



OECD Economics Department Working Papers No. 9

Medium-Term Financial
Strategy: The Co-ordination
of Fiscal and Monetary
Policies

Jean-Claude Chouraqui,
Robert Price

<https://dx.doi.org/10.1787/034626486843>

OECD
ECONOMICS AND STATISTICS
DEPARTMENT

WORKING PAPERS

**No. 9: MEDIUM-TERM FINANCIAL STRATEGY:
THE CO-ORDINATION OF FISCAL AND MONETARY POLICIES**

by

**Jean-Claude Chouraqui
and Robert Price**

Monetary and Fiscal Policy Division

July 1983



ECONOMICS AND STATISTICS DEPARTMENT

WORKING PAPERS

This series of Working Papers is designed to make available, to a wider readership, selected studies which the Department has prepared for use within OECD. Authorship is generally collective, but main individual authors are named. The Papers are available both in English and French.

Comment on the Papers is invited, and may be sent to OECD, Department of Economics and Statistics, 2 rue André Pascal, 75775 Paris Cedex 16, France. Additional copies of the Papers on a limited basis can be forwarded on request.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

(i)

MEDIUM-TERM FINANCIAL STRATEGY:
THE CO-ORDINATION OF FISCAL AND MONETARY POLICIES

by

Jean-Claude Chouraqui
and Robert Price*

* Respectively Head and Principal Administrator, Monetary and Fiscal Policy Division. This paper has been prepared in collaboration with Patrice Muller. The views expressed reflect the opinions of the authors and do not necessarily represent those of the OECD or its Member Governments.

(ii)

CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
II. THE RATIONALES FOR MEDIUM-TERM STRATEGY	6
A. <u>Medium-term budgeting, monetary targets and inflation control</u>	7
(1) The mix of monetary and fiscal policies up to the second oil shock	7
(2) The current instrument-objective setting	18
B. <u>Problems of public expenditure expansion</u>	20
C. <u>Government borrowing and public debt servicing</u>	29
III. POLICY IMPLEMENTATION: MEDIUM-TERM RULES AND OPERATING PROCEDURES	35
A. <u>Budgetary and monetary rules</u>	35
(1) Medium-term public expenditure planning	35
(2) Budgetary norms	37
(3) Monetary and exchange rate targets	40
(4) Consistency between monetary and budgetary rules	42
B. <u>Means of institutional control</u>	44
(1) Public expenditure control	44
(2) The control of government borrowing	46
(3) Monetary control	48
IV. SHORT AND MEDIUM-TERM POLICY CO-ORDINATION	54
A. <u>Automatic stabilisers and medium-term budgetary objectives</u>	55
B. <u>Short-run monetary targets and medium-term financial strategy</u>	61
V. SUMMARY AND CONCLUSIONS	62
REFERENCES	90

		<u>Page</u>
ANNEX 1	Notes to the Charts	69
ANNEX 2	General Government Financial Balances and Public Expenditure Trends	71
ANNEX 3	Central Government and Public Sector Debt	79
ANNEX 4	Budget Planning Procedures	87

TABLES

Text

1.	Shares of total general government expenditure in GDP/GNP	23
2	The composition of general government revenues and expenditures	24
3.	Central government debt and interest payments	31
4.	Medium-term budgetary objectives operative in 1983	38
5.	Fiscal indexation provisions	47
6.	Projected and actual growth rates of monetary aggregates	50-51

Annexes

A.	General government financial balances	72
B1	Share of general government current expenditures on goods and services in nominal GDP/GNP	73
B2	Share of current expenditures on goods and services in total general government current spending	74
B3	Share of social security transfers in total general government current spending	75
B4	Share of general government current expenditures on goods and services in the value of total consumption	76
B5	Share of general government current expenditures on goods and services in the volume of total consumption	77
B6	Share of general government debt interest payments in total government spending	78

	<u>Page</u>	
C1	Government debt held by the private sector	82
C2	Proportion of private sector financial assets held as government debt	83
C3	Government debt held overseas	84
C4	Interest payments on government debt	85
C5	Proportion of government interest paid abroad	86
D.	Public sector budgetary programming: institutions and planning procedures	88-89

CHARTS

1.	Fiscal-Monetary Policy Mix in the OECD Area	9-11
2.	Inflation, Growth and Unemployment Performance in Selected OECD Countries	14
3.	Economic Performance and Indicators of Monetary Stance in Selected OECD Countries	15
4.	Economic Performance and Budgetary Indicators in Selected OECD Countries	17
5.	Economic Performance and the Expansion of the Government Sector in Selected OECD Countries	26
6.	Trends in General Government Expenditures in Selected OECD Countries	28

I. INTRODUCTION

Scope of the paper

The aim of this paper is to provide an assessment of the medium-term financial strategies operating in and available to OECD economies. Three issues are discussed: first, the rationale for the increasing adoption of medium-term budgetary and monetary objectives; second, the appropriate criteria for the determination of medium-term policy norms, and the institutional means through which these are implemented; and third, the problems of ensuring consistency between short-term policies and medium-term goals. Underlying these issues is the theme of monetary and fiscal policy co-ordination and the medium-term effectiveness of demand management. To the extent that central banks can contain the pressures stemming from the mix of restrictive monetary targets and expansionary budgets, monetary and fiscal policies might be assigned to different objectives - inflation control and short-term employment support respectively (although monetary restraint would not free expansionary fiscal action of short-run inflation consequences)(1). But persistent imbalance between the two 'instruments' may result in diminishing fiscal effectiveness because of cumulative budget financing difficulties; output and employment gains may be progressively eroded through upward pressures on interest rates, either as a result of the 'crowding-out' of private demand or fears of future monetary accommodation and inflation. In this case the room for fiscal policy independence - i.e. for asymmetry between fiscal stance and monetary targets - may be limited. Fiscal and monetary policies may thus offer policy-makers nearer one instrument than two.

Rationales for medium-term policy-making

Part II examines the motivations for medium-term financial strategies. The analysis is on a cross-country basis. OECD economies are sufficiently different to make generalisation difficult; but they have experienced similar

(1) Monetary control issues are discussed in "Budget Financing and Monetary Control", OECD Monetary Studies Series, 1982. The effects on output of fiscal policy unsupported by monetary accommodation - i.e. of bond-financed deficits - are discussed in Price and Chouraqui, "Public Sector Deficits; Problems and Policy Implications", OECD Occasional Studies, June 1983.

trends and motivations. Since 1970 the share of resources(2) claimed by the general government sector has increased from one-third to over two-fifths of OECD GDP, while budget deficits have risen from a combined level of about 1/2 per cent of GDP at the beginning of the 1970s, to more than 4 per cent at present(3). Compositionally, three features have dominated - increasing public transfers, a growing imbalance between public consumption and investment, and rising debt interest costs. The size of the public sector is still sufficiently diverse (it varies from one third of GDP in Japan to nearly two thirds in Sweden) for concern about the adverse supply-side consequences of increasing taxation to be of a different dimension among countries. But the belief that the growth of the public sector has been too fast, too imbalanced and too little under governmental control has been sufficiently widespread among OECD countries for the reduction of the government's claims on resources to be a priority objective in economic planning. Setting limits on the scope of governmental influence over economic activity and devising institutional arrangements which can make such limits effective would perhaps be accepted as one of the principal motivations towards medium-term financial strategy.

Underlying this desire to restore long-run control over public finances is a widely-held distrust of ad hoc interventionism, and a perceived need to establish an environment of medium-term stability, in which private sector decisions to work, save and invest may be made in as stable a budgetary setting as possible - a gravitation towards 'consistency, continuity and credibility' in policy-making. There are three strands to this motivation - supply-side, monetarist and fiscalist - each giving different weight to fiscal policy in the determination of long-run economic growth. First, the increasing recognition of the importance of supply-side factors in the employment problem has necessitated a reconsideration of the allocational and regulatory roles of both public expenditure and taxation. Concern has grown about the impact of marginal tax and benefit rates on the efficiency of the labour market and this has led both to attempts to adjust the indirect-direct tax mix, and, more fundamentally, to the view that the employment problem cannot be solved by demand management alone. Secondly, medium-term financial strategy has been closely associated

(2) Resource pre-emption here refers to general government expenditures relative to GDP. This may understate the 'size' of government, given tax-expenditures, regulatory activity and nationalisation.

(3) In the decade up to 1970 public sector expansion was facilitated by relatively fast economic growth; only 40 per cent of the increase in OECD output was allocated to higher general government spending. Since 1970 public spending growth has accounted for two-thirds of the increase in total OECD final expenditure.

with monetary targetry and the creation of a climate of medium-term price stability. A corollary of this has been the need to ensure a long-run expansion of government borrowing consistent with monetary growth objectives. This is not just a matter of fiscal prudence and forestalling long-run crowding out of private demand; market expectations of future budget financing problems may give crowding-out a short-term dimension where interest rates include a risk premium against the possibility of a continuing accumulation of government debt. Medium-term financial strategy may be as much a means of influencing expectations and creating a climate of confidence in the private sector as of improving budgetary control per se.

A further, related, motivation stems from difficulties of phasing public expenditure counter-cyclically, and of preventing 'fine-tuning' from being destabilizing. Forecasting inaccuracies may cause tax changes to be mistimed, while the inflexibility of public expenditure makes it an imperfect stabilization instrument. In the United Kingdom, where the medium-term planning of public investment - and of public expenditures in general - goes back several decades, freeing public sector demand from short-term disturbance was considered more likely to enhance stability than deliberately varying public sector demand to offset business fluctuations. Elsewhere - Germany and the Netherlands are the principal examples - medium-term budgeting has, at times, been promoted as a framework for assessing the longer-run consequences of short-term actions, in order to make counter-cyclical fiscal policy more effective. The case for medium-term budgetary stability has, however, come to rest on its merits as an alternative, rather than a complement, to fiscal activism - a process which has entailed giving precedence to automatic stabilizers over discretionary policy-making.

Medium-term rules and operating procedures

The paper is also concerned, in Part III, with the policy rules and institutions through which medium-term strategies are applied. Fiscal policy may be subordinated to monetary policy under 'inflation first' strategies which give priority to the achievement of monetary targets or the linking of the exchange rate to a strong currency. Belief in the self-equilibrating properties of market economies and a 'natural rate' of unemployment, associated with conclusions about 'fiscal neutrality' (or the longer-run ineffectiveness of fiscal policy to raise national output(4)), has provided an

(4) 'Fiscal neutrality' implies that longer-run growth and employment performance is independent of the budget deficit, whether bond- or money-financed. ('New classical' propositions about rational expectations and continuous market equilibrium deny anticipated fiscal action even short-term effects.) Fiscal policy may still affect growth through the tax structure etc.

important part of the underpinning for such targets. But, in practice, medium-term budgetary rules still tend to be specified in terms which allow fiscal policy a positive influence on longer-run economic growth. This is not just a recognition of the fact that the natural rate of employment may be dependent on the allocational (supply-side) effects of government spending. For economies where public investment and/or private savings are large, a 'structural' budget deficit may be needed to absorb the excess of private savings over investment, and to satisfy private sector portfolio demand for government stock(5). Thus even if fiscal and monetary policies do not comprise two instruments in the medium term, they may constitute significantly more than one. The composition of public spending affects the extent to which fiscal policy has a long-run influence; public investment may yield a positive social or market rate of return to the economy which may prevent cumulative financing instabilities from occurring, since debt interest payments would be financed out of charges, profits or faster economic growth(6).

The effective implementation of medium-term policies needs efficient institutional arrangements. Public sector planning requires, inter alia, accurate projections of productive potential, assessments of the long-run spending implications of current legislation (the majority of government spending is contractual in the sense that it takes place as a result of previous governmental decisions(7)), proper measurement of government output and its costs, efficient procedures for public sector wage determination, and effective control of the growth of transfer incomes - the issue of fiscal indexation being an important one. It also involves problems of co-ordinating spending agencies and defining federal-state(8) and central-local divisions of

-
- (5) The ability to import capital at a given interest rate may allow fiscal policy a larger short-term role in demand management in smaller countries, capital imports balancing public sector and current account deficits. Budgetary rules sometimes incorporate a target of long-run external payments balance (cf. the Dutch case), so that public savings would exactly offset private.
 - (6) The effect of government debt interest payments on long-run fiscal effectiveness is discussed in Part II.C.
 - (7) For instance, 85 per cent of Swedish public spending is committed - changeable only by new legislation - and rises automatically with indexation, etc. (See 'The Swedish Budget 1982/83', p. 45).
 - (8) Australia, Canada, Germany, Switzerland and the United States are the five OECD member-state federations.

responsibility. Control of monetary growth or domestic credit poses problems of co-ordination between treasuries and central banks, which will tend to influence the extent to which fiscal policy is subordinated to monetary policy, the selection of appropriate aggregates as monetary targets, and the credibility of such targets. The choice may be between ensuring that monetary and fiscal policy act in an interdependent, consistent way and using central bank independence as a check against the risk of inflationary budgeting (as in the United States and Germany, for instance).

Finally, the effective planning of government borrowing may be dependent both on accurate projections of long-run private sector savings and on efficient institutional controls to ensure such savings are used for public investment. This may involve statutory limits on government borrowing for consumption purposes (central and local), separate treatment for public corporation ('off-budget') borrowing and arrangements for ensuring the self-sufficiency of social security schemes. The question of issuing indexed debt, and of measuring and controlling the budget deficit net of inflation-induced interest payments (which represent advance repayments of capital rather than new government spending) also arises in this context.

Short and medium-term policy consistency

Macro-economic policies in recent years have been based on arguments that moderating inflation improves economic performance. Accommodating an inflationary shock sustains demand in the short term, but may jeopardise longer-run growth - a proposition which formed the basis of OECD strategy following the second oil price shock. Beyond the fact that exchanging higher inflation for employment stability is not a feasible long-run option, however, it may be argued that economies which have already diverged from their potential growth path because of high inflation and excess budget deficits can effect a return to sustained higher employment only via policies of combined monetary and fiscal restriction. This 'inflation first' strategy reverses the usual counter-cyclical demand management orthodoxy (that budget cuts reduce output) and implies that budgetary retrenchment may be necessary - even sufficient - for regaining long-run economic balance, via lower interest rates and inflationary expectations, reduced uncertainty, and the beneficial effects on real private financial wealth. Persistently high government deficits will tend, in this perspective, to prejudice economic recovery because of the part they play in the formation of inflation expectations and interest rates, so that the reduction of budget deficits has assumed a critical role in the recovery process.

Measured in terms of actual budget deficits, however, the stance of fiscal policy appears expansionary in most countries: built-in stabilizers have more than compensated for discretionary tightness, leaving budgets in significant

deficit. If discounted as temporary and self-correcting, automatic variations in deficits need not put upward pressure on interest rates. As long as the economy remains below potential, however, 'automatic stabilizers' will continue to add to the stock of government debt, to the debt interest burden and to budget financing pressures. In this case the totality of government credit demands (present and anticipated) may become an element retarding the decline in the cost of borrowing, thus discouraging investment, impeding recovery and reducing productive potential. Built-in stabilizers, if they are not perceived by financial markets as self-cancelling with economic recovery, can become part of the structural budget problem as slow growth causes them to persist.

Partly because of budget 'feedbacks' from fiscal and monetary tightness, the combination of deflationary fiscal and monetary policies has been slow to create the conditions for medium-term recovery from which progress towards budgetary balance must ultimately stem. Higher interest charges and lower economic activity have raised the budget deficit, so that the restrictive policy stance has lowered demand without significantly reducing long-term interest rates. If market expectations about future credit market pressures and inflation are dependent on the actual budget deficit, as they appear to be, too restrictive a short-term policy stance may then risk locking OECD economies into a low-investment, low-growth trap. Does the pursuit of medium-term budgetary consolidation involve an unwarranted attachment to the self-righting properties of economies? Or is the success of such a strategy dependent upon allowing greater flexibility in the short-term implementation of budgetary policies? In particular, should "structural" and cyclical components of the budget deficit(9) be treated differently? While the scope for fiscal and monetary policies to act independently and asymmetrically in the medium-term is limited, part IV examines whether some degree of autonomy in and between the two instruments may be possible or desirable in the short term.

II. THE RATIONALES FOR MEDIUM-TERM STRATEGY

The inadequacy of conventional short-term public sector financial planning was most widely and obviously reflected, in the first half of the 1970s, in excess monetary growth and increasing inflationary expectations; to prevent a similar recurrence an emphasis on medium-term monetary stability has

(9) A "structural" budget deficit is that component which would remain, under unchanged policies, if the economy were to return to "high employment" levels of GDP. It is equated in the text with the "cyclically-adjusted" budget balance, which is used in a short-term context to describe discretionary fiscal stance.

followed. The corresponding need for medium-term budgetary planning has been reinforced by a number of adverse fiscal trends which have been general to OECD economies: increasing tax burdens, growing public transfers, a declining proportion of public investment in total public spending and inflated public sector borrowing requirements - a substantial part of which had, by the late 1970s, become 'structural', requiring deliberate measures to bring them under control. A growing accumulation of government debt and increased debt interest payments have paralleled this public sector expansion.

However, levels of public spending, domestic indebtedness and external borrowing vary significantly across countries, as do private sector savings and, perhaps, the sensitivity of inflationary expectations to persistent budget deficits. Depending on these factors, problems of real or financial crowding-out stemming from tax and borrowing pressures may appear immediate or distant. They take on a more long-term focus in those countries where expectations are that government action may forestall cumulative budget financing difficulties. They have appeared more pressing - and the crowding-out problem more immediate - in countries like the United States and the United Kingdom where high interest rates may have derived from adverse expectations about the intractability of budget deficits and the attendant inflationary risks. Nevertheless, for all OECD economies, the issue has a collective significance insofar as interest rate pressures stemming from large budget deficits may, in certain circumstances, be transmitted throughout the OECD area, leading to a degree of international financial crowding-out.

The monetary rationale for medium-term policy orientation is discussed first (section A) in terms of the convergence of monetary and fiscal policies towards a medium-term orientation where the two instruments are used symmetrically; there follows in section B an analysis of the trends in public spending which provide some of the proximate motives for governments' concerns about public sector expansion. In section C the problems associated with the financing of high budget deficits (accumulation of government debt and increased interest payments) are analysed in terms of the consequences for fiscal effectiveness.

A. Medium-term budgeting, monetary targets, and inflation control

(1) The mix of monetary and fiscal policies up to the second oil shock

During the late 1960s fiscal and monetary policies, although constrained by interest rate and exchange rate objectives (which were sometimes in conflict), were usually mutually reinforcing. Periodic asymmetries emerged because monetary policies were considered to be quicker-acting in deflations than reflations, so that in some countries there may have been a tendency to 'loose budgets and tight money'.

But one of the main characteristics of the late 1960s was the monetary 'accommodation' of the United States budget deficit through relatively low interest rates. Given the then fixed exchange rate regime, there followed a growing US balance of payments deficit with the rest of the OECD and a build-up of world liquidity which, in conjunction with accommodating monetary policies, served to underwrite a generalised monetary expansion within the OECD area in 1971-72. This was accompanied by fiscal reflation in the United States(10), Japan, Germany, the United Kingdom and Italy, and by the transition to a managed floating exchange rate regime(11). As may be seen from Chart 1, which compares real money supply changes and interest rates with indicators of budget stance, demand management policies were mutually supporting in 1971-72. The emphasis ex post (Chart 1A) appears to have been on monetary rather than budgetary expansion, but the cyclically-adjusted budget indicator shows both fiscal and monetary stance to have been expansionary(12).

In reaction to growing inflationary pressures, monetary conditions were tightened in 1973 and became more restrictive in response to the oil price shock. Budget stances also became more restrictive, as inflation-induced fiscal drag

-
- (10) The fiscal expansion in the United States is more evident from the federal government budget figures than from the general government balance. Cyclically-corrected, the federal budget swung towards deficit by 2 per cent of GDP in 1971-1972; see H. de Leeuw and T.M. Holloway, "The High Employment Budget: Revised Estimates and Automatic Inflation Effects", U.S. Department of Commerce, Survey of Current Business, April 1982, Table 3 (1982).
- (11) Reflation was associated in some cases with the belief that both monetary and fiscal policies could be more effective if they acted in concert, exchange rate depreciation preserving, where necessary, external competitiveness and payments balance. The small anti-inflationary gains resulting from demand deflation in 1970 had led to an assertion of the primacy of cost factors in the inflationary process, so the abandonment of the fixed parity system in 1971-2 and the accompanying reflation were associated with - and justified by - incomes policies experiments in the United States and the United Kingdom.
- (12) The Chart is drawn so that in the upper-right quadrant policies are mutually accommodating (budget expansion supported by monetary growth): see Annex 1. The contrast between the ex ante thrust of fiscal policy, which was generally expansionary in 1971-72, and the ex post stance, which was roughly neutral, may be seen in the difference between Charts 1A and 1C (which show the budget deficit corrected for 'automatic stabilizers').

CHART 1

FISCAL-MONETARY POLICY MIX IN THE OECD AREA

A. — REAL MONEY SUPPLY, REAL INTEREST RATES AND GENERAL GOVERNMENT BUDGET BALANCES: AGGREGATE FOR THE MAJOR SEVEN COUNTRIES 1971-1982

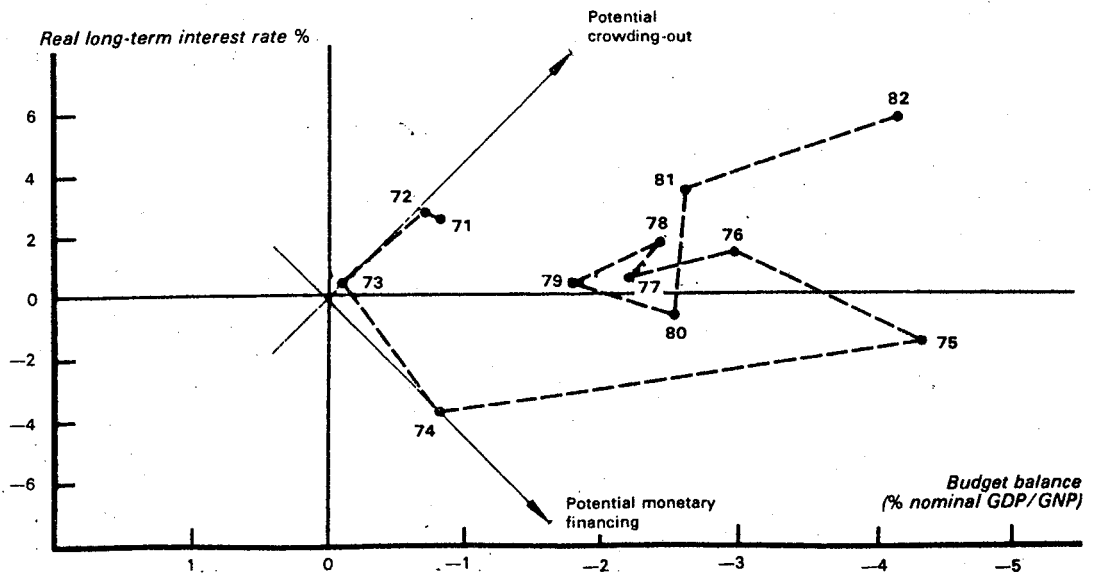
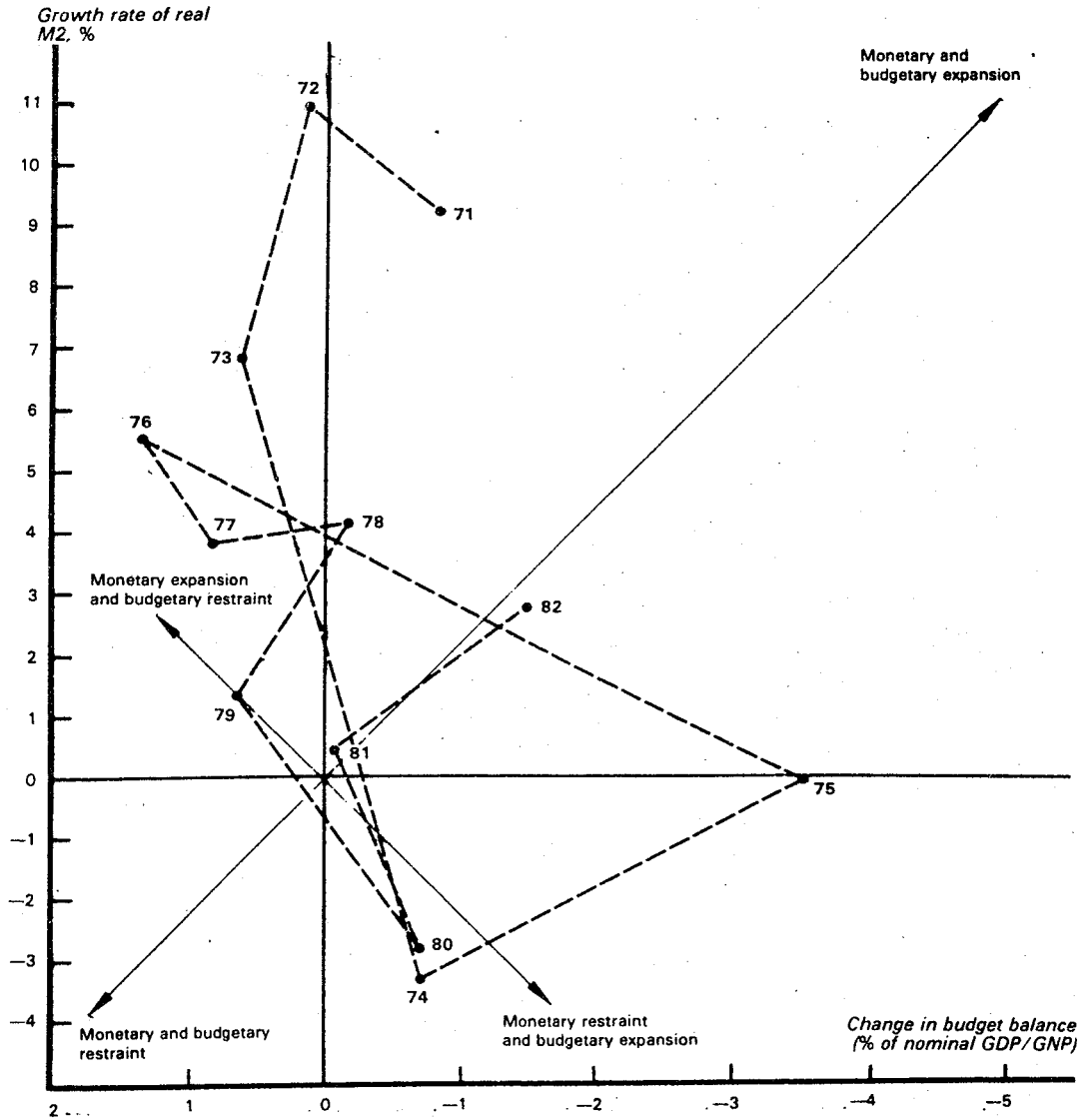


CHART 1 (continued)

FISCAL-MONETARY POLICY MIX IN THE OECD AREA

B. — REAL MONEY SUPPLY, REAL INTEREST RATES AND GENERAL GOVERNMENT BUDGET BALANCES: AGGREGATE FOR SELECTED SMALLER COUNTRIES 1971-1982

