COMMISSION OF THE EUROPEAN COMMUNITIES

REPORT

OF THE STUDY GROUP ON

THE ROLE OF PUBLIC FINANCE

IN EUROPEAN INTEGRATION

Volume I : General Report

Brussels

April 1977

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PREFACE

At the end of 1974 the Commission asked a group of independent economists (Professors Biehl, Brown, Forte, Fréville, O'Donoghue and Peeters, and Sir Donald MacDougall as Chairman) to examine the future role of public finance at the Community level in the general context of European economic integration.

The Study Group held fourteen meetings from April 1975 to March 1977. Officials of several Directorates-General of the Commission also took part in these meetings (Economic and Financial Affairs, Regional Policy, Budget, Financial Institutions and Taxation). The Group also had the benefit of discussions with two expert consultants from the United States (Professor Oates) and Australia (Professor Mathews).

The results of the work are presented in two volumes. This first volume contains the General Report, including an Introduction and Summary, all of which have been unanimously agreed by the members of the Study Group.

The General Report draws heavily on the much larger body of evidence and analysis contained in the second volume.(1) This consists of individual contributions by the members of the Study Group, and the two expert consultants from the United States and Australia. It also contains working papers contributed at the request of the Group by its secretariat of officials from the Directorate-General for Economic and Financial Affairs of the Commission. While the authors of the individual chapters in the second volume take final responsibility for them, they have all benefitted from detailed discussion by the Group as a whole.

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(1) Referred to in the General Report by chapter numbers in square brackets.

COMPOSITION OF THE GROUP

Members:

Sir Donald MacDougall	Chief Economic Adviser of the Confederation of British Industry, London (Chairman)
Dieter Biehl	Professor at the Technische Universität, Berlin
Arthur Brown	Professor at the University of Leeds, Leeds
Francesco Forte	Professor at the University of Turin, Turin
Yves Fréville	Professor at the University of Rennes, Rennes
Martin O'Donoghue	Professor at Trinity College, Dublin
Theo Peeters	Professor at the University of Louvain

The following also participated:

Russell Mathews	Professor at the Australian National University, Canberra
Wallace Oates	Professor at Princeton University, Princeton

Secretariat from the Directorate-General for Economic and Financial Affairs of the Commission:

Paul Van den Bempt	Director
Michael Emerson	Head of Division
Klaus Schneider	
Horst Reichenbach	
Jim McKenna	
Tom Scott (until mid 1976)	

GENERAL REPORT

PUBLIC FINANCE IN EUROPEAN INTEGRATION

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INTRODUCTION AND SUMMARY

Free trade in goods and services within the Community of Nine has been largely achieved, although significant non-tariff barriers remain in both the industrial and the agricultural fields. Monetary union, on which much has been written, is - for reasons given by the Marjolin Committee(1) - a long way off and will probably have to await major developments in the political, monetary and fiscal fields. This report examines the third main element in economic union, largely neglected so far, namely the role of public finance, which we take to embrace not only taxation and public expenditure, but also the many regulatory, co-ordinating and non-budgetary activities in the economic field in existing economic unions.

A major part of our work has been a detailed and quantitative study of public finance in five existing federations (Federal Republic of Germany, U.S.A., Canada, Australia, Switzerland) and three unitary states (France, Italy and the U.K.) - eight countries in all - and in particular the financial relationships between different levels of government and the economic effects of public finance on geographical regions within the countries. We have also studied a good deal of the voluminous theoretical literature on "fiscal federalism". The main purpose has been to see what light these studies throw on future developments in the public finances of the European Community.

It is most unlikely that the Community will be anything like so fully integrated in the field of public finance for many years to come as the existing economic unions we have studied. Nevertheless, we believe that our analysis helps to throw light on the ways in which the public finance activities of the Community might be expanded and improved during, say, the next decade. We do not make any definite recommendations (although we describe a possible package, with options, to help focus discussion); but we hope that the orders of magnitude we present will help to put the political debate on these matters in perspective, that our analysis will help those who have to decide the direction in which Community expenditures (and revenues) might be extended, and that it will also help those who have to determine which of the many possible techniques would be most appropriate: our analysis of other countries provides a rich treasure house of experience - including mistakes to be avoided.

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(1) Report of the Study Group "Economic and Monetary Union 1980", Brussels, March 1975.

Main points from study of eight countries and existing Community

The most relevant orders of magnitude and other facts are as follows:

1. Public expenditure by members of the Community in 1975 was about 45 % of the gross produot of the area as a whole (this is the weighted average for the individual states). Expenditure by all Community Institutions is 0.7 % (10 billion units of account in 1977).

2. Although the statistical problems are considerable, it can be said with a fair degree of certainty that per capita incomes are in general at least as unequal between the Nine members of the Community (and between the 72 regions we have distinguished in the Community) as they are on average between the various regions of the countries we have studied, even before allowing for the equalising effects of public expenditure and taxation.

3. These reduce regional inequalities in per capita income by, on average, about 40 % in the countries studied (by more in Australia and France, by less in the U.S.A. and Germany). The redistributive power between member states of the Community's finances, by comparison, is - not surprisingly - very small indeed (1 %); partly because the Community budget is relatively so small, partly because the expenditures and revenues of the Community have a weak geographical redistributive power per unit of account.

4. The redistribution through public finance between regions in the countries studied tends to be reflected to a large extent (though not, of course, precisely because other factors are involved) in corresponding deficits in the balances of payments on current account of the poorer regions, with corresponding surpluses in the richer regions. These deficits and surpluses are of a continuing nature. Net flows of public finance in the range of 3 - 10 % of regional product are common for both relatively rich and relatively poor regions, but a few of the latter enjoy considerably higher net inflows, up to around 30 % of regional product.

5. As well as redistributing income regionally on a continuing basis, public finance in existing economic unions plays a major role in cushioning short-term and cyclical fluctuations. For example, one-half to two-thirds of a short-term loss of primary income in a region due to a fall in its external sales may be automatically offset through lower payments of taxes and insurance contributions to the centre, and higher receipts of unemployment and other benefits. If only because the Community budget is so relatively very small there is no such mechanism in operation on any significant scale as between member countries, and this is an important reason why in present circumstances monetary union is impracticable.

6. The importance of the various instruments which effect inter-regional redistribution varies. On the tax side, personal income tax is, in most countries, the predominant instrument. The main public expenditure programmes and social security systems also tend to have substantial redistributive effects.

   In unitary states a large part of the total redistribution between regions arises automatically in these ways and is in a sense "invisible"; high incomes go with high tax payments and low incomes with high receipts of centrally provided services and transfer payments. (Regional policy narrowly defined is relatively unimportant).

   In federal countries intergovernmental grants and tax-sharing play a much more important part. These achieve relatively large redistributive results with relatively small amounts of federal expenditure, because the net inter-regional transfers are to a smaller extent than elsewhere the result of differences between large payments in opposite directions.

7. In the federal countries, leaving aside defence and external relations including aid, which are always a federal responsibility, as much as one-half to two-thirds of civil expenditure is left in the hands of lower levels of government, sometimes including most expenditure on education, health, houses and roads, although social security is normally a predominantly federal responsibility. On the other hand, the financing of the expenditure is much more a federal responsibility - to the extent of one-half to four-fifths.

8. The difference is reflected in grants from federal to lower levels of government; and the variety of techniques used - general purpose grants, specific purpose grants, matching grants, etc. - has been carefully analysed with a view to drawing lessons for the Community.

9. As regards the distribution of the main taxes between levels of government in the federations, there are few general rules except that customs duties are always federal, property tax always local or state, and social security contributions (or social insurance) mostly federal, except in the United States. For personal and corporate income tax, general sales tax and excises, there is a broad range of practices.

Implications for the future role of public finance in the Community

It is possible to conceive, presumably at some distant date, a Federation in Europe in which federal public expenditure is around 20 - 25 % of gross product as in the U.S.A. and the Federal Republic of Germany.

An earlier stage would be a federation with a much smaller federal expenditure of the order of 5 - 7 % of gross product, or roughly 7½ - 10 % if defence were included. An essential characteristic of such a federation would be that the supply of social and welfare services would nearly all remain at the national level. Such an arrangement could provide sufficient geographical equalisation of productivity, living standards and cushioning of temporary fluctuations to support a monetary union. But there are various degrees of confidence as to whether this would in practice be feasible.

In our Report we have tended to concentrate more on what we call "pre-federal integration", a period during which it is assumed that the Community's political structure is being gradually built up, partly with the direct election of the European Parliament. We can envisage public expenditure at Community level rising to around, say, 2 - 2½ % of gross product during this period.

In considering which expenditure functions might be carried out to a greater extent at Community level we have taken account, in addition to the experience of the eight countries studied, and political realities as we assume them to be, the following criteria.

First, the case for Community involvement where this can achieve "economies of scale", including greater bargaining power vis-à-vis third countries. This applies mainly to external relations (where it is a reality in external trade; a partial reality, which might be extended, in aid to developing countries; a possibility in energy and political co-operation; not at present a possibility as regards the supply of the defence services, although this does not rule out ad hoc co-operation between individual members). There are also possible economies of scale in Community action on advanced technology, industrial and technical standards, etc.

Secondly, there is a case for Community involvement when developments in one part of the Community "spill over" into other parts of it, or indeed all of it. Several of the external functions already referred to as achieving economies of scale also have major spillover effects. An important example, internal to the Community, during the "pre-federal integration" stage will, in our view, be Community action in the areas of structural and cyclical policies (regional, manpower, unemployment) to ensure so far as possible that the benefits of closer integration are seen to accrue to all, that there is growing convergence - or at least not widening divergence - in the economic performance and fortunes of member states. Those measures should make a start in reducing the inequalities in per capita incomes between the various parts of the area; the situation in the eight countries studied tends to confirm that this is a necessary part of economic union.

Thirdly, we assume that most member governments are reluctant at the present time to see any significant increase in total public expenditure at all levels - Community, national, state and local - as a percentage of gross product. This means that, besides curbing our ambitions for the Community, we must look for transfers of expenditure from national to Community levels, especially where economies of scale can be achieved; for savings where possible in existing Community expenditures (for example agriculture, which at present comprises two-thirds of the Community budget); for the most cost-effective methods of achieving the objectives described in the previous paragraph; and avoidance of regulations, harmonisation, etc. which are not worth-while in terms of the extra bureaucratic and other costs involved.

Changes in the Community's expenditure

In the light of these various considerations, and to provoke discussion by those responsible for action, we would suggest the following main directions in which the Community's expenditure might be changed during the "pre-federal integration" phase.

(a) The Community is already, and will increasingly on present plans become, involved in development aid. There is scope for transfers from national to Community level of some 2 - 4 billion units of account. This could achieve economies of scale by reducing administrative costs for recipient and donor countries and increasing the value of aid received by spreading the choice of procurement over a wider area.

(b) We would not see a case at this stage - though circumstances may change - for significant Community involvement in social and welfare services, which make up well over one-half of member states' total public expenditure, except for unemployment and vocational training - see (e) (ii)-(iii) below. The Community has an interest in such matters as standards of teaching of European languages, mutual recognition of examination standards and reciprocity in health services and social security, but these will not involve large amounts of public money.

(c) We would look for savings wherever possible, for example in agriculture and, less important quantitatively, through economies of scale in, for example, advanced technology, common political representation in smaller third countries, etc.

(d) In industrial sectors other than agriculture, for which Community intervention is established or plausible (e.g. steel, fisheries, energy, certain declining industries), the amount of direct budgetary subsidies should not tend to become large. But, not to be confused with budgetary expenditure, much larger sums of parallel loan financing, borrowed by the Community on capital markets or under Community guarantee, might be appropriate in some cases.

(e) It is in the area of structural, cyclical, employment and regional policies that we see the main need for substantial expenditure at Community level. The purpose of these measures is mainly to help to reduce inter-regional differences in capital endowment and productivity. Our general report sets out a "menu" of six possibilities.

(i) More Community participation than at present in regional policy aids (employment or investment incentives, public infrastructure, urban redevelopment).

(ii) More Community participation than at present in labour market policies (including vocational training and other employment measures).

(iii) A Community Unemployment Fund on the lines suggested in the Marjolin Report under which part of the contributions of individuals in work would be shown as being paid to the Community and part of the receipts of individuals out of work as coming from the Community. This need not necessarily involve any increase in total public expenditure or contributions in the Community as a whole. Apart from the political attractions of bringing the individual citizen into direct contact with the Community, it would have significant redistributive effects and help to cushion temporary setbacks in particular member countries, thereby going a small part of the way towards creating a situation in which monetary union could be sustained.

(iv) A limited budget equalisation scheme for extremely weak member states to bring their fiscal capacity up to, say, 65 % of the Community average and so ensure that their welfare and public service standards are not too far below those of the main body of the Community.

(v) A system of cyclical grants to local or regional governments that would depend upon regional economic conditions.

(vi) A "conjunctural convergence facility" aimed at preventing acute cyclical problems for weak member states leading to increasing economic divergences.

We judge that a selection from these six possibilities, or variants of them, involving budgetary expenditure of the order of 5 - 10 billion units of account per annum on average could be regarded as beginning to be economically significant. A 10 billion unit of account packet could reduce inequalities in living standards between member states by about 10 %, compared with the average of about 40 % in the countries studied, and might be judged an acceptable start.

Where grants are involved in the above possibilities (other than the suggested Unemployment Fund) they should be made as cost-effective as possible. This could involve, for example, the use of specific purpose matching grants (the Community providing a share of the total cost); having variable matching ratios, e.g. between 80 % and 20 % for poorer and richer states or regions so that the money went where it was most needed; and possibly the attachment of macro-economic performance conditions (on inflation, monetary policy, etc.) to some of the grants, to increase the likelihood that they would increase economic convergence.

The net cost of the suggestions under (a) - (e) above, allowing for savings, economies of scale, and mere transfers of expenditure from national to Community level, as well as for the hopefully favourable effects on the growth and stability of the Community's gross product, should not increase total public expenditure in the Community at all levels as a proportion of real product by much more than a percentage point. Allowing for the transfer of expenditure from national to Community level, the Community budget might rise from 0.7 % to around 2 - 2½ %.

Financing

This would, nevertheless, raise a problem of financing, because on likely present policies the Community will approach the limit of its existing financial capacity (customs duties, agricultural levies and not more than 1 % of VAT on a common base) towards the end of the decade, and without assuming any new policy developments with significant budgetary implications such as we have suggested, modest as they may be.

