The Meaning and Treatment of an 'Unsustainable' Budget Defict

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I. The concept of a 'structural' deficit

In many countries of the Western world, decisions about budgetary policy are now overhung by anxiety about the growth of public debt. These countries are operating with substantial budget deficits year after year, and in most of them the public debt has recently been growing not only in absolute amount but as a proportion of the GNP. At the present time there is widespread recession, and there is no doubt that this accounts for part of the deficits because recession reduces the yield of taxes and also raises some kinds of public expenditure, *e.g.* on unemployment compensation. But it is widely believed in many countries that a significant part of the deficit is not the result of the recession, and that if policies are not changed a substantial deficit could be expected to remain if and when the recession is over and the various economies have returned to what can be regarded as a normal condition in relation to the cycle. Such a deficit is called 'structural'.

A structural deficit is considered especially alarming by these commentators if it is on such a scale and of such a character as to involve a continuing rise in the ratio of national debt to GNP. For, as they see it, such a rise continuing indefinitely would eventually raise the interest burden on national exchequers to a point which exceeds what could be obtained in tax yield by any politically feasible in-

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creases in tax rates. At that point, if not earlier, there would be some kind of national financial breakdown. It is felt, not surprisingly, that it is imperative to prevent such an outcome.

The Maastricht treaty included among the conditions of economic convergence necessary for proceeding to the later stages of economic unification certain budgetary requirements. The public deficit should not exceed 3% of GNP, and the ratio of public debt to GNP should not exceed 60%. At the present time only one member of the European Union, Luxembourg, meets both of these requirements; and a fair number of the member countries meet neither. This is of course largely a reflection of the general recession, but they would be quite hard to meet even in normal cyclical conditions, so long as inflation is kept low.

As a further example of the importance currently being attached to the problem we may cite the United Kingdom Budget of November 1993. This Budget, which added a large (phased) fiscal deflation to one already provided for 1994/95 onwards in the Budget of *March* 1993, was inspired *mainly*, on the evidence of the Chancellor's Budget speech, by the determination to grapple with the problem of increasing debt. "The Budget", said the Chancellor, "must sort out the problem of public borrowing once and for all".

II. The international experience of debt ratios

The comparison of debt to income ratios of different countries (Table 1) reveals a very wide range of variation. The ratio has risen almost everywhere since about 1974 and in 1992 the average (for *gross* debt) was 63%. The proportionate burden of interest costs is equally diverse between countries. These variations show no consistent relationship with economic performance in the broader sense: growth, price stability, employment levels. Some countries with high debt ratios score well on the broader classifications, others badly; and the same is true of countries with relatively low ratios.

There has also been great variation in the debt ratios over time within the individual countries. A big increase during a period has usually reflected a series of large deficits produced by war; large reductions in the ratio over a period have on occasions reflected debt

repayment through budget surpluses, but have usually been caused mainly by a progressive rise in the GDP (partly through real growth, but often the result of inflation).

To take the United Kingdom as an example, the ratio of debt to GDP reached high points of 288% in 1821, 197% in 1924 and 275% in 1947; the low points were 27% in 1914, 156% in 1939, and 41% in 1992. Other countries also had very large variations in the ratio during the last 100 years.

TABLE 1

GROSS PUBLIC DEBT[a] AS PERCENTAGE OF NOMINAL GDP

Country	1978	1992
United States	39.2	61.7
Japan	41.9	67.3
Germany	30.1	42.8
France	38.8	51.6
Italy	62.4	108.0
United Kingdom	58.7	40.5
Canada	46.6	83.3
Total of above	42.2	62.8
Australia	–	29.6
Austria	33.9	55.8
Belgium	68.8	136.0
Denmark	21.9	62.4
Finland	13.5	44.0
Greece	29.4	94.6
Ireland	65.7	93.8
Netherlands	39.9	78.0
Norway	60.0	43.4
Portugal	37.6	62.6
Spain	14.4	51.4
Sweden	34.5	52.9
Total of above smaller countries	32.8	62.9
Total of above European countries	42.3	61.9
Total of above OECD countries	41.0	62.8

[a] Debt of 'general government', comprising central government, state/regional government, local authorities and social security funds.
Source: OECD, *Economic Outlook,* December 1993, Table A29.