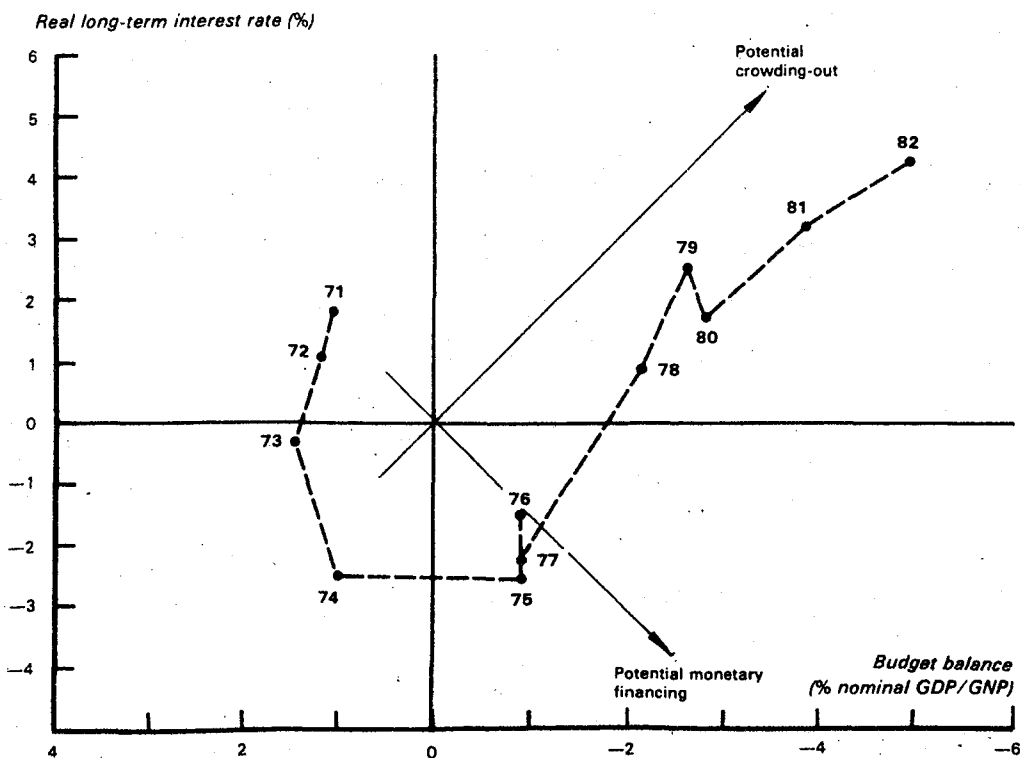
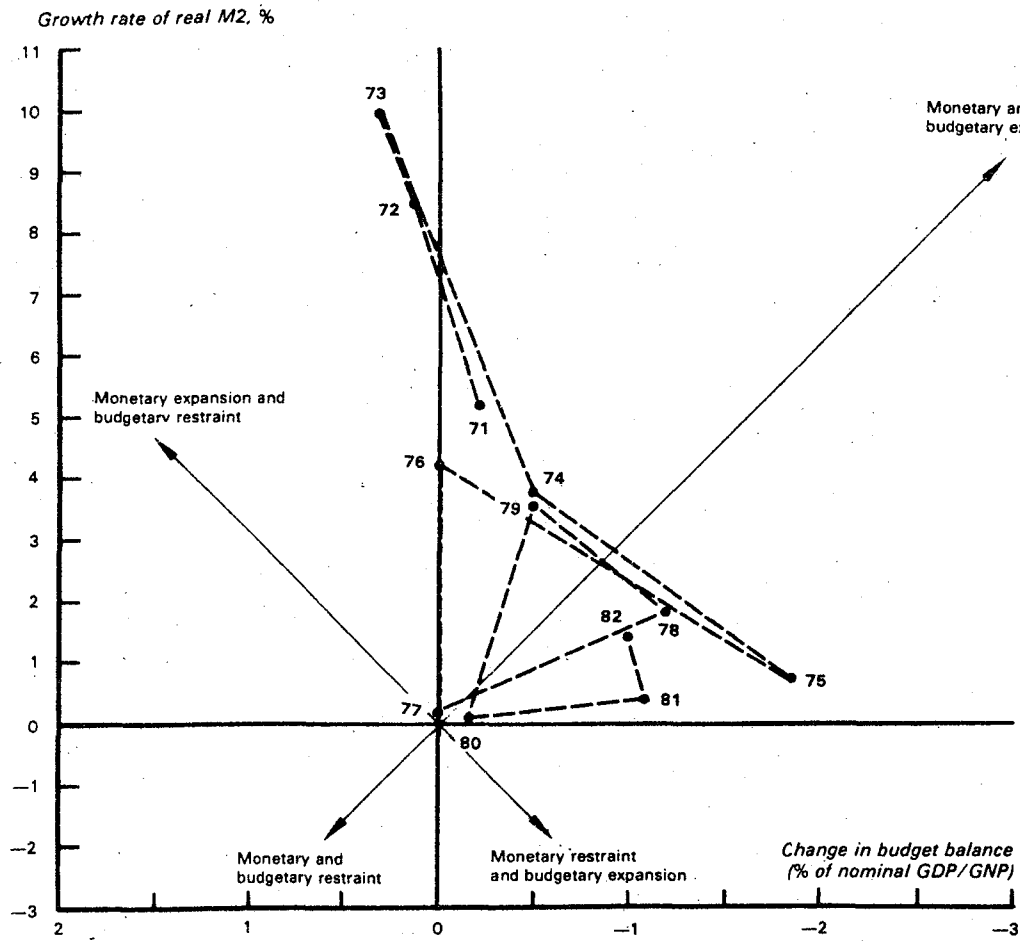
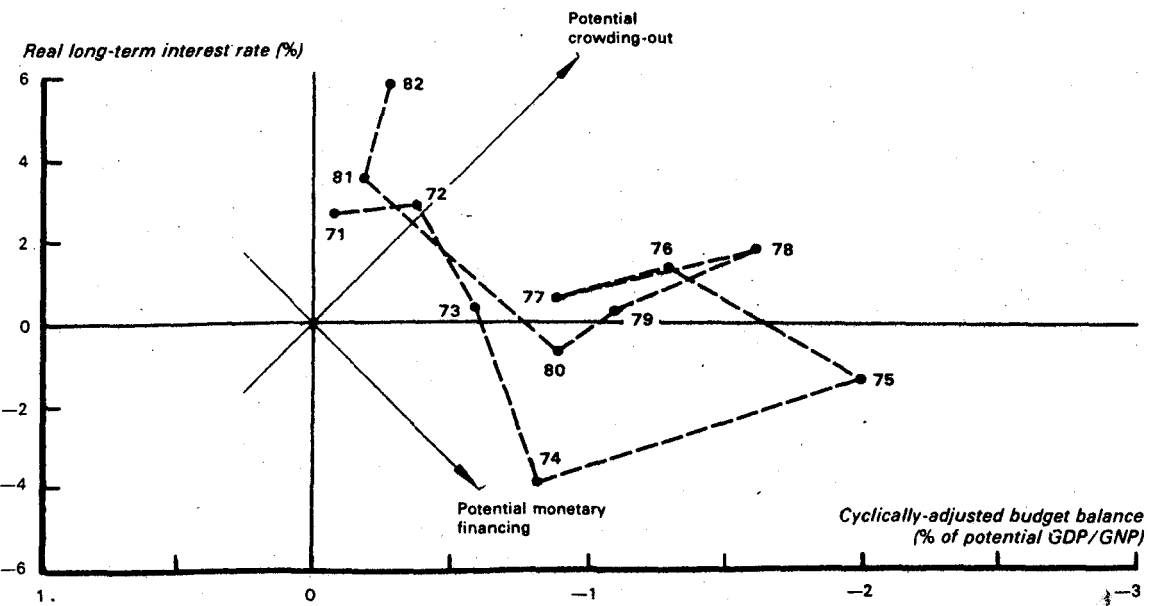
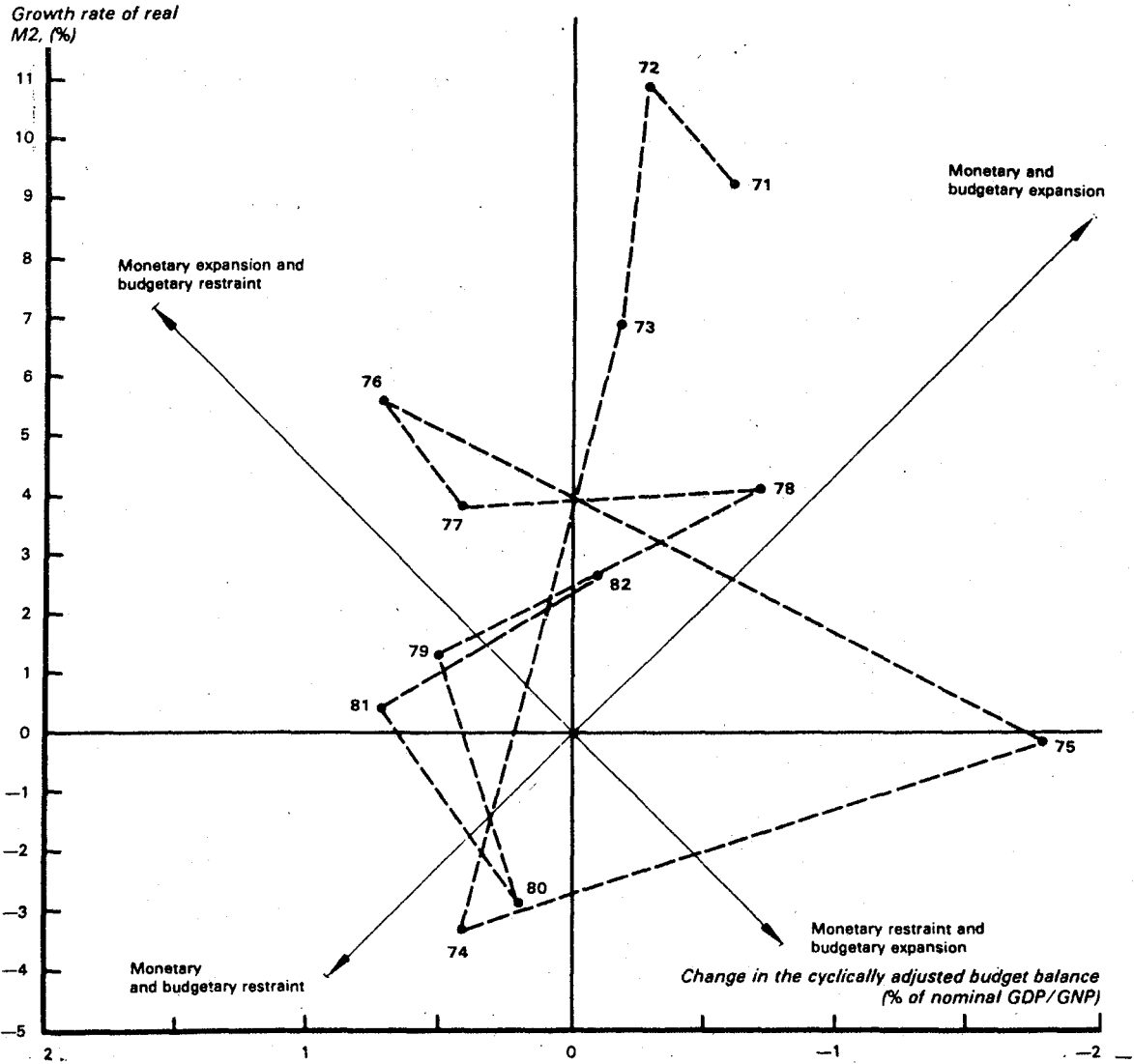


CHART 1 (continued)
FISCAL-MONETARY POLICY MIX IN THE OECD AREA

C. — REAL MONEY SUPPLY, REAL INTEREST RATES AND CYCLICALLY-ADJUSTED BUDGET BALANCES: AGGREGATE FOR THE MAJOR SEVEN COUNTRIES 1971-1982



reduced government deficits(13). Fiscal and monetary policies therefore remained synchronised (in favour of restraint) in the immediate aftermath of the oil shock. But while budgetary policies continued to be cautious for most of 1974, they became progressively more expansionary towards the end of that year and through 1975 as the authorities in several countries accepted the need to finance the external deficits relating to the oil shock through the public sector. With monetary restraint also easing, demand management policies remained mutually accommodating(14), becoming less so in 1976-77 as most countries turned towards fiscal retrenchment (Chart 1C).

As output continued to stagnate, unemployment increased and inflationary expectations persisted, the combined fiscal and monetary expansion of the early 1970s was perceived as having adverse results in terms of stabilization; attempts to 'fine-tune' the economy to continuous high employment at the expense (ex post at least) of the inflation objective had proved unsuccessful. There were two dimensions to this failure. The 1970-75 experience suggested, first, that short-term discretionary action might be destabilizing because of forecasting and timing errors; in which case there was a need to frame monetary and fiscal policies in a more stable, medium-term framework, so that demand management would become 'steadier and more predictable'(15). Secondly, the limited gains to output which followed monetary expansion demonstrated that governments should not - and in the end could not - acquiesce in high rates of monetary growth and inflation; countries that sought to achieve a high level of employment and rapid growth by means of 'easy money' and currency depreciation had, by the second half of the decade, to concede the failure of this policy(16). From late 1975 OECD

(13) The influence of inflation-induced fiscal drag on budget stances is illustrated by the swing of the U.S. cyclically-adjusted federal government budget indicator towards surplus by \$9.2 billion (0.7 per cent of GNP) in 1974, all of which may be ascribed to automatic inflation-induced effects on government revenues: see de Leeuw and Holloway, op. cit., p.29.

(14) The real money supply of the major seven economies as a group declined through 1973 and 1974, picking up from the fourth quarter and continuing to grow until the first quarter of 1976. The average money stock in 1975 was, however, about the same as the average for 1974 (Chart 1A and 1C), though its level at the end of 1975 was 4 per cent above that at the end of 1974.

(15) See OECD, Towards Full Employment and Price Stability, (1977) p.192.

(16) Memorandum of the Deutsche Bundesbank, United Kingdom House of Commons, Treasury and Civil Service Committee, HC720, 1980, Vol. II, p.12.

countries, with exceptions among the smaller economies, began to take corrective action to reduce budget deficits and public spending, this being linked to the increasing adoption of either monetary targets or the 'hard currency option' which implies that the exchange rate is tied to a strong currency like the Deutschemerk. These policies were aimed at a gradual reduction in inflationary expectations and a corollary of this was the need for public sector borrowing requirements to be explicitly linked to targets for monetary growth.

Another reason why the coincidence of high unemployment and inflation brought with it a reappraisal of policy trade-offs and the appropriate monetary-fiscal mix was that those countries with the best inflation and balance of payments performance appeared to be those with the most successful output and employment records. Chart 2 examines this proposition by comparing inflation and growth-unemployment performances in the 'seventies for a cross-section of countries. Any connection between growth and inflation appears to be tenuous, depending on the subset of countries considered(17); but the chart does suggest some form of relationship between lower unemployment and lower inflation. Chart 3 takes the analysis further and relates economic performance, in the form of inflation, real GDP growth and unemployment indicators, to the monetary policy instruments and intermediate targets used: monetary growth rates, real interest rates and exchange rate changes. The relationship between economic goals and the variability of monetary growth and interest rates is also examined in this chart, since the case for stable medium-term policies has derived in part from a scepticism about the effectiveness of short-term activism, the unpredictability of which may be a destabilizing factor. In fact, both the link between monetary accommodation and inflation and that between real monetary growth and GDP growth emerge as positive, while greater stability in monetary conditions also seems to be significantly associated with better economic performance. The benefits of 'sound money' might also be inferred (prima facie) from the positive correlation between exchange rate appreciation and growth, though no strong conclusion emerges from the correlation of real interest rates with economic performance(18).

(17) Details and definitions are given, for this and following charts, in Annex 1: 'Notes on the Charts' p.69 below. There is no correlation between inflation and growth rates on a cross-section basis (Chart 2A).

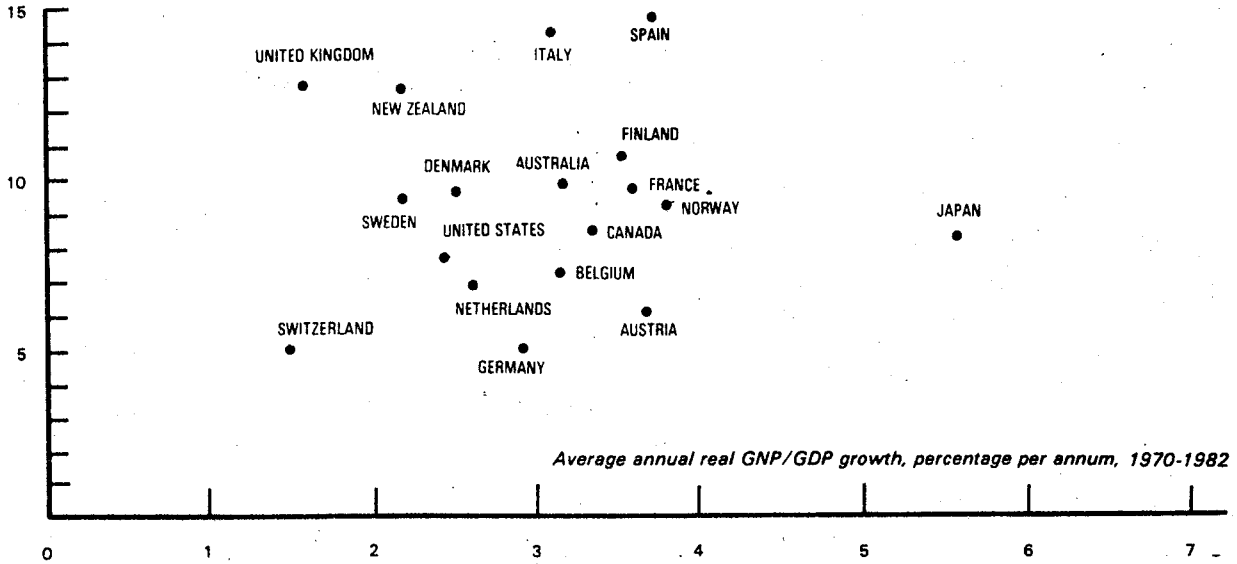
(18) The relationship between real interest rates and growth is ambivalent from Charts 3B and 3D, again depending on the sub-set of countries chosen. Conflicts may, of course, occur between money stock and interest rate stability; hence the advantages of steady real interest rates and monetary growth may not be simultaneously available. The same applies to exchange rates. Moreover, cross-section correlations are not to be taken as expressing causality in any definitive sense.

CHART 2

INFLATION, GROWTH AND UNEMPLOYMENT PERFORMANCE IN SELECTED OECD COUNTRIES

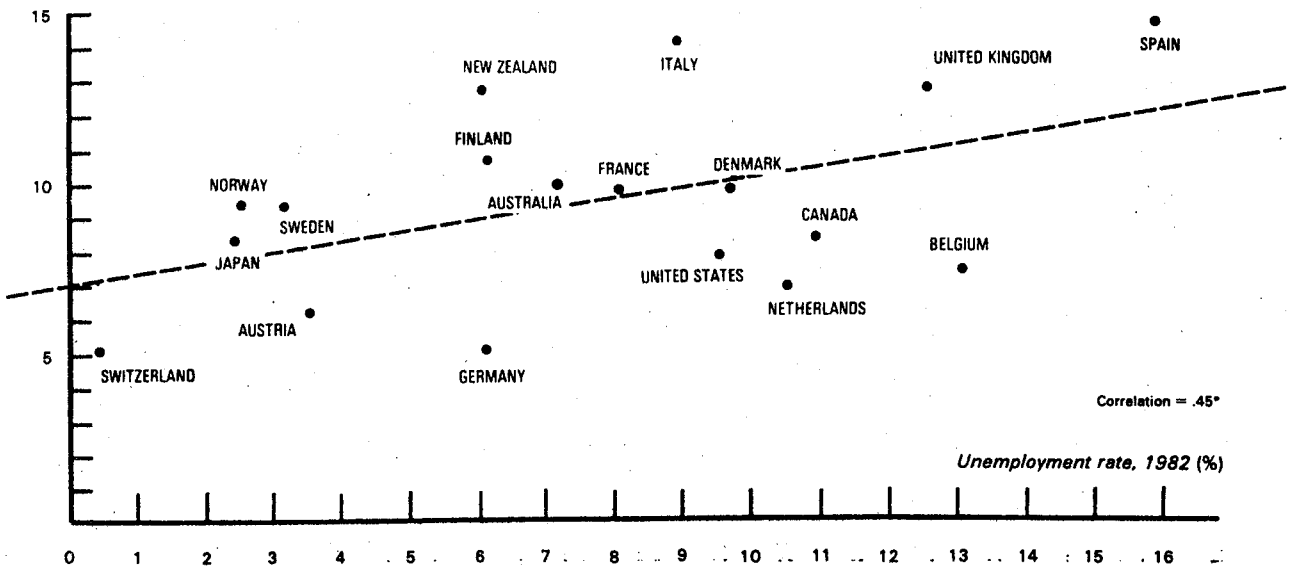
A. - REAL GDP GROWTH AND INFLATION

Average annual percentage change in consumer prices, 1970-1982



B. - UNEMPLOYMENT RATE AND INFLATION

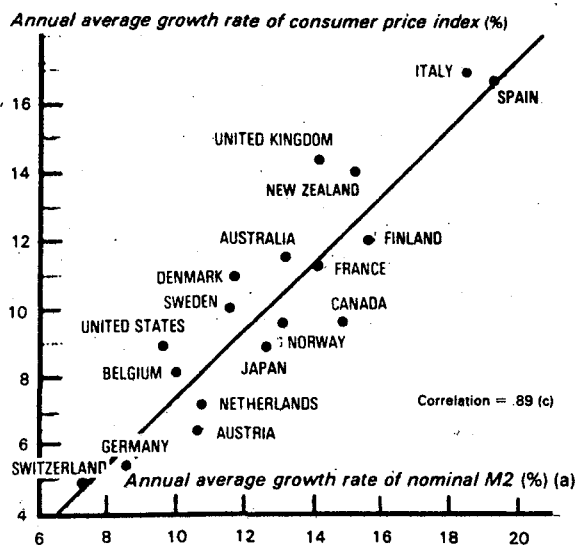
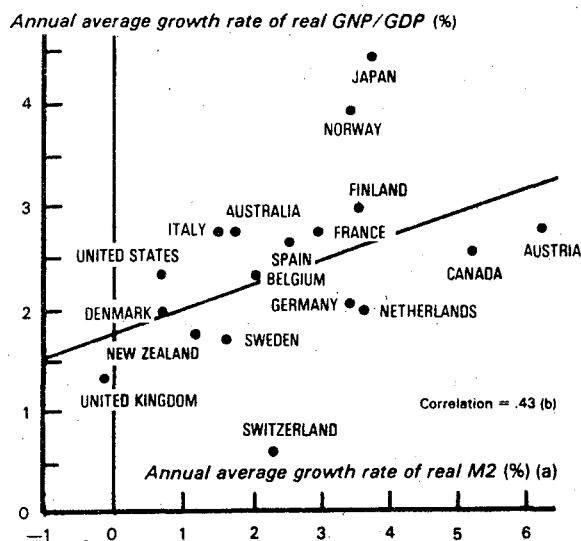
Average annual percentage change in consumer prices, 1970-1982



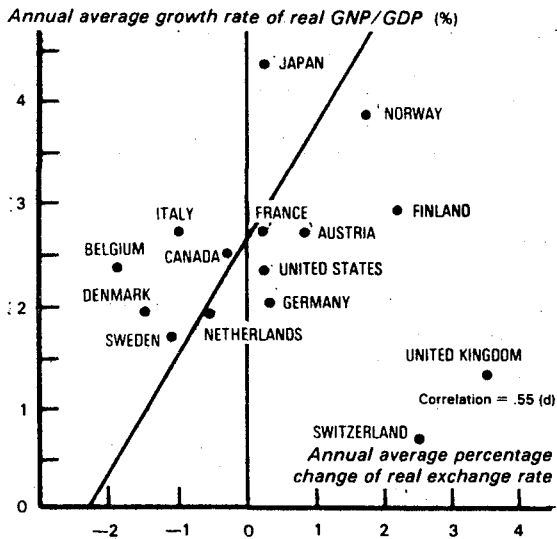
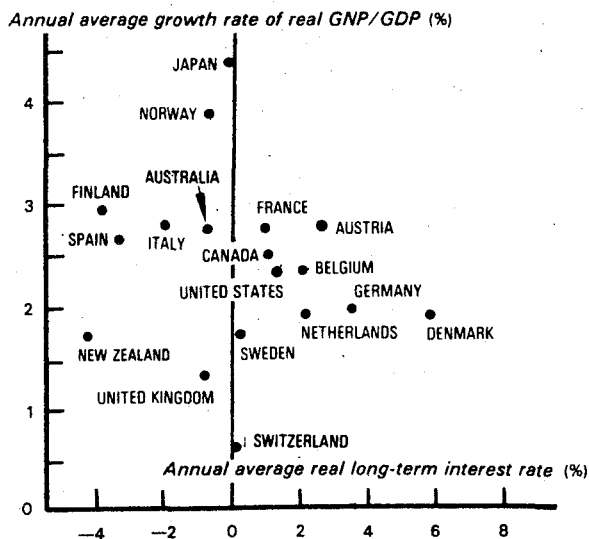
* significant at 10%

CHART 3 ECONOMIC PERFORMANCE AND INDICATORS OF MONETARY STANCE IN SELECTED OECD COUNTRIES 1973-1982

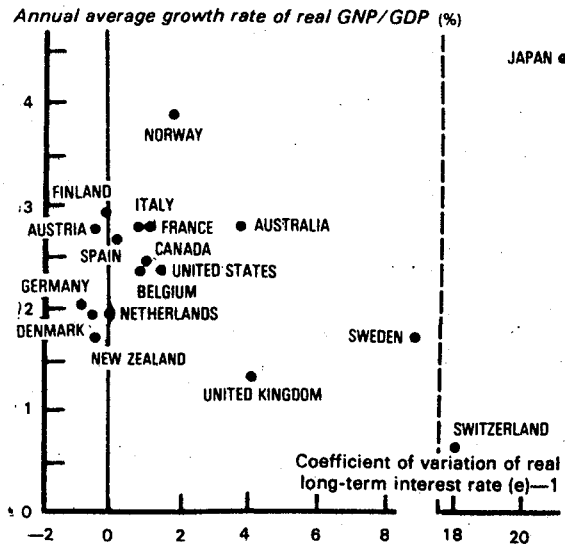
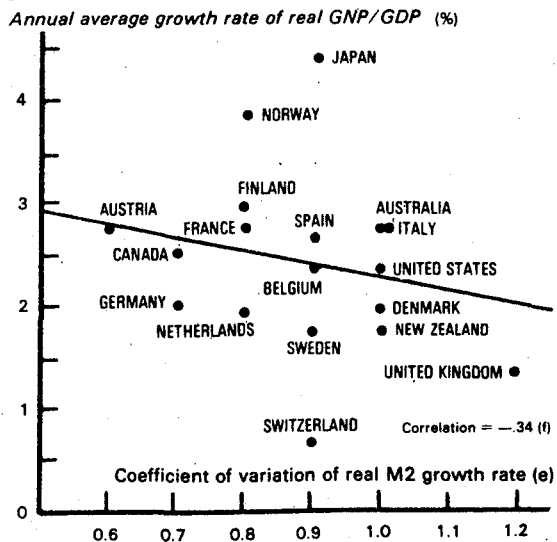
A. — REAL GDP, INFLATION AND MONETARY GROWTH



B. — REAL GDP, REAL INTEREST RATES AND REAL EXCHANGE RATES



C. — REAL GDP AND VARIATIONS IN REAL MONETARY GROWTH AND REAL INTEREST RATES



(a) M3 for Germany and EM3 for United Kingdom. (b) Significant at 10%. (c) Significant at 1%. (d) Excluding United Kingdom and Switzerland, significant at 5%. (e) Coefficient of variation = standard deviation/mean. (f) Excluding Japan, United Kingdom and Switzerland, significant at 20%.

An examination of the effectiveness of fiscal policies leads to similar conclusions about the beneficial impact of policy consistency and continuity: Chart 4B shows that the greater has been the discretionary variability of budgetary policy - i.e. the more the resort to "fine tuning" - the higher has been average unemployment(19). Stable medium-term budgetary support may, on the other hand, be more beneficial, since the "discretionary" budget indicator and government indebtedness (Charts 4C and 4D) do not display any significant negative longer-run correlation with employment and economic growth performance(20).

Though "fine-tuning" appears to have been discredited by the events of the early 1970s, the possibility of using selective discretionary action to steer OECD economies gradually back to higher employment emerged as an increasingly attractive strategy as activity stagnated in 1977-8(21). With monetary targets acting as a medium-term prevention against excessive monetary financing of budget deficits, fiscal policy was still thought capable, in principle, of promoting a sustained increase in employment without engendering inflation(22). Nor were higher interest rates and 'crowding out' of private demand considered a necessary consequence of reflation, provided action was overtly temporary and governments correctly set their budget deficit targets to equate with the supply and demand for loanable funds over the (medium-term) budget period(23). The potential usefulness of fiscal policy as a means of stimulating OECD economies in a way consistent, a priori, with both monetary growth targets and balance of payments constraints, was thus re-asserted in the context of co-ordinated fiscal reflation - the 'concerted action programme' - in 1978.

(19) 'Discretionary' policy is here defined in terms of changes in the 'cyclically adjusted' budget balance. These incorporate announced policy changes, fiscal drag and estimating revisions. See Price and Chouraqi (1983), op. cit., Annex I.

(20) It should, again, be emphasized that the correlations depicted in the charts provide only prima facie evidence on the link between budget stance and economic objectives. Further research is needed in relating objectives to instruments in a multi-instrument setting taking account of incomes policies, monetary and exchange rate control etc. Moreover, a positive relationship between objectives and fiscal support may not be proof that such support is permanently sustainable.

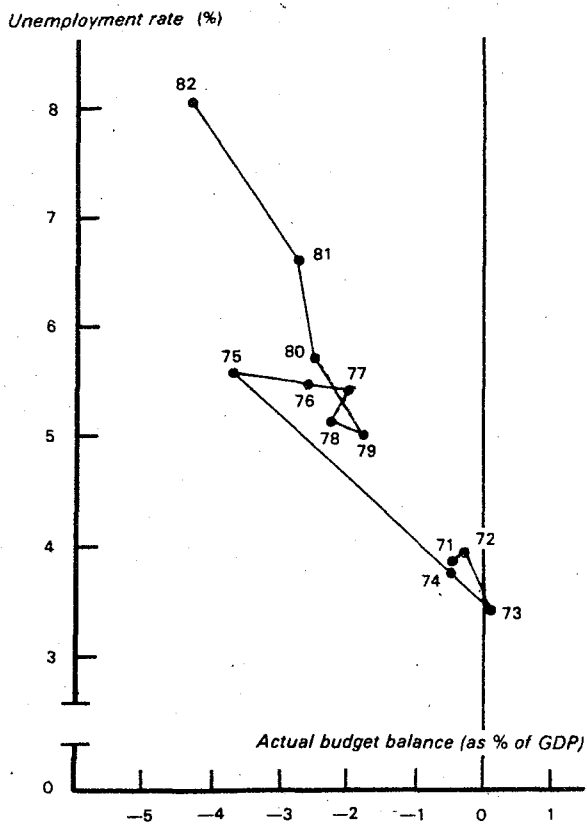
(21) See OECD (1977) op cit. which, while arguing for medium-term budgetary consistency, also diagnosed the need for active demand management to re-achieve the medium-term path. (pp.191-2).

(22) Ibid., p. 197. (23) Ibid., pp. 197 et seq.