The Group has therefore considered what the Community's next resources might be. Most possible candidates are either inadequate in size or raise serious practical difficulties. We therefore suggest as one source of finance a further tranche of VAT resources on the present approximately neutral basis after adjustment by the "Financial Mechanism". But we also suggest in addition a more progressive revenue source. Drawing on principles followed in Canada and Germany this could be a variant built onto the VAT system with adjustments based on a formula using a progressivity key such as personal income tax capacity.

Stabilisation

We have considered whether the Community budget could or should be used as an instrument for helping to stabilise short-term and cyclical fluctuations in economic activity. We conclude that this would be very limited in the "pre-federal integration" period. With a budget of the order of 1 % - 2½ % of gross product the budget balance would have to swing by enormous percentage fractions of this budget to have a perceptible macro-economic effect on activity in the Community as a whole;

and to allow this would also weaken the link in the minds of politicians between public expenditure and the need to pay for it over a period of years by taxation. In any case, some would hold that budgetary deficits and surpluses would have only limited effects unless they were linked with a coordinated Community monetary policy.

We would, however, favour limited powers of borrowing (and repayment) to prevent the need for a Community budgetary policy that actually accentuated cyclical movements, by forcing tax increases or expenditure cuts in recession years and vice versa. We would also favour specific countercyclical policies under (e) (iii), (v) and (vi) above - the Unemployment Fund; cyclical grants to local or regional governments; a "conjunctural convergence facility".

Conclusion

In conclusion, we hope that the analysis in our Report will be of some assistance to those who will be debating, and taking decisions on, these hitherto rather neglected public finance aspects of economic union. We should also like to think that the detailed chapters supporting the general report will for a considerable time be an important work of reference to which will turn for guidance, and even inspiration, those who have to analyse, advise on, and deal with, the many problems relating to public finance that we believe are bound to come up quite frequently in the years ahead.

Finally, we should like to pay tribute to the superb, original, professional work by the Secretariat which has supported our deliberations. To a large extent our Group has been in the nature of a Steering Committee of a number of highly qualified researchers, without whose expert and devoted work this Report could never have been produced.

1. AIM OF THE REPORT, AND POLITICAL ASSUMPTIONS

The subject of this report is the actual and potential role of public finance at the European level. We have also found it necessary to consider regulatory, or coordinating activities in the economic field. The main emphasis, however, is on public finance. This subject constitutes a third major aspect of economic integration, beyond the first two more familiar aspects, which are free trade and monetary integration.

At the outset, the Group's assumptions must be made explicit on two points; first, the geographic extent of the area in question, and secondly, its broad political objectives.

As to geographic extent, the Group has taken the political framework as given, and has concerned itself with the Community of the Nine, with some of the implications of extending membership to one or more Mediterranean countries.

As regards the political objectives of the Community, the Group has thought it right to avoid any particular value judgement as to the degree of political union to be attained. It has, however, felt it useful to start with the status quo, and beyond that, to consider three hypothetical degrees of integration which the Community might achieve and which could also be considered as representing different stages on the way towards closer union. These may be described as:

- pre-federal integration
- federation with a small public sector at the Community level
- federation with a large public sector at the Community level

We have not pursued the distinction between federation and confederation, beyond noting that in a confederation the states retain greater power. The distinction is not so clear in the economic as it is in the political and legal fields.

The status quo is characterised by a largely completed customs union, but one which is still distorted and buttressed by budgetary compensatory devices in the agricultural sector, and is fragile and incomplete in the industrial sector (e.g. the recent use of import deposits in Italy, limited effective competition in public tendering). Ambitious plans for monetary integration have failed and have relapsed into selective club arrangements (the 'snake'). Despite some divergence, rather than convergence, of economic performance between the most and least prosperous member states, integration is nonetheless proceeding, in an uneven and often modest way, in quite a number of public sectoral activities through financing, regulation and coordination (e.g. in development aid, regional policy, environmental policy, industrial and commercial norms and conditions of competition). Public expenditure at the Community level is very small - under 1 % of gross product.

Pre-federal integration is assumed to consist of completing the common market, e.g. by the elimination of non-tariff trade barriers, other distortions to trade and freer movement of capital and labour. There would also be some increased public sector activities partly or wholly in substitution for the member states, and further steps towards economic and monetary policy intervention - falling short, however, of monetary union. It is assumed that the Community's political structure is being gradually built up, partly with the direct election of the European Parliament, and that this affects both its internal and its external policies.

The Community's economic policies are assumed to include intervention in some industries as well as structural and redistribution policies designed to bring about a greater convergence of economic performance and fortunes between member states and regions - in the absence of which further integration of any fundamental kind would be unattainable. As regards the general level of economic activity, the instruments remain very largely in national hands, but since public expenditure at the Community level might rise from the present level of 0.7 % to 2 - 2½ % of gross product, it might be possible for Community finance to play some part in stabilisation and growth policy.

There is a strong contrast between this situation and that of a large public sector federation, like the federations already in existence. There, several of the major social and welfare expenditure functions would be in the hands of the federal government, so that it would have extensive direct contacts with individuals, by-passing the national level. Correspondingly, on the tax side, the large public sector federation implies a predominance of federal over state taxes. In existing federations like the United States, and the Federal Republic of Germany, federal public expenditure is around 20 to 25 % of GNP. The very large gross inter-governmental and other inter-regional flows of funds that this involves perform some important equalisation and stabilisation functions. While the Community might conceivably develop a public sector of this size, our references to a possible federation are based on a very much smaller one.

It would, for example, be possible to perform the same equalisation and stabilisation functions by means of net financial transfers which would be smaller. We may therefore envisage a small public sector federation in which the supply of social and welfare services (health, education, social security and welfare) would essentially remain at the national level, while the required equalisation of public service provision between members would be achieved by financial transfers between them which would be smaller than those in existing federations. Programmes of federal aid to particular industries and regions could also be limited to selective intervention, topping up national efforts. This would make possible a federation with central expenditure amounting to about 5 - 7 % of GNP. This ceiling would be increased if defence expenditure became a federal responsiblity; defence expenditure on the present scale would add about 2½ - 3 % of GNP.

A federation with these special characteristics would facilitate creation of a monetary union. Existing national federations enjoy such union internally, and its maintenance is powerfully assisted by the largely automatic equalising and stabilising inter-regional flows through the channels of federal finance. In the view of some members of the Group the necessary public finance underpinning for a monetary union could be achieved with a small Community public sector, having the special characteristics that we describe. Other members, while agreeing that in these circumstances monetary union would become a much more practical possibility than it is at present, feel unable to be so confident that it would in practice be feasible and sustainable, partly because there is no relevant historical experience to help form a judgement.

2. TWO APPROACHES TO THE ROLE OF PUBLIC FINANCE IN EUROPEAN INTEGRATION

The Group has pursued two lines of economic analysis, which at the outset are quite different, but which - as will be seen - converge in their conclusions to a considerable degree.

The first approach is to examine - largely on the basis of empirical case studies of relevant countries [1] to [9] (1) - the role of public finance in the macro-economic inter-relations between regions. (Unless otherwise specified, the term 'region' is used generally in this report to cover not only regions in unitary states, but also the member states of existing federations). This examination is concerned with the part played by inter-regional flows of public finance in the normal functioning of a modern integrated economy. In particular, it is concerned with the reduction of differences in average living standards between regions, which are typically significantly less than those in average productivity; with the extent to which, when the fortunes of different regions diverge over short periods, these differences are compensated through the tax and expenditure functions of the public sector; and with the part played by flows through public channels in financing regional balance of payments deficits.

This first approach may be described as 'looking from the top down'. It concerns the regional macro-economic role of public finance in the setting of mature economic integration between a number of regions. The results of this kind of analysis can be transposed into the Community setting for illustrative purposes, but not for the purposes of immediate policy recommendation. It points to the direction in which the Community may move, and to the kind of public finance characteristics that typically accompany other features of economic and monetary union.

The second approach may be described as 'looking from the bottom up'. In it, one examines the specific functions of the public sector in the supply of given goods and services or through regulation in such sectors as agriculture, fisheries, education, health, etc.; and its broader functions, such as income distribution policies, stabilisation, employment and growth policies [10] to [16]. Each function is considered against criteria which point to whether or not the Community is the most suitable level of government for its management. In the Community setting there are three to four main levels of government: local government, regional governments covering population sizes up to several millions, nation-state governments covering population sizes up to around fifty millions, and the emerging Community tier with a population of two hundred and fifty millions or more.

(1) Numbers in [ ] refer to the relevant Chapters in Volume II, of which the table of contents is given at the end of this volume.

As will be seen, this approach produces relatively few absolute prescriptions as to the level of government at which given functions may best be discharged. Rather, it provides some guidelines in relation to the Community, around which there will often be a wide range of options open for political choice.

3. THE INTER-REGIONAL ASPECTS OF PUBLIC FINANCE IN EXISTING FEDERAL AND UNITARY STATES

Economic and monetary integration leads to the progressive loss by states of their ability to control trade, exchange rates, and monetary and fiscal policy although, as will be seen, the loss of control over fiscal policy is only partial in federal systems. While there are gains from economic integration, there are also, in the absence of adequate safeguards, risks of an uneven distribution of these gains - even to the point of some areas being net losers.

At present these safeguards still largely exist in the form of member states' control over the main instruments of economic policy not transferred to the Community. In naturely integrated economies, however, the safeguards have a quite different nature: large-scale inter-regional flows of public finance, on both the expenditure and revenue sides, coupled to various administrative powers at the centre to influence the location of investment and public purchasing. The Group has studied the cases of a number of relevant countries in some depth: the four largest Community member states (the Federal Republic of Germany [3], France [2], Italy [4] and the United Kingdom [1]) and four federations outside the Community - Australia, Canada, Switzerland and the United States [6] to [9]. It has given more attention to financial factors than to regulatory action partly for the simple reason that the former can be measured.

3.1. Inter-regional differences in average per capita levels of income and output

In the countries studied, the net inter-regional flows of public money are to a large extent not motivated by explicit regional objectives. They arise, however, mainly from inter-regional differences in average per capita levels of output and primary income, because high incomes go with high tax payments, and low incomes with high receipts of at least some centrally-provided services or transfer payments.

Inter-regional differences in output and income can be traced to a variety of causes; for example, unequal natural resource endowment, different degrees of accessibility, different levels of investment in physical and human capital, and different degrees of dependance on industries for whose products demand is growing or declining in the national or world market. The processes of capital accumulation and migration frequently tend, in the absence of corrective measures, towards the cumulative distorted reinforcement of these differences.

Data on differences in average per capita income or output in the countries studied are given in Table 1. (1)

It should be noted that for the countries shown, but not the Community, these figures are already influenced by public expenditure on the incomes of civil servants, public procurement and administrative action influencing the location of economic activity. Without these influences of a central government the inter-regional or state differences would probably be larger.

The extreme figures shown, for the poorest and richest regions, give a simple but very imperfect measure of the overall inter-regional inequality of income distribution. These figures fail to take into account the population size of the extreme cases, or the wealth or population size of intermediate regions between the extremes. For this a statistically more complex measure, the Gini coefficient, is also given which takes these factors into account. This measure is explained in the Notes to Table 1. The overall results are reasonably consistent as between the simple poorest-richest comparison and the statistically superior Gini coefficient. Ranked by the Gini coefficient Australia appears to have the most equal inter-regional income distribution followed successively by Germany, the United Kingdom and Switzerland. France, the United States and Canada appear then to be grouped in a similar position, before Italy which appears to have the most unequal distribution.

As to the Community, inter-member state or inter-regional income differences vary substantially depending on whether the income comparison is based on market exchange rates or purchasing power parities. However, the degree of income inequality appears to be at least as great between member states of the Community as the average regional income inequality in the countries studied.

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(1) Where available Table 1 gives data on GDP and personal income. Personal income is defined as the sum of wages, salaries, entrepreneurial and personal property income; personal taxes and social security contributions are not deducted and governmental transfer payments (pensions, unemployment insurance benefits, etc.) not added. In the assessment of the quantitative redistributive effect of public finances (as given in Table 2), personal income is used mainly for two reasons: (1) to improve the comparability of results between European and non-European countries for which only personal income data exist, and (2) personal income appeared to be more relevant to the measurement of redistributive effects.

TABLE 1

Regional or state per capita product and income differences in relation to national (or Community) average

Country	Year	Income or output measure (1)	Poorest region or state	Level average = 100	Richest region or state	Level average = 100	Mini/Max ratio	Degree of inequality measured by Gini (2) coefficient
Australia	1973/74	Personal income	Tasmania	87	New South Wales	105	1.2	0.03
Canada	1973	Personal income	Newfoundland	54	Ontario	117	2.2	0.09
United States	1975	Personal income	Mississippi	60	Alaska	175	2.9	0.09 51 states
					Washington D.C.	125	1.4	0.06 9 regions(4)
					Connecticut	120		
Switzerland	1972	GDP	Appenzell i.R.	69	Basel Stadt	151	2.2	0.07
Switzerland	1967	Personal income	Obwalden	72	Basel Stadt	143	2.0	0.07
Germany	1974	GDP	Schleswig-Holst.	84	Hamburg	149	1.8	0.05
					Bremen	118		
					Nordrhein-West.	104		
Germany	1970	Personal income	Saar	81	Hamburg	133	1.6	0.05
					Bremen	113		
					Baden-Württemberg	108		
France	1970	GDP	Bretagne	81	Paris	139	1.7	0.09
France	1970	Personal income	Midi-Pyrénées	80	Paris	139	1.7	0.09
Italy	1973	GDP	Calabria	55	Liguria	137	2.5	0.15
Italy	1973	Personal income	Calabria	60	Liguria	134	2.2	0.14
United Kingdom	1974	GDP	N. Ireland	74	South-east	117	1.6	0.07
United Kingdom	1964	Personal income	N. Ireland	69	South-east	119	1.7	0.06
European Community at 9 member state level	1975	GDP at current market exchange rates	Ireland	49	Denmark	140	2.9	0.15
	1975	GDP at purchasing power parity exchange rates	Ireland	54	Belgium	117	2.2	0.09
European Community at 9 member state level	1975	Personal income at current market exchange rates	Ireland	51	Denmark	140	2.7	0.15
	1975	Personal income at purchasing power parity exchange rates	Ireland	57	Belgium	123	2.2	0.09
European Community at 72 region level	1970	GDP at current market exchange rates	Calabria	36	Hamburg	177	4.9	0.15
					Paris	161		
	1970	GDP at purchasing power parity exchange rates (3)	Calabria	39	Hamburg	172	4.4	0.13
					Paris	161		
European Community at 72 region level	1970	Personal income at current market exchange rates	Calabria	38	Paris	162	4.3	0.15
					Hamburg	161		
	1970	Personal income at purchasing power (3) parity exchange rates	Calabria	41	Paris	161	4.0	0.13
					Hamburg	154		

Notes

(1) GDP at factor cost for Germany; market prices for other countries; regional GDP data do not exist for Australia, Canada and the United States.
Personal income (as defined above) for all countries except Italy and Switzerland, for which net national product at factor cost is given, since official regional personal income data do not exist. For the European Community see sources.