It cannot be said that there has been any obvious inter-temporal correlation between the debt or interest ratios and the health or stability of the country's economy at the time. For most countries there have been periods of economic difficulty with high ratios, but also periods of economic stability and progress. The same is true of the times when the ratios were low. There is no warrant in historical experience for believing that a national debt to national income figure of more than some particular figure, say the Maastricht 60%, is a guarantee of economic turmoil and financial crisis. On the contrary, the remarkable impression from studying these figures is the ability of the economic and financial systems of the various countries to adapt themselves to comparatively high debt and interest ratios and in time to find ways of bringing them right down, if sometimes through inflation.

In recent years, with deep and widespread recession, budget deficits on a substantial scale, as well as rising debt ratios, have become a norm among the industrialised countries both in Europe and outside. Two countries whose debt experience has received much comment, a good deal of it critical, are the United States and Italy.

The United States has had public sector deficits which many people consider large (over 2.5% of GNP) for each of the last ten years.[1] The average rate of inflation has been moderate (4.5% pa for 1980-1992), the debt ratio to GDP rose from 44.9% in 1984 to 61.7% in 1992. Until last year there were no very convincing signs of policy initiatives to change the situation, but it cannot be said that economic or fiscal disaster has come upon the United States – despite many doleful prophecies – or even seemed to be coming close: indeed production in real terms has grown considerably faster in USA than in Europe in the last ten years or so.

The case of Italy is more difficult to evaluate. Here the ratio of debt to national income is both high and rising. No effective policy is so far in place to change the situation. It is, of course, far from being the only feature of the Italian politico-economic structure and policy that causes anxiety, and it is difficult to say how big a part in the whole collection of problems is played by the deficit and the debt growth. Perhaps the most important point is that Italy has achieved good GDP growth in real terms, despite all her 'financial' problem.

[1] Typically, however, the percentage deficits for 'General Government' (including the States) has been close to the OECD average. See *Economic Outlook*, in successive years.

III. Sustainability and the policy dilemma

In discussions of the budgetary problems of the present time, 'sustainability' has emerged as a priority objective for many finance ministers. A situation is widely deemed *not* to be sustainable if, with existing tax rates, and assuming that inflation is kept within acceptable limits, it would yield a continuing *structural* deficit on such a scale as to raise the ratio of the public debt to the GNP.

Many commentators see the possibility of a serious long-term policy dilemma. They consider the case where the government follows policies of demand management, with the budget having a central role, so as to maintain the economy as far as possible in a 'normal' condition, *i.e.* a condition in which an acceptable compromise is achieved between the key objectives of low unemployment, low inflation, and balance of payments stability. The commentators fear that there may emerge from this situation a budget deficit which is and remains what they would call "unsustainable" *i.e.* it brings about a continuing rise in the ratio of national debt, and its interest cost, to the GDP. They argue that the government would then have to choose between two alternatives, both highly disagreeable and damaging to the community: on the one hand a state of permanent recession and unemployment, and on the other hand a course towards inevitable disaster to the national finances.

Before taking a view on the likely existence of this policy dilemma it is necessary to look carefully at the meaning of the concept of sustainability. First, the concept has to be understood in a medium-to-long term sense. There is general agreement that whatever is to be planned, or accepted, as a *long-term trend* for the national debt, there can legitimately be variations in its rate of change as a reaction to cyclical variations in the activity of the economy arising from fluctuations in real expenditure by the non-government sectors (including the rest of the World). There would be upward variation in borrowing in times of recession, and downward variation in times of boom. What 'sustainability' calls for is (at least) stability in an *average* year, or over a period of cycle length.