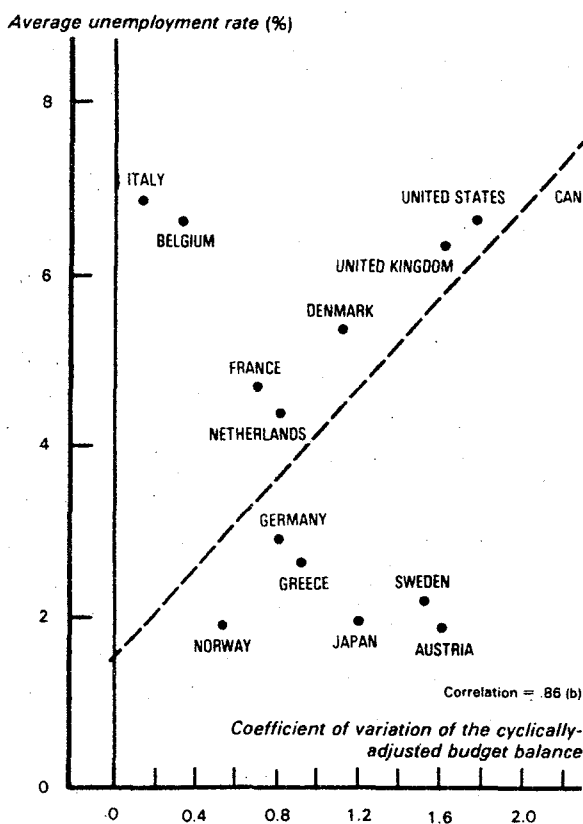
CHART 4

ECONOMIC PERFORMANCE AND BUDGETARY INDICATORS IN SELECTED OECD COUNTRIES 1971-1982 (a)

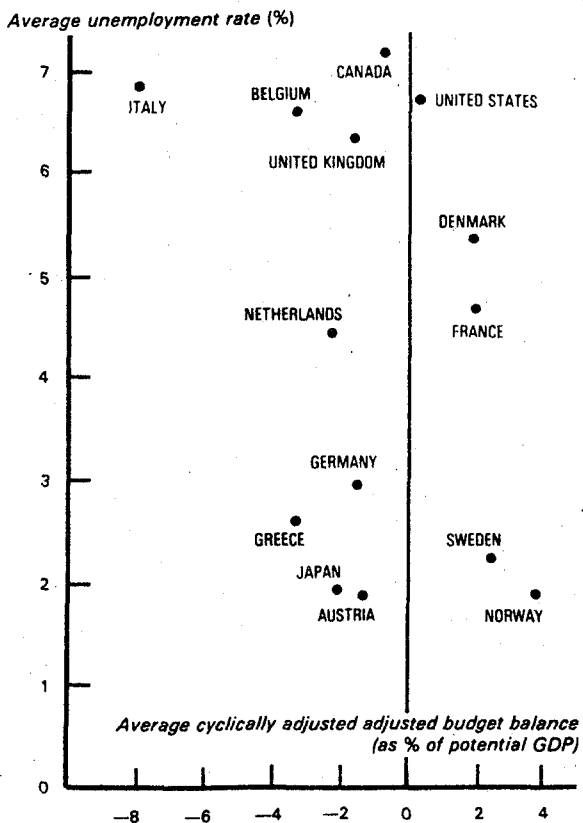
A. — UNEMPLOYMENT RATE AND ACTUAL BUDGET DEFICITS — OECD AVERAGE



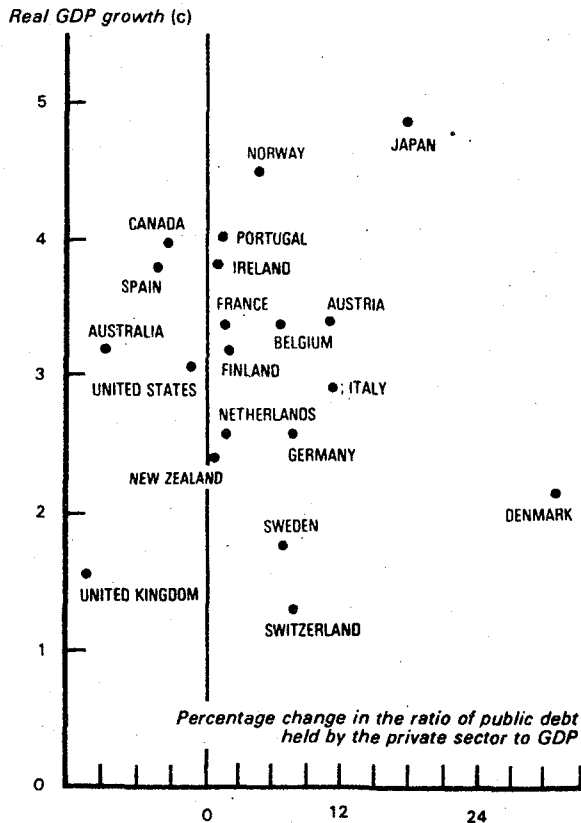
B. — UNEMPLOYMENT RATE AND VARIATIONS IN THE BUDGETARY STANCE



C. — UNEMPLOYMENT RATE AND THE CYCLICALLY-ADJUSTED BUDGET BALANCE



D. — REAL GDP GROWTH AND PUBLIC SECTOR DEBT



(a) See Annex 1. (b) Excluding Japan, Italy, Austria, Belgium and Sweden, significant at 5%. (c) Average annual real GNP/GDP growth rate.

(2) The current instrument-objective setting.

In the event, the second oil shock meant that the expected growth of economic activity needed to finance budget deficits (through automatic increases in tax receipts) did not emerge, so that concerted reflation left OECD countries with a legacy of higher deficits and inflation. Given the inflationary consequences of the joint monetary-budgetary expansion after the first shock, and the restricted room for manoeuvre allowed by already-large budget deficits, the response to OPEC II was non-accommodating. Fiscal policy became restrictive, as the maintenance of existing nominal money supply targets - lower in real terms because of higher inflation - called for deflationary budget action to prevent upward pressures on interest rates. However, 'automatic stabilizers' (in the context of a recession which turned out to be more severe than expected) have sustained budget deficits. Judged by the high level of government borrowing and real interest rates, policy stance might thus be characterised as one of relatively loose fiscal policy and monetary tightness (Chart 1A). But 'discretionary' restraint - though less effective than announced - is reflected in the move towards surplus of the cyclically-adjusted budget balance of the major seven countries between 1979-81(24): fiscal policies have - on this measure - supported monetary tightness (Chart 1C). From 1982, the mix of high budget deficits and tight money in the United States has counter-balanced the mix of fiscal restraint and (less marked) monetary tightness applied elsewhere.

At the same time, the medium-term approach to fiscal policies has received a new impetus from the perceived need to plan for a gradual reduction in the size of the public sector to make room for expansion in private activity and create the 'supply-side' conditions for recovery. Tax incentives have been widely used to attempt to improve labour supply and investment, to reduce allocational distortions in labour and capital markets, and to correct perceived imbalances between wage and profit shares. In some countries, tax cuts have been linked to wage restraint and incomes policies. Again, because of short-term spending rigidities, governments have actually been forced to rely to a significant extent on tax increases to try to reduce budget deficits and this development has run counter to their expressed aims of lowering taxation and enhancing the allocational soundness of the public sector. Attempts gradually to restructure and reduce public spending (so as to achieve a better balance between current and capital spending, or reform 'entitlement' programmes in particular) have, nevertheless, been significant factors determining budget stances in OECD countries. Fiscal policies have tended

(24) OECD Economic Outlook No. 28 (December 1980) projected the aggregate change in the cyclically-adjusted budget balance for 1981 as +1.1 per cent. The outturn (see OECD Economic Outlook No. 33, July 1983) was +0.7 per cent.

to be at least partially subordinated to both monetary and supply-side considerations in the process of medium-term policy re-orientation.

The extent of the subordination varies, however, there being a range of attitudes towards the role of fiscal policies in creating the conditions for sustained non-inflationary recovery. In countries which have experienced relatively high inflation, such as the United Kingdom and Australia, the reduction in budget deficits has been seen as a prior requirement for the attainment of balanced medium-term growth. 'Inflation first' strategies have implied using fiscal policy as an instrument for the achievement of monetary targets, persistent budget deficits being regarded as an impediment to market-oriented economic recovery. Similarly, in the United States the reduction of inflationary expectations, via cuts in budget deficits and strict control of monetary growth, has also been ascribed an essential role in promoting recovery. 'Supply-side' considerations have, however, meant that tax cuts have been given priority (by the U.S. Administration) over budget deficit reductions. While a reduction in medium-term budget deficits is considered necessary for balanced recovery(25), United States fiscal stance, from 1982, has actually been expansionary, so that high interest rates have borne the principal burden of suppressing domestic inflation.

In other OECD economies, the pursuit of budget 'consolidation' also reflects the need for fiscal policy to support monetary restriction in order to restore entrepreneurial confidence, lower interest rates and remove a source of potential inflationary pressure (Germany(26) and Japan(27)); to contain government credit demands within the limit of domestic saving availability so as to free domestic capital resources for private investment, (Belgium,

(25) While "supply side" advocates have emphasised the allocative benefits of cutting tax rates, simultaneous expenditure cuts are usually seen as necessary to obtain the advantages of a smaller public sector. Tax cuts alone may help, since higher government borrowing may be seen as harming business less than does taxation itself (see C. Roberts, Wall Street Journal, 2 June 1983). In the U.S. case, however, tax cuts have been designed to put pressure on the legislature to eliminate the ensuing deficit via expenditure cuts. It is the expenditure cutting process which is hypothesised as freeing resources for private sector use, the switch from tax to deficit-financed spending being seen only as a choice in favour of deferred as opposed to current taxation.

(26) Memorandum of the Deutsche Bundesbank, op. cit., p.13.

(27) Japan, Budget Bureau, Ministry of Finance, The Budget in Brief 1982, p. 12.

Netherlands), or more generally to prevent excess domestic liquidity. In those countries which have had recourse to foreign borrowing (Sweden, Denmark, Norway, Ireland) the need is to prevent continuing pressures on the balance of payments, costs of credit and debt service charges(28). In low inflation countries generally, the interest costs of continuous government borrowing have become an actual and/or prospective burden calling into question both the long-run effectiveness of supporting activity by budget deficits and the cost-benefit trade-off involved in maintaining domestic demand in the short term by this means(29).

The need to suppress inflationary expectations has thus been a strong motivation for budgetary restraint. It has derived both from the rationale that inflation tends - sooner or later - to undermine any immediately positive demand impact stemming from a money-accommodated budget deficit, and from the cumulating costs of avoiding the potentially inflationary consequences of persistent deficits. Such costs are seen in terms of domestic savings pre-emption, lower productive investment, higher debt service charges, and lower long-run revenue growth in exchange for a diminishing ability of budget deficits to sustain demand. For those OECD countries where market expectations are more favourable and budget consolidation strategies credible, however, fiscal imbalance is something that can be corrected gradually, over a period of years. Correction is necessary for longer-run growth prospects, but this does not necessarily imply a belief in the sufficiency of budget balance to bring about recovery. Not only may a "structural" budget deficit be necessary in equilibrium (see page 42 below), but progress towards deficit reduction may be tempered, in some cases, by short-term demand considerations: temporary employment-supporting measures have been judged necessary in economies such as Canada, Austria, and Switzerland(30)). Only in France, however, has a full-blown strategy of support for demand been attempted - unsuccessfully - in 1981-82.

B. Problems of public expenditure expansion

There are corresponding differences of approach in public expenditure planning. Earlier developments in this field aimed at refining the active role which, it was

(28) See The Swedish Budget 1982/83, Stockholm, 1982, pp. 33-4.

(29) See below, section C. for a discussion of the implications of having to finance debt interest payments either through spending cuts and/or tax increases (which may offset the initial fiscal stimulus), or through further government borrowing (which may lead to cumulative interest rate pressures and/or monetization).

(30) See OECD Economic Outlook No.33, July 1983, for a description of most recent fiscal policy actions.

considered, public expenditure could play in the stabilization process; but policies have since become more cautious as the objective of balanced public sector growth has eventually been superseded by the aim of containment or even curtailment of the public sector. The rationale for setting up long-range public sector planning frameworks in the United Kingdom (1961), the Netherlands (1961) and Germany (1967) was both to enhance the stabilization potential of public spending and to limit the expansion of the public sector to available resource growth(31). Long-range planning may, however, be motivated either by the wish to expand the public sector or by a need to limit its growth. The use of public spending to engineer faster economic growth (via indicative planning for instance(32)), and the need to plan for an expansion of welfare programmes tended to call for medium-term public spending projections in order to identify the growth of taxes required to finance them. This usually involved an explicit expansion of the share of the government sector in overall resources (as in the Dutch and Japanese cases). Even in the United States the introduction of medium-term public spending projections in 1975 was as much an attempt to correct control defects, which tended to result in the non-realisation of congressional programmes, as a measure to constrain the growth of public spending to within the limits of revenue and social choice(33).

More negative attitudes towards the role of the public sector - associated with the view that the marginal trade-off between social-distributional objectives and economic performance has become adverse - have since come to dominate public sector planning in many countries; and stabilizing or reducing the share of resources claimed by the public sector are now more common objectives than planning for balanced public sector expansion. This does not necessarily mark a prejudice against public spending in general; rather it is a reflection of what are felt to be the deleterious consequences of the inadequately controlled growth of such expenditure.

(31) The Plowden Report ("Public Expenditure Planning and Control", HMSO, London, 1961) is, perhaps, one of the earliest expressions of this approach.

(32) As in the French National Plans and also, for 1965-68, in the British National Plan; under such planning regimes public expenditure is expected to help - in principle - to create the resources through which it is financed.

(33) In the United States the concern, which arose in particular in the early 1970s was with the Presidential exercise of powers of 'impoundment' - either to defer or rescind expenditure authorised by Congress - so, it was considered, frustrating the intentions of the legislature. This concern led to the enactment in 1974 of a new budget control system.

Total general government spending has increased from 32 1/2 per cent of OECD GDP to over 40 per cent since 1970 (see Table 1): fastest in Sweden (by 24 percentage points) and slowest in the United States (where the increase was only 3 percentage points). The disparities in growth have widened the already large differences in the size of the public sector among OECD economies, which tends to emphasise that public spending issues vary significantly. But the view that the relative size of the public sector needs to be constrained is common to most countries and derives from a number of fundamental concerns about expenditures and their composition. In nearly all member countries there have been:

- a growth of the public sector as a ratio of GDP (see Table 1), associated with an increasing proportion of government in total employment and an increasing tax burden, especially higher effective income taxes rates;
- increasing current transfers to households (Table 2 and Table B3 in Annex 2), which together with an increasing employment in the public services has implied an increasing ratio of government-dependent incomes (public sector wages and transfers) to total national income;
- an increasing proportion of consumption in total government spending and a correspondingly smaller share of resources allocated to public investment.

(i) Total spending and tax pressure

Concern about public spending in aggregate is based most often on preferences for private versus state spending decisions, the pre-emption of scarce resources from the enterprise sector and pressures on wages and prices. These problems are, however, seen in different perspectives in different countries. Public sector size per se has not been such an issue in Japan, Canada, or Switzerland, for example, except as it relates to popular resistance to increased taxes or federal-provincial revenue apportionment. Elsewhere perceptions of the public sector as being too large - or of its expansion being unbalanced - derive from the more fundamental objections that efficiency and stability aims are being undermined for little gain in terms of social objectives. Such arguments have been most prominent in the United States, United Kingdom and in Australia (until recently), where restoring the 'discipline of the market' has been an integral part of medium-term strategy(34). They are, however, closely related with objections to the intrusion of governments into the private decision-making process (via the tax system), which have had a wider influence. The recognition that high marginal income tax rates - on

(34) House of Representatives, Australia, 18th August 1981, (Budget Speech), p. 111.

Table 1. Shares of Total General Government Expenditure

	in GDP/GNP													Per cent	
	1960	1965	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981*	1982*
United States	27.8	28.0	32.2	32.2	31.9	31.2	32.9	35.4	34.4	33.5	33.1	32.8	33.2	33.6	35.5
Japan	18.3	18.6	19.3	20.8	21.8	22.1	24.5	27.3	27.9	29.0	31.1	31.6	32.7	33.6	35.2
Germany	32.0	36.3	37.6	38.9	39.7	40.5	43.4	47.1	46.4	46.5	46.5	46.4	46.9	47.9	48.3
France	34.6	38.4	38.9	38.3	38.3	38.5	39.7	43.5	44.0	44.2	45.2	44.7	46.7	49.4	51.3
United Kingdom	32.6	36.4	39.3	38.4	40.0	41.1	45.2	46.9	46.1	44.1	43.7	43.5	45.4	46.4	46.5
Italy	30.1	34.3	34.2	36.6	38.6	37.8	37.9	43.2	42.2	42.5	46.1	45.5	46.1	51.5	54.0
Canada	28.9	29.1	35.7	36.6	37.2	36.0	37.4	40.8	39.6	40.6	41.0	39.3	40.7	41.7	46.4
TOTAL for MAJOR SEVEN COUNTRIES	28.7	30.0	32.6	33.0	33.1	32.9	34.8	38.0	37.2	36.8	37.3	37.5	37.8	38.9	40.6
Australia	22.1	25.6	25.5	26.2	26.3	26.8	30.4	32.4	32.9	34.3	33.7	33.2	34.1	34.2	35.5
Austria	32.1	37.9	39.2	39.7	39.8	41.3	41.9	46.1	46.9	46.8	49.7	49.0	48.7	50.0	49.2
Belgium	30.3	32.3	36.5	38.0	38.8	39.1	39.5	44.5	45.1	46.6	47.9	49.5	51.7	56.9	57.8
Denmark	24.8	29.9	40.2	43.0	42.6	42.1	45.9	48.2	47.8	48.9	50.6	54.0	56.0	58.3	59.0
Finland	26.7	31.3	31.3	32.8	33.2	31.9	32.9	37.1	38.3	39.5	39.1	38.5	38.2	39.0	41.0
Greece	17.4	20.6	22.4	22.8	22.0	21.1	25.0	26.7	27.4	29.0	29.9	29.7	30.3	..	..
Ireland	29.5	34.0	39.6	40.5	38.8	39.0	43.0	47.5	46.8	45.5	46.4	48.9	..	..	..
Luxembourg	30.5	33.3	33.1	36.3	37.0	35.7	36.1	48.9	49.7	52.7	51.8	52.1	60.2	..	..
Netherlands	33.7	38.7	45.5	47.5	48.1	48.7	50.8	55.9	55.9	56.0	57.5	59.5	62.5	63.4	65.2
Norway	32.0	34.2	41.0	43.0	44.6	44.6	44.6	46.6	48.5	50.2	52.3	51.4	49.4	48.2	50.0
Portugal	17.0	20.1	21.6	21.3	22.7	21.3	24.8	30.5	35.3	33.8	35.6	34.7	38.9	41.4	..
Spain	13.7	19.6	22.2	23.6	23.2	23.0	23.1	24.7	26.0	27.5	29.3	30.5	32.7	34.2	36.3
Sweden	31.1	36.0	43.8	45.4	46.3	44.8	48.1	49.0	51.9	57.9	59.6	61.3	61.9	65.4	68.0
Switzerland	17.2	19.7	21.3	21.9	21.9	24.2	25.5	28.7	30.3	30.4	30.1	30.2	29.7	..	..
TOTAL(a) SMALLER COUNTRIES	25.6	28.8	32.6	33.9	34.1	34.5	36.2	39.4	40.7	42.5	43.4	44.5	44.8	46.2	47.6
TOTAL(a) OECD	28.4	29.8	32.6	33.1	33.3	33.1	35.0	38.2	37.7	37.7	38.2	38.6	38.8	40.0	41.6

(a) Weighted averages: calculated from the total GDP and total outlays of general government for the group of countries, with both aggregates expressed in US dollars at current exchange rates.

Source: National Accounts of OECD Countries and where marked (*) Secretariat estimates. The data in this table are measured according to the standard definitions of the OECD-United Nations system of accounts, so that they are comparable across countries. Total general government spending is defined as current disbursements (including capital consumption) plus gross investment. It is the sum of lines 23, 28, 29 and 30 less line 26 in Table 9 of National Accounts of OECD Countries, Volume II, 1962-1979.

Table 2. The Composition of General Government Revenues and Expenditures(a)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Per cent of nominal GNP/GDP at market prices													
<u>Receipts:</u>													
Direct Taxes	12.1	12.0	12.3	12.5	13.4	12.6	13.0	13.4	13.4	13.6	13.9	14.1	13.8
Indirect Taxes	10.9	10.9	10.7	10.5	10.3	10.1	10.1	10.2	10.0	10.0	10.3	10.6	10.5
Social Security Contributions	7.5	7.7	7.9	8.3	8.8	9.3	9.5	9.7	9.7	10.0	10.2	10.5	10.8
Other Receipts(b)*	2.5	2.5	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.0	3.3	3.5	3.8
Current Receipts, Total	31.9	31.9	32.3	32.6	33.8	33.4	34.2	34.8	34.7	35.2	36.1	37.1	37.2
<u>Expenditures:</u>													
Government Consumption	16.8	17.0	17.0	16.6	17.4	18.3	18.0	17.8	17.6	17.4	18.0	18.3	18.8
Property Income Payable (Interest on Public Debt)	1.5	1.4	1.4	1.5	1.6	1.7	1.9	2.0	2.2	2.3	2.6	3.1	3.4
Subsidies	1.0	0.9	1.0	1.0	1.2	1.3	1.2	1.2	1.3	1.3	1.3	1.3	1.3
Social Security Outlays and other	9.7	10.2	10.5	10.6	11.4	13.0	13.2	13.2	13.4	13.4	13.9	14.6	15.4
Current Transfers Paid	29.0	29.6	30.0	29.8	31.6	34.4	34.2	34.2	34.4	34.4	35.9	37.2	39.0
Saving(c)	2.9	2.3	2.3	2.8	2.2	-1.0	0	0.6	0.3	0.9	0.2	-0.2	-1.7
Gross Investment (c)	4.2	4.3	4.2	4.2	4.1	4.2	3.9	3.8	3.8	3.9	3.8	3.7	3.5
Net Capital Transfers Received (c)	-0.3	-0.4	-0.3	-0.4	-0.4	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.6
Financial Balance	0.2	-0.5	-0.4	0.1	-0.5	-3.9	-2.7	-2.2	-2.3	-1.9	-2.5	-2.8	-4.2

(a) Aggregate for the major seven countries plus Australia, Austria, Belgium, Denmark, Netherlands, Norway, Spain, Sweden; 1981 GDP/GNP weights.

(b) Other current transfers received and rent, dividends and interest.

(c) Weighted average excluding the United States; because of this, the components will not add to the totals.

Source: see Table 1.

households and companies - may have potentially deleterious effects on labour and savings incentives is a case in point. These considerations have led, in personal income taxation, to the spread of indexation provisions and reluctance to raise income tax rates. Concerns about disincentives to work and save, together with imbalances in the indirect-direct tax mix, have led to marginal rate reductions in income taxes in the United States, United Kingdom, and Australia and to proposals for tax reform in Sweden.

(ii) The growth of government wages and transfers

The desire to reduce government interference in the labour market is based also on concern about the pre-emption of scarce employment resources and the impact of resulting employment rigidities on economic growth(35), export performance(36) and inflation. The effect of public sector size or expansion on economic objectives cannot be determined from cross-section evidence alone, but as Chart 5 shows(37), these factors have not been associated positively (i.e. beneficially) with economic growth and inflation performance in the past decade; the possibly adverse employment and inflationary consequences of excessive and sustained public resource demands have therefore been impossible to ignore. Indirect taxes may, for instance, affect prices directly, while real wage resistance may cause income tax increases to be passed on, through wage increases, to company profits. Furthermore, government wages and transfer incomes may have

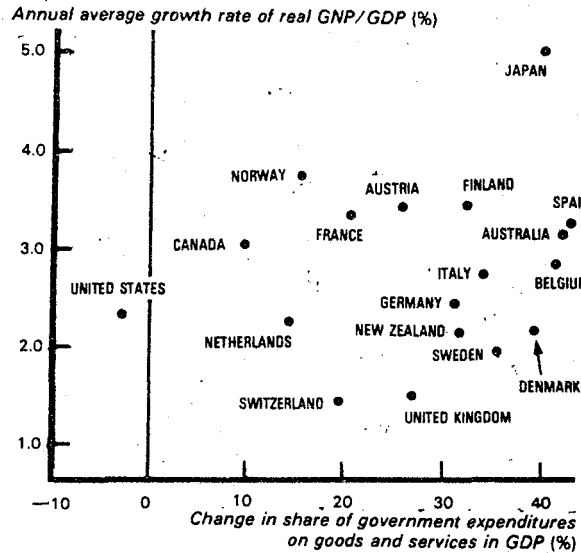
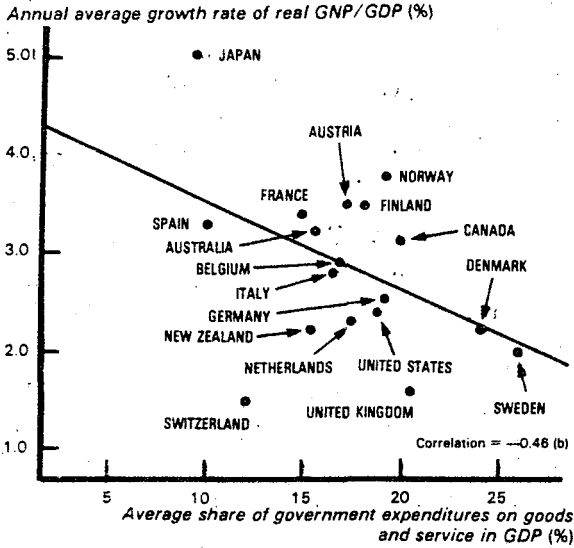
(35) This 'real' form of the crowding-out argument has been notably advanced in the United Kingdom, see Bacon and Eltis, Britain's Economic Problem: Too Few Producers, (1976).

(36) Sweden has the largest proportion of government in total employment; with a relatively tight labour market the expansion of public service activities may have contributed to increasing labour market rigidities in 1979-80: OECD, (1981), p. 27. Lack of labour constituted an obstacle to expanding production in many export industries.

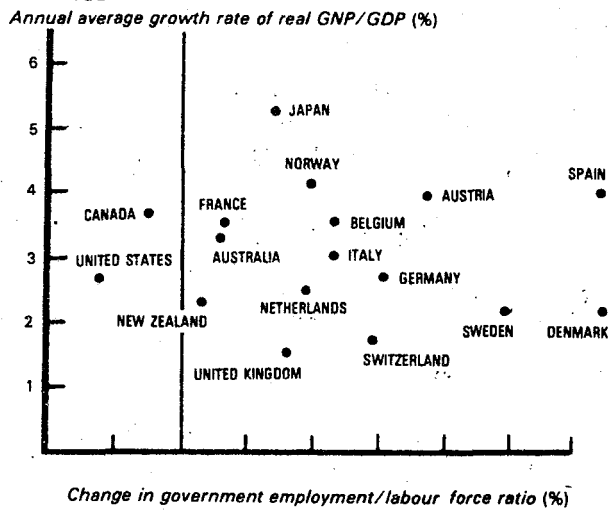
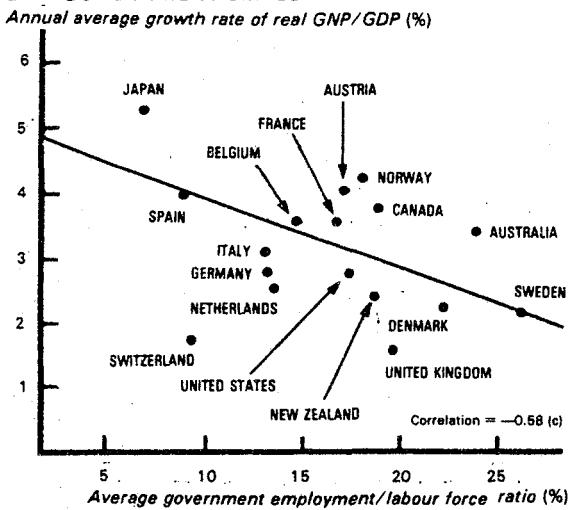
(37) The causality behind the negative relationship between growth performance and public sector expansion cannot, of course, be inferred directly from Chart 5: slower growth may have prompted such expansion. But the correlation does provide prima facie evidence for the assertions set out in the text. Similarly, evidence that the public sector is a causal factor in inflation is inconclusive on a cross-country basis. See also Peacock and Ricketts (1978), who found on the basis of cross-country analysis very little support for the hypothesis that the size or rate of growth of the public sector was linked to inflation.

CHART 5
ECONOMIC PERFORMANCE AND THE EXPANSION OF THE GOVERNMENT
SECTOR IN SELECTED OECD COUNTRIES, 1970-1982 (a)

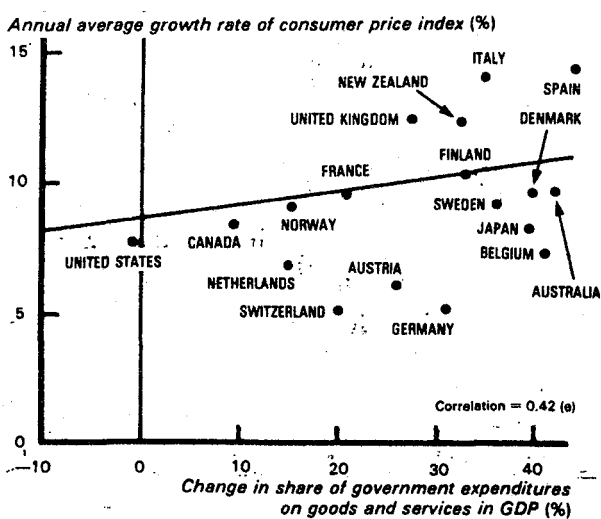
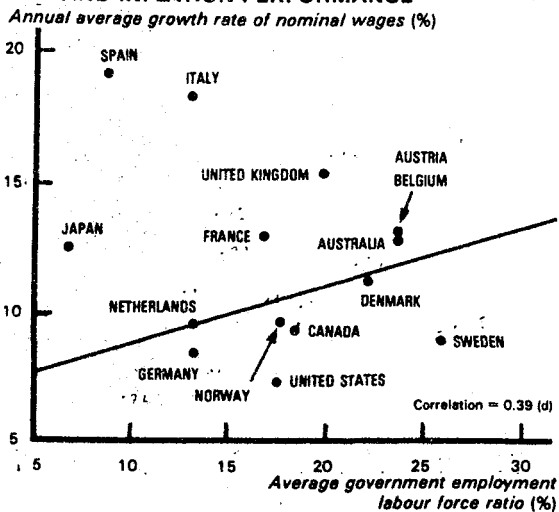
A. — GOVERNMENT EXPENDITURES ON GOODS AND SERVICES AND GROWTH PERFORMANCE



B. — GOVERNMENT EMPLOYMENT AND GROWTH PERFORMANCE



C. — GOVERNMENT EXPENDITURES ON GOODS AND SERVICES, GOVERNMENT EMPLOYMENT AND INFLATION PERFORMANCE



(a) See Annex 1. (b) Significant at 10%. (c) Excluding Switzerland, significant at 5%. (d) Excluding Japan, Italy and Spain, significant at 20%. (e) Excluding Germany, Austria and Switzerland, significant at 20%.

fuelled the inflationary spiral. In Canada, Sweden and Denmark the government sector has, at times, been regarded as a wage leader(38), and indexation of public sector incomes to prices may be a cause of rigidity which reduces the scope for the government and the real economy to resist inflationary shocks such as the oil price increase. Wage pressures in the 'sheltered' sector may make anti-inflationary policies more difficult to implement, either by increasing budget deficits or by leading to imbalances between wages and profits in competitive sectors of the economy.

