

Coordination and Harmonization of Stabilization Policies Among Countries, with Special Reference to Britain and the EEC¹

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I. Introduction: Stabilization Policy Today

Short-run stabilization analysis and policy by fiscal means² may fairly be said to be in a state of considerable flux at the moment. There are several groups of reasons: loss of confidence in short-run forecasting; serious conflict over target priorities; increasing political constraints on instruments; the substitution by governments of direct legislative control for fiscal and monetary policy; etc.

These factors apply with some force to many of the 24 OECD countries with their rather similar trends of price inflation, relative growth of public sector, etc. But they apply with even more force to the nine member-states of the EEC, where integrative movements, both in the private sector and in hesitant steps towards public policy coordination, are adding supplementary problems to autonomous national stabilization policies.

Britain presents the most interesting case of reconciling the continued possibility of fiscal flexibility for stabilization purposes with the limitation of fiscal autonomy implied by a Community tax harmonization programme. The use of fiscal instruments to balance aggregate supply and demand has, since Keynes, been more conspicuous in the United Kingdom

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¹ This paper represents the background to two research programmes (a) by an EEC group of academic economists, each from a different member-state, on the past and future use of fiscal policy for stabilization within the Community, see Cosciani (1974); (b) in the S.S.R.C. Public Sector Studies programme of I.S.E.R., University of York, on the stabilization policy of the United Kingdom as a member-state.

²The chapter deals with some aspects of fiscal policy for stabilization in the context of Community tax harmonization. Exchange rate policy in the context of Community monetary unification is fully dealt with in Corden (1972, 1973), Dosser (1973) and Magnifico (1973).

than in the other member states of the Community.³ This fact, together with the general sensitivity which exists in the United Kingdom over the transfer of areas of sovereignty to the Community makes the question of whether autonomous U.K. fiscal policy for stabilization is any longer desirable or possible a particularly significant one.

Two groups of issues are raised in reviewing stabilization policy in Britain today: those that exist irrespective of EEC membership, and those that arise through that membership. Both are much affected by "open economy" aspects, e.g., the growing integration of the European economy might render autonomous British policy ineffective, even if Britain were not a member. However, the fact of membership can affect both targets and instruments for the stabilization policy of a member-state.

2. Coordination of Targets of Stabilization Policy

The general problem of defining targets in today's conditions of excess demand in product markets and excess supply in factor markets needs little elaboration. There is still (presumably) a Phillips curve trade-off with normally "acceptable" levels of unemployment (below one million unemployed) now corresponding to inflation rates of over 25 percent per annum in the United Kingdom. Whether the post-war degree of very limited tolerance of unemployment should now be greatly modified to bring down this anticipated rate of inflation is a matter of the most acute political controversy in Britain today. In addition, coordination of policy by members of the EEC raises the problem of the differing position of the Phillips curve in each member-state, and the differing choice on the trade-off that each government wishes to make.

There is likely to be little scope for "abnormal" behavior by a member-state on its own, because of the financial consequences imposed (especially as monetary union proceeds) on one's partners. A member-state's predilections about the choice of trade-off may eventually have to be realized by its being a party to a general agreement within the whole community, on the community action vis-à-vis the rest of the world, and acceptable divergencies from community norms by one member-state.

This implies the distinction in a member-state's stabilization policy between imbalance with respect to one's partners, and being a party to a joint stabilization program of the community. The United Kingdom might engage in a policy to counter inflation in the whole community *and* to get itself to the norm already existing in other member-states.

This *relative* stabilization policy — getting in line with one's partners — will lead to "external" deficit vis-à-vis one's colleagues and require their financing, so above-agreed inflation rates are "intolerable" unless justified by superior productivity trends. The member-state is expected or mandated to act in this situation.

³ "There is probably no country in the world that has made a fuller use than the U.K. of budgetary policy as a means of stabilizing the economy," Dow (1965).

The conclusion is that following off-norm targets will become more and more difficult for a member-state. The control of instruments will have to fall more and more into the hands of a central authority. At the same time, member-states will express themselves more forcibly in the determination of community policy both for community stabilization as a whole and member-state relative stabilization policy.

For the external account, the Nine as a whole can expect to benefit from the recycling of OPEC surpluses. But both the deficit and the recycled inflow are on a community basis. The relative target then is determined by the "sharing-out" of the tenable community deficit. Attempts at apportioning it are difficult since the "share" of any member-state depends mainly on the attractiveness of its currency at the time. But, as soon as separate currencies lose their identities, the *relative* problem becomes a debated agreement as to the composition of the (deficit) community current account with the rest of the world.

It may reasonably be argued that there is as yet little sight of coordinated positions on an unemployment-inflation trade-off for the community as a whole, on an "acceptable" level of inflation, on permitted member-state deficits, etc. But conformity to average norms or those acceptable to one's partners will increasingly be *forced* by the financing implications of a monetary union. Whilst the institutions do not as yet exist to mandate such conformity, the conditions attached to credits supplied by one's partners, as implicit in the new Community Reserve Fund, will gradually have that effect, not so much while exchange rates can be varied, but if this becomes more difficult as monetary union proceeds.