(2) The Gini coefficient of inequality is a weighted average of per capita income differences between regions, where relative population shares are used as weights. A value of 0.0 means exact equality; a value of 1.0 all income concentrated in one region; a value around 0.05 indicates relatively small inter-regional inequality, whereas a value of 0.15 indicates already substantial inter-regional inequality. This use of population share weights takes into account both the size of regions and also the distribution of regions falling between the richest and poorest.

(3) No adjustment is made for inter-regional purchasing power differentials within countries.

(4) The Mini/Max ratio and the Gini coefficient refer to the nine census regions in the United States (and not to Washington D.C.); the poorest region is 'South-east' (Index = 77) and the richest 'Far West' (Index = 111).

Table 1 (cont.)

Sources:

GDP and personal income (except EEC): see Chapter [5].

EEC 1975 at nine member state level

GDP - Eurostat, National Accounts Aggregates 1960-1975.

Personal income - own extrapolation based on GDP figures for 1975 and personal income figures from (d), Country Table 9 (Cols. 1 + 2 + 3 + 4).

Purchasing Power Parity - Eurostat, Survey of retail prices and consumer purchasing power parities - 1975.

EEC 1970 at 72 region level

GDP - (c), Table 3.

Personal income - Germany (a), Table 5
France (b), Table XI, 1
Other country data (d), Country Table 9 (Cols. 1 + 2 + 3 + 4)
Other regional data: unpublished sources and own estimations based on production figures.

Purchasing Power Parity - (e) and (f).

(a) Volkswirtschaftliche Gesamtrechnungen der Länder : Entstehung, Verteilung und Verwendung des Sozialprodukts in den Ländern. Standardtabellen 1960-1970, Stuttgart 1974.

(b) INSEE, Régions françaises : Statistiques et indicateurs 1974.

(c) DIW, "Quantitative und institutionelle Aspekte eines Systems öffentlicher Transferleistungen zwischen den Regionen der Europäischen Gemeinschaft", bearbeitet von Fritz Franzmeyer und Bernhard Seidel, Berlin 1974.

(d) OECD, National Accounts of OECD Countries, 1962-1973.

(e) V. Paretti, H. Krijnse Locker, Ph. Goybet, "Comparaison réelle du produit intérieur brut des pays de la Communauté européenne", Analyse et Prévision, Futuribles, Tome XVIII, Juin 1974 (Published on the personal responsibility of the authors).

(f) Unpublished SOEC working paper.

3.2. Inter-regional redistributive power of public finance

The extent of the redistribution between regions provided through the public finance system of the countries mentioned is very substantial indeed. Table 2 gives estimates of it which indicate for recent years the percentage extent to which public finance at the central or federal level tends to reduce average per capita income differentials between regions [5]. The average extent of equalisation in the eight countries shown is about 40 per cent, with Australia and France clearly above this average and the United States and Germany below (for Switzerland the data do not cover social security transactions and so are far from complete). The equalising flows of public finance affect the living standards of the regions either directly by taxes on or transfers to individuals, or indirectly by inter-governmental transfers, or by the direct provision of public services. Comparisons are here being made between on the one hand income differentials by region (on an average per capita basis), and on the other hand these relative income levels modified by the tax, transfer and public expenditure policies of the central or federal government. Subject to regional differences in savings, this is close to comparing relative income and consumption levels, where consumption reflects living standards.

Two measures are given in the Table - one 'unweighted' and the other 'weighted' by population. The difference between these two measures - though quantitatively unimportant with the territorial divisions used for their estimates in most countries - involves a significant political and economic issue of relevance for the Community case. Using the 'unweighted' measure implies that all regions are regarded as equal units, this corresponding to the extreme confederal principle of 'one state - one vote'. The 'weighted' measure takes into account the population size of each region, and is thus more meaningful in relation to a unitary state where the central government is based on the principle of 'one person - one vote'. (1)

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(1) If the change in income differentials due to redistribution were the same for all regions, i.e. in all poor regions income increased, and in all rich ones decreased, by the same percentage relative to the average, the two measures give identical results. If the percentage change in income differentials above or below the average is different between regions, the measures give in general different results. If, for instance, a small poor region is treated relatively favourably, this will tend to make the unweighted measure show a greater degree of redistribution than the weighted one.

In the Community the 'unweighted' measure would thus indicate already substantial redistributive effects if only Ireland and a small number of regions in, say, Italy and the United Kingdom were to be treated favourably by Community finances, whereas the same order of magnitude would be shown by the 'weighted' measure only if Community finances favoured a larger share of below average income population.

Table 2

Percentage extent to which inter-regional income differences are reduced by central or federal public finances

	Average of individual regions' reduction in per capita personal income (3) differences (regions un-weighted by population)	Change in Gini coefficient of regional personal income (3) inequality due to public finances (regions weighted by population)
Federations		
Germany	29	39
Australia	53	53
Canada	32	28
U.S.A.	28	23
Switzerland (1)	(22)	(10)
Average of federations (2)	35	36
Unitary states		
France	54	52
Italy	47	44
United Kingdom	36	31
Average of unitary states	46	42
Average of federations and unitary states (2)	40	39

(1) Excluding social security.

(2) Excluding Switzerland because of its incompleteness.

(3) See Table 1 and Notes to Table 1.

The overall redistributive effects observed differ as between federal and unitary states: for federal states the average is in the order of 35 %, whereas it is about 45 % for unitary states. There is, however, a considerable dispersion about these averages, with some federations achieving greater redistribution than certain unitary states. While differences in the scale of public finance activities undoubtedly influence these results there is no simple connection between budget size and redistributive effects. Table 3 summarises the share of total and federal or central public expenditure as a share of GDP in the countries concerned (where the top level expenditure includes all grants to lower levels):

Table 3

Public expenditure as a percentage share of GDP at market prices

	all levels of government	central or federal governments
Germany (1971)	41.1	24.7
France (1972)	38.3	35.4
Italy (1972)	41.1	35.7
United Kingdom (1972)	41.5	33.9
Australia (1972/73)	27.9	22.5
Canada (1971/72)	38.5	19.3
Switzerland (1973)	39.8	23.6 (9.7)*
United States (1971/72)	37.6	22.8

* excluding social security

It is important to note that, although the net inter-regional transfers serve to offset so high a proportion of inter-regional differences in incomes (more than half of them in some cases), they are not themselves very large as proportions of GDP - only 2.5 % of it in the United States, for example, 3.7 % in the United Kingdom, and 4.2 % in Italy [5].

3.3. Inter-regional balance of payments and public finance balances

The redistributive power of central and federal budgets has major economic consequences for the regions and states. The inter-regional flows of public finance reflect the fact that in the richer regions there tends to be a surplus of taxation over public expenditure, which is effectively paid over by their citizens or governments, helping to sustain a current account surplus on the regional balance of payments and conversely in the poorer regions. This amounts to a real resource transfer from rich to poor regions or states, financed by the federal or central budget, though it must be remembered that other items enter into regional external balances - net inflows of real resources may be financed by private lending, for example, on which direct information is rarely available. The figures in Table 4 for selected regions or states in France, Germany, Italy and the United Kingdom serve to give an idea of the approximate orders of magnitude that seem to be involved [1] to [4].

Table 4 shows that net flows of public finance in the range of 3 - 10 % of regional product are common for both relatively rich and relatively poor regions, but a few of the latter enjoy considerably higher net inflows, up to around 30 % of regional product. This fits with the rather general rule that small, poor and peripheral regions tend to be generously aided by the centre. These deficits and surpluses are relatively permanent in comparison with those caused by short-term recessions, and will often require major structural changes to remove them.

3.4. The inter-regional stabilising role of public finance

The analysis so far has not touched on the stabilising role of the public finance system with respect to short-run or cyclical changes in the economic fortunes of given regions, which is related to but not the same as the long run or permanent role of public finance in tending to equalise their living standards. Regions within a modern integrated economy are exposed to greater risks in relation to their income of adverse economic developments outside their control than is the national economy as a whole, but these risks are covered by public finance transfers to an even higher degree than long-term differences in per capita production.

Both for sovereign countries as a whole and in federal states and regions, activity and income may be affected by either internal or external autonomous changes in demand. Internal changes can be offset to some degree by adjustments to public expenditure or taxation in the area in question. In any case, since tax revenue tends to vary automatically and directly with activity, and some items of expenditure (notably social security and relief payments) vary automatically and inversely with it, the normal working of public finance tends to smooth out fluctuations in personal disposable incomes, and in employment in those activities that supply mainly the local market, even without decisions of policy.

Table 4

Public finance balance and balance of payments
as percentage of gross regional product

	public finance outflow (-) or inflow (+) (1)	balance of payments current account surplus (+) or deficit (-) (2)
relatively poor regions or states		
Germany (average 1968-70)		
Niedersachsen	+ 3.4	- 6.5
Schleswig-Holstein	+ 6.0	- 9.8
Saarland	+ 9.0	- 13.6
France (1972)		
Bretagne	+ 11.0	- 15.0
U.K. (1964)		
Wales	+ 7.8	- 12.1
Scotland	+ 6.1	- 7.8
N. Ireland	+ 16.1	- 21.7
Italy (average 1971-73)		
Umbria	+ 7.8	- 17.4
Abruzzi	+ 14.8	- 14.8
Basilicata	+ 28.0	- 42.3
Calabria	+ 23.5	- 25.8
relatively rich regions or states		
Germany (average 1968-70)		
Baden-Württemberg	- 5.9	+ 7.9
Nordrhein-Westfalen	- 4.5	+ 5.2
Hessen	- 2.9	+ 2.2
U.K. (1964)		
South East	- 4.8	+ 2.4
West Midlands	- 2.9	+ 3.2
Italy (average 1971-73)		
Piemonte	- 7.4	+ 10.9
Lombardia	- 11.1	+ 15.3
Liguria	- 4.4	+ 12.6

(1) Difference between federal or central expenditures and revenues allocated to the region. For Italy the substantial national deficit is allocated to the regions in proportion to regional product.

(2) Difference between regional product and domestic expenditures.

Where the original, autonomous change in the pattern of demand is an internal one, no further problem in relation to the balance of payments arises from this built-in stabilising function of public finance. But where it is an external one - say, a decline in demand for the country's or region's exports - the maintenance of personal disposable incomes and expenditure is bound to lead to a change in the area's balance of external trade. In the face of a fall in its exports, for instance, the maintenance of its absorption of goods and services necessarily worsens that balance, whereas, in the absence of any internal stabilising mechanism, employment and incomes would be decreased through the multiplier mechanism, though not automatically to the point where imports are reduced as much as exports.

It is here that two differences between the region (including the federal state) on the one hand and the separate sovereign state on the other, become very important. In the first place, the region normally has most of the maintenance of its absorption of goods and services (and hence of its imports), in the face of a reduction in its exports, financed by national or federal sources; its citizens pay less in national or federal taxation and receive more from national or federal social security funds. No problem therefore arises in financing the deficit in its balance of trade. The sovereign state, on the other hand, maintains its absorption of goods and services only by creating the necessary purchasing power for itself, and unless it started with a sufficient export surplus can maintain the resulting surplus of imports over exports only so long as it is able to borrow from abroad, or draw on accumulated reserves.

Secondly, the region in an integrated economy is in no position to contribute to the correction of its balance of trade (if that were necessary) by either erecting trade-barriers or devaluing its currency. Market forces may reduce its price level in relation to other areas and so increase its competitiveness, but they will often operate only slowly and imperfectly. The sovereign state can, subject to the necessary measure of international agreement, use either trade-barriers or devaluation, or both, to reduce its trade deficit - to shift demand from foreign goods and services to domestically-produced ones.

The difficulty for a country which joins with others in a common market and common monetary system without a developed central system of public finance, therefore, is that, like a region or federal state within a developed economy, it cannot use trade-barriers or currency-devaluation to help it to adjust to, for instance, a fall in demand for its exports or a rise in the price of its imports, nor does the built-in stabilisation produced by its public finance system carry with it a built-in financing of the import surpluses which stabilisation of income may cause. If internal activity is to be in some degree stabilised, pending either a structural adjustment of the economy to its changed circumstances or an autonomous reversal of the original cause of the trouble, then the

country, unless it started with a sufficient export surplus, must be able to borrow from abroad or to draw on reserves. If it cannot do so, then employment cannot be maintained; it has to be reduced, perhaps in something like the proportion by which export earnings fall short of import expenditure.

Empirical evidence on the internal and external stability of regional and national economies is not easily available. It has been estimated for the United Kingdom regions [1], and in France for Bretagne [2], that the regional economies are several times as 'open' - the ratio of their imports, or exports, to their gross product is several times as great - as is the case with the United Kingdom or the French economy as a whole. It is more strictly to the point that the proportion of their gross product, or their value added, incorporated in goods or services, sold outside their boundaries, is also much higher (perhaps by a factor of two or three) than for the national economies of which they are part. Even that does not demonstrate conclusively that demand for their products is exposed to correspondingly larger proportionate variations through changes external to them. It does, however, create a strong presumption that this is so.

As to the degree of automatic compensation for these risks, it has been estimated from French and U.K. data that as much as one-half to two-thirds of a short-term loss of primary income due to, for example, a fall in a region's external sales may be offset through the public finance system, and much the same may be true of regions in other modern integrated economies. Moreover, the 'openness' of regional economies also means that much of the secondary loss of income due to the remaining falls in external earnings not compensated by public finance occurs in other regions rather than the one initially affected. The eventual reduction in personal disposable income in the initially affected region might well be as little as a third of the initial fall in external demand for its factors of production - and no complications would ensue through the effect on its balance of payments.