Secondly – and this is a point of the first importance – a persistent 'structural' deficit is not necessarily an 'unsustainable' deficit. Assume to begin with a national economy with a certain

'normal', rate of growth of *real* GDP and a 'tolerated' – modest – rate of inflation: from these two there results a certain rate of growth of *money* GDP. There is at any time a certain scale of deficit which could be called the debt ratio-stabilising (DRS) deficit, *i.e.* that level of deficit which has the effect of keeping the debt ratio stable, given that existing tax rates continue and that inflation remains modest; the ratio will neither rise nor fall during a year to which this deficit applies. A persistent 'structural' deficit could be within the DRS limit, if only because the level of the GDP is (normally) rising, and so tending to reduce the debt ratio. If it is, then it is not 'unsustainable' and the policy dilemma does not arise.[2]

Finally, there is an important point that arises from the recognition that some public expenditure is directed towards productive investment.

So far we have been arguing as if the growth rate of the GDP was a 'given', independent of the scale and nature of the government's spending programme. This procedure can be questioned, since part of the government's expenditure is on capital programmes which add to the national productive capacity and so to the growth of GDP. *Prima facie* it would seem legitimate for the government, as for other economic agents, to borrow for the financing of productive investment. Such investment should yield an income, possibly direct to the government, but at least to the national economy as a whole, out of which the interest cost on the borrowing could be paid. On this basis has been formulated what has been called the Golden Rule: government borrowing should be limited (as a medium term matter) to the amount of the government's *net* investment (gross investment *less* depreciation) in productive capital assets. If this rule were followed the government's borrowing would not involve any reduction in the government's net worth. We might thus find in the Golden Rule a formulation of a target, at least from the limited point of view of what might be regarded as 'respectable' for the government as an entity, ignoring wider 'policy' problems to which we return below. Even so, however, there are difficulties. It is not easy to decide what should be included as public investment, or to estimate what return can be expected from it. It seems reasonable that an economy-wide view should be taken of the return, but estimation on this basis

[2] The appendix sets out an approach to the problem of designing a 'sustainable' policy (via the so-called 'primary balance') which is well known, but which we do not consider very illuminating or productive. It plays no essential part in our argument.

is even more debatable than estimates on the narrow basis of direct return to the government.

And there is a wider consideration, which brings into question the adequacy of the Golden Rule even in principle. The Rule might seem to imply that it must be wrong for the government to borrow from the non-government sectors, taken as a whole, more than the government is itself investing productively. But suppose it is the case that the attitude of the non-government sectors to the disposition of their income (assuming a normal level of activity) is such that they *desire* to accumulate a private financial surplus which is more than enough to provide an offset to the government's capital expenditure. In the context of public borrowing policy, and of the use of other instruments with which the government might seek to influence the situation, the objectives and behaviour of the non-government sectors have to be taken into account. In the system of financial balances of which the public sector deficit is a part, the accumulation (or decumulation) of financial assets by the private sector and the overseas sector forms the other side of the transactions which finance the deficit. We must therefore look carefully at the factors which affect the asset-accumulation behaviour of those two sectors.

IV. The counterpart to the public sector deficit

A deficit in the public sector accounts implies a surplus in the accounts of the remaining sectors taken together. Taking a very broad view, these sectors are two: *a)* the country's domestic private sector and *b)* the rest of the world. The surplus of the rest of the world is the same as the country's balance of payments deficit on current account. Thus, as a matter of accounting logic, the financial surplus of the domestic private sector is necessarily equal to the financial deficit of the public sector *less* the amount of the current balance of payments deficit. If there is a balance of payments deficit, the system of capital flows balances with a smaller financial surplus of the domestic private sector than would otherwise be necessary.