Insofar as this implies manipulation of member-state economies from the center by fiscal and para-fiscal instruments, it is of interest to note which instruments are beginning to be transferred to the community in the process of tax harmonization, and whether these are the appropriate ones for the tasks.

3. Coordination of Instruments of Stabilization Policy

Since we are mainly referring to the United Kingdom, it is desirable to review the traditional, i.e., pre-membership, use of fiscal and para-fiscal instruments in U.K. stabilization policy. This is desirable as a background as to which are being coordinated, or constrained, by the process of economic and monetary union and tax harmonization. Are traditionally key instruments being removed from U.K. autonomy?

The number of occasions on which the main instruments have been used in the 10 years before accession, 1963-74, is given in Table 1.⁴

The "imbalance" between the "restriction" and "reflation" sides of the account reflects the growth in the relative size of the public sector. The more frequent use of indirect taxes does not necessarily reflect a swing to indirect taxation when the greater fiscal drag of the direct tax system is remembered.

⁴From Dossier in Cosciani (1974).

Table 1

	Restriction of Aggregate Demand	Reflation of Aggregate Demand
Purchase Tax	4	2
Excises: tobacco	5	—
alcoholic drinks	6	—
petrol	5	—
motor licenses	2	—
Personal Income Tax: standard rate	1	2
other rates	2	4
allowances	2	5
Hire Purchase Regulation	5	1
Corporation Tax	4	3
Selective Employment Tax	3	2
National Insurance	7	

Of course, sometimes the occasions had something of a structural and not just a stabilization aspect. This applies usually for the Corporation Tax, and sometimes in the case of the Personal Income Tax. Also the introduction and ending of taxes — Purchase Tax, SET, Corporation Tax — have been counted in.

The figures tend to conceal changes in the frequency of use in different parts of the whole period. There has been a slight preference for direct tax measures on the part of a Conservative Government, compared with indirect tax changes by a Labor Government.

An interesting point lies in the fact that (other than reforms in a tax) swinging changes have been avoided — the changes in a tax have usually been relatively small, the norm being one involving a revenue change of £ 100 mn. When a substantial deflation or reflation has been required, a package of tax changes has been put together rather than a very large change in, for example, the standard rate of income tax, or in purchase tax rates and categories.

This "piecemeal" approach has also extended to stabilization by fiscal means through time. That is, if "normal" changes have been made in one or two taxes in one part of the year, further action later in the year has used some other instruments.

The procedures for making tax changes for stabilization purposes in the United Kingdom are much more flexible than is commonly supposed. Indirect taxes and hire purchase regulations can be and have been, altered at any time. (Indirect taxes can be varied between certain limits by administrative order — called the regulator.) Changes in direct taxes and large changes in indirect taxes can be announced in supplementary budgets as well as the regular annual budget — and supplementary budgets have occurred in a majority of years in 1963-74. The usual assumptions about the difficulty in the United Kingdom of changing income taxes for stabilization purposes arise from the complex administrative tasks involved (especially in view of the PAYE system) rather than from the constitutional need for a budget and an enabling Act. Tax changes can always be arranged at any time of the year, if the gravity of the situation justifies undertaking the big administrative rearrangement.

These modes of stabilization policy of 1963-74 are now subject to severe modification. Any extrapolation of the use of instruments in the United Kingdom has to take account of (a) a loss of confidence in fiscal instruments irrespective of EEC membership and (b) constraints on the use of fiscal weapons imposed by community tax harmonization.

The first reason is due to the loss of efficiency of fiscal instruments in attaining targets, an issue taken up under comparative advantages of instruments later.

The second requires some account of the position to date of co-ordination of taxes in EEC countries.

The main tax subject to harmonization is the VAT, which has now replaced (and would be used instead of) the Purchase Tax and SET.

The three-part recommendation of the Neumark Committee of 1963 on the harmonization of general sales taxes remains the target of European Commission policy: a common structure in the form of a VAT, equalized rates, and the origin principle for intra-Community trade.

The first part, structural harmonization, has been partially achieved in five Directives of 1967-69. However, while using the same general form, the Six, and the acceding Three member-states show significant differences in coverage and administration. These are tackled by the Proposed Sixth Directive. This has been circulating for some time among national administrations in attempting to reach common ground on numerous practical details, large and small, such as the point of liability to tax, turnover limits for exemption, timing of payments of tax, etc. Of course, it is implied that the big divergencies in coverage in some member-states, such as the food sector in the United Kingdom and retail sector in Italy, have to be eliminated.

Structural harmonization is supported by the trade-distortion principle and by the Eurobudget principle. Differences in VAT rates applied in the same sector in different member-states have some quasi-tariff or trade-distorting effects. Under the Eurobudget principle, the 1 percent VAT yield that would finance the Community budget in 1975 (1978 for the acceding Three) must equitably be raised on an identical base in each

member-state (assuming a proportional principle of taxation between member-states). There seems little argument about many of the details of structural harmonization, except the inclusion of food, and educational and cultural items (principally books) which some member-states want to exclude (or rather zero-rate) for "social" purposes.

