Policy*, Vol. 13.
- Goodhart, C. A. E. and Smith, S. (1993), "Stabilisation", *The Economics of Community Public Finance, European Economy*, No. 5.
- Herbstgutachten der deutschen Wirtschaftsforschungsinstitute (1995), "Die Lage der Weltwirtschaft und der deutschen Wirtschaft im Herbst 1995", Halle.
- Hochreiter E. and G. Winckler (1993), "The Advantages of Tying Austria's Hands: The Success of the Hard Currency Strategy", University of Vienna, *Department of Economics Working Paper*, No. 9307 (October).

- Hoeller P. and Louppe M.O. (1994), "The EC's Internal Market: Implementation and Economic Effects", *OECD Economic Studies No. 23* (Winter).
- Italianer, A. and Vanheukelen, M. (1993), "Proposals for Community Stabilisation Mechanisms: Some Historical Applications", *The Economics of Community Public Finance*, European Economy, No. 5.
- King, D.N. and Owens J.P. (ed) (1991), *Fiscal Federalism in Economics in Transition*, April.
- Leibfritz W., Roseveare, D., Fore, D. and Wurzel, E. (1995), "Ageing Populations, Pension Systems and Government Budgets: How do they Affect Savings?", *OECD Economics Department Working Papers*, No. 156.
- Maré, M. (1994), "La sicurezza e l'economia della difesa in Europa: evoluzione e prospettive", mimeo, Roma.
- Matthes, H. (1995), "Points regarding the Financial Organisation of a United Europe", Speech given at the Walter-Eucken Institut, March 30, 1995.
- Oates, W.E. (1972), *Fiscal Federalism*, Harcourt Brace and Jovanvich, New-York.
- OECD (1993), *Economic Outlook No. 53*, (June).
- OECD (1994a), *Taxing Profits in a Global Economy*, Paris.
- OECD (1994b), *The OECD Jobs Study. Evidence and Explanations*, Paris.
- OECD (1995), *Environnemental Taxes in OECD Countries*.
- Pisani-Ferry, J., Italianer, A. and Lescure, R. (1993), "Stabilisation Properties of Budgetary Systems: a Simulation Analysis", *The Economics of Community Public Finance*, European Economy, No. 5.
- Ryan, M. (1995), "What Future for Payroll Taxes in Australia?" *Treasury Research Paper* No. 10.
- Sala-i-Martin, X. and Sachs, J. (1992), "Fiscal Federalism and Optimum Currency Areas: Evidence for Europe from the United States", *CEPR Discussion Paper*, No. 632 (March).
- Spahn, P.B. (1991), "Functions and Financing of the Community Budget under EMU: Federal Financial Constitutions compared. The cases of Australia, Switzerland, Germany and the EC", *Frankfurter Volkswirtschaftliche Diskussionsbeiträge* No. 17.
- Teutemann, M. (1993), "The role of the EC budget in the Fields of Defence, External affairs and International Assistance - as seen from the Perspectives of Fiscal Federalism and Public Choice Theory", *The Economics of Community Public Finance*, European Economy, No. 5.
- Valenduc C. (1994), "L'harmonisation fiscale et la construction européenne", *Courrier hebdomadaire*, No. 1441-1442, CRISP.
- Vanheukelen, M. (1994), "National and Supranational Public Finance in an Economic and Monetary Union. An Analysis of European Union Plans with references to the Canadian experience", (mimeo).

Von Hagen, J. (1991), "Fiscal Arrangements in a Monetary Union. Evidence from the US", *Indiana University Discussion Paper* No. 58.

ANNEX 1

IMPORTANT PROVISIONS OF THE TREATY ON EUROPEAN UNION

Common Provisions

Article A

This Treaty marks a new stage in the process of creating an ever closer union among the people of Europe, in which decisions are taken as closely as possible to the citizen.