At the present time most of the Western countries are suffering from recession. At such a time a public sector deficit usually has to be accepted if the level of activity of the economy is not to be unac-

ceptably low. Attempts by governments to eliminate the deficit, by raising taxes or reducing expenditure, would cause a fall in demand, production and employment, relative to what they would otherwise have been. To eliminate the public sector deficit necessarily involves eliminating the counterpart surpluses, taken together. Part of this would take the form of a reduction in the deficit in net exports – mostly occurring because with demand being cut down there would be a fall of imports. But the major part would necessarily take the form of a reduction in the private sector's financial surplus, *i.e.* a fall in its saving relative to its investment. This would be achieved by reducing the private sector's disposable income to the point where its surplus of saving was cut down to zero. Such a process must tend to create, or deepen, a recession.

This way of looking at the matter is generally accepted to the extent that the public sector deficit is attributable to cyclical recession. What is regarded with anxiety is the prospect that there will *still* be a budget deficit even when the recession is 'over', and national economies are back to what is considered to be a normal condition.

We are assuming that this structural deficit is a *continuing* condition in an economy which is not suffering from excess demand or an unacceptable rate of inflation (that it is not so suffering is part of the conception of 'normality'). That large part of the counterpart to the deficit which would take the form of a private sector financial surplus would arise out of free and informed decisions by the private sector's members about the disposition of their financial resources. These decisions, bearing on consumption, investment, lending and borrowing, can be assumed to have been taken in the light of (on the whole) correctly understood income positions, rates of interest and availability of credit and capital funds. It would be a 'voluntary' surplus, not one as it were 'inflicted' on the private sector by an inflationary process.

If, then, the private sector's share of the counterpart to the public sector deficit is voluntary in the sense defined, the private saving must be there to finance the appropriate part of the public sector deficit. Financing the deficit is a matter of designing the financial instruments offered by the public authorities so as to match the preferences of the aggregate private sector as to the form in which they wish to embody their savings. Provided that the authorities do not impede their own operations by restrictive conventions there

must be a way in which the finance can be found. It might involve offering more short term debt or index-linked bonds than has been done in the past; it might involve borrowing more from the banks in one way or another. A flexible attitude on the part of the financial authorities is clearly necessary; but if it is adopted there is no reason to think that the financing problem would prove insoluble.

In so far as there are good reasons for anxiety about the effects of a 'structural' deficit, they do not lie in the immediate financing problem but in the possible long-term effects of such a deficit continuing on the size of the public debt and the debt interest burden. In actual fact, it seems most unlikely that following a budgetary policy designed to maintain 'normal' conditions (including 'tolerable' inflation) would require excess public sector deficits (deficits larger than the debt-ratio-stabilising limit) that literally go on for ever. On reasonable assumptions about the balance of payments side of the matter, such a necessity could only arise if the collective private sector aimed for financial surpluses on a scale which produced an indefinitely continuing *rise* in the ratio of their holding of public sector assets to their income (and a parallel growth of their interest income). Is it plausible that this could happen? Does it really make sense to suppose that the private sector will want to raise *indefinitely* the *ratio* of its public sector asset holding to its income? Is not the more likely course that eventually the appetite for wealth of this kind will be satisfied (or reduced by a diversion towards building up *physical* assets) and in consequence the financial surplus will diminish to the point where the national debt will automatically stabilise as a ratio to the GDP? The process might take some time. But the fact that the present unwillingness, in many countries, of the private sector to spend enough (whether on consumption or investment) may outlive what we think of as a 'normal' recovery period does not mean that it will go on for ever.

However, even if it is not likely to go on for ever, it might be feared that it could go on for a long time. And while it is going on, no one will *know* for certain *how long it will go on*, or to what height the debt to GDP ratio, or the size of the debt interest burden, might attain. So we have to ask whether this possible future could be tolerated, and what policies are available to improve it.

V. The policy response to an obstinate deficit

There can never be absolute certainty that a country is facing an 'unsustainable' deficit, since we do not know the future. The framing of policy has to work, not on certainties, but on reasonable probabilities. Suppose the deficit is above the country's debt-ratio-stabilising limit, so that the debt ratio is rising; and that there is no clear reason for predicting that the rise will soon halt. Suppose that in calculating the deficit, public expenditure has been defined to *exclude* productive investment. Suppose that the excess scale of the deficit is not accounted for by a condition of recession, or, to put it in another way, the best estimate is that in a 'normal' condition of the economy the excess deficit would still exist. In the concept of a 'normal' state of the economy we include the condition that inflation is low and not accelerating, and also the condition that the balance of payments is not in unacceptable deficit.