When we come to rate harmonization, the situation is vastly different. It is still official policy to equalize VAT rates, explicitly stated in a Communication of the Commission to Council in April 1973,⁵ and implicit in the Proposed Sixth Directive. Indeed, the ideal is a single, uniform rate, with "universal" exemptions, and (hopefully) an equally effective administration everywhere.

The single uniform rate can be supported by the trade-distortion principle, and it is required by the Eurobudget principle, if and when the VAT steadily becomes the federal tax of the European Community (assuming the proportional principle again). On the other hand, it is opposed by the economic management principle (the subject of this paper) and by the "social" autonomy some states wish to reserve for special sectors.

These points for and against rate equalization as an aim bear on the third part, harmonization of jurisdiction principle. If rates were equalized, it would be a near formality to switch from the destination to the origin principle, and thus add to the "abolition of customs frontiers" the equally emotive Community achievement, the "abolition of fiscal frontiers." It would be near-formal because there would be a change in member-state revenue receipts from VAT on traded goods. But if rates are not equalized, the destination principle has to remain along with border checks, since trade distortions from rate differences are much more serious under the origin principle.

Thus the question of rate flexibility for member-state stabilization policy is wide-ranging, knocking a dent in several Community aims, and it is certainly of crucial interest whether the VAT is (a) necessary and (b) effective, as an instrument for such policy, a point again taken up later under the "comparative advantage" of different instruments.

Excises, the specific form of sales tax, are also subject to harmonization procedures, though not so far advanced as VAT. We can see that any rigidity built into these by Community centralization would compromise another fiscal instrument much used in recent British history. Further, harmonization is to be limited to the classic five (tobacco, beer, wine, spirits, petrol) of most prominence in the United Kingdom. However, devices are to be sought to equalize only on excisable products entering into cross-frontier Community trade. The qualifications to the use of excises in policy for internal and external balance are complex ones. The Community will not want to rely on them as instruments; they have traditionally been important as such in the United Kingdom, but later they are likely to be at least partially constrained for such use, although in ways too early to define at present.

⁵In EEC (1973).

The last major tax field in the path of harmonization is corporate taxation. A common *form* has now been agreed upon, the credit or imputation method. Much work on the alignment of company law is necessary over a long period, but the aim of a common Community corporation tax, taxing enterprises equally wherever they operate in the Community, certainly lies in the background. Considerable discussion has taken place as to whether a Community corporation tax might not be a more suitable tax to develop as a Community budget source of revenue rather than the planned VAT. This would put a different sort of tax into Community hands also for stabilization policy, a tax which is usually reckoned to have limited efficiency, but which has certain advantages in the new potential situation of comparative efficiencies of instruments briefly explored in the next section.

4. *Domestic and International Factors Affecting Efficiency of Stabilization Policy Instruments*

Any assessment of the use of a given instrument must at the present time take account of increased repercussions across borders in the Community and of the changing response of economic groups within one's own state.

We must first recognize a certain asymmetry among closely linked countries such as the Nine member states of EEC. The Nine partners are, by the usual trade (tradeables)/GNP measures, highly open to each other. This openness, while common to all, might apply much more strongly to some partners than others, so as to separate a class of inflation-exporters from inflation-importers ("transmitter" vs. "transmittee" economies). If so, this implies (a) from the Community's point of view, a stabilization policy for the Community is a stabilization policy in transmitter member-states and (b) from a member-state point of view, an autonomous stabilization policy is ineffective in transmittee states, while in transmitter states autonomous policy carries the responsibility of controlling one's partners' demand management.

In order to distinguish empirically transmitter states from transmittee states, one might work along the lines of competitive vs. non-competitive imports (and perhaps exports). Recent work by OECD on transmission of inflation has used this approach, and it forms the basis of the so-called Nordic model of a transmittee economy.⁶ The distinction between competitive and non-competitive imports/exports is an awkward one. It may be defined in terms of elasticities (elasticities of substitution or price elasticities of demand) which in turn depend on the stiffness of competition a sector faces from a home/foreign sector making a similar product. These elasticities are in part determined by the relative size of the sector under consideration. If it is small, it may be relatively powerless to compete against price changes imposed by a big foreign exporter, or to impose

⁶See OECD(1973).

price changes through its exports in the presence of large foreign domestic sector.

Although there may be some difficulties measuring these elasticities, we shall rely on concepts of competitive vs. non-competitive imports (exports), and define two polar cases: the transmitter state has competitive imports and non-competitive exports, i.e., is a price-maker on both sides of the trade accounts; the transmittee state is precisely the opposite, a price-taker on both sides of its trade account.

We now turn to the consideration of changing responses of domestic economic groups to stabilization policy measures. "Traditional" stabilization analysis evaluated the immediate effects of tax-induced price changes through substitution and income effects.⁷ But, more and more, some powerful economic groups are, in response to some policy measures, insisting on money income and price adjustment which tend to neutralize the intended real income effects. These adjustments were in the past considered too small and delayed so that they could be neglected in the short time span over which stabilization policy was designed to operate. But they are getting to be much larger and less delayed, so that they can no longer be ignored in our analysis of policy instruments.