Article B

The Union shall set itself the following objectives:

- to promote economic and social progress which is balanced and sustainable, in particular through the creation of an area without internal frontiers, through the strengthening of economic and social cohesion and through the establishment of economic and monetary union, ultimately including a single currency in accordance with the provisions of this Treaty;
- to assert its identity on the international scene, in particular through the implementation of a common foreign and security policy including the eventual framing of a common defence policy, which might in time lead to a common defence;
- to strengthen the protection of the rights and interests of the nationals of its Member States through the introduction of a citizenship of the Union;
- to develop close cooperation on justice and home affairs;
- to maintain in full the *acquis communautaire* and build on it with a view to considering, through the procedure referred to in Article N (2), to what extent the policies and forms of cooperation introduced by this Treaty may need to be revised with the aim of ensuring the effectiveness of the mechanisms and the institutions of the Community.

The objectives of the Union shall be achieved as provided in this Treaty and in accordance with the conditions and the timetable set out therein while respecting the principle of subsidiarity as defined in Article 3b of the Treaty establishing the European Community.

Provisions Amending the Treaty Establishing the European Economic Community With a View to Establishing the European Community

Article 2 shall be replaced by the following:

'The Community shall have as its task, by establishing a common market and an economic and monetary union and by implementing the common policies or activities referred to in Articles 3 and 3a, to promote throughout the Community a harmonious and balanced development of economic activities, sustainable and non-inflationary growth respecting the environment, a high degree of convergence of economic performance, a high level of employment and of social protection, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States.'

Article 3 shall be replaced by the following:

'For the purposes set out in Article 2, the activities of the Community shall include as provided in this Treaty and in accordance with the timetable set out therein:

- (a) the elimination, as between Member States, of customs duties and quantitative restrictions on the import and export of goods, and of all other measures having equivalent effect;*
- (b) a common commercial policy;*
- (c) an internal market characterised by the abolition, as between Member States, of obstacles to the free movement of goods, persons, services and capital;*
- (d) measures concerning the entry and movement of persons in the internal market as provided for in Article 100c;*
- (e) a common policy in the sphere of agriculture and fisheries;*
- (f) a common policy in the sphere of transport;*
- (g) a system ensuring that competition in the internal market is not distorted;*
- (h) the approximation of the laws of Member States to the extent required for the functioning of the common market;*
- (i) a policy in the social sphere comprising a European Social Fund;*
- (j) the strengthening of economic and social cohesion;*
- (k) a policy in the sphere of the environment;*
- (l) the strengthening of the competitiveness of Community industry;*
- (m) the promotion of research and technological development;*
- (n) encouragement for the establishment and development of trans-European networks;*

- (o) a contribution to the attainment of a high level of health protection;
- (p) a contribution to education and training of quality and to the flowering of the cultures of the Member States;
- (q) a policy in the sphere of development cooperation;
- (r) the association of the overseas countries and territories in order to increase trade and promote jointly economic and social development;
- (s) a contribution to the strengthening of consumer protection;
- (t) measures in the spheres of energy, civil protection and tourism.'

The following Article shall be inserted:

'Article 3a

1. For the purposes set out in Article 2, the activities of the Member States and the Community shall include, as provided in this Treaty and in accordance with the timetable set out therein, the adoption of an economic policy which is based on the close coordination of member States' economic policies, on the internal market and on the definition of common objectives, and conducted in accordance with the principle of an open market economy with free competition.
2. Concurrently with the foregoing, and as provided in this Treaty and in accordance with the timetable and the procedures set out therein, these activities shall include the irrevocable fixing of exchange rates leading to the introduction of a single currency, the ecu, and the definition and conduct of a single monetary policy and exchange-rate policy the primary objective of both of which shall be to maintain price stability and, without prejudice to this objective, to support the general economic policies in the Community, in accordance with the principle of an open market economy with free competition.
3. These activities of the Member States and the Community shall entail compliance with the following guiding principles: stable prices, sound public finances and monetary conditions and a sustainable balance of payments'

The following Article shall be inserted:

'Article 3b

The Community shall act within the limits of the powers conferred upon it by this Treaty and of the objectives assigned to it therein.

In areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the Community.

Any action by the Community shall not go beyond what is necessary to achieve the objectives of this Treaty.'

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