On any reasonable assumptions about the relevant magnitudes, the major share in the financing of the deficit on the 'excess' scale we are postulating must fall on the country's domestic private sector (*i.e.* it could not be carried by the capital inflow implied by an 'acceptably small' continuing balance of payments deficit). An unsustainable deficit thus implies a continuing private sector financial surplus, *i.e.* an excess of the saving of the aggregate private sector over its investment. A continuing excess of private saving over private investment suggests strongly that rates of interest are too high. A *reduction* in rates of interest constitutes, *prima facie*, the natural remedy for the situation. Such a reduction would encourage house purchase and the consumer spending that is associated therewith. It would also encourage business investment in durable assets. Thus private saving would tend to fall and private investment to rise.

Prima facie, then, the diagnosis of a long-term tendency of the aggregate private sector to save in excess of its investment argues for a policy of lowering rates of interest and keeping them low. But we have to consider what the wider economic effects of such a policy would be before we can advocate it unreservedly. First, it could be expected to have effects in the international capital markets which would put a downward pressure on the country's exchange rate. This is an argument for a co-ordinated international approach to the problem embracing both fiscal and monetary policy. If, as is the case at present, an important group of countries have large budgetary deficits and feel they have to raise taxes in response, they would *all* benefit from an agreed collective policy of reducing their interest rates broadly in line. But if agreement on these lines is not available, a single country cannot be blamed if, having attempted unsuccessfully to promote it, that country takes action on its own.

Secondly, by raising the level of activity, the policy of lower interest rates would *pro tanto* raise the strength of inflationary tendencies in the country adopting the policy. Since we have taken as our starting point a situation of 'normality' in which inflation is being kept within acceptable bounds, this particular side effect must be regarded as undesirable. The appropriate response would be a tightening of fiscal policy. In fact, the existence of an unsustainable structural deficit in a country is a sign that the demand policy of the country is *ill-balanced*: fiscal policy is too expansionary and other policies (including in particular monetary policy) insufficiently so. The policy mix is wrong and needs to be restored to balance by tightening fiscal policy and relaxing monetary policy or devising stronger non-fiscal stimuli to private spending.

There is a further complication which arises from the time-structure of interest rates and the forces which determine them. To be fully effective, a low interest rate policy needs to be manifested in *long-term* as well as short-term rates; long term rates are mainly determined by supply and demand in the securities markets. The market forces are themselves much influenced by expectation of what the monetary authorities will do with short rates, but behind these expectations must lie views about the forces which will *constrain* the authorities, in particular views about the future course of inflation. Thus even if short rates are kept low, long rates may stay high if the market is sceptical about inflation being kept down. This has an important implication. The effectiveness of a low interest rate policy will be much greater in a country where the authorities can succeed in devising and applying consensus procedures which can exercise a direct influence on the forces of income inflation.

A substantial maintained change in the policy mix, with lower interest rates (long and short) being balanced by tighter fiscal policy, should therefore be the principal element in the response to a situation diagnosed as one of unsustainable deficit. There may also be other elements which could contribute to the basic aim of raising private sector investment relatively to private saving. There are a

number of ways in which the tax structure could be modified so as to encourage private investment and withdraw inducements to saving: this would reverse what has been the tendency in some countries in recent years.

What is really important is that the remedy for obstinate excess deficits should not be sought by fiscal tightening *alone*. There should be no such tightening that is not balanced by equally powerful measures of monetary relaxation or other policies with equivalent effect. It is the policy *mix* that would need to be changed.