Disposable income retaliation, or real income maintenance, consists of the reactions of labor unions (but also other income and wealth holding groups) to the impact on their real incomes of the stabilization instruments. Principally this involves adjustment of the pre-tax money wage to compensate for (a) increases in product prices from devaluation, or increases in VAT, or other sales taxes, and (b) increases in the tax-take from the money wage by increased PIT.

Other neutralizing forces may be present, working through prices, in pricing policies of European companies and in public programs, which neutralize the member-state's autonomous stabilization policy.

In each case, adjustment of money incomes or prices can come about through automatic or non-automatic means. A leading example of partial automatic money wage adjustment exists in fact in the United Kingdom under Phase Three of the legislated Prices and Incomes Policy. This states that once the cost-of-living index shows a certain rise on the base month of October 1973, a wage rise for each additional 1 percent increase in the index is automatic for workers who have received pay awards under Phase Three: at the time of writing, some eight to ten million.

Discretionary upward adjustment may be connected to the above, for there may be a degree of substitutability between the two types of adjustment. As further employees are drawn into Phase Three and entitled to automatic increases, they may be satisfied and not make further claims — on the other hand, they may soon press further claims over and above those adjustments occurring automatically. The automatic provision may form the model for discretionary awards, but again it may not.

⁷For a standard example, see Kraus (1967).

In the context of EEC, instances of the Community policy to adjust prices automatically appear to be increasing. The Common Agricultural Policy applying to agricultural prices in all member-states is a much documented example. It is well-known that its provisions, which establish uniform real income levels for farmers through a maintained price system, protected the farmers from the effects of parity changes. That is, the "excess real wage" in that (mainly French) sector has not been affected by French devaluation and German revaluation. This was full automatic adjustment upwards of incomes (through the price of the product) undertaken by the public authority.

The more interesting and speculative area lies in whether this might not become a more general practice in Community expenditure policy. The indications are that the combined effect of the Social Fund and the new Regional and Employment Funds may well be an industrial welfare policy matching the agricultural welfare policy.⁸ That is to say, the Community budget will support real income in depressed areas of the Community. It will not be acceptable for these real incomes to be suddenly slashed by a member-state devaluation or general tax-increases: they will have to be defined in an external unit, such as the unit of account, or compensating increases made in the stricken currency. Thus the very areas or sectors which "need" a real wage cut — both industrial and agricultural — may be insulated from member-state stabilization acts by Community policy.

Other prospective Community programs could lead to price homogenization. For example, the development of European public corporations in energy and transportation could lead to pricing policies which automatically offset member-state actions to vary *national* prices or after-tax real incomes. Such possibilities are a long way off, but discretionary corporate pricing by European firms may already be having some such effect.

One important difference between discretionary and automatic adjustment remains to be noted. In the case of automatic adjustment it is irrelevant from what source the increase in the cost-of-living index is derived — the size and timing of the wage adjustment is the same. But in the case of discretionary retaliation, it might be highly significant. Some actions of government against inflation and an external deficit may be considered consistent with the now popular "social contact," e.g., a devaluation "forced by foreign interests." Other actions may not be considered tolerable, e.g., an increase in domestic taxes. Then, instruments with equivalent primary impacts on the targets may *not* have equal consequences in setting-in train money wage demands.

When we come to review the main fiscal instruments for stabilization policy today, any comparison of efficiency has to take account of the generation of money, wage and price maintenance.

⁸See Dosser and Prest (1974).

It remains to emphasize what is already implicit: that the two sets of repercussions, cross-frontier and within-frontier, are increasingly inter-related. We have seen this in the case of Community pricing policies; in money wage adjustment, the future could see indexation of money-wages in some sectors of the Community as an automatic adjustment device, or bargained adjustment in one member-state because of what was happening in similar circumstances in other member-states, as labor unions spread over member-state boundaries.

5. *Indirect Taxes as Stabilization Instruments in the Community*

We have seen that member-state autonomy over the VAT is in the process of being qualified. The question is whether the implicit transfer of control is in line with the needs of stabilization policy of the Community economy as a whole and in its parts.

VAT is a major factor in influencing both the internal and external balance, speaking only of the primary phase at present. There are, of course, two forms of VAT, origin and destination principles to keep in mind in reviewing their role in stabilization policy. We shall also retain our earlier distinction between transmitter and transmittee states.

Under the VAT origin principle,⁹ the base of the tax is domestic production including exports, and excluding imports and exempt sectors. An increase in rates (or decrease in exempt sectors) reduces aggregate demand by post-tax price increases and subject to neutralization of the proceeds in the national budget. The internal effect will, initially, be similar in transmitter and transmittee states. The external effect differs since a rate increase will tend to increase competitive imports, while competitive exports decrease in quantity but non-competitive do not. Thus from price effects alone, a transmitter country's external account may suffer on the import side from an increase in import quantities at prices which have not risen at all (extra-Community sources) or from a combination of equal quantities and higher (Community) supply prices, if VAT is increased simultaneously in other parts of the Community. On the export side, it increases its export takings from extra and intra-Community countries.

A transmittee country has fixed import quantities now at fixed, or higher prices from Community sources, while its export take with a combination of higher prices and lower quantities may change in either direction.

Income effects stem from the fall in domestic demand and reduce imports overall in both economies. In a transmitter country the income effect depressing imports may outweigh the price effect and lead to an improvement (bearing in mind the export gain) in the external account. This is less likely for a transmittee country.