On the other hand, a member of the Community suffering a proportionately much smaller initial disturbance might, because of absence of any substantial compensation through the Community finances, find its balance of payments so seriously in deficit that the difficulty of meeting the situation by borrowing could force upon it a reduction of income larger, perhaps much larger, than the initial fall in its export earnings. This absence between Community members of the substantial compensatory public finance mechanism that works between regions inside integrated states is thus of great importance as an obstacle to fuller Community integration.

3.5. Main instruments of inter-regional redistribution

On the tax side, the personal income tax is in most countries the predominant instrument of progressive inter-regional redistribution [9].

In all the countries studied the main public expenditure programmes and social security benefit systems [8] tend to have substantial inter-regional redistributive effects, especially in centralised states where national policies provide roughly equal per capita benefits (which produce a net equalising effect so long as primary incomes differ). In France and Italy the massive migration from poorer areas to the cities lead to major net flows of social security finance to poor regions, with their high ratios of children, women not seeking work and retired people. Features particular to individual countries are the important regional effects of defence procurement policies in the United States, and in Italy the major use of capital transfers to regional development agencies and for public infrastructural investment in the poorer regions.

In the federations, inter-governmental grant systems or tax-sharing arrangements [6] play a large part in inter-regional redistribution, in addition to the effects of direct central government expenditure programmes. In Australia and Canada there are major general purpose grant systems that tend to equalise the fiscal capacity of the states and provinces; in Germany similar results are reached through tax-sharing arrangements and horizontal transfers between Länder, with a more modest role for federal grants. As the counterpart, the states are responsible for a large part of education, health and other public expenditure functions which are provided in other countries by the central government. These budget equalisation mechanisms in the three countries mentioned account for around one-third to a half of the entire inter-state redistribution of public finance; these can be, from the redistributive point of view, very high powered instruments, e.g. in Germany equalisation grants amount to only 0.3 per cent of GNP.

In addition, specific purpose grant systems (providing matching or lump-sum grants for such programmes as regional development and roads) lead, in these three countries, to a further more limited redistribution of public funds [7]. The relative mix between general and specific purpose grants in federal systems is a major variable for political choice. The United States contrasts with the federations just mentioned in making very heavy use of specific purpose grants (with hundreds of individual programmes) and relatively slight although growing use of general purpose grants ('general revenue-sharing'); 'Food Stamps' and urban redevelopment programmes are among the specific purpose grants with highest inter-state redistributive effects. Switzerland is closer to the United States model than the other three federations, with relatively small-scale use of general purpose grants and an extensive use of specific purpose grants.

Analogous but smaller scale systems of grants exist in the unitary states in the financial relations between central and local governments. In France and Italy these have little redistributive power; in the United Kingdom the 'rate support grant' is a type of budget equalisation system with stronger redistributive characteristics.

Overall the pattern of inter-regional redistribution of public finance may be summarised in the following terms:

- there is on the whole more variation in the instruments by which the redistribution is achieved than in the extent and nature of the change it produces in inter-regional income differences;
- there is an important distinction between federations using large-scale budget equalisation systems and other countries. The former achieve relatively large redistributive results with relatively small amounts of federal expenditure because the net inter-regional transfers are to a smaller extent than elsewhere the result of differences between large payments in opposite directions;
- in the unitary states a large part of total inter-regional redistribution is automatic and 'invisible'. In decentralised, federal countries a much higher share of the total redistributive power is explicitly voted or negotiated on a geographic basis;
- regional policy narrowly and explicitly defined as such (excluding, for example, budget equalisation systems and general public investment in roads and schools, etc.) provides only a relatively minor component of the overall financial redistribution process, Italy being an exception.

3.6. Main features of federal financial systems: expenditure, taxation and grants

The shares of public expenditure [8] accounted for by the federal and lower levels of government in the five federations studied are as follows:

Table 5

Federal expenditure as a percentage share of total government expenditure

	final expenditure	final civil domestic expenditure	financing of total expenditure
Germany (1971)	56	51	60
Australia (1972/73)	50	42	81
Canada (1971/72)	38	34	50
Switzerland (1973)	52	39	59
United States (1971/72)	52	40	60

The first column (final expenditure) excludes from the federal share grants to lower levels of government, but includes national social security or social insurance systems: the federal share of all expenditure on this definition ranges between 38 % in Canada to 56 % in Germany. Defence and external relations and development aid are always entirely federal level responsibilities. If those functions are excluded, the federal share of final civil domestic expenditure ranges from 34 % in Canada to 51 % in Germany. Thus countries choosing the federal form of government are able to maintain a very high degree of economic integration while leaving a high proportion of civil domestic public spending in the hands of lower levels of government, subject to only partial, or to no influence by the federal government. For such large spending functions as education, health, housing and road construction, there are several instances among the federations studied where the federal governments have hardly any direct spending responsibility. The main domestic expenditure field where there is predominant federal responsibility is in social security systems, although in the United States as much as one-third of social security and welfare expenditure is undertaken by state or local governments.

The share of the federal government in providing finance is in all cases, however, considerably higher. Federal direct expenditure plus grants to lower levels of government range from 50 % of total expenditure in Canada to 81 % in Australia.

This also broadly reflects the situation as regards taxation [16] (although there are differences due to federal borrowing and lending operations, which will not be analysed here). Federal tax revenues as a share of total taxation excluding social security contributions in the federations have in recent years ranged from 41 % in Switzerland, from 53 % to 58 % for Germany, Canada and the United States, to 80 % for Australia - as compared to 90 % or more for the central government tax share in France, Italy and the United Kingdom.

As regards the distribution of the main taxes between levels of government in the federations, there are few general rules beyond the facts that customs duties are always federal, and property taxes always local or state. For personal and corporate income tax, general sales taxes and excises there is a broad range of practices which very often involve the simultaneous exploitation of tax bases by federal and state levels of government; either by tax-sharing arrangements where the revenues from single income taxes and value-added taxes are divided by formulae between levels of government (as in the German model) or in tax-overlapping arrangements where federal and state levels of government apply their own rates and often their own bases in the same field of taxation (as in North America and Switzerland). The tax-overlapping arrangements mean that many major taxes are unharmonised at the state level in these countries, although cooperative arrangements seek to limit the harmful effects of fiscal competition between levels of government and between states.

Federal governments' surpluses of fiscal resources over their direct expenditure responsibilities are reflected in the important intergovernmental grant or transfer mechanisms, amounting in recent years to the following orders of magnitude:

Table 6

Intergovernmental grants or transfers as a percentage share of GNP

	general purpose grants or transfers	specific purpose grants
United States (1973/74)	0.4	2.7
Germany (1973)	0.3 (1)	1.7
Canada (1973/74)	1.0	3.2
Australia (1973/74)	3.1	2.4

(1) Excluding VAT tax-sharing (see further below).

Three main types of grant or transfer may be identified [13]:

- general purpose grants for redressing vertical fiscal imbalance
- general purpose grants or transfers for fiscal equalisation purposes
- specific purpose grants for the pursuit of particular objectives.

With all three types, the federal or donor level of government is able to pursue objectives which are proper to it, but without fundamentally undermining the autonomy of lower levels of government. Financial aids and incentives are provided to lower level governments in such a way as to induce and enable, but not enforce, attainment of federal objectives. There are, however, different ways in which this can be done, and the differences between them are important.

The first type, grants for redressing fiscal imbalance between higher and lower levels of government, is illustrated by the United States so-called 'general revenue-sharing' system. In the Community context they are of no foreseeable relevance because fiscal imbalance in favour of the Community is not in sight [6], [10].

The second type, general purpose equalisation grants and transfers [6], [10], [13], aims to enable state levels of government to provide adequate standards of public services in the areas for which they are responsible without forcing the poorer states to impose significantly higher tax burdens, and without depriving state governments of the freedom to manage these services according to their own preferences. For example, different regions may give different degrees of priority to certain categories of public expenditure, have different preferences as to how to organise certain public services and so on, and these are left open for the state authorities to handle. However, the 'fiscal capacity' of the states is affected. (Fiscal capacity is defined for this purpose as the amount of tax revenue that would be yielded in a given state through applying a given tax system, plus the revenue it receives from federal grants.) In the relatively similar family of systems used in Germany, Australia and Canada, grants or transfers are made so as to raise the fiscal capacity of poorer states up to a politically decided standard - 100 % of the national average in Canada, and the standard of the two dominant and wealthiest states in Australia. A standard of 97 % of the national average is reached in Germany under quite different constitutional arrangements (see below).

The economic function of these systems, apart from their formal public finance role, may be seen as (a) preventing excessive flows of migration that can be induced, in homogeneous and mobile societies, by sharp differences in local taxation or public service levels, and (b) providing an element of broad inter-regional redistribution with respect to the economic fortunes of the union. In Australia in the pre-war period, and in Canada from the outset of the confederation to the present day, the fiscal equalisation systems, or their more ad hoc antecedent systems, have played quite prominant parts in the formation and holding together of the unions.

The German equalisation system has particularly interesting features. It is in three parts. The first element is built into the sharing between Länder of their part of the value added tax (VAT). A certain amount of VAT revenue is allocated not according to the Land of tax collection or its incidence, but by a formula which brings the poorer Länder's fiscal capacity up to 92 % of the per capita average of all Länder. The second element carries per capita fiscal capacity equalisation to the 95 % minimum level. This is achieved not by federal grants (as mentioned, the Bund does not have as large a fiscal surplus as in other federations) but by direct horizontal financial transfers from the richer Länder (Hamburg, Baden-Württemberg, etc.) out of their own fiscal resources to the poorer Länder (Saarland, Schleswig-Holstein, etc.); this is known as the Länderfinanzausgleich (state financial compensation). The third element consists of supplementary grants (Ergänzungszuweisungen) from the Bund which have the effect of bringing the poorer Länder up to approximately 97 % minimum per capita fiscal capacity compared to the average of all Länder.

The horizontal form of the Länderfinanzausgleich payments, which do not enter into the federal budget, compares with the more usual vertical form, as in Australia, Canada and the United States, where the federal level makes grants to the state level. The two forms can, however, give precisely the same results; the choice is a question of political preference or constitutional convenience. The horizontal form is the most transparent, which is an advantage for ease of analysis; even in Germany, however, only a part of the system takes this form.

Turning to the third type, specific purpose grants [7], [10], [13], the most important form is the matching grant, whereby the federal government provides a given percentage of the total for a given public expenditure programme, thus 'matching' the effort of the lower level of government. The federal matching ratio cheapens the effective price (known sometimes as the 'tax-price') at which the lower level of government can supply a given public service, incentive or infrastructural investment. The reason why the federal government should wish to do this is usually that the benefits from the function in question accrue in a significant measure beyond the frontiers of the lower level of government (these are known as 'externality' or 'spillover' effects). For example, in highly mobile societies the public benefits of education expenditure may be lost to the supplying state through emigration; or the benefits from regional policy go beyond the benefits that accrue to the aided region by reducing congestion costs in the metropolis. Put in more political terms, where there are significant and legitimate federal interests at stake in public expenditure sectors which are principally assigned to lower levels of government (e.g. a comparable general level of education, or a regionally balanced distribution of economic activity), there is a case for matching grants to induce lower levels of government to design their public expenditure programmes in ways that take adequate account of federal objectives.

Most countries have experience in the use of specific purpose grants, including all the federations. The relative use of general versus specific purpose grants is a major variable in the design of federal systems, with the United States and Switzerland making relatively strong use of the specific purpose grant form. Germany uses specific purpose grants in the areas designated in the constitution as Gemeinschaftsaufgaben (shared expenditure functions); similar techniques are used in French local government. At the Community level the Regional, Social and FEOGA Guidance Section funds are all of this family.

There are three technical points on the use of specific purpose grants which should be highlighted because of their major policy implications: first, the question of lump-sum (or quota-defined) versus 'open-ended' specific grants, secondly the possible use of the 'variable matching grant' form as a means of simultaneously pursuing sectoral and fiscal equalisation objectives, and, thirdly, the question of how far the multiplicity of specific purpose grant schemes can go without encountering

problems. All three questions in fact concern the same fundamental issue: how to define and manage the frontier between sectoral and fiscal equalisation activities [10].

Lump-sum (quota) or open-ended grants. It is not infrequently found that allegedly specific purpose grant programmes are designed in such a way as to give the recipient government a fixed sum of money in aid of a particular activity. Such grants are easily transformed into general purpose grants; they have no necessary effect on the specific purpose intended unless either of two conditions are satisfied: (a) the donor government has parallel regulatory powers to influence the level of service or expenditure provided by the recipient government (which is often the case in local government systems), or (b) the fixed sum is larger than the amount that the recipient government would have spent on the function in question in its absence. Otherwise, the specific purpose will tend to be illusory and unenforceable; the distribution of the grants may or may not be consistent with fiscal equalisation objectives.

Variable or uniform matching ratios. More positively, however, there is a form of specific purpose grant that has the qualities of, on the one hand, limiting the budgetary cost of the pure open-ended matching grant, and on the other hand, permitting a simultaneous pursuit of sectoral and redistributive objectives. This is the variable matching ratio grant, under which the percentage contribution of the federal or higher level of government is varied in accordance with objective criteria, for example the fiscal capacity of the recipient state, and/or the relative importance to the higher level of government of an expansion of the expenditure function in a particular form or region. The donor government's matching ratio may range, for example, between 20 to 80 per cent. At the higher matching ratios the recipient government has a very powerful incentive to shape its public expenditure programme to favour federal objectives. This form of grant may, for example, be particularly suitable for programmes intended to have a broad regional policy impact; indeed, use of the extreme case of a 0 % matching ratio is equivalent to a zoning of regions ineligible for 'federal' aid.

Multiplicity. As to the efficient number of specific purpose grant schemes, the evidence from the United States (which had over four hundred such programmes) and France (whose regional and local government finances have about one hundred and fifty) is that there is a definite limit beyond which the system as a whole may degenerate into a game of 'grantsmanship' for the recipient government; from the donor's point of view, it becomes a complex web of partially contradictory and overlapping incentives whose effects are very difficult to monitor. The corrective solution, seen in the countries mentioned, appears to consist of either consolidating programmes into broader categories, or replacing them by general purpose equalisation grants.