VI. Conclusion

To sum up. In many countries there is a potential dilemma affecting budgetary policy. Governments fear that they do, or may, face budget deficits on a scale which is unsustainable, even though their economies are not showing the classical signs of excessive demand such as unacceptable inflation or balance of payments weakness. The dilemma is then between allowing the public finances to continue on a course which seems headed for national bankruptcy, on the one hand, and executing measures of fiscal deflation which would result in permanent recession, on the other. Both the alternatives are highly unattractive: is there a way out?

Our answer would be as follows. First, the government must satisfy itself and public opinion that there truly *is* a situation of unsustainable deficit. This requires, to begin with, that productive capital expenditure should be eliminated from the calculation of the deficit. Next, it must be established that the size of the 'long term' or 'underlying' deficit is not being misread because of the effects of a *cyclical* weakness of the spending propensities of the collective private sector. And finally, it is not enough to show that there *is* a structural deficit; the deficit has to be above the debt-ratio-stabilising (DRS) limit. If it is *not* above this limit then it is not unsustainable and there is no reason to predict dire long-term consequences from it.

But suppose that, all allowances made, there is a tendency to deficit above the DRS limit, what should an enlightened government's attitude be? The essential point, we have argued, is to recognise that the structural deficit of the public sector reflects a structural surplus of the private sector. That such a surplus should continue *indefinitely*, on such a scale as to raise without limit the private sector's assets-to-income ratio, is inherently improbable. If, however, it seems likely to continue for a considerable period, what then?

The problem is one of a persistent tendency for private sector saving to exceed private sector investment. The most 'obvious' explanation for this would be that rates of interest are 'too high', and the natural remedy is to get those rates down and keep them down. There are however also other non-fiscal ways of stimulating private investment relatively to private saving, and the government has to select a satisfactory mixture of 'remedies'. To keep a proper balance between demand and supply, and forestall inflationary tendencies, it would then be necessary to reduce budget deficit by tightening up fiscal policy in a broadly offsetting way so far as the pressure of demand in the economy is concerned.

An apparently unsustainable deficit, with the present policy mix, is a sign that the policy mix is wrong. It is right, in such a case, that fiscal policy should be tightened; but it is equally important that monetary policy should be relaxed or some other instrument changed (*e.g.* propaganda in favour of saving reduced). Only in this way can the dilemma be resolved.

APPENDIX

The 'primary balance' approach

This approach to problems of deficit financing rests on making a distinction between what is called the 'primary' balance in the public accounts and the overall balance. The primary balance is the difference between public revenue, on the one hand, and public expenditure *other than debt interest* (but including capital expenditure), on the other. If this primary balance is exactly zero, then it can be said, as a first approximation, that the debt ratio will be rising or falling according as the real rate of interest is above or below the rate of growth of real GDP (this follows because with a zero primary balance the addition to the national debt in money terms consists precisely of the amount paid in debt interest). And it follows in turn that if the real rate of interest is *above* the rate of growth of real GDP, there will be a need for a primary *surplus* if the debt ratio is to be stable and the deficit 'sustainable'.

In order to apply this approach to an actual situation, one has to put figures on the real rate of interest, the growth rate of GDP, the rate of inflation to be allowed for and the debt ratio that is not to be exceeded. All such figuring is inherently imprecise and debatable. And, most important, nothing appears to have been gained by breaking up the budget in the way the approach involves. There is no deep significance in the 'primary balance': if there is an overall deficit, its size would be *large* (as a percentage of GDP) if the country started with a big debt ratio, but trifling if the debt ratio were small, even if the relationship between real interest and real growth was the same. Nothing important is gained from the inference that the primary balance would have to differ correspondingly, in order to reach a given overall target.

There is, further, a serious problem that has to be faced by *any* approach that depends on a maximum pre-set *level* or (conceivably) *path* for the debt ratio. There is no obvious ground of principle or practical rule of thumb to provide a basis for such a level or path. The historical and international data show that a very wide range of debt ratios have been experienced here and elsewhere; and there has been no close relation between them and economic performance.