⁹As recommended for trade within the Community in the Neumark Report.

Subject to all the parameters involved, the likelihood is that while a VAT (origin) rate increase will improve the internal balance in both types of economy, it only has much chance of improving the external balance in a transmitter country.

The effects of VAT increase under the existing destination principle are quite different. The base is now composed of imports plus domestic production, excluding exports. As before, only consumption goods are involved. But in contrast to the previous case, and as is well-known, there are now no price substitution effects on imports and exports. Income effects are still to be taken account of, but since these are not connected with the different structures of transmitter and transmittee countries, this distinction has no bearing on the use and effects of this policy instrument. The VAT increase will therefore improve the internal balance (subject to budget neutralization) as well as the external balance through depressing import demand.

Our analysis of the VAT has so far been concerned with conventional or what we have called primary effects. The secondary effects take account of money, wage and price adjustments, both automatic and bargained, which may substantially qualify these primary effects, even in the short term.

The most obvious neutralizing factors are automatic and bargained internal money wage increases. The VAT increases the official cost-of-living index¹⁰ which triggers off indexation agreements, and forms a leading argument in wage-bargaining.

Now there is some difference between VAT origin and destination principles as regards the effect on the index. In the origin case, as we have seen, there is an increase in import prices for a transmitter country and for a transmittee country, although of differing complexion. The index is affected upward both immediately and after a lag through the import content of domestically produced consumer items. For the destination principle, index increases through imports are not involved. Thus automatic increases in money wages are likely to be more significant in the origin case than the destination. However, bargained increases may or may not be; as part of the "social contract," employers (and, prominently, the government in the case of nationalized industries) might be able to ward off some retaliation when the increases are externally generated.

If the money wage increase does occur, perhaps automatically, and, with an accommodating money supply, shows up in increases in product prices, the effects can be compared with the product price rise wrought by the increase in VAT. The deflationary internal effect of the VAT increase, with budget neutralization of the proceeds, is spoiled to the extent that prices and money wages increase again. The external effect repeats that of the VAT (origin principle) increase, but excludes income effects; viz., a probable deterioration of the external account through price effects. This is more likely for a transmittee country than for a transmitter country.

¹⁰Estimates of the effect on VAT changes on the British official index of retail prices are available in Georgakopoulos (1973).

Excise duties could be discussed in a similar way to VAT. They are subject to harmonization in the Community; they are much used as a stabilization device in the U.K. economy. An increase in their rate of duty has the usual deflationary effect, which is nullified as money wages respond to the resulting rise in the cost-of-living index (in which they figure significantly). The initial external effect is akin to that for the VAT destination principle, and will remain so under harmonization. However, the second-stage external effect, arising from the money-wage increase, has external effects like those of VAT origin principle.

6. Direct Taxes as Stabilization Instruments in the Community

The corporation tax is similar to the indirect taxes previously dealt with in being subject to Community harmonization plans, but it has not been so commonly used as a stabilization instrument for obvious reasons of time-lags and relatively low marginal propensities of dividend receivers to spend. The only potential to affect aggregate expenditure lies in advancing the payment of the corporation tax,¹¹ and also in circumstances where investment plans depend significantly on profit levels. Since investment would carry the burden of aggregate expenditure reduction, the corporation tax is unlikely to become a stabilization instrument. However, its relative freedom from secondary income maintenance effects is worth noting. Indeed, profit reduction may be part of the "social contract" as labor unions see it, and hence corporation tax increases lead to money wage claim restraint.

The other principal direct tax, the personal income tax, is of course a major stabilization instrument, but is not subject to Community harmonization plans. It will, however, share with indirect taxes the secondary effects of income maintenance or retaliation, although with differences.¹²

The first difference is that money wage adjustment will not fall into the automatic category, since the retail price index is not immediately affected by an increase in PIT rates. This instrument thus has some advantages at the secondary stage. At the primary stage, it can be responsible for a deflation of internal demand, and it can reduce imports through income effects.

It should be remembered that, given the progressive rate structure of PIT, as money wage rate increases, wage earners are pushed up to higher tax categories, thus increasing the average rate of taxes. When prices are also rising, money income maintenance responses may occur in response to this automatic increase in the average tax rate, and the progressive structure of the PIT has been cited as a cause of accelerating inflation. If this is so, a discretionary rate increase in the PIT may also be met by

¹¹As was in fact done in the British Budget of February 1974.

¹²The model developed by Dernburg (1974) stresses these effects.

money wage retaliation, though perhaps with some longer time lag compared with those in response to an increase in indirect taxes working on the retail price index.

7. Some Conclusions

As EMU proceeds, more control over fiscal stabilization instruments must pass to Brussels. The first reason for this is the partial locking, and then extinction, of exchange rates between member-states. The second, arising from growing trade and capital market integration, lies in the increased "burden" on one's partners of a typical (particularly above average inflation) behavior in a member-state.

Control can be exercised either through Community fiscal instruments directly, or through regulatory powers over those remaining entirely under member-state jurisdiction. If it be the former, these are likely to consist of the VAT, Excises, and Corporation Tax; if the latter, the Personal Income Tax is the principal instrument, but also Consumer Credit control.