The relatively rapid growth of transfer incomes (Chart 6) may also pose inflationary problems. The diminishing employment base has, in the majority of OECD economies, been associated with an increasing ratio of transfer to employment incomes; with increasing government payrolls there has been a large increase in the proportion of government-dependent to total income - an expansion from 35 to 45 per cent between 1970 and 1982(39). The process has been particularly marked in the Netherlands, Denmark, Belgium, and Sweden where such incomes account for approximately 60 per cent of household income. In the Netherlands and Denmark, in particular, the labour market has suffered recurrently from severe tension as a result of the growth of government wages and transfers, which has obstructed the effectiveness of wages policy. Cost push forces emanating from the public sector may have led to a vicious circle of impaired competitiveness, lower economic growth, larger government deficits and higher taxes on industry(40) - a cycle of stagnation which is partly demographic and partly a matter of being 'locked in' to a spiral of increasing unemployment and higher benefit payments. Social protection may add as much as 40 per cent to the wage bill per employee, and such costs become a 'major

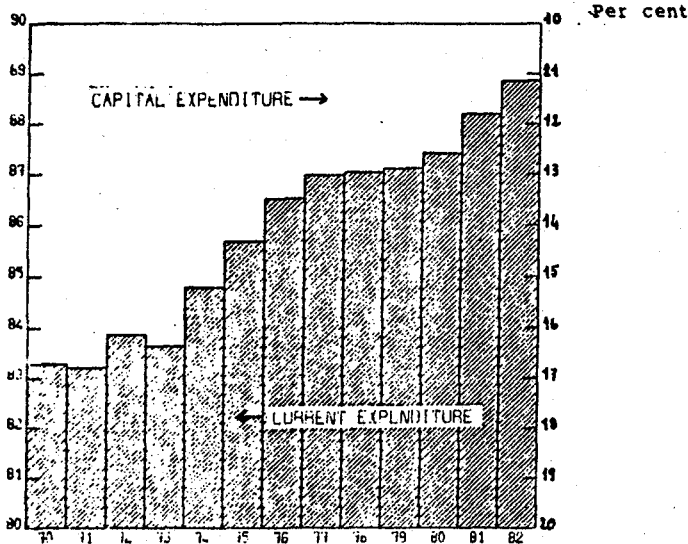
(38) In France and the United Kingdom the employees of public corporations (nationalised industries) have also played a wage-leadership role on occasions.

(39) This is a weighted average (for the major seven plus Sweden, Denmark, Netherlands and Belgium) of the ratio of general government wage bill plus transfers to households, to total employee compensation. The change in the ratio of transfers to total employee compensation was 10 percentage points - from 17 to 27 per cent.

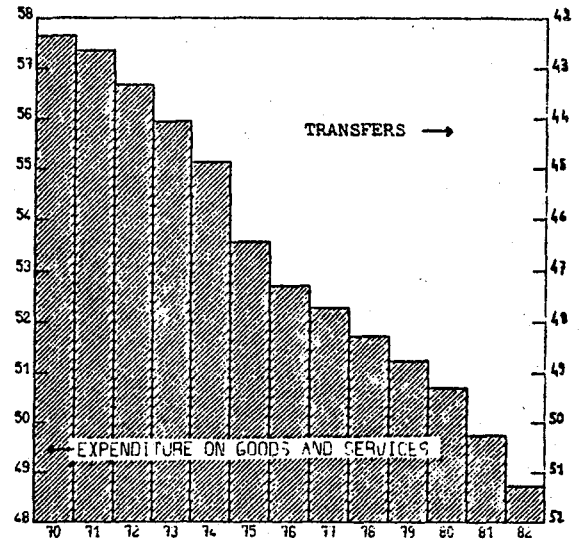
(40) E. Den Dunnen, "Long Term Fiscal and Monetary Policies in the Netherlands", Netherlands Central Bank, mimeo, p.8. See also footnote 89.

TRENDS IN GENERAL GOVERNMENT EXPENDITURES IN SELECTED OECD COUNTRIES

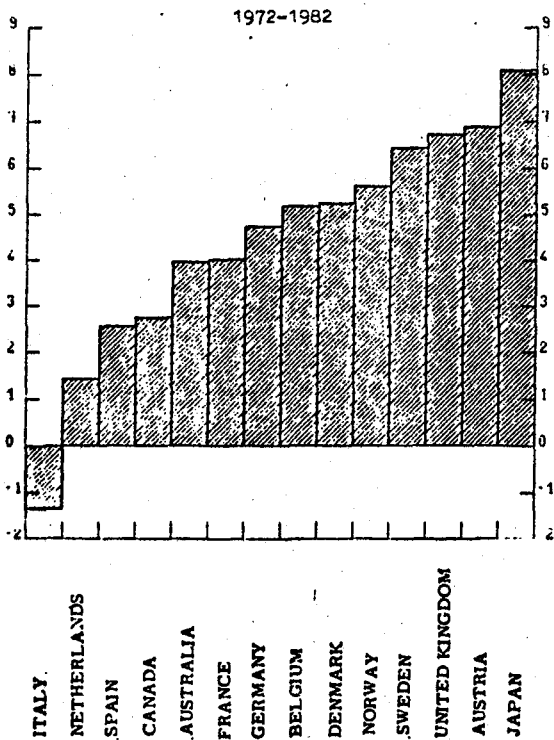
SHARES OF CURRENT AND CAPITAL EXPENDITURES IN TOTAL GOVERNMENT SPENDING - AVERAGE MAIN 15 COUNTRIES



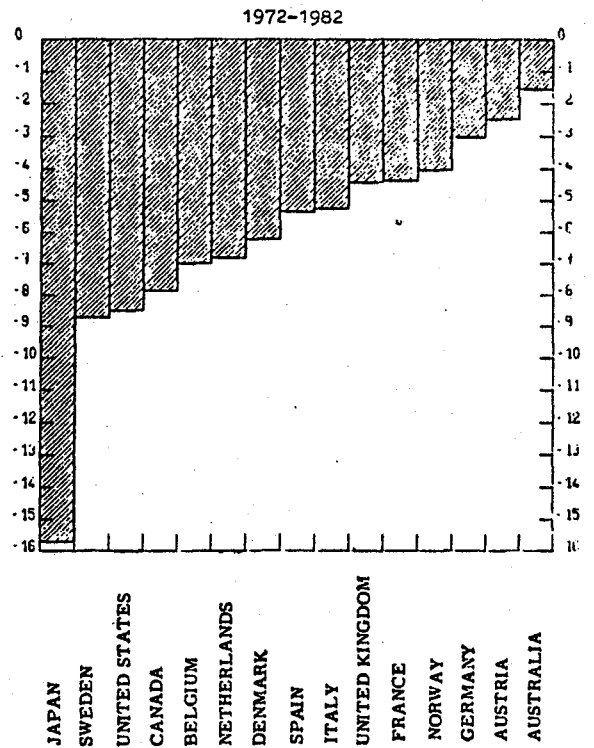
SHARE OF EXPENDITURE ON GOODS AND SERVICES IN TOTAL GOVERNMENT CURRENT SPENDING - AVERAGE MAIN 15 COUNTRIES



CHANGE IN THE SHARE OF CURRENT EXPENDITURE IN TOTAL GOVERNMENT SPENDING



CHANGE IN THE SHARE OF GOODS AND SERVICES IN TOTAL GOVERNMENT CURRENT SPENDING



disincentive to the offer of full time employment'(41).

The situation has been described in terms of a 'crisis of the welfare state' and has provided a potent rationale for improved medium-term planning. From the macro-economic point of view, this has been accompanied by a reappraisal of the benefits of 'built-in' stabilizers - as presently constituted (see page 60 below). If imperfectly designed, social security legislation may be seen as (potentially) cumulatively destabilizing in the longer run because of 'runaway' properties.

(iii) The imbalance between public consumption and investment

The 'lock-in' effect itself may arise either from a shrinking income (tax) base, via disincentives to labour demand and supply, or from a persistent imbalance between public (and total) investment and consumption, feeding through to slower economic activity. This may make welfare state commitments based on more optimistic economic growth projections increasingly difficult to fund. Investment fell from 17 to 11 per cent as a proportion of total public spending between 1970 and 1982 (see Chart 6), while general government current savings, which represented over 3 per cent of area GDP in 1970, have become negative (Table 2). In Japan, Italy, Belgium and Canada, in particular, central governments have been in persistent deficit with respect to their current transactions since the mid-1970s, and other OECD countries have been able to avoid this only by raising taxes. Outside the United States, United Kingdom and Australia, where little significance is attached to distinction between borrowing to finance investment and consumption, the restructuring of public spending, so as to eliminate deficit-financed government consumption (especially transfers), would probably be considered as important as cutting budget deficits per se.

C. Government borrowing and public debt servicing

The reduction of budget deficits has nevertheless been given priority over compositional expenditure adjustments and (except for the United States) tax cuts in attempts to move towards medium-term public sector balance: 'high employment' tax revenues have increased in most OECD countries since

(41) OECD, 'The Welfare State in Crisis', (1981) p.76. In a review of American experience Danziger et al. conclude that income transfer programmes have a negative marginal impact on labour supply and a neutral or slightly negative impact on savings; however, marginal effects on poverty and income distribution are not now large, so that trade-offs favour less state intervention (see 'How Income Transfer programmes affect Work, Savings and Income Distribution: a Critical Review', The Journal of Economic Literature, (1981) pp.975-1028).

1979(42). Increasing public sector indebtedness has generally been seen as a greater obstacle to long-run economic performance than higher taxation, both because of the adverse interest rate consequences of cumulative borrowing (associated in some cases with doubts about the ability to prevent "monetization), and the debt service costs of non-inflationary finance.

The data in Table 3 (and Annex 3) give some illustration of the scale of the problem by showing central governments' reliance during the 1970s on private domestic and on foreign savings to finance their budget deficits; they also show the generally growing burden - in nominal terms - of servicing the public debt(43). Between 1971 and 1980 the ratio of privately held public debt to GDP/GNP rose from 19.5 per cent to 24 per cent for the OECD as a whole(44). This global trend masks a variety of different national patterns, related to inflation performance (unanticipated price increases serving to depreciate existing government debt in real terms(45)), associated trends in interest rates, and levels of public borrowing. In the small group of countries where the ratio was stable or falling over the decade - the United States, United Kingdom, Spain and Australia - inflation was at least partly instrumental. The countries where the ratio increased over the same period fall into two groups. The first, which experienced a continuous rise, embraces Germany and Switzerland (where the ratio rose rather smoothly) and Japan, Italy, Austria, Denmark and Sweden (where the ratio rose very rapidly after 1975). The second and largest category, where the ratio fell up to mid-decade and has subsequently increased, includes France, Canada, Belgium, Finland, Ireland, Netherlands, New Zealand, Norway and Turkey.

In most OECD countries the second half of the 1970s thus saw an increasing pre-emption of domestic private savings by governments. The effects of this on private portfolios may

(42) This is in effective tax rate terms - i.e. revenues measured as a ratio of potential GDP; as stated above, statutory rates have fallen in some countries: see OECD Economic Outlook No.33, July 1983, for a breakdown of the high employment budget by revenues and expenditures.

(43) The data are not strictly comparable cross-country owing to variations in the definition of central government debt. Debt which has been monetized by the central bank or which is held by the public sector is not included.

(44) Unweighted OECD, excluding Greece, Iceland and Luxembourg. The OECD debt/GDP ratio fell to 18.1 in 1975.

(45) For an estimate of the impact of inflation on the ratio of central government debt to GDP, see Price and Chouraqui, 'Public Sector Deficits: Problems and Policy Issues', op. cit., Table 7.

Table 3. Central Government Debt and Interest Payments(a)

	Debt held by								Debt Servicing				Proportion of non-bank private sector financial assets held as central government debt (per cent)			
	Private Sector				Overseas				Total interest payments (as % of GDP/GNP)		Interest paid abroad (as % of total interest payments)		1971	1975	1981	1981
	1971	1975	1981	1971	1975	1981	1971	1975	1981	1971	1975	1981	1971	1975	1981	1981
United States	16.6	13.9	15.1	3.1	4.5	4.7	1.6	1.7	2.7	8.0	18.2	20.2	3.3	3.2	3.6	3.6
Japan	9.6	11.5	27.3	..	..	..	.4	.7	2.6	..	..	..	2.8	3.0	5.7	5.7
Germany	7.0	10.8	14.6	.2	.1	2.9	4	.5	1.0(b)	2.3	3.9	5.4(b)	3.0	4.1	4.7	4.7
France	9.3	7.8	10.7	.9	.4	.5	.6	.7	1.4	..	..	..	..	4.4(c)	..	..
United Kingdom	52.9	42.9	42.5	13.0	8.8	5.2	2.5	2.7	3.9	13.4	15.2	11.6	36.2	30.0	34.6	34.6
Italy(d)	40.1	40.9	51.3	.7	.5	1.2	2.0	4.0	7.2	..	..	..	13.6	12.7	15.1	15.1
Canada	41.5	33.4	37.8	.3(e)	.1	1.5	2.2	2.1	3.5	13.3	14.5	17.0	13.7	11.0	12.7	12.7
Australia(d)	24.2	19.6	15.6	4.6	1.9	3.6	2.5	2.1	3.2	10.6	5.8	9.0	21.8	26.3	25.4(f)	25.4(f)
Austria	8.3	10.5	19.1	2.9	4.9	9.0	.7	.7	1.9	..	..	..	..	..	..	..
Belgium	44.0	40.0	50.7(b)	1.8	.6	5.5(b)	2.6	2.7	6.6	..	..	..	11.9	11.2	12.8(b)	12.8(b)
Denmark	2.6	.8	33.6	3.0	3.6	14.0	1.3	1.2	5.2	..	..	..	..	..	..	..
Finland	1.5(g)	1.1	3.6	3.1	1.6	6.3	.5	.2	.7	..	..	..	..	..	..	..
Ireland	47.6	44.5	48.4	5.3	12.5	37.1	3.7	4.4	7.7	9.1	22.6	32.1(b)	..	..	..	..
Netherlands	24.9(e)	22.3	33.8	..	*(h)	0.0	3.1	3.2	4.4	0.0	0.0	0.0	..	..	..	..
New Zealand	23.0	14.9	23.3	10.4	8.6	17.6	2.8	2.2	3.7	21.0	18.7	28.7	..	..	..	..
Norway	6.9	5.4	11.3	1.9	3.6	7.7	1.1	1.3	2.5	..	..	..	..	..	..	..
Portugal	13.4(g)	12.7	14.5	..	4.9	11.4	..	..	3.9	..	4.9(i)	33.1	..	..	..	..
Spain	12.1	7.8	7.7(b)	1.0	.6	1.0(b)	.5	.4	.6(b)	..	..	..	..	..	..	..
Sweden	13.0	13.3	19.9	*(h)	.1	10.4	1.1	1.4	4.8	..	..	..	4.0	3.3	2.6	2.6
Switzerland	6.7	9.0	14.4(b)	..	..	..	.3	.4	.5(b)	..	..	..	..	..	..	..
Turkey	10.9	9.0	7.7	2.0	.8	.4(f)	..	..	..	..	..	..	..	..	..	..

(a) Financial years. (b) 1980. (c) 1976. (d) Total public sector debt. (e) 1972. (f) 1979. (g) 1973. (h) Less than .1 per cent. (i) 1976. United States - fiscal year ending June until 1976, ending September from 1977 on; Japan - fiscal year ending March; Germany, France - calendar year; United Kingdom - fiscal year ending March; Italy, calendar year; Canada - fiscal year ending March; Australia - fiscal year ending June; Austria, Belgium, calendar year; Denmark - fiscal year ending March until 1977, calendar year from 1978; Finland - calendar year; Ireland - fiscal year ending March until 1974, calendar year from 1975; Netherlands - calendar year; New Zealand - fiscal year ending March; Norway, Portugal, Spain, Sweden, Switzerland, Turkey - calendar year.

Source: see Annex 3.

be seen from the last three columns of Table 3 (and from Table C2), where central government liabilities are related to private sector financial wealth. A gradually rising share of government debt in private sector wealth can be seen in nearly all the countries listed: the United States, Japan, Germany, United Kingdom, Italy, Belgium and Sweden. This share has not, in general, risen so rapidly, or reached such high levels, as to suggest that portfolio imbalances may be causing acute problems for the absorption of government bonds into private hands. But the cumulative share of new savings needed to finance projected medium-term budget deficits implies a continuing substantial increase in the proportion of government bonds in total private sector financial assets, especially in the United States(46).

External borrowing by the public sector became an increasingly important source of budget finance during the second half of the last decade as the governments sought to avoid the domestic interest rate consequences of their deficits. This has been associated, in some countries, with current account deficits(47). After remaining stable at 3.1 per cent of GDP between 1971 and 1975, OECD public sector debt held overseas doubled to 6 1/2 per cent in 1981. The United Kingdom was an exception in reducing this ratio through the decade, though for France, Italy, the Netherlands and Spain the ratio was both insignificant and stable. Countries such as Germany, Canada, Australia, Austria, Belgium and Finland experienced significant increases in overseas debt, while for Denmark, Ireland, Norway, New Zealand, Portugal and Sweden the ratio attained relatively high levels by the end of the decade.

In line with higher government debt and/or interest rates, the burden of servicing government debt has also increased. While in 1971 the ratio of central government interest charges to GDP was 1.7 per cent for the OECD as a whole, it rose to 2.1 per cent in 1975 and to 3.2 per cent in 1981. The proportion of debt interest in total general government spending rose from 5 per cent to 9 per cent in the same period (see Table B6). All member countries saw their public debt service cost increase; and a few countries experienced more than a doubling in their debt service cost-GDP ratio between 1971 and 1981 (Japan, Italy, Belgium,

(46) The share of net private sector savings taken up by the general government in 1982 was 55 per cent in the United States, averaging about 50 per cent in the major seven as a group. These marginal claims on savings are substantially above the average figures shown in Table 3, and are projected to lessen only gradually up to the mid-1980s. See Price and Chouraqui, op.cit., Table 9 and OECD Economic Outlook No.32, Table 12.

(47) Borrowing abroad may lead to monetary expansion if central banks do not intervene, or if such borrowing is not reflected in a current balance of payments deficit.

Denmark, Norway and Sweden). Similarly, the share of interest payments paid abroad generally rose very rapidly between 1970 and 1980, reflecting both the greater use of external deficit financing and higher interest rates.

Though the current level of public domestic borrowing relative to savings is quite large, the displacement of company borrowers from credit markets is not necessarily extensive; the recession has reduced private sector demands for credit and increased the savings available to governments, thus mitigating interest rate pressures. Continuous budget deficits, nevertheless, threaten to absorb so large a share of the cumulative flows of private sector savings as to potentially abort, or even pre-empt, investment-led recovery. Expectations of persistent deficits may prevent such a recovery from being initiated where interest rates remain high because private savers require greater returns to be willing to hold a growing share of their financial portfolio in the form of government paper, or because they demand a greater 'risk premium' against the possibility that governments will be forced to accept some monetary financing of their debt with its likely inflationary consequences. In this case, crowding out might indeed be an immediate problem, since private investment may be deferred by the prospect of continuously high real interest rates in the future.

Concerns about potential capital market strains have been perceived in these terms in the United Kingdom and Australia (two countries where private portfolios have a relatively high public debt content) at different times, while in the United States, high interest rates based partly on the 'shadow' of persistent future budget deficits have made crowding-out a cause of concern even though the absorption of general government debt in private portfolios is not presently a source of capital market strain. Likewise, the difficulty of funding the French and Italian budget deficits (i.e. selling bonds to the non-bank private sector) have shown that inflationary and interest rate pressures may arise from such deficits with or without a large outstanding public debt. In the French case, the capital market is relatively small and the proportional increase large, while the heavy demands made by the Italian budget deficit have begun to exceed the already relatively large supply of available domestic credit.

In other countries - Germany, Japan, Austria, Canada, and Switzerland - government borrowing is neither perceived in terms of monetisation risks (real rates of return on government debt have traditionally been positive and confidence in the containment of inflation more deep-set), nor, necessarily, in terms of appropriating a presently excessive proportion of national savings (in Japan lower public deficits tend to be associated with higher capital exports). Rather, it is the projected rate of increase in debt and debt servicing costs, under unchanged policies, which is the principal cause for concern. In Japan the problem receives expression both in terms of the prospective debt

(re-)financing needs and the tax increases which would be necessary to cover the growth of social security obligations: action now is seen as preventing a build-up of problems in the future. Here, as in Germany, persistent borrowing to finance consumption is, in ordinary circumstances, banned. Concern about cumulating government debt obligations and debt servicing problems derives substantially from fears that with high real rates of interest and slow growth, the growth of government debt is potentially explosive and the effects of bond-financed deficits unstable. If borrowing did not continue to mount indefinitely, thus exerting increasing upward pressure on interest rates, the need to raise taxes or cut direct public spending would tend to offset the demand-effectiveness of a budget deficit(48).

Elsewhere, pressures on domestic capital markets have been avoided by, or are seen as implying an unwelcome recourse to, foreign borrowing and current balance of payments deficits. Borrowing from abroad can of course fill a domestic savings gap, at least in smaller countries, thereby alleviating domestic interest rate pressures. It may also provide a means of financing structural deficits in the current account of the balance of payments, arising from increased energy costs, as in Sweden, Denmark, Ireland and New Zealand in particular. But overseas indebtedness carries disadvantages which can make the prospect of even limited recourse to external borrowing a matter of concern; this is, for example the case in such economies as Belgium and the Netherlands(49) - which have hitherto financed most of their budget deficits on domestic markets but where public sector borrowing seems to have reached the limits set by domestic private sector savings. Whereas interest payments on public debt held domestically represent an internal income redistribution (or payment deferred to future generations) interest payments abroad imply a (generally untaxed) transfer of spending power from the nation as a whole to foreign lenders. Moreover, while capital imports may alleviate domestic capital shortages and interest rate pressures, they may be linked with current account deficits (which implies a form of exchange rate crowding-out) rather than with higher

(48) If other spending items are cut (or taxes raised) to pay for debt service costs, the deficit may be held to a fixed proportion of GDP; the outstanding debt/GDP ratio would then also tend to a ceiling, equal to $b[(1+g)/g]$, where b is the deficit/GDP ratio and g is the rate of economic growth. If the rate of interest on debt is equal to the growth rate, however, the deficit would eventually be entirely composed of debt interest payments. Such payments may have a significantly higher savings 'weight' than the public expenditure which they displace, so that the demand impact of the deficit would diminish.

(49) OECD Economic Survey of the Netherlands (1981) p.6;
Economic Survey of Belgium (1979) pp. 31 and 41.

domestic activity(50). Prolonged government borrowing abroad may lead (if it is associated with public consumption rather than (say) investment support to export industries) to a more rapid diminution of the demand-sustaining effect of a budget deficit than would occur as a result of domestic borrowing; debt service costs would tend to account for an increasing proportion of the current account deficit, either as other spending is cut back to stabilize the government (and overseas) deficit, or as the servicing of debt by further borrowing from abroad leads to rises interest rates(51).

Thus, though the evidence is that a budget deficit, particularly in a recession, gives short-term support to demand, such support tends to diminish rather than remain stable. This erosion might be gradual; but at worst the demand-sustaining impact of a budget deficit may be cancelled by the effect of adverse expectations on financial markets and entrepreneurial confidence. Action to cut budget deficits has thus increasingly stressed the need to reduce future rather than present deficits. In this case, the immediate deflationary effects of such action on demand may be minimised while its expectational and confidence effects - in the form of lower interest rates - may be maximised. Cutting deficits might then be seen as unambiguously increasing demand and promoting economic recovery.

III. POLICY IMPLEMENTATION: MEDIUM-TERM RULES AND OPERATING PROCEDURES

A. Budgetary and monetary rules

(1) Medium-term public expenditure planning

There are two basic approaches to the medium-term planning of public expenditures. First, and perhaps most widespread, is that of forward planning per se, in the context

(50) Overseas borrowing by governments may raise the exchange rate, erode competitiveness and worsen the current balance, so that higher demand is reflected in imports. Moreover, overseas loans involve foreign exchange transactions which inject new liquidity into the economy, adding to the money supply if they are not matched by higher imports. Neutralising this effect may therefore entail higher sales of debt, pushing up interest rates. For this reason foreign borrowing has not been looked on with favour in Australia and the Netherlands.

(51) Interest paid abroad is unambiguously deflationary compared with domestic interest payments, while payments to foreigners are also untaxed. An index of interest rate strains - i.e. of credit-worthiness - is often taken as the 'debt service ratio': the ratio of gross amortisation plus interest to total government revenue.

of four-to-five year 'rolling programmes', where budgetary aims are defined explicitly but in isolation from other economic objectives. Such plans may - beyond the first year - be conditional ('unchanged policy') projections, so there may or may not be a binding commitment to the evolution of programmes as specified; rather the extrapolation may provide a useful background (or 'scenario') for decision-making. Second, public spending plans may be set down periodically, as part of a composite economic plan (indicative or otherwise), where budget objectives are specified in the context of a range of medium-term economic goals. Pioneers with the first approach have been the United Kingdom, Germany and the Netherlands and latterly Canada and Denmark, while the United States and Japan use the medium-term extrapolation more as a 'scenario' than a set of commitments. France has been the chief exponent of indicative planning, but more recently public expenditure objectives have been increasingly articulated elsewhere - as in Belgium, Sweden and, for a time, Italy - in the framework of general economic strategies embracing objectives for balance of payments, investment, etc.

In this economic planning context, budget deficit norms are fixed in relation to overall economic goals (external equilibrium, employment objectives, etc.). However, rules for public expenditure programming in the continuous 'rolling programme' framework usually reduce to two criteria: the choice of the relevant resource constraint and the relationship of public spending growth to it. The resource constraint has usually been specified in terms of potential, rather than actual, GDP growth, since abstracting from cyclical variations in output has advantages of continuity and built-in stability. The second criterion, involving rate of growth of public spending relative to potential GDP, has tended to be derived from simple rules-of-thumb which can only be defended on pragmatic grounds - e.g. a fixed long-run share of public spending in GDP, or a secularly rising share of resources based on the automatic growth of the tax yield due to fiscal drag (as in the Dutch case(52)). Where public spending plans have been fulfilled but GDP potential has not been achieved, the result has tended to be increased public spending ratios, with a consequent need to re-specify spending

(52) In the Netherlands the extra revenue from 'real' fiscal drag (i.e. fiscal drag arising from real growth, not inflation) has, until recent years, been used to allocate a growing share of resources to government spending.

norms to account for GDP growth pessimism: proportionality (or less) with actual forecast growth (see the public expenditure objectives listed in Table 4)(53).

(2) Budgetary norms

Linking public spending to projections of tax revenue implicitly requires that normative rules be laid down for public sector deficits. The Dutch 'structural budget margin' and the German 'cyclically-neutral budget' have been pioneering developments in this field, while in the United States the 'full employment surplus' has performed a similar role from time to time(54). Such rules have generally been framed in terms of the longer-run deficit required to offset the excess or deficiency of savings in the private sector, assuming (approximate) equilibrium on the current account of the balance of payments. In the Netherlands the desirable size of the budget deficit has been, in principle, attuned to the average savings surplus of the private sector which is expected to prevail over the business cycle(55). In Germany, the normative structural budget deficit (as developed by the Council of Economic Experts) is derived from a historical full employment benchmark of balanced private and public sector (dis)savings, assuming a fixed ratio of public spending to potential output(56). The level of private sector savings -

-
- (53) In the Canadian case, for instance, proportional growth applies to public spending excluding debt interest; in Belgium central government expenditure should not rise faster than actual GDP; in Denmark the target is to bring real growth of public spending to a standstill. Finland and Norway have determined not to increase the gross tax ratio. For the United Kingdom, the United States, and (until recently) Australia, a fall in the public spending-GDP ratio is programmed to be accompanied eventually by an absolute decline in real public spending.
- (54) High employment (or cyclically-adjusted) budget estimates are, of course, more often used in the descriptive context of showing what budget stance is, rather than what it should be.
- (55) E. Den Dunnen, op.cit, p.2. The Dutch structural deficit norm is in the region of 4 1/2 per cent of potential GDP (see Table 4). However, doubts about potential growth rates have meant that policy has focused, more recently, on actual rather than potential savings availability.
- (56) The Council of Economic Experts, created in 1962, is responsible for the development of the 'cyclically-neutral budget' (CNB) and the norms to which it relates. The federal government is obliged to consider and reply to the Council's reports, but is not committed to adopting its proposals; the CNB analysis has not, in fact, been used in the government's official publications. See Dernburg (1975) pp. 827-8.