4. PERSPECTIVES FOR THE PUBLIC FINANCE FUNCTIONS OF THE COMMUNITY

In this chapter we come to the approach described earlier as looking at the problem "from the bottom up". It first sets out the various public expenditure functions grouped under headings that are convenient for analytical purposes together with statistics on the present amounts of expenditure by all levels of government in member countries and the Community institutions. Second, it explains the criteria that may be used for assessing the case for or against Community involvement in individual public expenditure and regulatory functions. Third, it applies these criteria to the Community in the context of the political scenarios already described - 'pre-federal' integration, 'small public sector federation' and 'large public sector federation'.

4.1. Supply of public goods and services, and regulatory activities

In 1970 [12] total public expenditure by all levels of government in the nine Community countries amounted to some 40 % of GDP (Table 7). Within this total the first heading, 'general public services', covers those functions which in general benefit the whole population and where the benefit cannot be easily allocated to individuals or groups: the cost of public administration, international relations, public order and safety, defence, and general research. Expenditure under these categories totalled 8 % of GDP.

The second heading, 'social and welfare services', includes education, health, housing and social security and welfare. These activities in the first instance benefit individuals, although the public as a whole also benefits to a significant extent. Their total cost amounted to 23 % of GDP, or a little over half or all public expenditure.

The third heading, 'economic services', covers expenditure that aims to influence the functioning of the market economy through infrastructure investment, or through the provision of subsidies to given sectors (agriculture, mining, industry, etc.), or to given regions, or to improve the working of the labour market. Expenditure under these headings amounted to 6 % of GDP. A particular feature here is that public expenditure is often highly substitutable for regulatory non-financial intervention (as, for example, in regional policy). Moreover, there are many areas of regulatory activity relevant to the Community which rarely involve any significant public expenditure (reference to some of these is made below).

Table 7

Total Public Expenditure in the Community

Estimated percentage share of GDP in 1970

General Public Services		8.05
general administration	2.45	
international relations	0.68	
public order and safety	1.13	
general research	0.97	
defence	2.82	
Social and Welfare Services		23.02
education	5.29	
health	5.33	
social security and welfare (excl. health)	10.50	
old age and survivors	5.80	
invalidity and disability	1.81	
unemployment	0.29	
family, maternity, child allowances	2.08	
other	0.51	
housing and community amenities	1.90	
sanitary services	0.64	
housing and other	1.26	
Economic Services		6.23
agriculture	1.69	
mining, manufacturing, construction	0.21	
electricity, gas, water	0.40	
roads	1.17	
inland and coastal waterways	0.19	
other transport and communications	0.84	
other	1.56	
Other (including debt interest)		2.82
Total		40.13

Note: Public expenditure is defined to cover all levels of government including social security organisations. But public corporations (railways, etc.) are generally not consolidated, i.e. only capital transfers or subsidies from the central government to these bodies are counted as public expenditure. GDP is defined at market prices.

Aggregate public expenditure has increased substantially since 1970, reaching about 45 % of GDP in 1975, partly reflecting the effects of the recession of that year. While detailed figures by expenditure functions are not yet available, the main increases since 1970 are known to have been mainly in social security and welfare benefits, and health and education expenditure.

Expenditure by the Community institutions is shown in Table 8 for 1976 and 1977. Total current expenditure in 1977 is forecast to amount to 0.7 of 1 per cent of Community GDP, or 10 billion units of account (1). Community expenditure in 1976 accounted for about 60 % of all agricultural and fishing subsidies, about 13 % of all development aid, around 10 % of regional policy and manpower training aids, and about 1 ½ % of publicly financed research in the member countries. [12]

In addition, there are financial intermediary functions. For example, the European Investment Bank and Coal and Steel Community are both currently lending at a rate of around 1 billion u.a. (1) per annum, and the Community Loan facility was drawn on for the first time in 1976. (However, the public expenditure figures for all levels of government, as in Table 7, exclude all such financial intermediaries.)

A highly summarised view of the criteria for or against Community involvement in the main functions of the public sector is set out in Table 9. The three main criteria used - economies of scale, externalities or spill-overs, and political homogeneity - will now be explained with some short examples. A more systematic account, function by function, follows; detail is given in Chapters [11] and [12].

(1) For definitions and amount in U.S. dollars see Table 8 and the Notes to Table 8.

Table 8

Expenditure by all Community Institutions[1]

(payment appropriations)[2]

	1976	1977	1977
	million units of account[3]		% of GDP
General Public Services			
general administration	418	469	0.03
international relations (primarily aid)	746	681	0.05
public order and safety (Court of Justice)	11	13	..
general research	140	190	0.02
Social and Welfare Services			
education (mainly European schools)	19	22	..
social security and welfare	27	30	..
housing	25	30	..
Economic Services			
agriculture, fisheries, forestry (incl. monetary compensatory amounts)	6,168	6,749	0.47
mining, manufacturing (coal, steel)	81	70	..
energy	30	80	0.01
manpower policy	513	663	0.05
regional policy	300	400	0.03
Reimbursements to the Member States of collection costs for own resources (10% of own resources)	503	585	0.04
Other	7	33	..
Total	8,988	10,015	0.70
Total (in millions U.S. dollars)	$ 10,843	$ 12,082	
Financial Intermediary Loans (gross)			
European Coal and Steel Community	$ 1,152	= 1,030 EUA[4]	
European Investment Bank	$ 727	= 650 EUA	
Community Loan	$ 1,323	= 1,183 EUA	
Total (including loans)	$ 14,045		

(1) Including non-budgetised expenditures (i.e. European Development Fund and ECSC).
(2) Figures for 1977 follow the same method of presentation as 1976 for reasons of comparability (so-called "real approach").
(3) Budget units of account (see Notes).
(4) European units of account (see Notes).

Notes: The budget unit of account is defined in terms of conversion rates which were the last parities for national currencies declared to the IMF. As from 1978 the budget expenditure will be expressed in European units of account - which is already used by the ECSC and EIB. This unit of account is defined in terms of a fixed basket of the currencies of the member states. Its conversion rates are based on the valuation of the basket using market exchange rates. The budget unit of account uses fixed exchange rates. 1 u.a. = FB/FLux 50, DKr 7.5, DM 3.66, HFl 3.62, FF 5.55, Lit 625, £ 0.4166 (The implicit exchange rate of the US $ is 1.20635). The European unit of account in 1976 had the following average exchange rates: 1 EUA = FB 43.16, DKr 6.76, DM 2.82, HFl 2.96, FF 5.34, Lit 930.15, £ 0.6215, US $ 1.12.

The term 'economies of scale' is used broadly here to cover not only its usual technological meaning (that as the scale of production rises, the physical volume of output rises faster than that of inputs), but also the case where more favourable terms of trade or results of political bargaining may be obtained from pooled efforts in external negotiations. Such economies in the technological sense apply mostly to expenditure on advanced technology; the bargaining power type of 'economies of scale' applies obviously to external relations; but both types apply to defence. That economies of scale render a function prima facie suitable for handling at the Community level rather than at national levels is obvious.

The 'externality or spillover' criterion applies where given policies necessarily have effects reaching in a significant degree across all (or several) member states, and where it is impractical or undesirable to try to limit these trans-national effects or control them at the national level. These constitute reasons for referring the activity, at least partially, to a 'higher' level of government than the member state. In external relations and defence these transnational effects reinforce 'economies of scale' as grounds for activity above the member state level. The 'externality' argument does not apply, however, to the advanced technology functions since patents, licensing and secrecy permit the exclusive 'club' form of organisation, which is not practical for general public service functions such as external relations and defence. The social and welfare services are marked 'little now, but future yes' under this heading: this derives from the spillover of costs and benefits that occur with large-scale migration. Until and unless such migration becomes a major factor there will be only a limited case against the national management of these functions. Externalities are relevant in the case of structural and cyclical policies for two basic reasons. First, there are the transnational effects of national policies (through trade, prices, exchange rates and business sentiment). Secondly, there is the potential for Community level intervention in regional, manpower, unemployment, and general inter-member state redistribution policies to balance out the gains and losses from the general integration process sufficiently convincingly to enable this process to go ahead further, and so generate larger gains in the aggregate for the Community as a whole than would otherwise be the case.

Table 9

Criteria for Assessing the Case for or against Community Level Involvement in Public Sector Functions

	Economies of scale	Externalities or Spillovers	Political Homogeneity*
General Public Services			
external non-defence (trade, aid, energy, political cooperation)	yes	yes	adequate or under negotiation
defence	yes	yes	no
public administration, law and order	some	some	some
Social and Welfare Services			
education, health, social security, (1) housing	-	little now, future yes	no
Economic Services			
market intervention functions (agriculture, fisheries, oil)	-	selective yes	adequate or under negotiation
market regulation functions (technical norms, competition, etc)	selective yes	some yes	adequate or under negotiation
advanced technology	yes	-	some now, future ?
structural and cyclical policies (regional, manpower, unemployment) (2)	-	yes	some now, future ?

(1) excluding unemployment compensation

(2) including unemployment compensation

* As seen at present under a "pre-federal integration" hypothesis. This political criterion is potentially subject to more change over time than the other two economic criteria.

By 'political homogeneity' is meant the degree of cohesion between member states that would enable a function to be dealt with at the Community level if other reasons existed for doing this. The 'political homogeneity' criterion is thus at present partly a matter of fact (Community legitimacy under Treaties, etc); for the period ahead, however, it is more a question of future choice on the part of member states, subject also to the influence of a directly elected European Parliament. In the scheme above, the term 'adequate or under negotiation' has been loosely applied to certain external (non-defence) activities, and to the market regulation and intervention groups of functions; these are areas in which the Community's legitimacy is already established, or where negotiations are at present under way (aid, energy, technical and commercial standards, fisheries, steel). The less positive rating 'some now, future?' is applied to the advanced technology and structural and cyclical policy functions, and signifies that the Community has already had some, if only fractional, involvement, and that some increase in the degree of involvement is conceivable in the future without enormous constitutional implications. The third rating designated 'no', covering the defence and social and welfare services sectors, means that there are fundamental political and constitutional reasons which rule out a significant Community involvement in the setting of 'pre-federal integration'.

Under the hypothesis of federation, the 'political homogeneity' criterion is, of course, drastically transformed. Three groups of functions - defence, advanced technology and structural and cyclical policies - would be fundamentally affected. The first two economic criteria, however, are not really changed.

The application of these criteria to the various headings of expenditure may now be considered more systematically.

4.1.1. General Public Services

External and defence functions. The main headings here, ranked roughly in descending order of the present "legitimacy" of Community level activity, are:

- external trade negotiations
- aid to developing countries
- political cooperation
- energy negotiations
- defence.

These functions have three major characteristics in common.

First, if member states pool their efforts at the Community level for their dealings with the rest of the world they can profit from a type of economy of scale that amounts essentially to bargaining power. The terms of trade are improved or more favourable results obtained from political negotiations by united action.

In addition there are other more technical kinds of economy of scale potentially to be obtained at a Community level of activity: in the development aid sector savings in administrative costs for recipient and donor through unified policy criteria, in the value of aid received through spreading the choices in procurement over a broader area; in political cooperation through the pooling of diplomatic representation in perhaps a considerable number of smaller countries; and above all in the defence sector through investment in common weapon technologies (the Eurogroup in NATO is attempting to make progress in this field).

Secondly, there are major 'externalities' in the benefits from these activities. Any member state operating on its own knows that there is a high degree to which the result of its efforts will benefit other countries; it is either impossible, impracticable or undesirable to exclude other states from benefitting. Disunited efforts in these circumstances will in principle lead either to less effective results, or to less than the desirable level of activity in the function.

Thirdly, there are major and increasing interrelations between these blocks of activity, and in these circumstances there are advantages to be had from establishing an integrated system of policies. The advantages are of two kinds, bargaining power against third parties is further increased, and the scope for agreement through trade-offs across different policies by member states becomes wider.

Of the five categories listed only two involve very substantial direct public expenditure, development aid where member states spent 4.8 billion U.S. dollars in 1974, and defence, where they spent 39.3 billion U.S. dollars.

In development aid, the recent Lomé Convention and agreements with Mediterranean countries imply a growing Community level share in the total aid effort, rising from about 8 % in 1974, to about 13 % in 1975 and 1976, and prospectively to 20 - 25 % towards the end of the decade on the basis of present plans. The German Government has proposed further progressive increases in the degree of Community level responsibility for this function. [12]

Progressive development of Community policies in development aid, political cooperation and energy negotiation are plausible, and potentially profitable for the pre-federal integration phase. As for defence, it is difficult to foresee major developments at the European level except under the hypothesis of a federal political structure (this concerns the supply of the defence service, not selective and ad hoc procurement arrangements within the sector which are less demanding politically - see further below).

Internal, non-defence, general public services. The main headings here are:

- public administration
- law and order
- general research.

For the first two items here, the degree of Community activity should depend entirely upon the actual functional responsibilities which the Community itself is given. At any event the Community's administrative costs should remain only a small fraction of those of member states. Its 'law and order' activity should be confined to specialised 'supreme court' functions in its areas of competence. By general research is meant that which concerns the fundamentals of the physical sciences, as well as research in the social sciences and humanities (as opposed to applied science in military and commercial fields - discussed under other headings). In general research thus defined, there is little case for Community involvement on a significant scale.

4.1.2. Social and welfare services. This concerns sectors covering well over half of all public expenditure, and amounting to 20 to 25 % of GDP. The principal headings are:

- education
- health
- social security and welfare
- housing programmes.

There are in general no significant economy of scale considerations favouring European level activity, with some small exceptions, for example for specialised fields of medical research.

In the education sector especially, the member states and regions of the Community are strongly attached to national or sub-national traditions and preferences; diversity also provides a testing ground for innovation. Specific Community interests are relatively limited in the education sector, for example a high standard of learning of each other's languages in schools, the mutual recognition of examination standards, particularly for the protected professions (doctors, architects, lawyers, accountants etc.). In the health and social security sector reciprocity and non-discrimination and other technical coordination arrangements are required to facilitate the free movement of labour. There are very few cases where it can be argued that the Community should be a leading force behind the development of social security systems. The social security systems of Community member countries are relatively complete, and may be more similar to each other than, for example, in the United States where there are serious problems of 'laggard' states. In the field of social legislation, however, 'Equal Pay' for men and women provides a recent example of Community action.