In the case of the former category of harmonizable instruments, there is a further distinction: the Community may "own" the tax (for "resources propres"), or only have control over the (harmonized) structure and rate applied by the member-states.

The question of VAT harmonization is raised most acutely here. Already, the Community will receive a first tranche of the VAT, a 1 percent rate for itself, in 1976-78.

Should this VAT transfer be progressive? The issue is likely to be bitterly fought between Community supporters and opponents.

A steady convergence of the VAT rate to a single Community figure, and its gradual take-over by the Community, will be opposed on grounds of the transfer of sovereignty *and* the need to retain flexibility in the rate for member-state stabilization policy. Compromises in this most crucial case of Community fiscal harmonization and member-state fiscal flexibility may be found along these lines.

The simplest solution would be (i) to equalize VAT rates into a band of, say 3-4 percentage points, which allows some variability and where trade distortions would hardly be significant, and (ii) to endorse the U.K. "regulator" technique, already applicable to the U.K. rates in its VAT system, allowing variation in the standard rate between 7 1/2 percent and 12 1/2 percent, to be applied by any member-states to the equalized rate. These leave open the question of the Community/member-state division of control/revenues.

More complex, and a further move to member-state autonomy, are shadow systems. The Community budget receives its revenues of a 1 percent (or later 5 percent or more) VAT from each member-state, but the member states are allowed varying degrees of autonomy in how they actually raise the revenue. The Community tax system may shadow reality

fairly closely; for example, member-states may charge a slightly higher rate on the majority of sectors in order to charge nothing on one. Or the Community "tax system" may be only an accounting device to determine member-state contributions, where member-states can raise the revenues by *any* means.

Decisions in these areas determine what tranche of the VAT around the Community is uniform in structure and rate and is *not* available for variation for member-state stabilization policy. What is available is any degree of freedom in this Community tranche, and any permitted autonomous member-state VAT system alongside the developing Community VAT system.

The transfer of instruments to the Community level is mainly politically or administratively determined, with only little reference to economic criteria. The economic criterion behind concentration on VAT harmonization and transfer lies in the supposed analogy between tariff distortion to trade and indirect tax distortions — VAT differences seen as quasi-tariffs. A more respectable reason for concentration on the VAT is the political one of obtaining for the Community a tax of excellent revenue potential.

But when it comes to stabilization policy, there is no necessary match between a proper division of instruments between Community and member-states for the tasks each ought to perform in short-term demand management, and the ongoing transfer of instruments.

Certainly it is difficult to make such an assignment to levels of government because of the changing comparative efficiency of instruments, bearing in mind the strength and rapidity of retaliatory action to maintain real income. In the last resort, the new responses may so compromise an instrument's efficiency to affect the internal or external balance as to make it a trivial question from the stabilization point of view as to who gets that instrument.

It is difficult to re-evaluate the comparative efficiency of traditional instruments, as used in Britain in the last 10 years, at the present moment in time.¹³ It does seem as though the force of some of those listed in Section 3 is considerably weakened. This leaves others intact, but means that budget packages will in the future have to contain bigger action through fewer instruments.

As responsibility for stabilization policy has to be transferred to a central authority as part of EMU, the accompanying instruments, notably VAT, may well not be those with much efficiency left for short-term management. The Community may have to use such instruments as income tax and consumer credit control that were to be left in member-state discretion in the earlier discussion.

¹³At the very moment of writing, a substantial body of British economists are advising the Chancellor of the Exchequer to reflate and an equally distinguished body is recommending deflation.

Our conclusion has to be that while there appears to be a growing need to recognize both the limits of autonomous stabilization policy in Britain as a member-state, and also its externalities on Benelux-type partners, little help can be offered in the proper assignment of stabilization instruments between Community and member-state because of the changing efficiency of given instruments *per se*. Naturally this can be used as an argument against centralization; but equally it can be used to reassert historical Community tax harmonization (i.e., uniformization) for some taxes over fiscal flexibility. Elucidation awaits analysis of the secondary effects of retaliation and group emulation pertaining to traditional fiscal instruments.

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Discussion

Richard N. Cooper

In reading Professor Dosser's paper, I found it useful to put his line of thought into my own terms, and I do so here in the thought that it may also help others interpret his paper and at the same time permit me to make some general comments on the broader question of assignment of policy instruments to policy targets that runs through Dosser's paper.

Professor Dosser has identified three particular targets of economic policy: the balance of payments, the rate of change of prices, and the rate of unemployment. And he directs at these targets three instruments of policy: the rate of exchange, the value-added tax rate (VAT) and the personal income tax rate (PIT). These instruments and targets in principle exist for *each* country within the Community. Moreover, he draws attention to three different stages, distinguishable mainly by their time dimension but partly also by the degree of economic integration within the Community. The first stage represents the impact effect (in the first year) of a change in any instrument on the target variables. The second stage allows for "income retaliation," that is, the response by various factors of production to preserve or restore their income levels to what they were before the change in policy. For example, organized labor may try to recoup any increase in the VAT or PIT through higher money wages. The third stage is less clear than the first two, but seems to envisage a regime in which factors of production (mainly labor) attempt to attain and maintain comparable wages in all member countries, even without actual movement of labor between countries. That is, factor prices are kept in harmony by imitative behavior rather than by factor movements linking the factor markets in the various countries.