Table 4. Medium-Term Budgetary Objectives Operative in 1983

Country	Time Scale	Objective
United States	FY1981 - FY1988	Achievement of Federal budget balance by 1984, amended to a FY 1988 federal deficit/GNP ratio of about 2 per cent; federal outlays to be reduced from 26 per cent of GNP in FY 1983 to 23 per cent.
Japan	1979/80 - 1984/85	Seven year plan to reduce public sector deficit from 11.25 per cent of GDP in 1978 to 5 1/2 per cent, implying the elimination of deficit-financed public consumption. Subsequently revised; objective still holds but and no deadline at present operative. Original intention of raising taxation altered, in 1981, to policy of restraining public expenditure through a 'zero-ceiling' on most public consumption.
Germany	1983 - 1987	Medium-term financial plan aimed at reducing the federal deficit from DM39 billion (2 1/2 per cent of GNP) to DM22 billion (about 1 per cent), to be achieved by holding nominal public spending growth to about 2 3/4 per cent per annum.
France	1982-83	Aim to stabilize central government deficit at 3 per cent of GDP.
United Kingdom	1980/81 - 1985/86	'Medium-term Financial Strategy', aimed at reducing PSBR from 5.7 per cent of GDP to 2 per cent; general government expenditure planned to fall from 47 1/2 per cent of GDP in 1981/2 to 43 1/2 per cent.
Italy	1981 - 1983	Freezing of PSBR at 1980 level; altered to stabilizing PSBR at 1982 level.
Canada	1981/82 - 1986/87	Reduction of Federal deficit to 2 per cent of GNP in 1975/6 from over 5 per cent in 1978-9; revised to cutting deficit from nearly 7 per cent of GNP in 1982/3 to 3 1/2 per cent in 1986/7, via a reduction in the government expenditure/GNP ratio from 26 to 23 1/2 per cent.
Australia	1975 - 1982	General objective to reduce the central government deficit and size of public sector. Ceased to operate 1983.
Austria	1978 - 1983	Reduction of central government deficit to 2 1/2 per cent of GDP, via expenditure restraint
Belgium	1979 - 1983	Reduce general government deficit by about a half, to 7 per cent of GDP, through restriction on the growth of current spending.
Denmark	1980 - 1985	Medium-term action programme to reduce the central government deficit through restriction on the growth of public spending and revenue-raising measures.
Finland	1976 -1982	Growth in the volume of public consumption to be restricted to 1 per cent per annum below the annual average growth rate of GDP; tax burden to be stabilized.
Netherlands	1978 onwards	Reduction in public sector deficit from 5.25 per cent to structural norm of 4-4.5 per cent of GDP, via expenditure restraint.
Norway	1982 - 1985	"Long-term programme" to contain public expenditure growth and stabilize gross tax level.
Portugal	1981 - 1984	Stabilize or reduce the central government deficit.
Spain	1979 onwards	Medium-term objective to control public sector deficit and curtail current expenditures.
Sweden	1980 - 1990	Reduction of central government deficit in line with the achievement of external current account balance.
Switzerland	1980 - 1983	Establish federal government budget balance by 1984, by restricting the growth of spending; altered to achieving deficit of 0.2 per cent of GDP by 1986.

Sources: OECD Economic Surveys 1982-83 and National Budget sources.

the longer-run ability of the private sector to absorb government debt - is thus critical to the specification of "normal" budget deficit levels, subject to the achievement of equilibrium in the current balance of payments, or to the attainment of capital import/export objectives.

If such budgetary norms may be necessary for the achievement of balanced economic growth, they may not be sufficient. Thus, while the trend in medium-term budgeting has been to give greater weight to automatic stabilizers and to de-emphasise budgetary activism, a strong motivation behind the Dutch and German approaches has also been the desire to enhance the potency of counter-cyclical action (with which, for example, the 1967 German Law on Stability and Growth was associated). Defining the longer-term implications of short-term counter-cyclical policy has been regarded as essential to maximizing its stabilizing impact(57). Similarly, in the United States, and more recently in Canada(58), it has been argued that a budget which would be balanced at high employment may not be sufficient in itself to create full employment conditions(59); discretionary action may then be necessary to promote recovery and sustain medium-term growth.

The 1972 United States budget did, however, adopt the principle of full employment budget balance as a 'self-fulfilling prophecy': it was stated that 'by operating as if we were at full employment we will help bring about

(57) The German budget deficit is divided into two elements: (i) the 'cyclically-neutral' deficit, composed of a normal structural borrowing requirement (of about 1 1/4 per cent of potential GDP) and automatic stabilizers (excluding unemployment transfers) which will be self-correcting as the economy returns to its long-run growth path; and (ii) the 'cyclical impulse'. This helps prevent discretionary fiscal support from spilling over into the medium term. Similarly, in the Netherlands, short-term variations around the structural budget norm have been allowed up to a limit at which an 'emergency brake' has come into operation and fiscal policies would be subordinated to reducing actual deficits.

(58) The twin objectives of the 1983 Canadian budget (Budget Speech, April 19th 1983) were to give a short-term demand stimulus while cutting the deficit in future years.

(59) See for instance Musgrave, R.A. 'On Measuring Fiscal Performance', Review of Economics and Statistics, (1964) and Blinder, A.S. and Solow, R.M., 'The Analytical Foundations of Fiscal Policy', in The Economics of Public Finance, Brookings Institute, (1974).

that full employment'(60). More generally, experience with discretionary policies has tended to show that reliable long-term principles are more important for the growth process than short-term reactions; consequently, budget rules aimed at stabilizing the deficit at a structural norm have come - de facto - to be seen as embodying self-righting principles to a greater extent than hitherto. They may, though, depend on supplementary instruments to make them effective: in particular, supply-side reforms may be seen as necessary for effecting the high employment budget equilibrium (in the United States for instance), or compositional changes in taxes and public expenditures.

(3) Monetary and exchange rate targets

Much stronger presumptions about the self-righting properties of market economies and the longer-run "neutrality" of fiscal actions may provide the basis for the adoption of monetary targeting. A dependable relationship between monetary aggregate(s) and total expenditure might imply the sufficiency of monetary (plus structural) policies to achieve long-run economic growth. Monetary targeting has, however, derived more from an 'eclectic' need to suppress inflationary expectations than from a strictly monetarist view about the ability of intermediate monetary targets to achieve final economic objectives(61). In this context, the choice of monetary growth rate will depend on how far out of balance the economy is, in terms of deteriorating growth and inflation prospects. Where there is a perceived disequilibrium - accelerating inflation - the authorities may aim at a gradual reduction in monetary targets (negative real monetary growth) to contain inflationary expectations; where the economy is varying around its secular growth path the target growth rate of the money supply will usually be the sum of productive potential (i.e. real) growth, 'unavoidable inflation' and an allowance for trend changes in velocity(62).

(60) The Budget of the United States Government, Fiscal Year 1972, p.7.

(61) For a description of the scope of monetary targeting see OECD, 'Monetary Targets and Inflation Control', (1979).

(62) Few central banks divulge their method of arriving at their target growth rates, but the Bundesbank rule probably approximates to the norm. It consists, in principle, of productive potential, plus (in the short run) desired change in capacity utilization, plus unavoidable inflation, less the expected change in velocity allowing for the change in the cyclical position of the economy. See ibid. p.40.

Although subscribing to the same aims, several smaller countries (Austria, Belgium, Denmark, the Netherlands, Norway and Sweden(63)) have preferred a hard-currency approach to price stability, via fixed exchange rates rather than monetary targets. The choice of exchange rate stability may be based largely on the fact that in highly indexed economies currency depreciation would tend to feed through quickly into prices, with little beneficial effect on output to offset the cost in terms of inflation. Or it may be based on a perceived price inelasticity in exports and imports, implying that exchange rate depreciation could correct any current payments imbalance only very slowly(64). It may also derive from the specific advantages of linking to the currency of a dominant trading partner - Germany in particular - whose 'domestic policy discipline' is highly rated(65), while exerting pressure on wages in the exposed sector of the economy through which wage-discipline would be also be transmitted to protected sectors(66). A fixed exchange rate policy may still require long-run plans for domestic monetary expansion in order to regulate the domestic value of the currency; in the Netherlands, for example, the growth of the money supply (M2) is geared to the longer-run growth of net national income in volume terms augmented for unavoidable price rises(67). In Austria and Belgium, on the other hand, the authorities do not consider the money supply an appropriate medium-term objective in conjunction with exchange rate targeting.

Monetary and exchange rate targets, however, owe at least part of their rationale to their role as short-term economic regulators. Interest rates in the 1960s proved

(63) Belgium, Denmark and the Netherlands are members of the EMS (European Monetary System); Austria links to the Deutschemark; Norway and Sweden link to a basket of their most important trading partners' currencies.

(64) OECD Economic Survey of Austria, 1981 p. 46; low price elasticities would mean that volume changes in exports and imports would take place only after long delays.

(65) E. Den Dunnen, op.cit., p.4. Conversely, the rationale for preferring a monetary objective may be that 'inflationary policies abroad that were causing foreign currencies to depreciate relative to the dollar would force similar policies on the United States if the announced parity in exchange rates were to be maintained': see Axilrod, S.H., 'Monetary Policy, Money Supply and the Federal Reserve Operating Procedures', Federal Reserve Bulletin, Jan. 1982, p.15.

(66) 'Memorandum by the Oesterreichischen Nationalbank' to the U.K. House of Commons, Treasury and Civil Service Committee, op. cit., p.44.

(67) E. Den Dunnen, op.cit., pp. 5-6.

increasingly unreliable instruments (and indicators) of policy as inflationary expectations became more volatile and persistent. Assuming a stable relationship between the demand for money and nominal income, monetary aggregates can give an early indication of deviations from price and output objectives, so that interest rate adjustments can be more effective. (Short-run monetary stability may of course entail greater interest rate 'fine tuning' and volatility, notably when monetary control operates on bank liquidity). If monetary growth norms are based on a constant long-run expansion of the money supply, the response to inflation shocks will be non-accommodating, real interest rates being forced up. The response to demand shocks - i.e. lower private sector credit demands - will also be beneficially counter-cyclical as interest rates will tend to decline as demand falls.

(4) Consistency between budgetary and monetary rules

Consistency between budgetary norms and monetary targets may be ensured by adjusting interest rates, at least in the short run. Over a longer period, however, (as has been seen in Part II), a persistent conflict between budget deficits and monetary stance may lead to cumulative financing pressures. Matching budget deficits with the flows of private savings in the economy will not necessarily prevent the emergence of financing strains, upward pressure on interest rates, mounting debt service requirements and monetisation pressures, unless portfolio imbalances stemming from the disproportionate growth of government stock are avoided. What structural deficit norms should be specified so as to ensure that the stock of government debt expands at a manageable rate and does not lead to medium-term financing instabilities and eventual crowding-out?

Where policies aim at a steady medium-term growth of monetary aggregates, the supporting fiscal strategy might be based on a 'stable budget rule' entailing a long-term deficit 'sufficient to provide the specified secular increase in the quantity of money'. This approximates to a balanced budget rule, since long-run debt accumulation will be nil, though it might not necessarily imply that revenues and expenditures are always equal throughout the cycle(68). Balanced budgets have usually been associated with relatively narrow definitions of government activity, which exclude public corporations and other 'off-budget' agencies and treat government spending as

(68) See M. Friedman, 'A Medium-term Framework for Monetary and Fiscal Stability' (1948) p. 249, which called for automatic variations in the deficit, to be financed dollar-for-dollar by money creation. Where monetary growth is set independently of the cycle, however, the policy choice becomes (as here) one of tax- finance (permanently balanced budgets) versus bond- financed automatic stabilizers.

consumption. The argument for balanced budgets then derives from the the perception that government debt needs to be financed by higher future taxes, because public spending yields a nil rate of return. Sustaining the original spending indefinitely would entail borrowing to cover interest payments and persistently increasing debt/GDP ratios. The unsustainability of this process may lead to financing problems and monetisation pressures (leading to the erosion of the debt burden via an 'inflation tax', which would make persistent deficits incompatible with longer-run control of monetary growth.

The principle of balanced budgets was operated (with occasional exceptions) in France during the 1960s and in Japan up to 1965, while the approach also has been more recently and persistently advocated in the United States. The compromise variant of balancing the budget at high employment, however, involves the cumulation of public debt because built-in stabilizers are not paid back if the budget is balanced - rather than in surplus - at the cyclical peak. Elsewhere, though unbalanced budgets may be seen as representing a choice in favour of present expenditure and deferred taxation, these may be considered appropriate if the government's role as a supplier of public goods and social overhead capital is seen as justifying a transfer of part of the cost to beneficiaries in future generations, via the sale of long-term bonds - as in Japan since 1965.

Viewed, in general, as a means of anchoring - or gradually reducing - inflationary expectations over the medium term (rather than as precisely determining nominal income), monetary targeting usually allows the budget deficit a long-run role in meeting employment and growth objectives. Government debt issues may satisfy a private sector portfolio demand for bonds. In the German medium-term financial strategy (as developed by the Council of Experts) the cyclically-neutral deficit is set, in principle, so as to ensure that the growth of government debt equates, with private sector asset demands, the government aiming to take up a fixed long-run share of private savings by issuing long-term debt (for public investment) in proportion to the projected high employment deficit. Interest rates would, in principle, be unaffected and funding pressures would not arise where the public have a portfolio preference for bonds and government spending earns a real rate of return.

Elsewhere, while there are a variety of medium-term objectives for reducing the growth of domestic or foreign debt of the public sector, these tend also to be framed in such a way as to allow for long-run structural budget deficits and positive public sector debt accumulation (see Table 4). In Japan the relatively high private savings ratio leaves room for accumulating government debt to be - in principle - compatible with growing public and private investment. In other countries such as Canada, maintaining a steady ratio of debt to GDP also allows a long-run positive public sector

borrowing requirement, although no given ratio is taken as a formal target. Among the other OECD countries, France has probably been alone in considering, in recent years, that there was scope for the public debt-GDP ratio to be increased, but this development has been constrained by monetization pressures, balance of payments deficits, and exchange rate depreciation.

Inflation is a complicating factor. A budget balanced under usual definitions of income may be in 'real' surplus if inflation is eroding the value of government debt. If, for instance, the additional real wealth accruing to OECD governments, because of the inflationary devaluation of their debt obligations, is added to their income, their budgets would tend to be in real balance or in surplus, though they appear in conventional deficit(69). Adjusted for inflation in this way, most of the budget deficits observable in OECD economies would disappear. In the United Kingdom the "medium-term financial strategy" evaluates budget stance in terms which (implicitly) allow for the fact that a fall in the inflation rate reduces the 'inflation tax' on holders of government bonds, thus reducing the real budget surplus(70). A reduction in government borrowing might, by decreasing inflation, have more positive effects than an increase, because the reduction of inflation acts as a longer-run automatic stabiliser; disinflation acts both as a spur to lower private savings and to cuts in interest rates. This does not, however, imply that the 'correct' level of the public sector borrowing requirement at nil inflation would itself be zero; investment by the nationalised industries would still tend to imply a positive borrowing requirement.

B. Means of institutional control

(1) Public expenditure control

Despite the restrictive medium-term orientation of fiscal policy in recent years, increases in public expenditures have persistently exceeded planned rates of growth. One explanation may lie in basing spending plans on optimistic projections of output growth, which carries dangers

(69) See Price and Chouraqui, op cit., Table 7 for estimates of the effects of inflation on government debt and borrowing requirements.

(70) See, for instance, M. Miller "The Medium Term Financial Strategy: An Experiment in Co-ordinating Monetary and Fiscal Policy", Fiscal Studies, 1982. A budget deficit cut which reduces monetary growth and inflation will also reduce the 'inflation tax' on government bond holders (which tends to push the deficit into real surplus). This 'wealth' effect, by raising private spending, may compensate for the initial demand-lowering effect of the budget cut.

possibly as great as those entailed in the absence of any forward planning. A further explanation might be found in control imperfections. Liaison difficulties may exist between the various spending authorities and be a problem in some countries; local authorities - and still more so provinces or states - have their own tax base. Division of fiscal power might then cause problems either via an expansion of local spending or by leaving the federal authorities short of revenues (as is partly the problem in Canada and is an issue for discussion in the United States).

Planning difficulties and programme inflexibilities may also arise from the general failure to measure government sector output properly, and the corresponding separation of public spending decisions from price considerations. Because of measurement difficulties, the output of the government sector is defined not in terms of the quantity of public services provided, but in terms of manpower inputs (i.e. the number of public servants). For the supply of public goods to increase at the same rate as private, therefore, the government share of total employment must increase (as it has done in all OECD countries except the United States). This growth in labour share is automatically accompanied by increasing tax pressure if public sector wage costs do not rise more slowly than those in the market sector.

Failure to measure the productivity of their employees properly has, however, meant that governments have needed - for reasons of equity and consistency - to link public pay rates directly to wage rises in the private sector. Governments have generally not been able to rely, in the longer run, on their labour costs rising more slowly than elsewhere. Thus, while the government share of output consumed has remained fairly constant (i.e. the amount of public services provided has grown no faster than consumption as a whole), the share of national income spent on government consumption has risen by three per cent in the last decade, because public employment has increased and public wage costs have kept pace with pay rates elsewhere(71). (See the comparison between the volume and value trends of government

(71) The value change less the volume change is a measure of the relative price effect on government consumption. Since the share of general government final consumption in value terms has increased by 1.6 per cent (Table B4) over the period, while the volume (constant price) share fell by 1.2 per cent (Table B5), the relative price change, as between public services and marketed goods, accounts for a $2\frac{3}{4}$ per cent growth in the share of government in overall consumption.

consumption in Tables B4 and B5 of Annex 2(72)). Combined with public sector manpower expansion, cost rigidities have tended to make for a secular expansion of public spending relative to GDP.

(2) The control of government borrowing

The Treasury's ability to borrow may be controlled by statute. In the United States the advocates of a balanced budget have suggested that a constitutional amendment is needed to make such a borrowing limit stick - though Congress must, in any case, legislate increases in the government borrowing ceiling. In other countries, such arrangements are expressly linked to a proscription on government borrowing for consumption purposes, legislation being seen as a safeguard against diverting scarce capital resources away from investment (this is the case in Germany, Japan and Switzerland etc; see Table D). Local authority borrowing on revenue account is also generally proscribed, while social security funds are normally supposed to be self-sufficient (either in income redistribution or actuarial terms(73)). These limits have not been effective. They have been insufficient to prevent current expenditures, including grants to cover deficits in social security funds, from being a major source of central government deficits.

One force majeure undermining the legislative control of government borrowing to finance current expenditure has been the rise in interest payments. These might be viewed as advance repayments of principle where they are due to inflation, so the problem of medium-term budget deficits might be eased by indexing debt. This approach has been adopted to a very limited extent (see Table 5). It has generally been opposed either on the grounds that it postpones the process of

(72) This phenomenon is usually defined as the "relative price effect". Because output per public employee is generally assumed not to rise, there is no observed productivity gain to set against higher labour costs, in contrast to the private sector. The relative price of government consumption thus grows. This tends to maintain the share of such expenditure in GDP; the share will, however, rise if the government expands its labour force.

(73) Actuarial funding of social security programmes accounts for a minority of cases; income redistribution schemes - where social security taxes pay for benefits - predominate. In certain countries (Australia and New Zealand) social security expenditures are financed out of general government revenues.

Table 5. Fiscal Indexation Provisions

	Personal Income Tax		Public Expenditures			Financial Assets
	Date of Operation	Type	Index	Pensions	Other Transfers [Indexation Link]		Government Wage Bill
Australia	1976(a)	Bracket	CPX(a)	Prices	Prices	Wages
Austria	-	-	-	Prices	-	-
Belgium	-	Threshold(b)	CPI	Prices	Prices	Prices
Canada	1974	Bracket	CPI	Prices	Prices (c)	Prices (c)
Denmark	1970	Bracket	CPX	Wages	Prices	Wages
Finland	1977	Bracket	CPI	Prices	Prices	Prices
France	1968	Discretionary	CPI	-	-	-
Germany	-	-	-	Prices	Prices	Prices
Iceland	1966	Bracket	CPI	-	-	-
Ireland	-	-	-	Prices/wages	Prices	Prices
Italy	-	-	-	Prices	Prices	Prices
Japan	-	-	-	Prices	-	Wages
Luxembourg	1968	Bracket	CPI	-	-	Prices
Netherlands	1972	80% Bracket	CPX	Legal minimum wage	Average private sector wages	Average private sector wages
New Zealand	-	-	-	Post-tax average wage prices	prices	Private sector awards
Norway	-	-	-	prices	prices	Subject to incomes policy
Spain	1981	Threshold(b)	CPI	-	-	-
Sweden	1979	Bracket	CPXE	Prices	Prices	[Public sector wage-leader]
Switzerland	-	Discretionary (b)	-	Prices	Wages/prices	Price escalators
United Kingdom	1978	Bracket(d)	CPI	Prices	Prices	(c)(e)
United States	1985	Bracket:	CPI	Prices	Prices	Wages(f)

Key: CPE = Consumer price index, including indirect taxes. CPX = Consumer price index, excluding indirect taxes. CPXE = CPX, excluding energy prices.

(a) Indexation factors 0 in 1979/80, 1/2 in 1980/1 and 1981/2. The actual CPI change was adjusted for the effects of oil pricing policies and indirect taxes in 1980, and adjusted for devaluation and indirect taxes in 1979.

(b) In Belgium, Spain and Switzerland indexation exists, de facto, but is not routinely or uniformly applied.

(c) Public service pensions indexed.

(d) Indexation factor 0 in 1981-2.

(e) A limited number of sectors are indexed to prices.

(f) Subject to discretionary approval.

Source: various national publications.

budgetary adjustment (to the stage where the debt needs re-financing) or because it appears to represent an acquiescence in inflation(74).

Public corporation borrowing may or may not be excluded from medium-term budget goals and legislative control: as finance for productive investment it may be treated as earning an explicit or implicit return which is available for the repayment of the borrowing in the longer run. Despite being covered by government guarantee (and hence, in principle, substitutable for other government debt instruments) it is not usually treated as a cause of present or future 'crowding-out'. Investment may, on the other hand, be difficult to define, since 'capital expenditure' may lead to operating losses and higher government subsidies. Such considerations have led to borrowing constraints being defined quite widely in the United Kingdom and Australia; public sector borrowing targets cover nationalised industry expenditures. The implication is that such investment should, to a significant degree, be financed internally out of operating surpluses. If this is not possible then public investment would tend to have the same consequences for economic performance as public consumption.

The drawback is that the wider the range of activities included in the budget, the harder medium-term budget targets may be to achieve (the profits and losses of nationalised industries being a very fluctuating item). Moreover, balancing a budget which incorporates large parts of the economy's industry would tend to have somewhat different consequences for the long-run growth of the capital stock than balancing expenditures and revenues in the traditional public goods sector.

(3) Monetary Control

The effectiveness of any medium-term strategy for controlling the growth of monetary aggregates - and of the fiscal-monetary mix which should be associated with it - depends on three sets of considerations:

- (i) the choice of monetary targets: the stability of the relationship between different monetary aggregates and nominal income will help determine the selection of target variable (narrow or broad money or domestic credit), and whether one or several aggregates are to be targeted;

(74) The Swiss Central Bank (Memorandum to the Treasury and Civil Service Committee, U.K. House of Commons, Vol. II, op.cit.) opposes the indexation of government debt on these grounds; similarly the Banque de France regards the arguments in favour of indexation as indecisive: it may (i) undermine confidence in anti-inflation policies; (ii) interfere with the bond market; and (iii) be harmful to investment in shares. (Memorandum by the Banque de France, ibid., p. 23).

- (ii) control procedures: the effectiveness of monetary control may depend on whether the authorities operate on the liquidity of banks (influencing bank credit expansion from the supply-side) or on the portfolio and expenditure behaviour of non-banks (influencing bank credit expansion from the demand-side); it may also depend on the institutional relationships between the central bank and the Treasury.
- (iii) operational constraints: the attainment of final policy objectives is likely to depend on the public's confidence in the monetary strategy and on market expectations regarding the consistency and feasibility of the monetary and fiscal stance. These will be affected inter alia by the time horizon to which the monetary targets refer, by whether there is a specific target or a target range, and by whether the targets are conditional on competing objectives (such as the behaviour of the exchange rate).

(i) Formulating objectives

The monetary targets pursued by OECD economies since the mid-1970s are set out in Table 6, together with the actual growth rates of the relevant aggregate. The narrow money aggregate (M1) was the principal target until recently in the United States and Canada, while a broader aggregate (variously defined) has been favoured by Japan, France, the United Kingdom, Australia, Spain, and the Netherlands. Both Germany and Switzerland (since 1980) target the 'Central Bank Money Stock'. Such a target may serve as a proxy either for the broad money stock (M3 as in Germany) or for a monetary base target (the Swiss case). In Italy, considerations associated with both the financing of persistent public sector deficits and external disequilibria have led to the adoption of a quantitative target in terms of Total Domestic Credit Expansion.

While the choice will to some extent depend on the method of monetary control (discussed below), the principal criteria involved are the stability, measurability and predictability of the relationship between monetary aggregates and total expenditure⁽⁷⁵⁾. From this point of view a relatively narrow definition might seem preferable, on the ground that this would be more likely to represent money as a

(75) See OECD, 'Monetary Targets and Inflation Control', op cit., Paris, 1979. The availability and costliness of compiling data on assets with short maturities has been one factor inhibiting the calculation of an ideal, liquidity-weighted monetary aggregate: see Axilrod, op.cit., pp. 16-17.

Table 6. Projected and Actual Growth Rates of Monetary Aggregates

Country	Aggregate	Period	Target		Outcome	
			M1	M2	M1	M2
United States	M1, M2(a) % increase	March 1975-March 1976	5.0-7.5	8.5-10.5	5.0	9.6
		1975 Q.2-1976 Q.2	5.0-7.5	8.5-10.5	5.2	9.5
		1975 Q.3-1976 Q.3	5.0-7.5	7.5-10.5	4.6	9.3
		1975 Q.4-1976 Q.4	4.5-7.5	7.5-10.5	5.7	10.9
		1976 Q.1-1977 Q.1	4.5-7.0	7.5-10.0	6.3	10.9
		1976 Q.2-1977 Q.2	4.5-7.0	7.5- 9.5	6.6	10.7
		1976 Q.3-1977 Q.3	4.5-6.5	7.5-10.0	7.8	11.0
		1976 Q.4-1977 Q.4	4.5-6.5	7.0-10.0	7.8	9.8
		1977 Q.1-1978 Q.1	4.5-6.5	7.0- 9.5	7.7	8.7
		1977 Q.2-1978 Q.2	4.5-6.5	7.0- 9.5	8.2	8.4
		1977 Q.3-1978 Q.3	4.0-6.5	6.5- 9.0	8.0	8.2
		1977 Q.4-1978 Q.4	4.0-6.5	6.5- 9.0	7.2	8.6
		1978 Q.1-1979 Q.1	4.0-6.5	6.5- 9.0	5.1	7.6
		1978 Q.2-1979 Q.2	4.0-6.5	6.5- 9.0	4.8	7.7
		1978 Q.3-1979 Q.3	2.0-6.0	6.5- 9.0	5.3	8.2
		1978 Q.4-1979 Q.4	3.0-6.0	5.0- 8.0	5.5	8.3
		1979 Q.4-1980 Q.4(b)	4.0-6.5	6.0- 9.0	7.5	9.9
		1980 Q.4-1981 Q.4	3.5-6.0	6.0- 9.0	5.5	8.7
		1981 Q.4-1982 Q.4	2.5-5.5	6.0- 9.0	8.5	9.3
		1981 Q.4-1983 Q4(c)	4.0-8.0	7.0-10.0
Japan	M2(d) % increase	1977 Q.3-1978 Q.3	11.0-12.0		12.0	
		1977 Q.4-1978 Q.4	12.0		12.6	
		1978 Q.4-1979 Q.4	11.0		9.1	
		1979 Q.4-1980 Q.4	10.0		7.2	
		1980 Q.4-1981 Q.4	10.0		11.0	
		1981 Q.4-1982 Q.4	11.0		7.9	
		1982 Q.2-1983 Q.2	7.0		..	
Germany	Central bank money % increase	End-1974-End-1975	8.0		10.0	
		Average 1975-1976	8.0		9.2	
		Average 1976-1977	8.0		9.0	
		Average 1977-1978	8.0		11.4	
		1978 Q.4-1979 Q.4	6-9		6.3	
		1979 Q.4-1980 Q.4	5-8		6.0	
		1980 Q.4-1981 Q.4	4-7		3.0	
		1981 Q.4-1982 Q.4	4-7		6.0	
		1982 Q.4-1983 Q.4	4-7		..	
France	M2 % increase	Dec.1976-Dec.1977	12.5		13.9	
		Dec.1977-Dec.1978	12.0		12.2	
		Dec.1978-Dec.1979	11.0		14.4	
		Dec.1979-Dec.1980	11.0		9.8	
		Dec.1980-Dec.1981	10.0(e)		11.4	
		Dec.1981-Dec.1982	12.5-13.5		12.0	
		1982 Q.4-1983 Q.4	9.0		..	
United Kingdom	Sterling M3 % increase	Fiscal year ending April 1977	9.0-13.0(f)		7.8	
		Fiscal year ending April 1978	9.0-13.0		14.9	
		Fiscal year ending April 1979	8.0-12.0		10.9	
		Oct.1978-Oct.1979	8.0-12.0		13.4	
		June 1979-April 1980	7.0-11.0		9.7	
		Feb.1980-April 1981	7.0-11.0		19.9	
		Feb.1981-April 1982	6.0-10.0		13.6	
		Feb.1982-April 1983	8.0-12.0		10.8	
		Feb.1983-April 1984	7.0-11.0		..	
Italy	Total domestic credit absolute increase	March 1974-March 1975	Lit. 21,800 bn		19,600 bn	
		March 1975-March 1976	Lit. 24,700 bn		35,280 bn	
		Dec.1975-Dec.1976	Lit. 29,500 bn		33,280 bn	
		Dec.1976-Dec.1977	Lit. 32,000 bn(g)		35,652 bn	
		March 1977-March 1978	Lit. 30,000 bn		39,265 bn	
		Dec.1977-Dec.1978	Lit. 46,000 bn		49,013 bn	
		Dec.1978-Dec.1979	Lit. 53,000 bn		53,348 bn	
		Dec.1979-Dec.1980	Lit. 59,300 bn		62,141 bn	
		Dec.1980-Dec.1981	Lit. 64,500 bn		72,368 bn	
		Dec.1981-Dec.1982	Lit. 73,000 bn		98,430 bn	
		Dec.1982-Dec.1983	Lit.105,000 bn		..	

continued

Table 6. continued

Country	Aggregate	Period	Target	Outcome
Canada	M1 % increase	1975 Q.2-1976 Q.2	10-15	12.06(h)
		Feb./April 1976-1977 Q.2	8-12	7.0
		1977 Q.2-1978 Q.2	7-11	9.5
		1978 Q.2-1979 Q.2	6-10	8.1
		1979 Q.2-1980 Q.3	5-9	3.3
		1980 Q.3-1982 Q.4(i)	4-8	3.1
Australia	M3 % increase	June 1976-June 1977	10-12	10.5
		June 1977-June 1978	8-10	8.0
		June 1978-June 1979	6-8	11.8
		June 1979-June 1980	10.0	12.3
		June 1980-June 1981	9-11	12.7
		June 1981-June 1982	10-11	11.0
		June 1982-June 1983	11.0	..
Netherlands	Domestic Private Sector M2 Creation(j) Growth Rate	July 1977-March 1978	5.1(k)	7.8
		April 1978-March 1979	5.2	4.6
		Jan.1979-Dec.1979	5.5	6.3
		Jan.1980-Dec.1980	4.5	4.7
		Jan.1981-Dec.1981	4.5	2.3
Switzerland	M1 % increase	Dec.1974-Dec.1975	6.0	5.9
		Average 1975-1976	6.0	8.0
		Average 1976-1977	5.0	5.4
	Monetary base % increase	Average 1977-1978	5.0	16.2
		Average 1979-1980	4.0	0.2
		Average 1980-1981	4.0	-1.5
		Average 1981-1982	3.0	2.6
	Average 1982-1983	3.0	..	