There is no case for any major Community financial involvement in these spending functions as long as two present conditions are maintained: (i) the level of inter-member state migration remains relatively slight and (ii) the differences in the standard of public services are not so great as to constitute a real Community-level political issue. However these two conditions are crucial, and one cannot predict how long they will hold. The Community's objectives and policies are directed towards the day when either or both conditions could cease to prevail. Two deliberate steps are currently being taken in this direction: further enlargement to include one or more less developed and migration-prone Mediterranian countries, and direct election of the European Parliament, which will increase the political sensitivity to differences in standards in the major public services. A third unintended factor is the continued divergence of economic performance between existing member states, which means diverging fiscal capacities and ultimately public service standards.

Tendencies towards increased migration between member states will affect different categories of the population in different degrees; normally it is on the one hand the most highly qualified and mobile professions (doctors, managers etc.), and on the other hand unskilled labour from regions with high unemployment, that are the most migration-prone groups.For professional categories such as doctors there are costly public finance investments involved. The conventional 'fiscal federal' solution - to situations in which specific types of migration result in 'spillover' losses for the public authorities of the emigration areas - is through the use of specific purpose grants, where the federal grant matches the degree of leakage through migration.

Where differences in public services and social security benefits become a major factor in broader-based migration, and to the extent that there is a wish to discourage or reduce this migration, the appropriate remedy lies in a combination of general purpose fiscal capacity equalisation grants with the financing of regional development programmes. However even under these conditions there would not necessarily be an implied case for the Community to be involved in the provision of basic public services and welfare state functions across the whole Community, nor necessarily to be concerned with their detailed implementation in states receiving grants.

4.1.3. Economic Services

Market intervention functions. The sectors in which the Community is at present involved to an important extent are:

- agricultural produce
- fisheries
- steel
- oil

Good reasons are required to justify, from the economic point of view, direct intervention in the functioning of the market for goods produced by the private sector - as opposed to regulation of the general conditions of trading and competition referred to below. In the case of agriculture, the use of budgetary price support policies stems from a long history of public intervention, traceable mainly to the short-term volatility of conditions in uncontrolled markets and the desire to maintain a degree of self-sufficiency.

In off-shore fisheries there are inherent dangers of overproduction leading to a disastrous depletion of stocks, while it is difficult to enforce production limits. These factors imply in theory and practice the strong need for public intervention. In addition there is an involvement with non-members of the Community. In this sector the use of production quotas or licenses may be appropriate, coupled to structural and compensatory measures of a budgetary nature to make the introduction of a common policy acceptable.

In the case of steel, the small number of producers creates a case for public intervention; a common system in the Community also provides a basis for bargaining with third parties.

For oil, a minimum price mechanism has been proposed to improve the degree of self-sufficiency and, again, provide a basis for bargaining with third parties.

In all these cases, and in other problem sectors such as textiles and ship-building, to the extent that there are adequate reasons for public intervention in private markets there are also reasons of orderly international marketing and/or external bargaining strength for these activities to be conducted at the Community level. These activities seem to be possible in the pre-federal integration stage, although there are major interests at stake which would be easier to handle in a stronger federal political structure.

As regards the Community's finances, the agricultural and steel sectors are already adequately covered by existing powers. Some budgetary implications have been mentioned for fisheries. In the oil sector a minimum price system might produce public revenue, but this is uncertain in the present world market situation. Other possible measures in the energy sector are in the research and development field (see next heading), or in contributions to the cost of public stock-holding policies (e.g. for coal), and in the provision of loan finance for nuclear power and energy network investments of Community interest.

Market regulation functions. The main headings here are:

- technical, environmental and safety standards in industry, transport, etc.,
- aspects of commercial law for companies, intellectual property, accounting standards, etc.

- regulation of financial services
- competition and public tendering policy
- aspects of tax harmonisation.

The general characteristics of these functions is that they involve public regulation without any substantial public expenditure implications; the case for Community level activity is based on a deepening of the common market through maintenance of fair conditions of competition, some measures of simplification or standardisation, and some economies of scale.

However, these arguments have no absolute value, and have to be weighed against the costs of new Community level activity, which include the elimination of national political or cultural preferences and traditions (these are particularly important in the tax harmonisation field), and the administrative costs of implementation to individuals, businesses and governments (the volume of legislation can be enormous).

The case for Community level activity will often be easiest to establish in areas of new or rapidly developing regulatory activity, where the sunken costs of existing practises are smallest and traditions also least strongly valued. Examples include automobile safety, environmental policy and inflation accounting.

In general these are sectors which often permit a quite detailed, item by item, approach to the question of Community level activity; where there are plausible prima facie reasons for Community involvement, but where selectivity is called for in the extent and timing of new initiatives. The pace of Community progress in these functions is on the whole not so dependent on the political development of the Community; advances are conceivable under the pre-federal or federal hypotheses, and limitations to the extent of harmonised or Community legislation would remain in all cases.

Advanced technology functions. The public sector tends to be involved in activities where the costs of research and development are extremely high so that private development either would not occur at all, or would involve wasteful duplication, or would result in private monopoly. It is also involved where strategic interests are at stake. The main headings where these considerations are, or could be, relevant at the Community level are:

- civil nuclear engineering
- defence research and development
- civil aeronautics
- space
- telecommunications
- computer science and automation
- new sources of energy
- medical research.

Regional policy expenditure in the Community in 1974, on a narrow definition including regional capital subventions, interest rate rebates, employment premiums and fiscal investment incentives, is estimated to have amounted to 3.5 billion U.S. dollars. This excludes much public infrastructure expenditure in the designated regions (for example roads), urban redevelopment programmes, and, in the case of Germany, special aids to Berlin. On a broader definition, the total could well be around twice as large - in the region of 7 billion U.S. dollars. The Community's Regional Fund at present (1976, 1977) operates on an annual allocation of 650 million U.S. dollars.

Manpower and employment policy programmes, including vocational training (outside the formal education system), temporary employment maintainance or creation, geographic mobility, public employment services, and aids for the training and employment of handicapped persons is estimated in 1975 to have amounted to 6.6 billion U.S. dollars in the five member states where the statistics are best. Taking into account the relative weight of other member states, total expenditure in the Community probably amounted to around 7.5 billion U.S. dollars. The Community Social Fund's allocation for 1976 was 620 million U.S. dollars, all however devoted to vocational training, since the Fund is not authorised to intervene in other types of manpower and employment policy.

Unemployment insurance benefits paid in 1975 in the Community are estimated to have totalled about 11 billion U.S. dollars. Community participation in the financing of unemployment compensation was proposed in the 'Marjolin Report', under a scheme whereby the Community would pay 2 units of account per day per unemployed. Applied to the unemployment situation of 1975, this would have led to Community expenditure of 3.4 billion U.S. dollars which, as a share of total benefits paid in each state, would range, from the highest to lowest income states, from 33 % to 85 %.

There are possibilities in these three areas for partial Community financing. This would leave member states responsible for the operation of the policies subject to broad framework agreements at the Community level.

4.2. Stabilisation policy

The Group has reflected on whether in the period ahead there is a plausible role at the Community level, beyond the important subject of coordination of national macroeconomic policies, for fiscal stabilisation policy; stabilisation here meaning the control of short-term and cyclical fluctuations in economic activity.

The prima facie case for an increasing Community involvement in the general regulation of economic activity is based on the increasing inter-dependence of national economies, through increasing trade, capital flows, and internationally transmitted inflation. The more open

It seems, for example, by making comparisons with the United States, that in several of these activities there may be some further benefits to be exploited in Europe, through a pooling of R & D efforts, and a related organisation of production and marketing facilities. Their main distinguishing characteristics are (a) political and strategic sensitivity and (b) the 'possibility of exclusion' through secrecy, patents, licensing and cooperative arrangements, which means that there will not necessarily be major 'spillovers' of costs or benefits to states excluded from the activity, (c) the R & D efforts lead to goods whose procurement is to a very high degree by governments or public corporations. The result has in recent years been a proliferation of ad hoc bilateral or multilateral 'club' arrangements, which give some economy of scale benefits at little cost in terms of national freedom of action. Examples are seen in civil nuclear engineering (Eurodif, Urenco uranium enrichment clubs), in defence procurement (Jaguar, MRCA combat aircraft), in civil aeronautics (Concorde, Airbus), space (European Space Agency, which, through its organisation of multiple projects on an à la carte basis, is in fact a 'club of clubs'), and telecommunications (European Space Agency, Euronet). The principal Community activity at present under negotiation is the JET thermonuclear fusion project.

These seems little doubt that these activities will continue in Europe in the future to be organised largely on a multi-national basis; the question to evaluate is the economic and political costs and benefits of ad hoc intergovernmental cooperation versus integration into the general political structure of the Community.

Under a federation, these activities would gravitate predominantly to the Community level. In the pre-federal integration stage it is an open question whether the required degree of political homogeneity can be organised in the Community.

The public expenditure implications of these R & D activities are not very large, although the ultimate economic implications are much larger. Total public R & D spending in the areas here mentioned was about 3 billion U.S. dollars in 1971; substantial steps in the direction of Community level activity would be measured in terms of hundreds rather than billions of units of account passing through the Community's finances.

Structural and cyclical functions [12]. These concern:

- regional policies, broadly defined to cover employment or investment incentives, public infrastructure, and urban redevelopment programmes (within designated regions);
- manpower, employment and unemployment policies, broadly defined to cover adult vocational training and retraining, labour mobility, job creation or maintenance;
- unemployment compensation.

the economies of member states become in all these respects, the less effective national instruments of economic policy become. Multiplier effects on internal demand of tax or expenditure changes are dampened by a high propensity to import. The presumed remedy is to pursue the objectives at a 'higher' level of government with a broader jurisdiction encompassing major spillover or leakage effects, either through coordination or direct fiscal action. [10]

However, any proposal for direct fiscal action for this purpose at the Community level encounters two major issues, the inter-relation with monetary policy, and the question how to achieve adequate scale of operation.

There is a close and necessary connection between fiscal and monetary stabilisation policy in any economy, and this would be true also at the Community level [15]. There are major links between the public sector deficit and its financing on the one hand and the external balance on the other. Because of its monetary repercussions, the harmonisation of budgetary policies between member countries, in particular of public sector deficits and borrowing requirements, has an important role to play in assuring a consistent pattern of intra-Community current account balances and capital flows. In this sense a Community fiscal stabilisation policy is a key element in any programme for European monetary integration. At the same time the link between fiscal and monetary stabilisation policy implies that proposals for fiscal anti-cyclical actions at the Community level will become fully effective only to the extent that it will be supported by a Community control over monetary conditions.

It is hard to envisage the adequate debt financing power and mechanisms which a Community anti-cyclical budgetary policy would require, in a framework where control of monetary policy and access to the member states' capital markets are jealously guarded national prerogatives.

As to the question of critical scale of fiscal action, the small size of the Community budget in the 'status quo' and 'pre-federal' stage implies that in order to have a perceptible macroeconomic effect on the Community economy as a whole, the budget balance would have to swing by enormous percentage fractions of this budget - e.g. 50 %.

On the expenditure side, the functions that exist, or are envisaged for the 'pre-federal integration' period, would not lend themselves to massive cyclical manipulation of this order.

On the revenue side, a more intriguing possibility could be seen in a further development of the VAT, whereby the Community's rate would be 'piggy-backed' onto national rates and so become a truly independent fiscal instrument [10], rather than, as under present plans, subsumed in the national rate so far as the individual consumer is concerned. The introduction of a 'piggy-back' scheme would also imply the need for some Community approach to the question of VAT <u>rates</u> by product groups, as well as the base (which is all that is being harmonised at

present). This would also be a positive factor in making the budgetary authorities - Council and Parliament - directly responsible to the tax payer [17]. The Community rate might then be modulated for fiscal stabilisation purposes, with the resulting budget balance financed by Community debt issues. However, this would imply massive swings in the degree to which budget expenditure was covered by VAT or debt. While this idea has a certain logical appeal, the Group would not wish to promote it as an operational proposal for the foreseeable future. The main reason, apart from considerations already raised, is essentially a political one. Member states have in recent years experienced difficulties in keeping Keynesian deficit financing under control; it would seem inopportune to propose that a new tier of government be given by design an unprecedently wide potential margin of contra-cyclical budgetary imbalance.

Already in the context of more limited ambitions, however, there are several functions the Community should consider:

(a) limited borrowing powers (for relatively short periods) to avoid a pro-cyclical influence from the budget, and to 'lean in the right direction' so far as the general thrust of coordinated national conjunctural policies is concerned;

(b) operation of certain financial grant instruments that would help even out business cycle conditions across the Community and begin to establish the kind of inter-regional cyclical financial solidarity that is typical of integrated modern economies.

As regards borrowing powers, the Community already operates as a financial intermediary in several capacities (for the Community Loan, European Coal and Steel Community, European Investment Bank) and there are further Commission proposals under negotiation in the Council (Euratom loans for nuclear power stations, European Export Bank). There is a further case for borrowing and lending powers for a broader sectoral range of industrial development and redevelopment, as well as for an expanded use of the Community Loan facility for balance of payments or general financing purposes. To these borrowing powers might be added general budget loan powers either to meet short-term cash management needs or to 'lean in the right direction' for Community stabilisation through a net borrowing or lending position - without, however, seeking to exercise a major corrective influence.

It would then be worth considering the establishment of an agency or common organisation to serve for financial intermediation purposes, which would be controlled alongside the general budget of the Community by the same political processes. This organisation would manage borrowing and lending operations to support the specific objectives of various individual loan powers, and the general objective of cyclical policy, as well as other Community objectives such as the integration of capital markets.

As regards grant instruments relevant for cyclical stabilisation, a possible Community participation in the financing of unemployment benefits (as already outlined above) is of clear importance here. The idea advanced in the Marjolin Report was that this should be a field in which the Community would have direct contact with the individual citizen, thus providing at least one major (and attractive) exception to the general principle that the Community's finances would in a pre-federal period mainly involve intergovernmental transactions [12].

Moving one step up the hierarchy of inter-governmental finance, another instrument worth considering would be something similar to the recent U.S. proposal for cyclical general purpose local government grants, related to regional unemployment level and trend indicators. In the Community case this might be an automatic mechanism obeying quantified criteria (e.g. regional GDP per capita and regional unemployment trends). An advantage of dealing with regions rather than whole member states is that it avoids taking the large member states in their totality; but the grants would, presumably, have to be related to member states' local government financing systems, which would raise some further problems.