A simplified formulation of the economic structure that Dosser seems to have in mind can be written in compact matrix form as

$$y = A_i x, \quad i = I, II, III.$$

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Here y represents a vector of the target variables, as enumerated above, x represents a vector of the three policy instruments, and A_i represents the reduced form linear structural relationship between the instruments and the targets in each of the three stages enumerated above, call them, I, II, and III. Dosser's paper is clearly a working paper, and he makes only a rough stab at identifying some of the elements of A_i and of A_{11} for the United Kingdom and for Belgium. Dosser would like to discover the *comparative advantage* of each policy instrument in pursuit of each of the three target variables, so that each instrument can be assigned to a particular target. To do this he needs numerical values for the elements of the structural matrices.

I would like to make some general comments on this framework for analysis, which runs through the paper, and in particular on the question of assigning instruments to targets. Robert Mundell started us down this road in two celebrated articles on the division of labor between monetary and fiscal policy in the early sixties. The basic idea is that policy instruments should be manipulated so as to track discrepancies between the actual and desired values of particular target variables, one instrument to each target. In the notation above, the values of the instrument variables, x , should be altered so that: $\dot{x} = k(y^* - y)$, where the dot over x indicates its rate of change, y^* represents the desired values for y , and k is a matrix which by appropriate arrangement can be made diagonal and which makes the assignment of each instrument to each target and also specifies the speeds of adjustment. Combining the two equations (for a given set of structural coefficients) yields the system of simultaneous differential equations $\dot{x} = -kAx$, where $y^* = 0$ by choice of units.

The rationale for this type of policy adjustment is that we cannot always know just what the disturbance was, but we can observe the variables in which we are directly interested. Therefore a system of "tracking" these variables back to their desired values is a useful one, if we can be sure that the process of tracking will in fact lead to the desired values. Identification of each instrument with a target according to the comparative advantage of the former is alleged to achieve this.

Mundell's original contributions were couched in terms of two instruments and two targets. They are very nice for exposition in the classroom, but they have perhaps received too much serious attention from those concerned with the actual formulation of economic policy. In particular, four important qualifications have to be introduced into this framework.

First, the simplicity of assignment disappears when the number of instruments and targets exceeds two. The notion of "comparative advantage" of each instrument ceases to be well-defined, just as the notion of factor-intensity of each commodity ceases to be well-defined, where three or more are involved. As a result, while a stable assignment in a tracking model can always be made when there are only two instruments and targets, it is still an open question whether stability of the tracking

model (that is, convergence to target) can always be assured if there are three or more instruments and targets. There is a presumption that stability cannot be assured. (For the above system of simultaneous differential equations to be stable, i.e., to converge to target, the matrix $-kA$ must satisfy the Routhian conditions noted in Samuelson's *Foundations of Economic Analysis*. While this can be for an arbitrary matrix A for some values of k , it probably cannot be done for just any value of k , the adjustment speeds, even with complete freedom to assign instrument to target.)

As a footnote, S.C. Tsiang has shown in a recent article in the *Quarterly Journal of Economics* (forthcoming) that Mundell's assignment in the 2x2 case of monetary policy to the balance of payments and of fiscal policy to aggregate demand will be unstable in the long run, once allowance is made for the higher interest costs of servicing external debt created by directing monetary policy to the preservation of external balance. By moving the problem into a longer time frame, the appropriate assignment of instrument to target may thus be altered.

Second, in practice there is clearly a great deal of uncertainty about the values of the structural coefficients, that is, the elements of the A matrices. This fact has two important implications. In the first place, we cannot be sure about our reckoning of comparative advantage even in those cases in which we are confident about the theoretical structure, for sharp differences in numerical values might alter the appropriate assignment. In the second place, to the extent that uncertainty does surround our knowledge of economic structure, we should take that uncertainty into account in framing economic policy. This requires being explicit about the costs of being wrong, and it means therefore that we must confront directly our preferences and priorities among the different targets in case a choice must be made among them. The quadratic framework of analysis developed by Theil, while artificial, is nonetheless a more satisfactory one for dealing with policy choice than the simple Tinbergen-Mundell framework because it can accommodate both of these factors.

Third, lags in the response of target variables to changes in policy instruments may be such that 1) an otherwise stable system is rendered unstable (except in the 2x2 case) and that 2) some target variables may be far from their targets much of the time, leading to loss of utility. A more

¹See H. Theil, *Optimum Decision Rules for Government and Industry* (Chicago: Rand McNally, 1964).

On the bearing of uncertainty in the coefficients on the formulation of policy, see William C. Brainard, "Uncertainty and the Effectiveness of Policy," *American Economic Review*, LVII (May 1967), pp. 419-21, and Richard N. Cooper, "Comment on Limited Information and the Assignment Problem," in E. Claassen and P. Salin (eds.), *Stabilization Policies in Interdependent Economies* (Amsterdam: North-Holland Publishing Co., 1972) pp. 117-122.

sensible strategy may then be to direct several instruments at the same target for awhile. Here, as in the case of uncertainty, some choice among targets may have to be made for temporal reasons and the assignment of one instrument to each target will be inappropriate.