(a) M3 targets, which have less operational meaning, are not shown.

(b) M1B in 1979 and 1980.

(c) 1983 M2 target is based on February-March 1983 average.

(d) Forecast. Including certificates of deposits from 1979.

(e) Raised implicitly to 12 per cent in the second half of 1981.

(f) Revised from 12 per cent target to be consistent with objective for domestic credit expansion.

(g) Revised from Lit.36,6000 billion.

(h) 1975 Q.2 - Feb./April 1976 (excluding effects of postal strikes).

(i) No targets have been announced for 1983.

(j) Domestic private sector M2 creation targets were used to bring the "liquidity ratio" (M2 in relation to national income) back from about 40% in early 1977 to a desired level of 35 per cent in 1981. No targets have been announced for 1982 and 1983.

(k) In per cent of total M2.

spending medium than as a store of savings and wealth(76); but in fact broader measures of money may be more stably related to expenditures because, by encompassing a wider spectrum of assets, they may be less disturbed by switches in asset demands induced by institutional changes and movements in interest rates. This consideration, together with the fact that even broader aggregates may be dominated by transactions demand, has supported the choice of broader aggregates (M2 or M3) outside North America and Switzerland. The institutionally-induced instabilities in the demand for narrow money have, in fact, led to the de-emphasis of the M1 target in the United States and to its suspension in Canada. Conversely, uncertainty about the stability between the broad money stock and nominal income in the United Kingdom has led to the adoption of multiple monetary targets.

(ii) Control procedures

The money stock may be controlled from the supply side - via money market operations and/or central bank credit to the commercial banks, directly affecting banks' reserve positions. The use of such operating procedures (as in the United States, and to some extent in Canada, Germany and Switzerland) tends to favour targets in terms of central bank money (which includes bank reserves) or narrow money supply (which is most closely related to bank reserves)(77). Where the authorities attempt to control the money stock through its asset counterparts - influencing bank lending by altering private and government demands for credit (as in Japan, France, Italy, and to some extent the United Kingdom) - attention has focused either on broad monetary aggregates, which cover most of the deposit liabilities of the banking system, or on domestic credit expansion. The role of the government borrowing requirement in overall money creation (private credit demands and overseas capital flows being the other principal determinants) may be seen more explicitly by

(76) In principle this criterion might demand the use of base money as an intermediate variable, but only one part of the base is currency in circulation; the remainder is reserves of depository institutions. In the United States these are consistent with a wide range of money supply (and hence spending) outcomes in terms of money in the hands of the public, so that as an intermediate target base money has been regarded as inappropriate. On the other hand, separate considerations attach to its use as a control variable. See Axilrod, op.cit., p. 19.

(77) However, the evidence from econometric studies is that demands for narrow and broad definitions of money respond similarly to changes in money market rates. The link between available instruments and choice of aggregate may thus not be strong. See OECD, 'Monetary Targets and Inflation Control', op.cit. p.24.

focusing on a broad money aggregate(78). This may allow for the use of the public sector borrowing requirement as an instrument of monetary control, in the United Kingdom and Australia in particular(79), and in this sense the choice of a broad money aggregate may serve to strengthen the subordination of fiscal to monetary policy. In the process it may also give treasuries explicit leverage over monetary targets, and encourage centralisation of monetary and fiscal decision-making.

Where budgetary and monetary responsibilities are separated, by the constitutional independence of the central bank vis-à-vis the government (as in the United States and Germany) there may be less scope for government borrowing to diverge from a restraining monetary growth target. The experience of the United States has, however, shown that fiscal and monetary policies can diverge, if they are formulated and implemented autonomously, the respective authorities calling on the other to adjust. Such divergences may obviously affect market expectations about, and hence the achievement of, medium-term financial objectives. At root, there is in effect a choice between the merits of co-ordinated policy-setting (but with the associated risk of monetary accommodation) on the one hand and potentially unco-ordinated policies, (but with central banks acting as a bulwark against the monetary financing of budget deficits) on the other(80).

(78) On the other hand, it might be argued that a narrow monetary aggregate - particularly if it is related through a fixed 'money multiplier' to the monetary base - allows the link between the government deficit and the creation of bank reserves to be explicitly identified. For a discussion of the two main systems of monetary control operating in OECD countries see OECD, 'Budget Financing and Monetary Control', op. cit.

(79) Cf. 'Memorandum by H.M.Treasury' to the Treasury and Civil Service Committee of the House of Commons, op.cit., p.9: 'we believe that the money stock should be controlled by an appropriate combination of fiscal policy and interest rates'.

(80) Central banks in Australia, Belgium, France, Italy, Japan, the Netherlands, Sweden and the United Kingdom are subordinate to the central government. In Germany, the United States and Switzerland central banks enjoy varying degrees of greater independence. (see M. Parkin and R. Bade, "Central Bank Loans and Monetary Policies; a Preliminary Investigation", in M.G. Porter, The Australian Monetary System in the 1970s, pp. 24-39. See also D.E. Fair, "Relationships between Central Banks and the Government in the Determination of Monetary Policy", Société Universitaire Européenne de Recherches Financières, 1980.

(iii) Operational constraints

There is a degree of consensus among countries with monetary targets that a medium-term strategy is required if the announcement of restrictive targets is to influence inflation expectations(81). Only in the United States and the United Kingdom, however, have long-range (four-year) monetary targets been in operation(82). The Bundesbank, though basing its strategy on the medium-term stability in the demand for money and longer-run GDP growth potential, avoids setting targets beyond one year on the grounds that uncertainties about the future make targets for longer horizons inadvisable(83). Flexibility is considered to be necessary; and it has been provided also by the adoption (since 1979) of a target range - a practice followed by other countries. Its purpose is to give monetary policy room for manoeuvre where conflicts between objectives arise. Such conditionality has been explicitly defined in terms of aiming at the lower end of the target range if nominal income and money velocity rise too fast but at the top end if the exchange rate comes under unwarranted upward pressure or if money velocity declines unexpectedly. Similarly, the Swiss central bank found it necessary to abandon temporarily its monetary target and to replace it with an exchange rate target in 1978; and the downward pressure on sterling in 1981 provoked - for a time - an exchange-rate conditioned approach to targeting in the United Kingdom. Experience has therefore tended to show that too rigid adherence to precise intermediate monetary targets may be untenable.

IV. SHORT AND MEDIUM-TERM POLICY CO-ORDINATION

The analysis so far has shown that the increasing tendency towards the medium-term planning of budgetary and monetary policies has been based on the principle that, beyond the short run, such policies need to be harmonised. Lack of co-ordination risks financial crowding-out and/or growing inflationary pressure. At the same time, control difficulties - associated with legislative rigidities and financial

(81) 'Memorandum by the Banque de France' to the Treasury and Civil Service Committee of the House of Commons, op. cit., Vol. II, p. 18.

(82) The United Kingdom Medium-term Financial Strategy set a target of reducing monetary growth from 8-12 per cent to 4-6 per cent between 1980-81 and 1983-84; similarly, the new American administration indicated its intention of halving the rate of monetary growth (from 10-11 per cent in 1980) by 1984.

(83) 'Memorandum by the Deutsche Bundesbank', op. cit., pp. 11-12.

innovation for instance - have prevented fiscal and monetary co-ordination from being fully effective. And, more fundamentally, there remains the problem of defining the short-term fiscal-monetary mix appropriate to the maintenance or restoration of balanced growth, in the face of the various economic "shocks" to which OECD economies have been subject. Two issues are involved(84):

(A) the consistency between short-term fiscal stance and medium-term budgetary objectives, especially as this relates to the operation of "built-in stabilizers" and the distinction between cyclical and structural budget imbalances;

and (B) the choice of the appropriate mix of short-run monetary and fiscal policies to achieve medium-term monetary and inflation objectives, given feedbacks from monetary restraint - via lower activity and higher interest rates - to the budget deficit itself.

These issues are discussed below.

A. Automatic stabilizers and medium term budgetary objectives

In principle, once the appropriate medium-term budget and monetary targets have been set, monetary and fiscal stance could be allowed to change automatically with short-term demand conditions. The budget deficit would vary counter-cyclically owing to the operation of "built-in stabilizers"(85). For an economy on its long-run balanced growth path, but subject to short-run non-inflationary demand variations, such automatic budget responses would be consistent with the maintenance of balanced economic growth - in terms of public sector resource claims, public borrowing, monetary creation and price and interest rate stability. With such stabilizers in operation, the economy and the budget

(84) A third issue, that of choosing between money, interest rates and/or exchange rate targets, is not discussed here. The relative merits of automatic stabilization regimes in the face of various shocks, or differing exchange rate regimes is discussed in D. Currie, "Stabilization Policy in an Open Economy", in Cook, S.T. and Jackson, P.M., Current Issues in Fiscal Policy, Oxford, 1979, pp. 108-122.

(85) Automatic stabilizers have two dimensions: first, revenues fall in a recession, leaving a proportion of on-going government expenditure to be financed through borrowing: the effectiveness of stabilizers is thus dependent partly on the composition of medium-term public spending plans; second, unemployment-related transfers will tend to rise, increasing the consumption orientation of spending.

deficit might be self-correcting and as such market expectations would discount short-term increases in government demands for credit as transitory(86). Private sector demands for money and credit being lower in recession, no net pressure on interest rates need, in principle, arise either from current or expected public sector claims on private savings.

In practice, however, such stabilizers have tended to be imperfect and inadequate economic regulators. In the first place, tax and expenditure systems reflect social as well as economic objectives, so that their short-term stabilizing properties are to some extent arbitrary and not necessarily consistent with medium-term structural balance. Unemployment compensation may affect longer-run economic growth adversely by discouraging labour supply (increasing structural unemployment), though the evidence is not conclusive on this. Or, where government transfers are indexed to prices, a degree of inflexibility in adjusting to supply-side (particularly terms-of-trade) shocks may be introduced, increasing real wage rigidity and decreasing labour mobility. "Built-in stabilizers" may, in certain circumstances reduce the long-run growth rate of the economy, becoming, thus, part of the structural budget problem.

Secondly, automatic stabilizers add to the stock of outstanding government debt insofar as they are not "redeemed" through a budget surplus as the economy recovers. They will therefore have longer-run cumulative effects, which will help determine market expectations of future interest rates. The operation of automatic stabilizers is consistent with medium-term budgetary balance only insofar as they ensure that balanced economic growth is resumed, and this raises questions as to how automatic rules can facilitate the attainment of the longer-run growth on which they are predicated. Divergent opinions have been expressed in this respect.

(86) Where the economy was thought to self stabilizing, public sector debt could be issued and retired as the cycle caused the budget to fluctuate between deficit and surplus. Expectations of future crowding-out or monetisation would not occur and automatic stabilizers would be self-correcting. See Infante E.F. and Stein J.L., "Money-financed fiscal policy in a growing economy", Journal of Political Economy, 1980, Vol. 88, No.2, p. 284. To the extent that the budget deficit is covered by a combination of government borrowing from the banks or non-bank sector, however, interest charges will be incurred; these might make the cyclical variation of public sector deficits unstable (non-convergent) if taxes are not increased or transfers are not reduced to pay for them. See Christ C.F., "On Fiscal and Monetary Policies and the Government Budget Restraint", American Economic Review, vol. 69, 1979, pp. 526-538.

Traditional short-run demand management, with its emphasis on active government support for demand, has stressed the view that the economic system is not necessarily self-regulating. If the economy is liable to diverge for long periods from its steady-state growth path, government intervention may be necessary to maintain a consistently higher level of employment, and/or to speed recovery. And if there is no way of distinguishing purely temporary from longer-run divergences, demand management may need to be flexible in the short term - automatic stabilizers may not be sufficient for recovery(87).

As has been described above, however, the tendency has been to question the effectiveness, feasibility and scope for counter-cyclical activism to aid economic recovery. Indeed a corollary of 'inflation first' strategies is generally a belief in the capacity of the private sector to achieve automatic recovery as a result of budget cuts. Three principal automatic mechanisms may be discerned:

- (i) Lower inflation may mean a smaller erosion of the real value of private sector financial wealth (or a lower 'inflation tax'); private savers may then have to allocate a lower proportion of their income to maintaining the real value of their savings, so that personal spending may rise as a result. Given a constant monetary growth rate, a fall in the rate of inflation will cause an increase in the real money supply, allowing room for real demand to expand. This argument has been particularly prominent in the United Kingdom (see p.44 above), where it has been associated with an emphasis on setting a fixed target for nominal GDP growth(88).
- (ii) Business investment may rise as lower interest rates and less inflationary uncertainty follow reductions in government credit demands and slower medium-term monetary growth;

(87) See Cairncross, A., "The Relationship between Fiscal and Monetary Policy", Banca Nazionale del Lavoro, Quarterly Review, 1981 p. 378.

(88) The principle of nominal GDP targeting has not been utilised explicitly in other major OECD countries. For a discussion of the arguments for and against what is essentially a 'velocity-adjusted' monetary target, see Dornbush, et. al., "Macro Economic Prospects and policies for the European Communities", 1983, pp. 18-19.

(iii) Investment may also be promoted by simultaneous tax and spending cuts. Either - as in the United States in particular - the 'supply-side' effects of lower taxation may be seen as reducing work and investment disincentives, or - as in the Netherlands - higher tax-financed public spending may be seen as leading to lower company profits and investment, so that simultaneous cuts in taxes and state spending may prompt higher net profits, more investment, faster longer run growth and lower structural deficits(89).

The idea that economic recovery may be facilitated by budget cuts goes further than neo-classical propositions about longer-run 'fiscal neutrality' (i.e. budget multipliers of zero). The stabilizing potential of the above mechanisms depends upon a reversal of the conventionally positive multiplier properties attaching to tax- and deficit-financed public spending. The combination of short-term fiscal and monetary restraint which followed the second oil price rise may therefore be seen not just in terms of a trade-off between disinflation objectives and output, but as aiming to secure a viable and lasting increase in output and employment via lower public spending and inflation. Medium-term monetary and budgetary restraint has been seen as requiring a parallel restrictive co-ordination in the short run.

In the event, however, the combination of fiscal and monetary tightness has been associated with recession, stagnant investment and sustained government credit demands; public sector borrowing and interest rates have remained high, while the achievement of medium-term budgetary goals has had to be deferred. Because of increased unemployment-related transfers, lower tax receipts and higher public sector debt service costs, simultaneously tight fiscal and monetary policies have tended automatically to inflate budget deficits, frustrating - wholly or in part - attempted deficit reductions. In the process, economic recovery may also have been compromised: deflationary policies reducing demand while budget 'feedbacks' from lower growth prevented reductions in interest rates.

(89) The proposition that simultaneous cuts in expenditures and revenues will tend to increase output and reduce government deficits (which inverts the conventional 'balanced budget multiplier' theory), relies significantly on the argument that taxes are borne, for the most part, by companies; reducing taxes is of more benefit to investment than cutting government borrowing and interest rates. See, for instance, A. Knoester, 'Stagnation and the Inverted Haavelmo Effect: Some International Evidence', Ministry of Economic Affairs, Netherlands, Discussion Paper 8301, April 1983.

This problem has two (related) dimensions. In the first place, realised budget deficit cuts may be quite small in the short run when all countries are attempting simultaneously to reduce public borrowing by joint monetary and fiscal restriction(90). Secondly, to avoid the "feedback" on to the budget deficit from lower activity, interest rates need to fall in order to encourage interest-sensitive private spending and reduce debt service costs. In such a case, to the extent that crowding out of private demand may be virtually complete in the medium run, public sector deficits could be reduced without eventual loss in terms of activity and output: private spending would tend to substitute for public(91). However, if the realised budget deficit cut is small, or negligible, so will be the interest rate reduction and the increase in interest-sensitive private spending(92). Indeed, attempts to cut deficits, in conjunction with restrictive monetary targets, contain the danger that lower demand and sustained high interest rates will deter investment and risk locking OECD economies into a slow-growth impasse.

While cyclically-corrected budget balances, which are better indicators of the thrust of fiscal policy, have generally shown a tendency towards surplus, or lower deficit, since the second oil crisis(93), the overall level of actual budget deficits may still be maintaining expectations of monetary and interest rate pressures in the medium run. In the circumstances described above, a strategy of reducing interest rates by combined fiscal and monetary restraint may be slow to take effect because ex ante budget cuts may not lower the expected stream of future deficits, unless financial markets see the cyclical component of the deficit as

(90) See OECD Economic Outlook No.29, July 1981, pp. 30-31. Again, there are two aspects to this problem: (i) In an international environment, the short-term fiscal multiplier will approximate to the case where import leakages are zero. This raises the multiplier substantially, while reducing, pari passu, the ratio of realised budget deficit reduction to the initial ex ante budget cut. (ii) Failure to take account of the budgetary reaction in other economies may lead to an over-estimate of likely budget deficit reductions.

(91) See Price and Chouraqui, op. cit.

(92) There is a circularity here: budget cuts and interest rate reductions are interdependent, so the problem is to get the process underway. Interest rates will, however, fall as a result of the lower demand for money consequent upon the deflationary effect of ex ante budget cuts.

(93) See OECD Economic Outlook No.33. The United States federal budget has been sui generis in moving towards structural deficit since 1982.

temporary. If they do not, recovery may be pre-empted and medium-term structural budget balance be unattainable. Slow growth expectations will be self-fulfilling, as high interest rates are sustained. Concerted short-term monetary and fiscal restriction might then be incompatible with the medium-term objectives of promoting growth and reducing the budget deficit.

Automatic stabilizers may therefore be a mixed blessing. They may be potentially beneficial in the face of demand shocks, and they may provide a more reliable source of fiscal support than 'fine-tuning'. But they may contain structural biases which make for rigidities of response to inflationary supply-side shocks, reducing growth potential, sustaining long-term interest rate pressures and making structural budget deficit problems more intractable. In the process, they may - while supporting current demand - impede the implementation of recovery strategies based on reducing interest rates and inflation expectations. OECD economies have, therefore, been seeking to reshape such stabilizers, through reforms to marginal tax and unemployment benefit rates and revisions to indexation commitments; in the process their impact may be made more consistent with longer-run structural budget balance. At the same time, budget 'consolidation' has been seen to demand that at least part of the 'automatic stabilizer' element in the budget deficit be offset.

On the other hand, with non-accommodating monetary targets (resulting in lower real monetary growth rates) the effects of offsetting such stabilizers in the cause of inflation control may prove deflationary and perverse. Their existence therefore demands a degree of autonomy in the setting of short-term fiscal stance, even if medium-term strategy needs to be based on the inter-dependence of fiscal and monetary policies and (currently) on the gradual reduction in structural budget deficits. Attempts to control monetary growth and reduce interest rates by cutting budget deficits appear, because of the dependence of the government deficit on economic activity, to be open to difficulties which may make the process self-defeating.

The difficulties of avoiding the short-term deflationary impact of attempted budget cuts, while assuring that excess spending is eliminated in the long run, has been accompanied by an increasing recognition of the need to distinguish between structural and cyclical budget deficits. Because continuous future deficits appear to affect present interest rates, these have needed (and still need in some cases) to be reduced. Concentrating budget cuts less on the present and more on following years is seen as allowing the aims of budget consolidation to be achieved without the adverse effects of fiscal deflation on demand. The extent to which short-run cuts in deficits are still needed, in order to instill confidence that budgets are under control, will vary; but in some cases (Canada, for instance, see above, p. 39) controlling medium-term deficits may be seen as allowing

greater scope for additional short-term demand support via overtly temporary budget measures. The proposition that budget cuts may raise activity and ensure recovery is more likely to be validated where future deficit cuts can be traded-off for cuts in current interest rates.

B. Short-run monetary targets and medium-term financial strategy

Although the problems entailed in expanded budget deficits and tight monetary policies are general to OECD economies, the conflicts have been particularly pronounced in the United States. Since fiscal and monetary policies are set quasi-independently, their divergence might be looked on either as an expansionary fiscal stance conflicting with a given monetary constraint, or as a restrictive monetary target competing with a given fiscal stance. Critics of the American situation have based their case on the former interpretation - that fiscal policy should be tightened in order to reduce interest rates and the "international crowding out" stemming from the transmission of high interest rates from the United States to Europe. The proposed readjustment of the policy mix is seen as a matter of meeting pre-set monetary targets by a different mix of interest rates and public sector deficits. Such a strategy would succeed in raising total OECD output if the fall in activity induced by tighter fiscal policies were more than offset by the effects of budget deficit cuts on interest-sensitive expenditures, in the United States and abroad. To the extent that the emphasis has increasingly been placed on cutting future deficits, and hence interest rates, rather than reducing current budgetary support for demand, this would be more likely to be the case.

Alternatively, and not confined to the United States, the monetary-fiscal mix issue may be seen as one of choosing the monetary growth rates most consistent with medium-term financial objectives, given an only marginally controllable fiscal policy course in the short run. Central banks can, in the short term, offset the monetary effects of budget deficits so that monetary targets may, in principle, be set independently of fiscal policy (as appears to be the case in the United States). For an economy on its medium-term growth path this poses few problems; but when the object of monetary targets is to reduce inflationary expectations, via negative real monetary growth, the question arises as to whether monetary restraint might, in the short run, prove too severe in order to achieve the monetary growth objectives (and hence stable prices). The higher the interest rates necessary to square monetary restriction with the fiscal stance, the greater the danger that they may feed - through automatic increases in budget deficits associated with lower economic activity and higher debt servicing costs - into expectations of future monetary accommodation.

It has been argued from this that, in the face of expanding budget deficits, short-term monetary tightness may be self-defeating, since cumulative interest payments and

indebtedness will make longer-run financing of such deficits impossible so that government debt will eventually be monetised(94). Two inferences might, once more, be drawn: either fiscal policy should be tightened or short-term monetary policy eased, the latter prescription being more consistent with medium-term budgetary objectives if financial markets put less weight on an undesirable upward revision of short-run monetary targets than on the prospective long-run benefits of reducing budget deficits. The issues involved here will have greater immediate relevance the more monetarist-rational are financial markets (though "international crowding-out" makes them of wider interest). Essentially, however, they concern the balance between gradualism and flexibility in monetary targetry on the one hand, and consistency and confidence in progress towards longer-run inflation goals on the other. In this respect, monetary targets may not constitute intermediate objectives which can be set independently of other economic factors, including the stance of fiscal policy, in the short or medium-term(95). Conversely, although it could display some degree of independence in the short run, the stance of fiscal policy should help the achievement of monetary targets in the long run.

V. SUMMARY AND CONCLUSIONS

The rationale for medium-term policy-making

Medium-term financial strategy has tended to develop out of the need to ensure longer-run consistency between monetary, fiscal and structural policies. Not only are economic objectives inter-dependent, but policy instruments themselves need to be concerted and co-ordinated. Independent assignment of instruments may be possible in the short run, but over a longer period the scope for persistent divergences between the stance of one instrument and another must be closely constrained so that adverse inflationary, allocational and financial repercussions are prevented. In this respect, medium-term budget and monetary strategy has three origins.

(94) Sargent and Wallace, "Some unpleasant monetarist arithmetic", Federal Reserve Bank of Minneapolis, Quarterly Review, Fall, 1981.

(95) Cf. "Memorandum by the Deutsche Bundesbank (op. cit., p. 13). It is the Bundesbank's conviction that "control of the money supply for the sake of combatting inflation and ensuring steady economic growth can only be successful if the policies and behaviour of public authorities, enterprises and trade unions are guided by the same objectives".

There was, first, a realisation, following the inflationary consequences of the early 1970s reflation, that price stability cannot be sacrificed to the benefit of growth and unemployment goals, and that the monetary accommodation of budget deficits could not ensure that fiscal policy was effective. Given the perceived need to contain inflationary expectations through the control of monetary aggregates, a corollary was seen to be the pursuit of a compatible medium-term budget balance. This brought a re-appraisal of the assignment of instruments to objectives, insofar as the necessity was recognised for fiscal policy stance to be set in concert with anti-inflationary monetary policies; governments could not rely on a long-run positive trade-off between inflation and output.

Secondly, the move towards long-range financial planning has reflected the attempt to stem what is seen as a piecemeal and uncontrolled expansion of the public sector over two decades. The adverse allocational and inflationary effects of this - reflected in the stagnation of private sector output in recent years - have created a general concern that government spending and taxation be brought into better long-run balance with available resources. This has been most marked where (as in the Netherlands, Belgium and Scandinavian countries) public sector expansion has been fastest, where (as in the United Kingdom and Australia) there was a political reversion to greater belief in the efficacy of the market sector, and where (as in the United States and Canada) the degree of interference with private activities has been an issue. Adverse trends in the composition of expenditure - in particular the growth of current transfers and the declining proportion of public investment in total spending - have, however, made concern about public sector imbalances more general; such a concern may be seen, particularly, in the budget consolidation strategies of Germany and Japan.

Thirdly, ensuring that high budget deficits are financed in a non-inflationary way - i.e. without money creation - has entailed increasing public sector borrowing from the non-bank private sector and cumulating debt interest payments. Continuation of such trends is seen as risking upward pressures on interest rates or forced tax increases, which would tend sooner or later to undermine the support given by budget deficits to demand.

This problem, however, has different dimensions and a different degree of immediacy between countries, depending on the extent to which (i) inflation has eroded outstanding government debt and/or such debt has cumulated; (ii) prospective future budget trends are adverse or favourable; and (iii) financial markets translate future deficit trends in terms of likely crowding out and inflation. In those economies where inflation is perceived by markets to be strongly linked to budget deficits and monetary creation, 'inflation first' strategies have emphasised medium-term budget reductions from the point of view of controlling market

expectations, reducing long-run interest rates and eliminating the danger of any future re-imposition of an 'inflation tax. In the United Kingdom and Australia this problem has been seen as one calling for immediate correction, while in the United States the supply-side strategy has concentrated more on the correction of past tax - rather than debt - increases, accepting that future budget deficits must be reduced, but not (in recognition of the difficulties of achieving this) requiring immediate deficit cuts; future budget trends are seen as more important for the creation of business confidence.

Elsewhere, while there has been a general acceptance that the second oil price shock called for fiscal retrenchment so as to relieve the burden on interest rates, such retrenchment has been only indirectly seen in terms of alleviating capital market pressures and inflationary uncertainty. In the Netherlands and Belgium, for example, the fact that public sector borrowing has reached the limits of private savings has meant that short-run corrective action has been necessary to prevent the emergence of upward pressures on interest rates. Also, the link between business confidence and the budget deficit has required that short-term progress be made towards the reduction of this deficit in Germany. But here, as in Japan, Canada, Austria and Switzerland, the need to take action to reduce government indebtedness is, perhaps, expressed more in terms of long-range fiscal prudence and the necessity to reverse the trend to debt accumulation and debt service pressures, rather than in terms of relieving actual crowding-out of private expenditure or reducing inflationary expectations. It is, however, recognised that on present trends the capacity of budget deficits to support demand will diminish gradually, as refinancing problems and cumulating debt service obligations lead to mounting interest rate pressures and/or increased tax rates.

In countries such as Sweden, Denmark and Ireland, where domestic activity has been sustained by government external borrowing, the problem is linked to structural deficits in the current balance of payments; medium-term financial strategy is perceived as a means of preventing, by gradual adjustment, the real income transfers connected with overseas debt servicing from reaching a point where a deflationary domestic expenditure adjustment is ultimately needed.

France has been, in the very recent period, the principal exception to this medium-term concern: with a relatively small government debt, some room was seen, in 1981-82, for expanding the public sector deficit. However, this trend has had to be reversed (the deficit of the central government being limited to three per cent of GDP) because of increased monetary financing (due to the narrowness of the domestic capital market), downward pressures on the exchange rate and larger borrowing abroad (associated with the emergence of a substantial current account deficit) - factors seen as implying a danger of crowding out and/or a worsening of inflationary expectations.

Budgetary norms and monetary targets

The specification of medium-term budgetary norms consistent with a balanced growth of public sector claims on resources again depends on country circumstances, particularly as they relate to the role of the government as investor. Where public investment yields a return sufficient to cover debt interest payments, and where private savings have been high enough to warrant it, budgetary norms have been based on a positive role for the budget deficit in taking up excess domestic private savings. A structural (high employment) deficit may be planned, for example, where outstanding government debt grows in line with potential GDP. Such a positive role for fiscal policy in creating employment would be questioned in countries where government expenditure is seen as consumption and where a longer-run balanced budget (implying a full employment surplus) would appear to be more in line with the perceived self-equilibrating properties of a market economy. However, the majority of OECD economies allow, in their medium-term budget targets, for a structural budget deficit and a positive longer-run accumulation of government debt.