Alternatively, and for operation at the level of the member state, the Community might establish a 'conjunctural convergence facility' to extend grant finance to economically weak member states in particularly difficult economic situations, taking into account the extent to which the member state was or was not prospering in the course of trade and competition in the Community, and according to the circumstances subject to negotiated economic policy or performance conditions.

4.3. Redistribution

It has already been suggested that during the pre-federal and also the small public sector federation phase the Community is more likely to achieve significant redistribution by transfers between member states than through Community taxes and social security systems that deal directly with the individual. The scope for such transfers, however, is in part a question of evident political preference; the individuals of member states and their governments simply do not want to transfer powers over 'internal' income distribution issues to the Community. It is also a matter of economic principles, since transfers between member states can satisfy specific Community needs, notably to keep the Community together during the integration process, whereas the case (generally argued in the literature of 'fiscal federalism') for discharging the inter-personal redistribution function at the 'top' level of government depends essentially on a high level of geographic mobility of the individual, which is not at present the Community situation [10], [13].

The need for redistribution between member states arises partly because the process of economic integration, which may confer net gains in the aggregate, does not necessarily raise the economic welfare in all areas. The changing pattern of production and exchange that characterizes an integrating Community typically brings gains to some but losses to others. To make integration acceptable to all participants may thus require an explicit redistributive mechanism to divide the gains from integration in a politically acceptable way. Failure to attend to this matter may at the least result in a stagnation of the integration process, and at the worst result in secession and dissolution. Economic analysis can give an analytical framework and point to the techniques that may best match the objectives and circumstances in question. Only the political system, however, can in the last analysis prescribe what should be done.

The scale and pattern of redistribution can be defined technically in terms of the scale and pattern of financial flows. As to the scale of redistribution, the Group has made use of a standard measure of the redistributive power of inter-regional flows of public finance [5]. This measures the extent to which such flows of public finance change the average per capita income positions of regions or states in relation to each other. In brief, the 'redistributive power' of inter-regional transfers would be 100 % if the effect of such transfers was completely to equalise regional or state per capita average incomes; the 'redistributive power' would be 50 % if the transfers halved average per capita income differentials.

Using this measure, the Group has done some simulations in the present Community setting [14], to demonstrate the pattern of inter-member state transfers that would correspond approximately to what may be observed as between the regions of the fully integrated economies studied (as already described above) and to show what kind of budgetary mechanisms could generate these transfers. This in the first instance is merely to illustrate the extreme hypothesis of the Community as a maturely integrated economy; more limited variants are discussed later.

The country case studies suggested that the average redistributive power of central or federal public finance was such as to achieve a 40 per cent equalisation of regional or state primary income differentials. Among the numerous simulations set out in Chapter [14], there is one which may here be briefly described to give an idea of what a 40 per cent redistributive power in the Community could involve. It is assumed that a horizontal budget equalisation mechanism (of the type used in Germany in inter-Länder equalisation - Finanzausgleich) is used to raise the per capita fiscal capacity of the economically weaker member states in the Community up to a minimum of 95 % of the Community average. This would in 1975 have entailed transfers totalling 20 billion units of account or 2 % of Community GDP. The receiving states would have been Italy, the United Kingdom and Ireland, the paying states being the remaining six member states. (These calculations are made with reference to purchasing

power parity differences in fiscal capacity between member states, not market exchange rates: to use current market exchange rates would much increase the transfers.)

Under this hypothesis, with the redistribution process reduced to pure net transfer terms (i.e. not combined with payments to particular sectors of the economy throughout the Community), a very high-powered effect is obtained in relation to the expenditure involved. Transfers amounting to 2 % of Community GDP, apart from equalising inter-member state incomes to the extent of 40 %, would have financed a large part or all of the current balance of payments deficits of the beneficiary states in the year in question. Thus very significant macroeconomic effects would have been achieved by expenditure amounting to about three times the actual size of the Community budget. It should be stressed that this degree of redistribution corresponds to that which is produced by the public finance system of a federation.

The Community's present finances achieve, by contrast, only a very small redistribution. Expressed in the same terms as the foregoing example, the Community's budget in 1975 is estimated to have had a 1 % redistributive power, i.e. one-fortieth of the average found in maturely integrated economies [14]. The budget expenditure totalled 6.6 billion u.a. in this year; its weak redistributive power, per unit of account, in relation to the preceding example reflects the fact that the agricultural fund has specific sectoral objectives, with only an incidental inter-member state redistributive effect (of $\frac{1}{2}$ of 1 % 'redistributive power'). The Regional and Social Funds have more explictly redistributive purposes, but since their expenditure commitments are each only about one-tenth of those of the agricultural fund, they achieve redistributive powers of only about 1/4 of 1 % each.

The question then is, where between these two extremes should one expect the Community to be moving in the course of a pre-federal integration phase? Can the range of possibilities be plausibly narrowed down? One way of approaching this extremely difficult question is to reconsider the reasons why inter-regional redistribution takes place on such a large scale in maturely integrated economies, and note how many of these factors are at present relevant in the Community.

Inter-regional redistribution produces a reasonably equitable sharing of both the cyclical and secular fortunes of an economic union, and thereby helps to maintain its political unity; it helps as far as possible attainment of comparable economic performance between regions; it compensates for the inability of regions or states to use trade or exchange rate policies in the management of their economies, and it limits the extent to which migration has to serve as part of the economic adjustment process. In all mature federal states, on the other hand, the counterpart of these powerful equalisation mechanisms is a mature political structure with a federal government and parliament and other federal agencies.

The considerations that, prima facie, work in favour of an emphasis on redistribution between the member states of the Community are:

(a) The explicit political objective of convergent economic performance and reduction in the backwardness of less favoured regions. Within the limits of the pre-federal Community expenditure that is envisaged, it seems likely that this can best be provided by grants for such specific purposes as regional and manpower policies in the weaker areas.

(b) The desirability of avoiding an excessive level of general migration from the poorer areas. The areas in question are of limited size at present, but the accession to membership of e.g. Greece and Portugal would add substantially to this problem. The best policy for dealing with it is probably a selective one of specific purpose grants, as in (a), rather than wider redistributive measures.

(c) The desirability of avoiding excessive migration of more mobile, highly trained, manpower from those countries where their net earnings are substantially lower than elsewhere. This is primariliy a matter of pay and tax structure in the countries concerned rather than a ground for major international aid.

(d) The danger that, as economic integration proceeds, there will be increasing pressure from wage-earners for real earnings equal to those in the richer member countries, regardless of the remaining international differences in productivity. This is a serious danger, which could weaken the competitive power of the poorer countries and/or promote rapid inflation in them. Once again, however, international transfers within the expenditure total envisaged for the pre-federal stage could make a substantial contribution to its solution only in so far as they could be channelled into specific schemes for improving productivity. The main hope in anything but the long-run must lie in adequate senses of economic realism among wage-earners in those countries where productivity, for various reasons, lags behind the more advanced national levels.

(e) The creation of a degree of convergence in productivity levels, and of automatic compensation for short-term relative changes in income, which would facilitate progress towards monetary union. We do not think, however, that the extent to which convergence and compensation could be promoted by Community expenditure on the scale that we are assuming for the pre-federal integration stage could, in any case, be adequate to make major progress towards monetary union practicable, and we regard this as an objective for a later stage, not for the immediate future.

There is thus a case for further redistributive Community expenditure, but it must be qualified in the various ways just enumerated. Moreover, political expectations in the Community today are concerned more with help to economically weaker member states with the acute economic problems of the day (unemployment, trade and exchange rate and public finance problems) than with an equalisation (through transfers) of longer-run differences in living standards as such. The Community is expected to have a responsibility for the dynamic effects of economic integration and for measures to compensate for the absence of national trade policies. It has also a strong interest in each member state conducting its macroeconomic policies in ways that do not have ill effects on other member states (especially as regards trade, inflation and international monetary policies).

This suggests that, in the pre-federal stage, a large part of the payments made to member states is likely to be conditional. Unconditional horizontal redistribution between states which achieves the highest 'redistributive power' per unit of expenditure would seem to be not so appropriate for use on any large scale in a setting of 'pre-federal integration' stage; its natural place is in a federation with a small 'top' level public sector.

The constraints to which financial redistribution in the 'pre-federal integration' stage might be subjected are:

- links to specific purposes, such as regional and manpower policies aimed at improving the economic capacity, employment situation and competitive power of weaker regions, (rather than simply enhancing their consumption);
- links to economic criteria reflecting the relative cyclical as well as structural economic situation of member states;
- links to economic policy performance in areas over which member states have some control and which are of consequence to the economic stability of the Community as a whole.

Conditional transfers are likely to be less efficient than unconditional as instruments of redistribution, because it is improbable that all the recipients of benefit will be in the poorer countries. This, however, merely reflects the fact that the simultaneous pursuit of more than one objective requires compromise solutions. The result is that the redistributive power of the extra expenditure most appropriate for the Community in the pre-federal integration period is likely to be substantially smaller than the maximum that could be attained if the same amount of spending took the form solely of unconditional net transfers from richer to poorer member countries.

There are, nevertheless, circumstances in which some limited unconditional redistribution may be called for. For example, the Community might establish a fiscal equalisation mechanism, having the structure of typical federal equalisation mechanisms, but setting an unusually

low minimum standard of, say, 65 % of the Community average fiscal capacity. Such a system might be intended to assure to poor, small and peripheral member states economic, welfare and public service standards not too far below those of the main body of the Community. For prospective member states it could serve to provide some general financial underpinning for the economic risks of joining the customs union.

4.4. Financing [16]

The Council decision of December 1976, agreeing the common VAT base (with certain temporary derogations) means that on 1st January 1978 the Community will be giving full effect to the Own Resources decision of 1970, according to which the Community's budget will be financed first by customs duties and agricultural levies and, then, by a share of the VAT not exceeding 1 % on the common base. Being indirect taxes, these revenue sources tend to have a somewhat regressive incidence, but this distributive problem has broadly speaking been dealt with by the 'Financial Mechanism', which reimburses to economically weaker member states, in certain circumstances and in a certain degree, the excess of their share in total Own Resource payments over their share in Community GNP; this puts the Own Resource system onto an approximately neutral basis from the distributive stand-point.

The maximum available Own Resources on this basis is forecast to amount to about 11 ½ billion units of account in 1978 (at 1976 prices). Community budget expenditure is forecast to be 9.7 billion units of account in 1978. Taking into account the intended future budgetisation of certain development aid expenditure, the possible budgetary consequences of enlargement with Greece, and various other items, it seems probable that the Community will approach the limit of its existing financial capacity towards the end of the decade without assuming any major new policy developments with budgetary implications.

The Group has therefore considered what the Community's next resources might consist of, having in mind the expenditure implications of the foregoing analysis. A working hypothesis is that the Community might need two to three times its present financial capacity in the 'pre-federal integration' stage. Potential revenue sources have to be evaluated by several criteria, notably their yield, their distributive characteristics and their economic functions, as well as administrative and political considerations.

As indicated above, there is in the experience of federations no tax of a relevant size that is an obvious candidate for total transfer to the Community in the way that was true for customs duties.

There are several types of existing or potential taxes with economic functions relevant to the Community: a contribution based on payrolls in the event of a Community participation in unemployment benefits; an

oil import levy in the event of a minimum oil price mechanism; or various types of excises or levies on agricultural produce subject to Common Agricultural Policy.

There is also a logical case to be made for a fiscal complement to the Community's Regional Fund subsidies. This could, for example, take the form of a tax on new investment in regions fulfilling criteria that were the inverse of those used for eligibility for regional aids (e.g. centrally located agglomerations with labour shortages, high income levels, high levels of congestion, etc.).

None of the foregoing examples, although each has a functional logic of its own, can be seen as sufficiently large-scale and regular sources of Community revenue.

As regards future revenue sources, an increase in the 1 % VAT limit on members' contributions (adjusted by the "Financial Mechanism") would be the easiest idea from an institutional and administrative point of view. It would not, however, in itself assist redistribution from the revenue (as opposed to the expenditure) side. For that a progressive revenue source is required. The most obvious such sources are personal and corporate income taxes. However, the problems of the Community moving into either of these fields for revenue purposes would be enormous. Without here going into these questions, the Group feels that corporation tax would probably only be a plausible candidate for a Community tax overlapping or sharing arrangement under the hypothesis of federation; a Community participation in personal income tax would be an even more difficult proposition.

Alternative sources of progressive finance could be a personal income tax capacity key [14], which could, technically, be based on the methods of tax capacity estimation used in certain budget equalisation systems (e.g. Canada). A variant could be built onto the VAT system, with adjustments for redistributive purposes made on the basis of a formula using a given progressivity key, such as personal income tax capacity (1); this would mean a system of the 'redistributive tax-sharing' variety, somewhat akin to that used in Germany for distributing between Länder their share of VAT revenue.

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(1) Alternatively, average GNP per head could be used in such a system. The adjusted VAT contribution at present is proportional, as between member states to $n\,y$ where n is population and y average GNP per head in the country concerned. Progressiveness could be introduced by, for instance, substituting $n\,y^{a}$ where a is above unity.

As a general system for the period ahead, there would be advantages in having open at the same time two marginal sources of finance: first a neutral tranche of VAT resources, and secondly a progressive revenue source. The purpose would be to allow the redistributive power of the system to be adjusted from the revenue side from time to time without opening up the whole question of the basis of VAT contributions.

4.5. General financial and budgetary perspectives

The object of this section is to draw together the main implications of the above discussion for the future development of the Community expenditure under the hypothesis of, firstly, a period of pre-federal integration and, secondly, a small public sector federation. For this purpose the main heads of expenditure are briefly reviewed and the redistributive power of various conceivable packages is indicated, together with their gross expenditure implications. It will be recalled that the Community's budget expenditure in 1977 is a little over 10 billion budget units of account, or 0.7 % of Community GDP (1).

Pre-federal integration. Under 'general public services' the main area for potential increases in expenditure within the pre-federal hypothesis is development aid, where 2 to 4 billion u.a. further straight transfers from national to Community level are conceivable. Increased expenditure for general administration and research are likely, but not in macroeconomically significant amounts. The defence sector, which at present costs some 40 billion u.a., only features under the federal hypothesis.