Fourth, there is no compelling need for decentralization of policy instruments *within* countries, the case typically discussed and the case considered by Dosser. Various government agencies can and do consult one another, and economic policy can be coordinated at the top. Choices can be made among targets, and several instruments can be (and usually are) devoted to the pursuit of a single target, and then to another, in sequence. With enough information, the whole economic "system" can be solved simultaneously for the appropriate values of all targets, and they can be set accordingly, although that rarely in fact occurs.

The real need for a stable decentralized system arises among different but economically interdependent national economies, an issue addressed by Max Corden in his remarks.

Thus the economic structure of the whole Community (ignoring relations with the rest of the world) can be depicted as

$$\begin{pmatrix} y_1 \\ \bullet \\ \bullet \\ \bullet \\ y_n \end{pmatrix} = \begin{pmatrix} A_1 & \dots & \dots & I_{1n} \\ \bullet & \ddots & \bullet & \bullet \\ \bullet & \bullet & \ddots & \bullet \\ \bullet & \dots & \dots & \bullet \\ I_{n1} & \dots & \dots & A_n \end{pmatrix} \begin{pmatrix} N_1 \\ \bullet \\ \bullet \\ \bullet \\ N_n \end{pmatrix}$$

where y_i represents a vector of target variables and N_i a vector of instruments in country i , A_i represents the internal structure of the i^{th} economy, and I_{ij} represents the interaction effects (marginal propensities to import, interest sensitivity of capital movements, etc.) of the instruments of country j on the target variables of country i . High values of the I_{ij} suggest a high degree of economic interdependence, and hence a strong influence of actions in one national economy on the economic variables of another.

Corden suggests that decentralization among nations will work, but he rightly retreats from the suggestion that full decentralization should therefore be allowed to reign and offers some reasons for attempting to coordinate policies among countries. Close coordination (which is quite different from harmonization, which means doing the same thing), by minimizing the extent to which countries work at cross purposes or unknowingly reinforce one another's actions and thus lead to overshooting of targets, permits all countries to remain closer to their targets more of the time — provided the targets are consistent — than would a regime without coordination.

But does the European Community need a single stabilization authority? The answer is clearly yes, if the instruments of policy are tied together, as Dosser suggests they should be. Therefore we must ask, should the various national instruments of policy be tied together in their use, i.e., "harmonized"? In the space remaining I will give my own answer to this question, which is an evolutionary one and divides the process into three stages. It assumes that the various national targets are consistent with one another.

If the objective of monetary unification is a serious one, it implies fixity of exchange rates and hence harmonization of national monetary policies, that is, formulation of monetary policy for the Community as a whole. If this step is taken before the national economies are fully integrated in the sense of free and easy movement of labor, it is important that fiscal policy *not* be harmonized among the member countries. On the contrary, each should be left free to use national fiscal policy to cope with periodic national booms and slumps that are out of phase with those elsewhere in the Community. Of course, governments would not have access to the national central bank to finance any resulting budget deficits; rather, they would have to sell government debt into the Community-wide capital market, as has been suggested by James Ingram.

Over the course of time, the localized impact of fiscal policy will be eroded, as the marginal propensity to import from the rest of the Community increases and each national economy becomes more closely linked to others through the markets for goods and services. As this happens, the effectiveness of conventional fiscal policy, whether operated through changes in taxes or expenditures, will diminish. In order to retain their grip on the national level of employment, governments will be drawn increasingly into "regional" policies to attract internationally mobile real capital (not just financial capital) into their areas in order to stimulate economic activity, raise incomes, etc. Various tax subsidies and other forms of support are used to accomplish this, and these devices in effect represent a way to alter relative factor prices through the fiscal system with the relatively immobile (and therefore potentially unemployed) factors paying the tax bill for the relatively mobile factors, mostly footloose business firms. These actions of course take a longer time to be effective than does conventional fiscal action, and therefore at this stage it will be necessary to introduce Community-wide fiscal action, that is, to harmonize national fiscal policies or to use the Community budget for stabilization purposes for the Community as a whole.

After a further period, vigorous competition will develop among the various regions of the Community for the same mobile activities, and gradually it will become necessary to limit this regional competition through harmonization of the instruments of policy used in the competition, e.g., property and profits taxes, subsidies to long-term borrowing, provision of construction sites, and so on. This harmonization will have to take place not in the name of economic stabilization, which

can be handled adequately by a combination of Community-wide fiscal and monetary action and by competition among regions for mobile firms, but rather in the name of distribution of income, which may become strongly skewed in favor of the mobile factors of production for which the various regions are competing. With harmonization of the regional instruments of policy, regional policies will have to be financed on a Community-wide basis.

All of the forces described here can be observed to some degree at the present time. But some of them are still sufficiently weak that they can be ignored for awhile. The Community should not proceed too rapidly toward fiscal harmonization or it will deprive the member nations of still badly needed tools of stabilization. By raising the costs of membership, such deprivation might well undermine politically the move to eventual economic union.