Monetary growth targets will depend partly on the current rate of inflation and monetary creation. Where inflationary expectations have stabilized, monetary objectives are usually based (as in Germany) on an allowance for potential output growth plus "unavoidable inflation". Strategies designed to contain inflation expectations may imply the gradual reduction of monetary growth and this may entail a dominance of monetary over fiscal objectives and a limited role for fiscal policy in demand management. In the United Kingdom, for instance, the fall in the rate of inflation, insofar as this reduces the so-called 'inflation tax' on holders of government securities, is a factor affecting the choice of the budget deficit norm.

Where an exchange rate objective has been chosen in place of a monetary target, this has usually implied taking advantage of linking monetary growth to a dominant trading partner whose rate of inflation is relatively low, so that this may not, in principle, imply a different approach except insofar as the monetary growth target is not chosen domestically.

Policy implementation and the institutional setting

Specifying a 'normal' level of structural budget deficit or rate of public spending growth has not, historically, been a defence against deficits exceeding structurally desirable levels; for most economies, indeed, medium-term budget consolidation is framed in terms of restoring, rather than maintaining, structural budget balance. Operational deficiencies have prevented budgetary norms from being achieved: in particular, the over-estimation of potential GDP growth and the indexation of government wage

and transfer costs to prices have both been responsible for some public sector over-expansion. Such conventions as indexation have been introduced to impart greater consistency to the medium-term evolution of public sector services and their costs; but in practice they tend to make for perverseness and rigidity in responses to inflationary shocks, as they may prevent necessary adjustments in labour and exchange markets. In fact, indexation rules have frequently had to be suppressed for policy to be made more flexible: a demonstration of the difficulty of devising operating rules which allow beneficial automatic responses to every type of economic disturbance.

A degree of flexibility has also been found necessary with respect to monetary targets. These have been based, in general, on empirical evidence of medium-term stability in the relationship between money supply and nominal income; but the need to respond pragmatically to various types of shock and to allow for unforeseeable disturbances has led to the adoption of target ranges for monetary aggregates, and - for the most part - to targets being formulated only for the short-term horizon. Experience with monetary targeting in the United States, the United Kingdom and Canada - in particular the apparent instabilities in the demand for targeted money aggregates due to financial innovations - seems to have confirmed the need to monitor or target several monetary indicators rather than one. The monetary authorities have had, in effect, to seek a balance between maintaining credibility through flexibility, or rigorous consistency which may, at times, involve being locked into inappropriate and unrealistic targets.

Short and medium-term policy consistency

In principle, budget deficits may vary counter-cyclically, owing to the operation of 'automatic stabilizers', without causing monetary and interest rate pressures. The experience since the second oil crisis has, however, shown that such 'stabilizers' may impede beneficial structural adjustments to inflationary supply shocks, especially where they encourage real wage rigidities, thus sustaining expectations of persistent budget deficits and high interest rates. Consistency with monetary targets and budgetary objectives has demanded that 'built-in stabilizers' be at least partially neutralised by discretionary fiscal restraint and at best reformed.

Cutting interest rates can be made more difficult by 'built-in stabilizers'. Such cuts require smaller budget deficits, while reducing deficits also depends crucially on lowering interest rates because of the increased government debt service burden. This circularity may prevent ex ante fiscal restriction from achieving, ex post, sufficient budget deficit reductions to attain medium-term objectives, if the deflationary impact of fiscal restraint increases the 'automatic stabilizer' element of the deficit. Continuous

budget deficits may then help maintain expectations about future upward pressures on interest rates, and these expectations may be self-sustaining as slow growth prospects are fulfilled. In this respect automatic fiscal stabilizers might be viewed as an unwelcome constraint, preventing lower interest rates and reduced inflation expectations from operating effectively. Conversely, this might be seen as an argument for not trying to use fiscal restraint as a means of enforcing monetary tightness and achieving short-term monetary objectives. They may demand, in the latter case, an acknowledgment of some degree of short-run autonomy in budgetary stance, with budgetary decisions - and the fiscal-monetary mix - being related to long-term horizons.

Given that fiscal restraint may have short-term deflationary effects which add a degree of rigidity to budget deficits, but that persistent deficits may be ineffective in permanently sustaining demand, governments have given greater emphasis to the distinction between the structural and cyclical components of these deficits. Reducing budget deficits without adverse deflationary side-effects is seen in the United States, for instance, to entail cutting projected structural deficits, but not (demand-supporting) cyclical deficits. The timing of fiscal cuts is important: too much fiscal restraint in the face of existing monetary tightness may not help to reduce long-run inflationary expectations if the feedback from higher interest rates and lower growth further increases government borrowing. Fiscal and monetary restraint may lead to slow growth and budget deficit expansion, even though, asymmetrically, the long-run ability of fiscal policy to achieve faster economic growth is more problematic. The difference is that long-term interest rates and inflation expectations may be more difficult to reduce via demand management restraint than they are to increase by policies of expansion.

To the extent that the conjunction of fiscal restraint and tight monetary targets may not succeed in reducing longer-run inflationary expectations (if the persistence of high government borrowing is a factor in such expectations), the question arises as to the appropriate short-term degree of monetary restriction necessary to achieve counter-inflationary objectives. If inflation expectations depend more on prospective budget deficits than on short-term monetary targets, these targets might be raised without necessarily prejudicing long-term monetary growth. Given short-term rigidities in fiscal stance, too tight a monetary policy may sustain inflation expectations if it leads to persistent budget deficits. Much depends on whether financial markets put more store on the adverse budget deficit trends in assessing future inflation dangers than the immediate severity of monetary targets.

This is an empirical matter. But the possibility that budget trends may be more important highlights the potential significance of whether monetary targets are set in co-ordination, or in competition, with fiscal policy. The implications of medium-term budgeting for the independence, or interdependence, of fiscal and monetary policies may therefore be summarised as follows. For the medium-term, these policies cannot be considered to constitute separate instruments, though they may - if structural budget norms are properly defined to take up excess private savings - constitute significantly more than one. For the short term, the inflexibility of fiscal policy may imply that the instrument is - to a degree - autonomous so that monetary stance needs to be determined with this inflexibility in mind, in order best to achieve medium-term financial and economic balance.

ANNEX 1

Notes to the Charts

Chart 1 shows the fiscal-monetary policy mix for an aggregate of both the major seven OECD economies and nine smaller countries (Austria, Australia, Belgium, Denmark, Netherlands, Norway, Spain, Sweden and Switzerland). It describes policies in terms of actual and cyclically-corrected budget deficits, real monetary growth and real interest rates. The chart has been constructed to assess the extent to which the 'mix' of policies is mutually accommodating or otherwise. There are four money supply-budget deficit combinations, defined by the quadrants of the chart: (i) upper-right: policies are mutually expansionary and accommodating; (ii) lower-left: re-inforcing restriction; (iii) upper left: budgetary restraint is accompanied by expansionary monetary policies, while (iv) lower-right: budgetary expansion is combined with non-accommodating monetary growth. The interest rate - budget deficit mix is, conversely, designed to illustrate potential crowding-out (upper-right) and potential monetary accommodation (lower right quadrant). For monetary growth (vertical axis) the scale has been set at half that for the budgetary stance. A perfectly accommodating monetary stance would (depending on the demand for money) expand the money supply sufficiently to meet a growth of aggregate demand equal to the budget impulse times the fiscal multiplier. The chosen scale should, therefore, be taken only as an approximation.

Real M2 is nominal money supply for the year (M1 + quasi money from OECD Main Economic Indicators) deflated by the consumer price index. Growth rates are annual averages, not year-end figures. Real interest rates are generally long-term public or semi-public yields deflated by the consumer price index growth rate. (United States, Moody's AAA Corporate bonds; Japan, NTT subscriber bonds; Germany, long-term government bonds; France, public corporations bonds; United Kingdom, 20 year government bonds; Italy, private sector bonds; Canada, Government of Canada bonds 10 years and over; Austria, Belgium, Denmark, Netherlands, Norway, Spain, Sweden and Switzerland, long-term government bonds.) Actual budget balances measure general governments' net financing requirements; cyclically-adjusted balances adjust the actual balance for cyclical influences. (For methodology, see OECD Economic Outlook No.33, July 1983). Aggregate indicators are derived using 1981 GDP/GNP values, expressed in 1981 dollars, as weights.

Chart 2 relates inflation to growth and unemployment performance for a cross-section of OECD economies. The 1981 unemployment rate is the OECD standardized unemployment rate (table R12 OECD Economic Outlook No.32). Consumer price indexes and GDP/GNP annual growth rates have been calculated from national statistics published in OECD Main Economic Indicators.

Chart 3 relates monetary indicators, as described for Chart 1, to economic performance. The real exchange rate is equal to the relative manufacturing unit labour cost (in US dollars) calculated by the OECD Secretariat.

Chart 4 describes the relationship between budgetary stance and real growth and employment performance. The budget indicators are those used in Chart 1 and debt figures refer to central government debt held by the non-bank private sector (See Annex 3). Excluding Denmark, Switzerland and Sweden the growth of government debt appears significantly correlated with real GDP growth rates (correlation = .42); excluding Denmark, Japan and the United Kingdom, however, the correlation is negative (-.35).

Chart 5 describes the correlation between public sector growth, real economic growth and inflation. Government current expenditure on goods and services corresponds to general government final consumption (Table R6 in OECD Economic Outlook No.30). The general government employment/labour force ratio has been calculated from national statistics published in OECD, National Accounts of OECD Countries and OECD, Labour Force Statistics.

Chart 6 describes, for selected OECD countries, changes in the balance between (i) total current and capital spending and (ii) general government final consumption (current expenditure on goods and services) and current transfers. Capital expenditures include grants net of capital taxes; transfers include current grants, subsidies and debt interest. In the lower two charts the change in the share of capital spending may be read as the negative of the change in the share of current in total spending, while the change in the share of transfers may be read as the negative of the change in the share of goods and services in total current spending.

ANNEX 2

General Government Financial Balances and
Public Expenditure Trends

Table A presents data on the development of general government financial balances for 15 OECD countries between 1970 and 1982, with weighted averages for the major seven countries, eight smaller countries and for the fifteen in aggregate.

Tables B1 to B6 illustrate the compositional trends in general government spending for the years 1970-1982, as described in Parts II-B and III-B:

- (1) Table B1 shows the growth of government consumption on goods and services relative to GDP/GNP;
- (2) Table B2 illustrates the diminishing weight of consumption on goods and services - and conversely the increasing weight of transfers, subsidies and debt interest - in government current expenditure. These data are used in chart 6. Table B3 shows the weight of transfers to households (social security) alone in general government current spending.
- (3) Tables B4 and B5 describe the ratio of government final consumption on goods and services to total (government and personal) consumption in both value and volume terms. Divergences between the two trends derive from changes in the relative price of government and private consumption, an increase in the value share relative to the volume one being evidence of an adverse relative price effect.
- (4) Table B6 shows general government debt interest payments as a proportion of total government spending.

For all tables, the source is OECD National Accounts.

Table A. General Government Financial Balances (a)

Surplus or deficit (-) as percentage of nominal GNP/GDP at market prices

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
United States(b)	-1.7	-0.3	0.5	-0.2	-4.2	-2.1	-0.9	0.0	0.6	-1.3	-1.0	-3.8
Japan(b)	1.4	0.4	0.5	0.4	-2.6	-3.8	-3.8	-5.5	-4.8	-4.5	-4.0	-4.1
Germany	-0.1	-0.5	1.2	-1.4	-5.7	-3.4	-2.4	-2.5	-2.7	-3.2	-4.0	-3.9
France	0.7	0.8	0.9	0.6	-2.2	-0.5	-0.8	-1.9	-0.7	0.3	-1.9	-2.6
United Kingdom	1.5	-1.2	-2.7	-3.8	-4.6	-4.9	-3.2	-4.2	-3.2	-3.3	-2.5	-2.0
Italy	-7.1	-9.2	-8.5	-8.1	-11.7	-9.0	-8.0	-9.7	-9.5	-8.0	-11.7	-12.0
Canada	0.1	0.1	1.0	1.9	-2.4	-1.7	-2.6	-3.1	-1.9	-2.1	-1.4	-5.5
Total Major Seven Countries(c)	-0.6	-0.7	-0.1	-0.8	-4.3	-3.0	-2.2	-2.4	-1.8	-2.5	-2.6	-4.1
Australia	2.4	2.2	0.6	2.0	-1.8	-2.0	0.0	-1.9	-1.5	-1.0	-0.1	0.4
Austria	1.5	2.0	1.3	1.3	-2.5	-3.7	-2.4	-2.8	-2.5	-2.0	-1.8	-2.5
Belgium	-3.0	-4.0	-3.5	-2.6	-4.7	-5.4	-5.5	-5.9	-6.9	-9.3	-13.1	-12.2
Denmark	3.7	4.6	5.6	1.5	-1.2	-0.2	-0.5	-0.2	-1.6	-3.2	-7.1	-9.1
Netherlands	-0.5	0	1.1	-0.1	-2.6	-2.2	-1.8	-2.7	-3.7	-3.9	-4.9	-5.6
Norway	4.3	4.5	5.7	4.7	3.8	3.1	1.6	0.6	1.9	5.7	4.8	4.4
Spain	-0.6	0.3	1.1	0.2	0.0	-0.3	-0.6	-1.8	-1.7	-2.1	-3.3	5.9
Sweden	5.2	4.4	4.1	2.0	2.8	4.5	1.7	-0.5	-3.0	-4.0	-5.3	-6.9
Total, Smaller Countries(c)	1.1	1.2	1.5	1.0	-0.9	-0.9	-0.9	-2.1	-2.6	-2.8	-3.9	-4.9
Total of above OECD countries(c)	-0.5	-0.4	0.1	-0.5	-3.8	-2.7	-2.1	-2.3	-1.9	-2.5	-2.8	-4.2

(a) On an SNA basis, except for the United States, United Kingdom and Italy, which are on a national income account basis. 'Financial balances' are equivalent to 'net lending', a negative sign indicating net government borrowing. The general government borrowing requirement is equal to the financial balance plus financial transactions and accruals adjustments.

(b) As a percentage of GNP.

(c) 1981 GDP weighted.

Source: National Accounts of OECD Countries, national sources (see note (a) above) and OECD Secretariat estimates.

Table B1. Share of General Government Current Expenditures
on Goods and Services in Nominal GDP/GNP (a)

	Per cent												
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
UNITED STATES	22.0	21.7	21.3	20.3	21.1	21.8	21.1	20.5	20.0	19.6	20.4	20.3	21.2
JAPAN	7.4	7.9	8.1	8.2	8.9	10.1	9.9	9.9	9.7	9.8	10.0	10.2	10.3
GERMANY	15.8	16.9	17.1	17.3	19.3	20.5	19.8	19.6	19.6	19.6	20.1	20.7	20.6
FRANCE	13.4	13.4	13.2	13.2	13.6	14.4	14.6	14.7	15.0	14.9	15.2	15.8	16.1
UNITED KINGDOM	17.6	17.9	18.4	18.3	20.1	21.9	21.7	20.3	19.9	19.7	21.4	22.0	22.1
ITALY	13.8	15.5	16.1	15.5	15.1	15.4	15.4	15.8	16.4	16.7	16.9	18.6	19.0
CANADA	19.4	19.4	19.3	18.6	18.9	20.2	20.1	20.8	20.7	20.0	20.0	20.1	21.7
SPAIN	8.5	8.6	8.6	8.6	8.8	9.2	9.8	10.0	10.4	10.9	11.6	11.7	12.2
AUSTRALIA	12.2	12.5	12.6	13.2	13.9	15.4	15.9	16.2	16.7	16.0	16.7	17.1	17.3
NETHERLANDS	15.6	16.0	15.9	15.6	16.3	17.4	17.2	17.4	17.7	18.1	18.1	17.8	17.7
SWEDEN	21.7	22.7	23.0	23.0	23.5	24.1	25.2	28.0	28.3	28.7	29.2	29.8	29.8
BELGIUM	13.6	14.3	14.7	14.8	14.9	16.7	16.7	17.2	17.9	18.1	18.5	19.5	19.3
AUSTRIA	14.7	14.8	14.7	15.3	15.9	17.2	17.6	17.4	18.3	18.1	17.8	18.4	18.5
DENMARK	20.7	21.3	21.3	21.3	23.4	24.6	24.1	24.0	24.5	25.1	26.8	27.6	27.8
NORWAY	16.3	17.9	18.2	18.2	18.3	19.3	20.0	20.2	20.4	19.5	18.8	18.9	19.4
TOTAL, MAJOR SEVEN COUNTRIES	17.1	17.3	17.2	16.9	17.6	18.6	18.1	17.8	17.5	17.3	18.0	18.2	18.7
TOTAL OF ABOVE COUNTRIES	16.8	17.0	17.0	16.6	17.4	18.3	18.0	17.8	17.6	17.4	18.1	18.3	18.9

(a) Government final consumption expenditure as a ratio of GDP/GNP at market prices.

Table B2. Share of Current Expenditures on Goods and Services
in Total General Government Current Spending (a)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
UNITED STATES	70.2	68.6	68.2	66.6	66.1	63.5	63.0	63.2	63.4	63.2	61.8	60.6	59.7
JAPAN	52.5	53.3	52.3	52.2	49.3	48.2	45.7	43.9	41.9	40.6	39.4	38.2	36.6
GERMANY	48.3	47.8	45.7	49.1	49.7	47.2	46.5	45.8	46.1	45.4	47.0	46.7	45.7
FRANCE	38.7	37.2	38.4	37.9	37.2	36.7	36.8	36.1	35.6	35.9	35.2	34.3	33.6
UNITED KINGDOM	54.8	55.1	55.2	55.0	52.9	53.3	54.4	53.0	52.0	51.3	52.4	51.3	50.7
ITALY	43.5	44.2	43.6	43.0	42.5	40.3	39.3	40.6	38.9	40.5	40.5	39.6	38.9
CANADA	60.3	59.3	57.6	57.4	55.9	54.7	55.3	55.4	53.8	53.3	52.0	50.9	49.7
SPAIN	45.7	44.0	43.6	43.5	44.5	43.6	43.2	42.3	39.8	39.2	39.2	39.1	38.3
AUSTRALIA	56.2	56.9	56.3	57.4	57.8	57.1	56.7	55.4	55.4	54.4	55.5	56.3	54.8
NETHERLANDS	41.4	40.4	39.2	37.5	37.1	36.4	35.3	36.1	35.6	35.3	34.5	33.4	32.3
SWEDEN	56.2	55.4	54.1	55.3	52.2	52.0	51.0	50.7	50.0	49.3	49.3	47.4	45.4
BELGIUM	41.4	42.4	42.5	41.4	41.3	40.8	40.2	39.8	39.9	39.2	38.6	36.9	35.5
AUSTRIA	44.4	44.3	44.5	45.3	45.5	44.7	43.9	43.2	42.2	42.0	41.7	41.8	42.0
DENMARK	55.5	57.0	56.8	56.5	56.9	56.6	56.0	53.9	53.2	51.9	52.0	51.0	50.5
NORWAY	46.4	46.9	45.9	45.7	45.3	45.2	45.6	44.6	43.2	41.9	41.8	42.7	41.8
TOTAL, MAJOR SEVEN COUNTRIES	58.9	58.6	57.9	57.1	56.2	54.5	53.6	53.2	52.7	52.4	51.6	50.6	49.6
TOTAL OF ABOVE COUNTRIES	57.7	57.4	56.7	55.9	55.1	53.5	52.7	52.3	51.7	51.4	50.7	49.7	48.7

(a) Total current spending comprises expenditure on current goods and services (final consumption), interest on the public debt, subsidies, and social security and other transfers.

Table B3. Share of Social Security Transfers in Total General Government Current Spending(a)

	Per cent													
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	
UNITED STATES	25.0	27.1	27.5	26.7	30.2	32.0	33.0	32.5	32.1	32.5	33.4	33.4	33.9	
JAPAN	33.1	32.5	33.3	33.0	34.2	37.2	39.4	39.9	40.9	41.2	40.3	40.6	41.4	
GERMANY	40.0	38.9	39.2	39.2	38.5	41.2	41.4	41.0	40.2	39.6	39.2	39.4	39.7	
FRANCE	48.4	49.2	49.8	49.8	50.0	51.2	51.1	51.6	52.2	53.9	53.0	52.9	53.4	
UNITED KINGDOM	26.4	25.2	27.6	26.4	25.1	24.8	26.0	27.4	28.2	28.1	27.6	29.3	30.8	
ITALY	43.9	43.2	43.1	43.1	42.6	40.8	40.4	39.2	39.2	38.0	37.8	38.1	37.2	
SPAIN	40.5	42.7	43.2	43.7	43.4	43.8	44.0	43.8	45.8	47.1	46.7	48.5	48.1	
AUSTRALIA	26.2	24.9	26.4	27.7	28.1	30.9	32.1	32.4	31.3	31.3	30.1	29.2	30.0	
NETHERLANDS	44.1	44.0	46.0	46.6	47.0	48.0	48.4	39.2	39.8	40.0	40.5	40.2	41.1	
SWEDEN	28.9	30.0	30.5	30.2	32.9	31.7	31.6	31.5	32.0	31.3	31.1	30.6	29.4	
BELGIUM	42.6	41.9	42.7	43.1	43.8	45.6	46.3	46.1	45.4	45.1	44.0	43.2	42.3	
AUSTRIA	34.9	35.1	34.9	33.9	32.9	31.9	31.7	31.6	30.8	31.1	31.3	31.4	30.9	
DENMARK	32.3	30.2	30.3	29.4	29.3	31.7	31.3	31.8	32.4	31.8	32.2	32.3	33.4	
NORWAY	33.0	33.8	34.7	34.9	33.3	32.4	31.7	31.2	31.7	33.3	32.5	32.7	34.6	
TOTAL SIX MAJOR COUNTRIES	31.5	32.3	32.6	33.1	34.0	35.0	36.6	36.5	36.5	36.8	36.9	37.2	37.6	
TOTAL OF ABOVE COUNTRIES	32.0	32.6	33.3	33.6	34.4	35.2	36.9	36.6	36.6	36.9	37.0	37.2	37.6	

(a) See note (a) to Table B2.

Table B4. Share of General Government Current Expenditures on Goods and Services in the Value of Total Consumption (a)

	Per cent												
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
UNITED STATES	26.1	25.9	25.7	25.0	25.4	25.7	24.9	24.6	24.3	23.9	24.4	24.5	24.7
JAPAN	12.3	12.5	13.0	13.2	14.0	15.0	14.7	14.8	14.7	14.6	14.8	15.1	15.0
GERMANY	22.5	23.7	24.0	24.9	26.5	26.7	26.3	26.0	25.8	26.0	26.3	26.8	26.9
FRANCE	16.3	16.2	17.2	16.0	16.3	16.9	19.0	19.2	19.5	19.4	19.4	19.6	19.8
UNITED KINGDOM	22.1	22.7	22.5	22.5	24.0	26.2	26.3	25.4	25.0	24.7	26.3	26.6	26.6
ITALY	16.0	19.9	20.4	19.9	19.4	19.4	19.8	20.4	21.1	21.6	21.7	23.1	23.6
CANADA	24.6	24.2	24.6	24.4	25.0	25.6	25.7	26.2	26.1	25.8	25.8	25.9	26.9
SPAIN	11.1	11.3	11.2	11.2	11.4	11.9	12.4	12.6	13.1	13.6	14.1	14.4	14.8
AUSTRALIA	16.7	17.3	17.4	16.4	19.2	20.5	21.0	21.1	21.5	20.9	21.5	22.2	22.1
NETHERLANDS	21.2	21.4	21.9	21.7	22.4	22.9	22.7	22.6	22.7	22.9	22.8	22.8	22.8
SWEDEN	29.0	30.0	30.2	30.4	30.6	31.7	32.2	34.3	34.8	35.5	36.3	36.4	36.2
BELGIUM	18.0	19.2	19.7	19.6	20.0	21.5	21.4	21.7	22.4	22.4	22.6	22.9	22.8
AUSTRIA	21.2	21.2	21.2	21.9	22.3	23.5	23.8	23.3	24.7	24.5	24.4	24.6	24.8
DENMARK	20.5	27.6	28.5	25.1	30.1	30.7	29.9	29.7	30.5	30.8	32.3	33.3	34.1
NORWAY	25.9	25.0	25.4	25.9	26.4	27.0	27.6	27.1	28.2	27.9	28.4	28.6	28.7
TOTAL, MAJOR SEVEN COUNTRIES	21.8	22.0	22.0	21.8	22.4	23.0	22.6	22.5	22.3	22.1	22.5	22.8	23.0
TOTAL OF ABOVE COUNTRIES	21.5	21.8	21.8	21.7	22.3	22.9	22.6	22.5	22.4	22.2	22.7	22.9	23.1

(a) Government final consumption expenditure as a ratio of total (private and government) final consumption expenditure at current prices.

Table B5. Share of General Government Current Expenditures on Goods and Services in the volume of Total Consumption(a)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
UNITED STATES	27.2	25.5	25.7	24.8	25.3	25.3	24.3	23.7	23.3	23.1	23.4	23.3	23.3
JAPAN	15.9	13.0	14.5	14.0	14.5	14.8	14.9	14.9	14.9	14.7	14.9	15.5	15.4
GERMANY	22.7	22.9	23.0	23.5	24.2	24.5	24.2	23.7	25.5	25.6	25.8	26.4	26.9
FRANCE	18.3	17.9	17.4	17.0	16.8	17.0	17.0	16.8	16.8	16.6	16.6	16.5	16.5
UNITED KINGDOM	24.4	24.8	24.5	24.4	25.1	26.2	26.4	26.2	25.6	25.0	25.4	25.3	25.5
ITALY	18.0	18.4	18.7	18.2	18.2	18.9	19.6	19.7	19.6	19.1	18.7	18.8	19.1
CANADA	25.5	24.8	24.0	23.7	23.5	23.2	22.4	22.4	22.3	22.1	21.7	21.6	22.1
SPAIN	11.1	11.1	10.0	10.7	11.0	11.3	11.3	11.5	11.9	12.2	12.5	12.9	13.2
AUSTRALIA	17.1	17.6	17.4	17.5	17.7	20.4	21.2	21.0	21.2	21.0	21.3	21.6	21.0
NETHERLANDS	23.7	23.6	23.5	23.0	22.2	22.9	22.0	22.4	22.5	22.5	22.7	23.4	23.7
SWEDEN	31.1	31.7	31.5	31.7	31.3	31.7	31.6	32.5	33.3	33.7	34.2	34.8	35.3
BELGIUM	20.4	21.1	21.0	20.6	20.7	21.5	21.2	21.5	22.0	21.7	21.7	22.2	22.3
AUSTRIA	24.5	24.0	23.6	23.2	23.7	23.6	23.6	23.4	24.4	24.2	24.2	24.5	24.5
DENMARK	26.1	27.3	30.1	29.0	31.0	30.7	29.8	30.0	31.2	32.1	33.9	34.8	35.0
NORWAY	25.7	25.0	26.2	26.7	26.7	27.0	27.2	26.9	25.2	28.3	28.8	29.5	29.5
TOTAL, MAJOR SEVEN COUNTRIES	23.2	22.8	22.3	21.9	22.1	22.3	21.5	21.5	21.5	21.2	21.4	21.5	21.6
TOTAL OF ABOVE COUNTRIES	23.0	22.7	22.2	21.8	22.0	22.3	21.9	21.6	21.6	21.4	21.6	21.7	21.8

(a) Government final consumption expenditure at constant prices as a ratio of total final consumption at constant prices.

Table B6. Share of General Government Debt Interest
Payments in Total Government Spending

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
UNITED STATES	5.9	3.6	3.3	3.2	3.5	3.9	3.8	4.0	3.8	4.2	5.3	5.8
JAPAN	4.5	4.5	5.0	5.3	5.3	7.2	8.7	9.3	11.1	12.6	13.6	14.8
GERMANY	3.0	2.9	3.1	3.2	3.2	3.6	4.0	3.9	4.1	4.5	5.2	6.1
FRANCE	3.3	3.0	2.6	2.6	3.3	3.1	3.3	3.4	3.7	3.8	4.7	4.5
UNITED KINGDOM	12.3	11.4	10.8	11.2	10.1	11.0	11.5	11.4	12.0	12.3	12.3	12.2
ITALY	5.4	5.6	5.9	6.7	7.9	10.4	11.7	14.0	14.1	15.0	15.5	17.2
CANADA	11.1	11.7	11.9	10.9	10.7	11.7	11.9	12.9	14.1	14.1	15.6	16.6
SPAIN	5.3	2.9	2.5	3.2	2.5	2.2	2.2	2.1	2.2	2.6	2.5	2.9
AUSTRALIA	11.6	11.2	10.3	9.9	9.0	7.9	8.1	9.6	10.3	10.4	10.4	11.1
NETHERLANDS	7.9	7.4	6.3	6.7	6.9	6.3	5.9	6.3	6.3	7.1	8.1	8.4
SWEDEN	4.9	4.9	4.5	4.5	4.6	4.7	4.6	4.7	5.3	7.0	9.1	11.3
BELGIUM	10.2	9.7	9.5	9.3	9.6	8.9	9.5	10.1	11.0	12.8	15.1	17.5
AUSTRIA	3.3	3.1	3.0	3.0	3.4	4.2	4.6	5.1	5.4	5.7	6.2	7.2
DENMARK	4.5	3.3	3.0	2.7	2.5	2.9	3.8	4.0	6.0	6.3	7.9	8.4
NORWAY	4.9	4.8	4.9	5.0	5.2	5.7	6.3	7.0	8.0	8.7	8.6	8.0
TOTAL, MAJOR SEVEN COUNTRIES	4.9	4.7	4.6	5.0	4.9	5.7	6.1	6.4	6.7	7.3	8.2	8.8
TOTAL OF ABOVE COUNTRIES	5.1	4.9	4.8	5.1	5.0	5.6	6.0	6.4	6.7	7.3	8.2	8.9

ANNEX 3

Central Government and Public Sector Debt

This annex presents the data on central government debt and interest payments in OECD countries underlying Table 3, together with debt figures for the public sector where these are available(1). They are not fully comparable on an international basis; they are, however, consistent for individual countries over the period analysed (1970-1982), so that the trends in the different debt indicators can be compared.