Under 'social and welfare services' the Group does not foresee the Community taking over macroeconomically significant blocks of expenditure functions, with certain exceptions and qualifications. The exceptions are unemployment benefits and vocational training, but these are viewed as cyclical and structural economic services - see below. The qualifications are that the Community may find itself at some stage involved in budget equalisation arrangements, whereby general purpose grants would be made to the weakest member states to be used indirectly for aiding the attainment of certain general public service standards. Under the federal hypothesis, mechanisms of this type could become highly probable. According to simulations set out elsewhere [14], such mechanisms could be expected to lead to grants amounting to several billion u.a. per annum. During the pre-federal integration period, however, mechanisms of this type on any comprehensive or general scale would seem constitutionally premature. The need for more limited general purpose grants may still arise during the pre-federal integration period, and this also is further mentioned below.

(1) See Table 8. One billion budget units of account (u.a.) corresponds to about 1.2 billion U.S. dollars (at average 1976 exchange rates).

Under 'economic services' the Community should, in the view of the Group, face the prospect of a rather complex pattern of partial - and occasionally total - financial responsibility for quite a number of headings.

In the area of agricultural market price support the high present level of expenditure (6.5 billion u.a.) reflects the financing of some structural product surpluses (e.g. milk) and of price differentials between countries (through the monetary compensatory amounts system). Savings from this level could be expected from a better structural supply-demand relationship for some products, and through the achievement of greater monetary stability which is in turn dependent on a greater convergence of real economic performance between member states. The latter, however, depends on the adequacy of the Community's role in the area of general economic policy to which other parts of this report are addressed. At all events, this is not an area where the Group expects important growth of expenditure.

In other industrial sectors for which Community intervention is established or plausible (steel, fisheries, energy, advanced technology industries, declining industries such as textiles and ship building etc) the amounts of direct budgetary subsidies should not become very large. Sectoral programmes in the area of tens or hundreds of millions u.a. - rather than billions - may be expected. Much larger sums of parallel loan financing, borrowed by the Community on capital markets or borrowed under Community guarantee, would seem to be indicated for aiding investment and industrial reconversion activities in problem sectors where a Community-level solution is needed. However these loan financing operations, with the Community acting as a financial intermediary, are not to be confused with budgetary expenditure. The latter may supply, however, interest-rate subsidies on the former. Such subsidies may be expected, according to circumstances, to come either from sector-specific programmes (e.g. as already in the Coal and Steel Community) or by drawing on more general structural subsidies where appropriate (e.g. from the Regional Fund). Here, again, the prospects of growth are moderate rather than large.

It is in the area of structural, cyclical, employment and regional policies that the Group sees the main need for macroeconomically significant expenditure at the Community level. Here there are a number of possibilities that have to be considered as substitutes, depending upon detailed practical (in part institutional) considerations which it is not for this Group to seek to determine. Three fairly clear-cut possibilities arise in the fields of (a) regional policy aids, (b) labour market policies, and (c) unemployment compensation. Member States are estimated to be spending from 5 to 9 billion u.a. per annum on each of these three headings, whereas the Community's contribution is around $\frac{1}{2}$ billion u.a. on regional and labour market policies and nothing on unemployment compensation. The Group considers that one option the Community should contemplate during the pre-federal integration period would be to raise the degree of Community financial participation in each of these fields to somewhere in the region of a third. This would entail major reforms and extensions in the intervention criteria for the Regional and Social Funds; the unemployment compensation idea also has major implications of policy and practical natures.

The regional and labour market expenditure would be intended to raise aggregate expenditure under these headings above all in the economically weaker parts of the Community. The unemployment compensation would not be intended to increase unemployment benefit levels: its objective would be that of introducing an element of visible and real financial solidarity between the individual members of the labour force across the Community, and like the other two measures, it would have considerable inter-member state redistributive, resource transfer, and balance of payments implications.

Three further ideas, which are partly related to the objectives of the preceding three possibilities, have been mentioned in the report, which are: (a) a limited budget equalisation scheme for extremely weak member states, (b) a system of cyclical grants to the local or regional government level that would depend upon regional economic conditions, and (c) a conjunctural convergence facility that would make available grant finance to member states in packages of Community finance aimed at preventing acute cyclical problems of weak member states leading to increasingly divergent structural gaps between states. These three suggestions are to a high degree substitutable. They differ, of course, but the Group would not envisage all being introduced. The general characteristic of these suggestions is that the funds would be less specifically tied to narrow programmes of permanent public expenditure, and therefore more capable of responding to the urgent needs of the general economic situation and of being applied flexibly in relation to macroeconomic policy criteria or performance indicators. These characteristics would be intended to make the instruments helpful in pursuing the objective of economic convergence in the Community.

One cannot be at all precise as to the total amounts of Community expenditure implied by these suggestions under the structural, cyclical, employment, and regional headings, except to give very rough orders of magnitude at which the instruments in question could be expected to have a material impact on the objectives in question. If the general objective was to concentrate a selection of such instruments to a large extent on the problems of the weaker regions or states (covering not more than twenty, or at the outside, thirty per cent of the Community's population at any one time), then budgetary expenditure of the order of 5 to 10 billion u.a. per annum could be regarded as beginning to be economically really significant - especially if a further induced supply of loan finance from capital markets was achieved, as might be reasonably expected. The choice between the six types of instrument, and of their relative weighting in financial terms, is in the view of the Group a very open matter, and has to depend upon the detailed consideration of many political, economic, and administrative considerations.

As to redistributive power, expenditure of, say, 10 billion u.a. on a selection of the foregoing six instruments could - if concentrated rather heavily on the weakest member states and regions - result in an equalisation of about 10 % of existing income per capita differentials between member states (measured at purchasing power parity exchange rates);

i.e. this would be about one-quarter of the average degree of equalisation observed to take place in the fully integrated economies studied. This is small in comparison with that which would probably be required to render full economic and monetary integration acceptable; but it would be an acceptable start.

The implications for net aggregate public expenditure in the Community as a share of GNP are quite limited. Expenditure under some headings would be essentially transfers from national to Community levels (as for development aid, industrial policy, fisheries, energy, unemployment compensation). In some areas (for example, advanced technologies) real economies would in fact be the principal reason for a transfer to the Community level. Savings should be aimed for in agriculture. As regards regional, labour market, and cyclical and general purpose budgetary transfers, a principal objective of these programmes would to be even out demand pressures and resource utilisation in the Community economy as a whole, and so induce an increase in real Community GNP.

Small public sector federation. The Group can envisage a rather novel 'high-powered' budget model for the Community which would aim at the specific needs of economic, monetary and political union. This model would be 'high-powered' in the sense of fulfilling to a high degree the redistributive and macroeconomic policy functions that are to be expected of a union, but which at the same time aims at minimum Community level public expenditure - i.e. a minimum centralisation in the supply of goods and services. The contents of this model are now described: it will be noted that the 'high-powered' effects are achieved because the budget operates to a high degree through net resource transfers, or through subsidies that are designated to have a high leverage effect on national expenditures and on capital flows.

The main functions in this budget model are described with reference to the nomenclature, and financial orders of magnitude for the Community, given in Table 7. Community expenditure under 'social and welfare services' would remain very limited, and here in fact would lie the major difference with the large public sector federation (which covers all the existing federations studied). Of the 23 % of GDP devoted to such services the Group would envisage Community expenditure of not more than 1 ½ to 2 % of GDP. The largest component would be a general purpose equalisation mechanism making transfers to the weakest member states for them to top up their own budget efforts; there would also be specific expenditure on unemployment and perhaps some kinds of housing expenditure in the content of urban redevelopment programmes. Under 'economic services' the Community's involvement in structural and sectoral actions (agriculture, energy, public infrastructure, industrial, regional and labour market policies) would be extensive, but even so might not account for expenditure of more than 2 to 3 % of GDP (half or less of all expenditure under these headings), since the Community's policies would aim here again at complementing member states' actions, and boosting the

efforts of weakest member states in particular. As regards 'general public services', the Community's share of expenditure on public administration, law and order would remain quite small. The Community would, however, account for all foreign aid expenditure (0.7 % of GDP) and defence (of 2 ½ to 3 % of GDP), and a sizeable part of all research expenditure (say ½ % of GDP). Total civil expenditure might then range from 5 to 7 % of GDP. Including defence, total public expenditure would amount to 7 ½ to 10 % of GDP.

In order for this budget model to be capable of sustaining an economic and monetary union, the transfers and expenditure under the budget equalisation mechanism for 'social and welfare services' and 'economic services' would have to be not only strongly redistributive, but also capable of a sensitive and large-scale response to short-term changes in the economic fortunes of regions and states. Simulations made by the Group [14] suggest that the budget of the small public sector federation could attain the standards of redistributive power seen elsewhere in fully integrated economies (e.g. equalising up to 40 % of per capita regional income differentials), but the technical design of the budgetary instruments to do this would have to be strongly and deliberately biased in favour of these objectives.

4.6. Principles for the Community's financial instruments

An expansion of the Community's grant and loan facilities, as envisaged in this report, makes essential the proper technical design of the financial instruments in relation to their objectives, and the formulation of a coherent overall financial policy. Questions of financial technique are particularly important when – as in the Community case – there is a mix of structural and redistributive objectives.

The main issues here concern (a) the use of fixed money amount allocations by country versus matching funds offering more or less 'open-ended' financial incentives, or funds that can be managed with some flexibility of response to changing priorities; (b) the use of uniform or variable matching ratios in the Community's financial contribution under grant programmes; and (c) the links between grant funds (such as the Regional and Social Funds) and loan funds (such as through the ECSC and the EIB and the Community Loan).

The Community's present financial instruments contain a variety of practices. The Regional Fund administers quotas which are fixed sums per member state, the Social Fund has a system of priority allocation of its global budgetary attribution, while the FEOGA Guidance Section's instruments are moving from a system of fixed sum allocations to one based on open-ended matching grants. As to matching ratios, the Regional and Social Funds apply more or less uniform rates as between countries or regions, while the FEOGA Guidance Section has begun to make use of variable matching ratios. As to links between grant and loan funds, the

ECSC's current income from levies is used actively for subsidising interest rates for loan finance raised by the ECSC on capital markets, and used for industrial redevelopment. The Regional Fund is empowered to operate similarly in conjunction with EIB loan finance, but the use of this facility is impeded by the Fund's small size and fixed quota allocations. Moreover EIB lending to the private sector of member states with weak currencies is at present impeded because of heavy exchange risks for borrowers where these are not covered by national governments.

Principles that would seem to be indicated for the Community in its present or envisaged functions are:

- fixed sum quotas by country or region should be avoided except for grants that are intended to be for general financial purposes; the use of quotas for specific purpose funds will tend to entail some contradiction, since unless the Community has powers over national expenditures (which it will normally not have) the recipient government will in effect be able to treat the funds as fungible general purpose grants: this is relevant to the Regional Fund and to much of past expenditure under the Guidance section of FEOGA (notably the 'individual projects' under Regulation 17/64).
- where it is intended that the grants should encourage recipient governments to increase their expenditure efforts in the sector in question, as is the case for the Regional and Social Funds, there should be some at least partially open-ended commitment under which the Community would match the recipients' increased efforts. The Community's financial commitment may still be limited in various ways,for example in certain regions, or through the use of priority criteria with overall financial limits.
- as regards matching ratios, there is a plausible case - in the interest of obtaining the greatest effect from very limited resources - for the use of variable ratios, ranging, for example, from 20 to 80 %, or 30 to 70 %. The Community matching ratio would be highest in member states with the weakest fiscal capacity and for projects or regions of highest need; and vice versa for the lowest matching ratio. Uniform matching ratios are more appropriate where there exists a budget equalisation system, which is another way of countering the problem of divergent fiscal capacity, or where member states are of similar fiscal capacity; but these conditions do not reflect the Community situation.
- Community grant funds, for example the Regional Fund, and, possibly, allotments from the suggested 'conjunctural convergence facility', should be enabled to operate in conjunction with Community loan facilities (ECSC, EIB, and Community Loan). This would increase the financial leverage of the grant funds, and enable the loan resources to be tapped in circumstances in which they would otherwise be blocked because of inflexibly commercial terms.

Finally, there is an important question of institutions and procedures. The difficult economic and political issues involved in deciding on inter-governmental grant policies cannot easily be resolved within closed circles of experts, or of officials, or even ministers. They require a particularly large amount of public debate and high degree of political consensus, especially in the event of grant instruments with redistributive characteristics. In this connection the Community could possibly profit from the experience of some specialised institutions developed in the United States (notably the Advisory Commission on Inter-Governmental Relations) and the Australian Grants Commission. These are independent and essentially technical bodies which prepare the ground for political debate and negotiation in the domain of inter-state financial transfers. They make the necessary analytical studies, and recommendations, while the governmental structure retains the powers of decision. In the Community there might be created a body which would, from outside the political institutions, but with links to them, evaluate regularly the economic case for Community financial intervention across the range of inter-governmental financial instruments.

CHAPTERS IN VOLUME II

A. STUDIES ON THE INTER-REGIONAL ASPECTS OF PUBLIC FINANCE IN EXISTING FEDERAL AND UNITARY STATES

Chapter	Author (1)	Title
1	A.J. Brown	United Kingdom
2	Y. Fréville	France
3	D. Biehl	Germany
4	F. Forte	Italy
5	working paper	The overall redistributive effect of public finances in seven integrated economies
6	working paper	Budget equalisation in federations
7	working paper	Specific purpose grants in four federations
8	working paper	Regionalisation of federal or central government expenditure in seven integrated economies
9	working paper	Regionalisation of federal or central tax burden in seven integrated economies

B. STUDIES ON THE PERSPECTIVES FOR THE PUBLIC FINANCE FUNCTIONS OF THE COMMUNITY

10	W. Oates	Fiscal federalism in theory and practice: applications to the European Community
11	F. Forte	Principles for the assignment of public economic functions in a setting of multi-layer government
12	working paper	Perspectives for the place of the European Community in the sectoral economic functions of government
13	R. Mathews	Mechanisms for fiscal equalisation in an integrating European Community
14	working paper	Simulations of financial redistribution in the European Community
15	Th. Peeters	Fiscal stabilisation policy in the Community and monetary and exchange rate policies
16	working paper	The assignment of tax resources between levels of government: the experience of five federations, and perspectives for the Community's resources
17	M. O'Donoghue	Budgetary powers of the European Parliament

(1) Working papers were contributed at the request of the Group by its secretariat of officials from the Directorate-General for Economic and Financial Affairs of the Commission.