A. Coverage

(i) The information given in the text relates to central government debt held by the private sector. However, local and state governments may be actively involved in financial markets and though private investors may distinguish between local and central government debt in their portfolios, such borrowing claims may add to credit market pressures. Both central government and public sector debt-GDP ratios are therefore presented, for comparison, below. In most cases the 'public sector' is equivalent to 'general government' debt (central government plus local authorities); in some countries, however, the public sector also embraces public corporations(2). Furthermore, government guarantees attached to borrowings by other economic agents are not considered to be government debt, although this type of 'off-budget' liability may not be distinguishable, in principle, from direct government obligations. Finally, wherever possible, debt monetized by the central bank or held by the public sector has been excluded.

(ii) Government debt is measured as gross liabilities, in preference to a net concept (liabilities less assets). It is, therefore, an indicator of total government borrowing pressures on credit markets. Governments may, however, be important financial intermediaries; this and the composition of the debt (short versus long-term) helps to determine total interest rate pressures in the economy.

(1) The data sources are national statistics; details may be obtained, upon request, from the OECD Secretariat.

(2) In the case of Germany, Italy, Canada, Australia, Sweden, and Switzerland public enterprise debt is excluded from public sector debt, which is therefore equivalent to general government (central plus local authorities) debt. The Japanese, United Kingdom and Belgian public sector debt figures include public corporation borrowing.

B. Trends in government debt

Debt-GDP ratios: Table C1 expresses private sector holdings of government debt, as at the end of each financial year, as ratios of nominal GDP/GNP(3).

A noticeable feature is the widespread fall in debt-GDP ratios up to the mid-seventies, followed by increases (sometimes very rapid) thereafter; Germany France, United Kingdom, Canada, Belgium, Denmark, Finland, Ireland, Netherlands, New Zealand, Sweden, Switzerland and Turkey belong to this set of countries. Japan, Italy, Austria and Norway, who experienced a somewhat erratic ratio in the early 'seventies, also saw their debt ratio increase steadily from 1975. In contrast, the debt-GDP ratio in Australia and Portugal fell continuously until 1979, while that of the United States showed no significant trend during the decade. With few exceptions, therefore, OECD countries experienced a significant deterioration in their central government debt-GDP ratio in the second half of the last decade, a trend paralleled by public sector debt in Canada, Belgium and Switzerland until 1978. In the United Kingdom the total public sector debt ratio fell almost continuously throughout the decade while the central government ratio rose significantly between 1976 and 1979.

Public debt in private portfolios: In Table C2 government debt held by the private sector, both total (A) and non-bank (B), has been related to the financial wealth of that sector(4). Measures of wealth are not internationally comparable; the data do, however, illustrate the quite large differences both in the proportions of household wealth held as government debt and in the reliance of governments on bank lending (seen in the difference between the ratios in (A) and (B)). The proportion of government debt in total financial wealth may, in principle, be stable even where the debt/GDP ratio is rising. However, the two sets of indicators seem

-
- (3) Financial years are defined in the notes to table 3. The private sector incorporates commercial banks; central bank holdings of government debt are excluded.
- (4) The non-bank private sector embraces households, non-bank financial institutions (pension funds, insurance companies, money market funds etc.) and non-financial private enterprises. Private financial wealth refers to all financial assets - money, bonds and stocks - owned by the non-bank sector. It excludes the net financial wealth of the banking system (except in the case of Australia and Germany, which relates to total private sector financial assets). Both parts (A) and (B) of table C2 use the same non-bank financial wealth indicator in the denominator. Canadian and Australian data include holdings of physical capital.

generally to have moved in parallel. In the United States the debt/wealth indicator was, like the debt/GDP ratio, fairly stable up to 1981, when it began to rise. Present policies imply a substantial further increase between 1982 and 1988. Federal government claims on gross savings, as implied by the budget deficits projected under unchanged policies in the 1984 Budget, are estimated to reach a sustained level of 40 per cent in the 1983 - 1986 period. This would mean an increase in the government debt/GDP ratio of about 11 percentage points (see Special Analyses, Budget of the United States Government Fiscal Year 1984, p. E-7) and an approximate doubling of the debt/wealth ratio in Table C2 from its level of 4 1/2 per cent in 1982.

Overseas borrowing: Governmental reliance on external budget deficit financing was greater at the end of the decade than at the beginning (See Table C3), about half of OECD countries experienced an increase in their external debt-GDP ratio, especially as a result of accumulating oil deficits from mid-decade. Although, external debt financing remains relatively small in the majority of countries it has reached significant levels in Austria, Denmark, Ireland, New Zealand, Norway, Portugal and Sweden.

Debt interest payments: As a result of increasing public indebtedness and higher interest rates, the costs of servicing the public debt increased significantly (Table C4). Between 1971 and 1982 total public debt interest payments as a proportion of GDP often more than doubled, Japan, Denmark, Italy, Norway, Sweden, Germany, Belgium, Ireland, Canada, Switzerland, United States being the worst affected. Paralleling this general trend in higher interest charges and the greater use of external budget financing, the cost of the external debt servicing also rose very quickly in many countries (Table C5).

Table C1. Government Debt Held by the Private Sector

		Financial year end(a); per cent of GDP/GNP												
		1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
United States	CG	18.0	16.6	14.8	13.6	12.4	13.9	16.3	15.8	14.5	14.1	15.0	15.1	17.3
	PS	..	..	..	..	..	..	..	..	..	..	..	..	..
Japan	CG	..	9.6	10.5	13.0	12.0	11.5	13.4	15.7	19.0	22.8	25.5	27.3	31.5
	PS	..	..	..	..	..	..	..	..	31.7	36.3	39.4	41.4	46.1
Germany	CG	7.5	7.0	6.9	6.4	7.5	10.8	11.5	12.6	13.9	14.6	13.9	14.6	..
	PS	17.6	18.1	18.6	18.1	19.6	24.5	26.0	27.0	28.4	29.3	29.3	31.5	..
France	CG	10.5	9.3	7.2	6.4	6.3	7.8	7.3	7.4	8.1	8.5	8.8	10.7	..
United Kingdom	CG	..	52.9	52.2	46.7	44.4	42.9	42.6	43.9	43.4	44.5	40.7	42.5	42.6
	PS	..	71.2	68.8	62.0	59.5	53.8	54.3	53.9	52.8	53.0	49.1	50.5	50.9
Italy	PS	32.8	40.1	43.0	42.4	38.1	40.9	37.6	43.6	50.0	52.6	49.9	51.3	56.7
Canada	CG	..	41.5	41.1	39.1	35.1	33.4	33.7	33.6	36.3	37.3	36.6	37.8	38.4
	PS	..	60.0	59.2	54.9	53.3	52.2	52.3	52.3	57.7	58.8	..	..	..
Australia	PS	..	24.2	24.7	23.5	19.6	19.6	18.8	17.4	17.4	17.0	16.0	15.6	13.9
Austria	CG	9.1	8.3	8.3	8.7	7.8	10.5	13.7	14.6	16.7	18.3	19.0	19.1	20.3
Belgium	CG	44.1	44.0	44.2	42.3	39.0	40.0	40.0	43.0	44.6	47.7	50.7	..	..
	PS	73.3	75.0	76.4	72.8	69.1	71.1	69.9	73.0	75.4	79.2	82.4	..	..
Denmark	CG	..	2.6	2.5	1.7	1.3	.8	3.2	6.8	14.9	18.9	24.9	33.6	44.5
Finland	CG	..	..	..	1.5	.8	1.1	1.2	1.6	2.5	2.9	3.0	3.6	4.5
Ireland	CG	..	47.6	43.3	40.4	38.2	44.5	44.0	47.2	52.5	52.3	51.2	48.4	..
Netherlands	CG	..	..	24.9	23.0	21.7	22.3	22.9	22.4	24.4	26.7	29.6	33.8	..
	PS	..	..	49.1	45.5	43.5	43.5	42.2	39.7	40.9	42.7	46.0	..	..
New Zealand	CG	25.8	23.0	19.9	20.5	17.4	14.9	16.5	13.0	17.6	18.9	18.9	23.3	21.8
Norway	CG	6.4	6.9	6.9	7.3	7.3	5.4	5.5	6.0	7.7	10.2	11.8	11.3	..
Portugal	CG	..	..	..	13.4	12.0	12.7	11.8	7.7	7.5	6.5	22.5	14.5	..
Spain	CG	11.4	12.1	11.7	9.8	8.4	7.8	8.0	6.7	7.4	7.7	7.7	..	..
Sweden	CG	13.8	13.0	11.9	13.5	12.2	13.3	11.7	11.7	16.4	18.1	20.9	19.9	..
	PS	25.6	27.6	24.1	24.6	20.7	22.6	20.7	21.3	25.3	26.4	28.9	27.6	..
Switzerland	CG	7.0	6.7	6.5	6.3	7.1	9.0	11.4	13.3	13.5	14.1	14.4	..	..
	PS	36.8	36.4	35.9	35.7	36.9	41.9	45.7	47.2	46.4	45.5	44.3	..	..
Turkey	CG	11.9	10.9	9.9	8.6	6.6	9.0	10.5	10.1	9.2	8.8	5.5	7.7	..

Key: CG = central government; PS = public sector; .. = not available.

(a) For definition of financial year see note (a) to Table 3.

Table C2. Proportion of Private Sector Financial Assets
held as Government Debt

(End of fiscal year(a); per cent of private sector financial wealth)

		1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
A. Total Private Sector Holdings of Government Debt(b)													
United States	CG	5.1	4.5	4.4	4.2	4.7	5.6	5.5	5.1	4.9	5.0	5.2	5.8
Japan	CG	12.3	12.1	13.9	13.5	13.2	14.1	15.8	18.1	20.4	21.7	21.5	24.1
	PS	..	..	..	..	..	..	..	30.2	32.6	33.5	32.6	35.2
Germany	CG	3.0	2.8	2.7	3.0	4.1	4.3	4.5	4.8	5.0	4.7	4.7	..
	PS	7.8	7.7	7.5	7.7	9.2	9.6	9.7	9.8	10.0	9.9	10.1	..
United Kingdom	PS	60.4	57.2	51.4	50.0	48.3	52.3	53.0	53.8	51.9	51.3	49.8	46.8
Italy	PS	26.1	25.4	25.7	26.8	27.7	27.1	32.8	33.1	33.6	27.6	29.7	..
Canada	CG	13.7	13.7	13.1	11.6	11.0	10.8	10.8	11.5	11.4	11.1	12.7	..
	PS	19.8	19.6	18.4	17.7	17.2	16.8	16.9	18.2	17.9	..	..	..
Australia(b)	PS	21.8	22.2	21.7	21.9	26.3	24.3	24.4	26.9	25.4	..	..	..
Belgium	CG	23.7	23.5	23.2	22.6	22.2	22.8	23.7	24.1	25.2	26.8	..	..
	PS	40.3	40.5	39.9	40.0	39.6	39.9	40.3	40.7	41.9	43.5	..	..
Sweden	CG	6.6	6.0	6.6	5.9	6.6	5.9	5.8	8.0	8.7	10.3	9.0	..
	PS	14.1	12.1	12.1	10.0	11.3	10.4	10.4	12.3	12.8	14.2	12.5	..
B. Non-bank Private Sector Holdings of Government Debt													
United States	CG	3.3	2.9	2.9	2.9	3.2	3.6	3.7	3.5	3.5	3.6	3.8	4.5
Japan	CG	2.8	2.8	3.0	2.8	3.0	3.0	3.2	3.8	4.5	5.2	5.7	6.2
	PS	..	..	..	..	..	..	..	6.3	7.1	7.6	8.1	8.5
United Kingdom	PS	36.2	35.1	30.5	28.1	30.0	31.3	34.6	36.1	36.2	34.3	34.6	31.3
Italy	PS	13.6	13.1	12.3	12.1	12.7	13.5	15.8	16.6	18.2	15.9	19.1	..
Belgium	CG	11.9	11.6	11.1	11.0	11.2	11.4	11.8	12.3	12.6	12.8	..	..
	PS	20.6	20.5	19.5	19.4	19.2	18.9	19.0	19.4	19.6	19.4	..	..
Sweden	CG	4.0	3.1	3.3	3.2	3.3	3.5	2.6	4.3	5.0	5.3	2.6	..
	PS	8.5	6.4	6.3	5.5	6.1	6.4	5.7	7.4	7.9	8.1	5.1	..

Key: CG = central government debt; PS = public sector debt; .. = not available.

(a) For definitions of financial year see note (a) to Table 3.

(b) Including commercial banks; excluding central bank holdings.

Table C3. Government Debt Held Overseas

		Financial year end(a); per cent of GDP/GNP												
		1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
United States	CG	1.4	3.1	4.4	4.7	4.1	4.5	4.3	5.1	5.8	5.3	4.9	4.7	4.8
Germany	CG	.2	.2	.1	*	.1	.1	*	.1	*	*	1.5	2.9	..
	PS	.2	.2	.1	*	.1	.1	.1	.1	*	.1	1.6	3.1	..
France	CG	1.1	.9	.8	.7	.6	.4	.3	.3	.4	.4	.5	.5	..
United Kingdom	CG	..	13.0	11.3	10.2	9.2	8.8	7.7	7.4	7.1	5.5	5.2	5.2	4.8
	PS	..	13.5	12.0	11.2	10.6	10.7	10.1	10.7	10.5	8.4	7.4	7.0	6.6
Italy	PS	.7	.7	.6	.6	.5	.5	.4	.3	.4	.6	.7	1.2	1.8
Canada	CG	..	..	.3	.3	.2	.1	.1	.1	.5	3.0	1.7	1.5	1.3
Australia	PS	..	4.6	3.8	3.0	2.0	1.9	1.8	2.3	4.0	5.1	4.7	3.6	3.6
Austria	CG	3.6	2.9	2.2	1.7	2.2	4.9	4.9	6.0	7.2	7.0	8.0	9.0	9.9
Belgium	CG	3.4	1.8	1.3	1.3	1.0	.6	.9	.8	2.1	2.7	5.5	..	..
	PS	4.2	2.5	1.9	2.3	1.9	1.6	1.8	1.6	2.9	3.7	6.8	..	..
Denmark	CG	..	3.0	3.9	3.9	3.7	3.6	4.6	7.4	9.4	10.3	12.1	14.0	17.0
Finland	CG	3.4	3.1	2.6	2.0	1.3	1.6	2.0	2.9	5.3	5.5	5.6	6.3	7.8
Ireland	CG	..	5.3	5.4	5.3	6.0	12.5	22.9	19.0	16.9	21.1	25.9	37.1	..
Netherlands	CG	..	..	*	*	*	*	0.0	0.0	0.0	0.0	0.0	0.0	..
New Zealand	CG	10.9	10.4	9.5	7.2	5.1	8.6	12.7	13.2	16.1	16.6	17.0	17.6	19.2
Norway	CG	2.4	1.9	1.6	1.1	.8	3.6	5.6	8.3	12.8	13.2	10.2	7.7	..
Portugal	CG	..	..	..	5.0	4.0	4.9	5.5	5.2	8.6	9.2	9.7	11.4	..
Spain	CG	1.1	1.0	.7	.7	.6	.6	1.0	2.2	1.3	1.1	1.0	..	..
Sweden	CG	*	*	*	*	*	.1	.1	2.5	2.6	4.4	7.9	10.4	..
	PS	*	*	*	*	*	.2	.4	2.8	3.0	4.8	8.3	10.9	..
Turkey	CG	2.4	2.0	1.6	1.3	1.0	.8	.7	.6	.5	.4	..	..	..

Key: CG = central government; PS = public sector;

* = less than .1 per cent; .. = not available.

(a) See note (a) to Table 3.

Table C4. Interest Payments on Government Debt

		Financial year(a); per cent of GDP/GNP												
		1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
United States	CG	1.6	1.6	1.5	1.5	1.6	1.7	1.7	1.8	1.9	2.0	2.3	2.7	3.2
Japan	CG	.4	.4	.5	.6	.6	.7	1.1	1.2	1.6	2.0	2.3	2.6	..
Germany	CG	.4	.4	.4	.4	.5	.5	.6	.8	.8	.8	1.0	..	..
	PS	1.0	1.0	1.0	1.1	1.2	1.4	1.6	1.7	1.7	1.7	1.9	..	..
France	CG	.7	.6	.4	.4	.4	.7	.7	.7	.8	.9	.9	1.4	..
	PS	1.1	1.0	.9	.8	.9	1.3	1.2	1.4	1.4	1.5	1.7	2.1	..
United Kingdom	CG	..	2.5	2.4	2.5	2.4	2.7	2.7	3.1	3.2	3.5	3.8	3.9	4.4
	PS	..	4.5	4.3	4.3	4.5	4.9	5.0	5.4	5.2	5.3	5.6	5.8	6.1
Italy	PS	1.8	2.0	2.3	2.5	3.1	4.0	4.5	4.9	5.9	5.8	6.3	7.2	..
Canada	CG	..	2.2	2.2	2.1	2.0	2.1	2.3	2.4	2.6	3.0	3.2	3.5	4.5
	PS	..	3.7	3.7	3.7	3.7	3.7	4.0	4.3	4.6	5.1	5.2	5.5	6.4
Australia	CG	..	..	..	..	..	..	..	..	1.9	2.0	2.1	2.1	2.1
	PS	..	2.5	2.5	2.4	2.1	2.1	2.1	2.5	2.8	3.0	3.1	3.2	3.3
Austria	CG	.7	.7	.6	.6	.6	.7	1.1	1.3	1.5	1.6	1.7	1.9	2.4
Belgium	CG	2.8	2.6	2.6	2.6	2.7	2.7	2.8	3.1	3.5	4.0	4.9	6.6	..
	PS	3.3	3.3	3.3	3.3	3.5	3.6	3.7	4.1	4.5	5.1	6.1	8.0	..
Denmark	CG	..	1.3	1.4	1.3	1.3	1.2	1.2	1.3	2.2	3.5	3.9	5.2	..
Finland	CG	.6	.5	.4	.4	.3	.2	.3	.4	.4	.6	.6	.7	1.0
Ireland	CG	..	3.7	3.5	3.4	3.5	4.4	5.1	5.5	6.1	6.5	7.1	7.7	..
Netherlands	CG	3.1	3.1	2.3	2.9	3.2	3.2	3.0	3.1	3.1	3.3	3.7	4.4	..
New Zealand	CG	3.0	2.8	2.4	2.3	2.2	2.2	2.4	2.7	3.1	3.4	3.6	3.7	4.2
Norway	CG	..	1.1	1.2	1.2	1.3	1.3	1.6	1.8	2.2	2.5	2.7	2.5	..
	PS	..	1.9	2.0	2.0	2.1	2.1	2.5	2.8	3.3	3.8	3.4	3.3	..
Portugal	CG	..	..	..	..	..	..	1.1	1.6	2.6	2.9	3.0	3.9	..
Spain	CG	.5	.5	.5	.5	.4	.4	.3	.4	.4	.5	.6	..	..
	PS	.6	.6	.6	.6	.5	.5	.5	.5	.6	.6	.7	..	..
Sweden	CG	1.1	1.1	1.0	1.0	1.2	1.4	1.3	1.7	1.8	2.3	3.3	4.8	..
Switzerland	CG	.3	.3	.3	.3	.3	.4	.4	.6	.5	.5	.5	..	..
	PS	1.3	1.3	1.3	1.4	1.5	1.8	1.9	2.0	1.9	1.8	1.7	..	..

Key: CG = central government; PS = public sector; .. = not available.

(a) See note (a) to Table 3.

Table C5. Proportion of Government Interest Paid Abroad

(Financial year(a); per cent of total interest payments)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
United States	CG	5.1	8.0	14.5	17.3	18.3	18.2	15.3	15.2	20.2	19.7	20.2	18.0
Germany	PS	2.0	2.3	4.6	5.8	5.6	3.9	3.7	4.7	4.9	5.4	..	..
United Kingdom	PS	..	13.4	11.6	11.0	12.7	15.2	14.6	14.0	15.1	12.4	11.6	10.4
Canada	PS	14.0	13.3	13.4	13.6	13.1	14.5	16.8	20.6	20.5	18.5	17.0	..
Australia	PS	..	10.6	9.5	8.1	7.0	5.8	5.7	5.5	6.4	10.0	9.0	..
Ireland	CG	..	9.1	11.6	13.2	13.3	22.6	26.8	32.0	34.0	32.2	32.1	..
Netherlands	CG	.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	..
New Zealand	CG	21.4	21.0	21.8	20.7	17.0	18.7	25.5	30.1	28.7	29.6	29.0	28.7
Portugal	CG	..	..	..	..	..	4.9	4.1	5.6	11.7	18.2	33.1	..

Key: CG = central government; PS = public sector; .. = not available.

(a) See note (a) to Table 3.

ANNEX 4

Budget Planning Procedures

Coverage of the budget: The United Kingdom and Italy have the widest definition of the budget, embracing central government, social security funds, local authorities and nationalised industry investment under the 'Public Sector Borrowing Requirement'. (This is also monitored by Australia). Most countries base their budget planning on concepts of central government budget balance which incorporate transfers and subsidies to local authorities and social security funds, but not the full accounts for these sectors. Social security funds are intended to be self-financing in most countries: they are run on actuarial principles in the United States, Japan, Canada and Switzerland and are based on income redistribution (social security tax) systems in France, Italy, Austria, Belgium and Spain; they are funded directly from the budget in Australia and New Zealand. The link between the budget and public corporations varies; some - railways, post offices for instance - may be within the budget (see Austria, Germany, Switzerland), but the bulk of public corporations and agencies are generally outside the budget ('off-budget'), which may leave a wide range of government operations uncovered by the annual budget procedures.

Legal constraints on government borrowing: Limits on central government borrowing may be difficult to enforce when governments can enact amending legislation. The ceiling on United States federal debt for instance may be raised by appropriate legislation. Nevertheless, where borrowing to finance public consumption is proscribed, as in Germany, Japan and Switzerland, such legislation may act as an effective medium-term constraint. Local authority borrowing to finance current spending is generally limited by statute in centralised economies, and its borrowing for capital purposes subject to sanction. In federal economies, the States (or equivalent) may be independent (United States, Canada) or co-ordinate with the federal authorities in the pursuit of borrowing targets (as in Germany and Australia).

Budget planning horizons: The United States, Germany, the United Kingdom, Canada, the Netherlands, Norway and Sweden have systematic medium-term budgetary procedures, embracing expenditure and revenues; Denmark plans the expenditure side four years ahead. Other countries plan their finances in detail only one year ahead, with budgetary objectives being expressed in the context of general economic programmes (or plans) in France, Italy, Belgium, Norway and Switzerland.

Table D. Public Sector Budgetary Programming: Institutions and Planning Procedures

Country	Coverage of the Budget		Budget Planning Horizon
	Institutional Scope	Constraints on Borrowing	
United States	Federal government, including (in part) social security and subsidies to public corporations; excluding 'off-budget' agencies.	Limit on debt outstanding (subject to Congressional approval).	Fiscal year (October-September) with 5 year projection of expenditures and receipts under unchanged policies.
Japan	Central government including social security and transfers to local government, plus some public enterprises.	Borrowing to finance consumption possible only through 'exceptional bond' issue which cannot be refinanced.	Fiscal year (April-March). Medium term prospects for public finance analysed in the context of New Economic and Social Plan, 1979-85.
Germany	Federal Government net borrowing, including loans and grants to local government, social security and some public corporations (Railways and Post Office).	Legal limit on total federal borrowing: should not exceed investment except to avert 'disturbance of overall equilibrium'.	Both Federal and State governments make 5 year projection of expenditures and revenues (since 1967). (State budgets independent, but co-ordinated through Council of Financial Planning.)
France	Central government financial balance, excluding social security	Balanced budget principle operated until 1974.	Calendar year, with medium-term projection of (some) expenditures within the context of National Plans.
United Kingdom	Public sector borrowing requirement (including public corporation investment)	None	4 year rolling programme, within 'medium term financial strategy'
Italy	Central government, including transfers to local authorities public enterprises and social security; since 1979 'enlarged public sector' deficit (general government plus autonomous agencies)	Limit set by Parliament	Calendar year; planning in context of 3 year rolling economic programmes.
Canada	Federal government financial balance and net borrowing requirements, excluding social security and including subsidies to public corporations.	None	Expenditure and revenues planned 4 fiscal years ahead.
Australia	Central (Commonwealth) net borrowing requirement, including social security; (PSBR also monitored, but not forecast).	None	Fiscal year (July-June) with medium-term budgetary objective to reduce public sector since 1976.
New Zealand	Central government net borrowing requirement, including social security and some public corporations.	None	Fiscal year (April-March)
Austria	Federal government gross and net borrowing requirement; excluding social security and nationalised industries, but including public corporations such as Railroads and Post Office.		Calendar year, with medium-term budgetary objective since 1977.
Belgium	Central government net borrowing requirements, including loans to other sectors	Limit on current borrowing	Calendar year for expenditures and revenues. Medium-term projections in conjunction with rolling 1981-84 National Plan

Table D. continued

Country	Coverage of the Budget		Budget Planning Horizon
	Institutional Scope	Constraints on Borrowing	
Denmark	Central government financial balance net and gross borrowing requirement. Includes deficits of public enterprises and and social security.	None	4 year rolling programme for of public expenditure; 1 year for revenues; policy objectives formulated since 1979 in context of 'medium-term action programme'
Finland	Central government including state enterprises financial deficit and net borrowing	None	Calendar year;
Netherlands	Central government net borrowing requirements, including transfers to social security and public enterprises	None	4 year rolling programmes introduced 1975; linked to revenue via 'structural budget margin'. 'Blue print 81' set main guidelines of medium-term financial and social economic policies', for the period 1978-81.
Norway	Central government net borrowing, including transfers to social security funds and grants and loans to public corporations	None	Fiscal year budgeting; Political economic 'long-term programmes' looking 4 years ahead [1978-81 (April 1977, revised April 1978); 1982-85: (1981)] set out planned public expenditures for 4 years ahead.
Spain	Central government financial balance and borrowing requirement.		Calendar year budgeting. Medium Economic Programme (1979) provides budgetary planning programme framework.
Sweden	Central government financial balance and net borrowing, including most social security.	None under the revised budgetary system operating since 1980-1.	4 year budgetary projections with 5 year medium-term economic surveys, including balance of payments, budgetary and other objectives.
Switzerland	Federal government financial balance, including some social security operations and some public corporations (Post Office and railways)	Federal Act. 22nd June 1979 limits borrowing	Calendar year budgeting; medium-term objective incorporated in 3-year financial plans (1981-3, presented Jan. 1980).

Notes:

'financial balance' = balance between total spending, (consumption plus capital formation) and revenues.
 'net borrowing' requirement = financial balance (as defined above) plus net acquisition of financial assets.
 'gross borrowing requirement' = 'net borrowing' plus refinancing.

REFERENCES

Axilrod, S.H., 'Monetary Policy, Money Supply, and the Federal Reserve's Operating Procedures', Federal Reserve Bulletin, January 1982.

Blinder A.S., and Solow R.M., 'The analytical foundations of fiscal policy' in The Economics of Public Finance, Brookings, 1974.

Cairncross, A., 'The Relationship between Fiscal and Monetary Policy', Banca Nazionale del Lavoro, Quarterly Review.

Christ C.F., 'On Fiscal and Monetary Policies and the Government Budget Restraint', American Economic Review, vol. 69, 1979.

Currie D., 'Stabilization Policy in an Open Economy', in Cook, S.T. and Jackson, P.M., Current Issues in Fiscal Policy, Oxford, 1979.

Danziger et al., 'How Income Transfer Programs affect Work, Savings and the Income Distribution: a Critical Review', The Journal of Economic Literature, September 1981.

Den Dunnen, E., 'Long-term fiscal and monetary policies in the Netherlands', Netherlands Central Bank, mimeo, 1981.

Dernburg, T.F., 'Fiscal analysis in the Federal Republic of Germany: the Cyclically Neutral Budget', IMF Staff Papers, 1975.

Dixon, D.A., 'The full employment budget surplus concept as a tool of fiscal analysis in the United States', IMF Staff Papers, 1975.

Dornbush R., et. al., 'Macro Economic Prospects and policies for the European Communities', 1983, pp. 18-19.

Fair, D.E., 'Relationships between Central Banks and Government in the Determination of Monetary Policy', Société Universitaire Européenne des Recherches Financières, 1980.

Friedman, M., 'A monetary and fiscal framework for economic stability', American Economic Review, June 1948.

Infante, E.F. and Stein J.L., 'Money-financed fiscal policy in a growing economy', Journal of Political Economy, 1980, Vol. 88, No.2.

Knoester A., 'Stagnation and the Inverted Haavelmo Effect: Some International Evidence', Ministry of Economic Affairs, Netherlands, Discussion Paper 8301, April 1983.

Lucas, R.E., 'Tobin and Monetarism', The Journal of Economic Literature, June 1981.

Miller, M., 'The Medium-Term Financial Strategy: An Experiment in Co-ordinating Monetary and Fiscal Policy', Fiscal Studies, 1982.

Musgrave, R.A. 'On measuring fiscal performance' Review of Economics and Statistics, May 1964;

OECD 'Budget Financing and Monetary Control', OECD Monetary Studies Series, Paris, 1982.

OECD 'Monetary Targets and Inflation Control', OECD Monetary Studies Series, Paris, 1979.

OECD 'The Welfare State in Crisis'; Paris, 1981.

OECD, Towards Full Employment and Price Stability, (1977).

Parkin, M. and R. Bade, 'Central Bank Loans and Monetary Policies; a Preliminary Investigation', in M.G. Porter, The Australian Monetary System in the 1970s.

Peacock, A.T. and M. Ricketts, 'The Growth of the Public Sector and Inflation', in Hirsch & Goldthorpe, (Eds.), The Political Economy of Inflation, 1978.

Price, R.W.R. and Chouraqui, J-C., 'Public Sector Deficits: Problems and Policy Issues', OECD Economic Outlook, Occasional Studies, June 1983.

Sargent and Wallace, 'Some unpleasant monetarist arithmetic', Federal Reserve Bank of Minneapolis, Quarterly Review, Fall, 1981.

United Kingdom, House of Commons, Treasury and Civil Service Committee, HC720, (1980) Vol.II, Appendices to the Minutes of Evidence .