The tragedy of UK fiscal policy in the aftermath of the financial crisis

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June 2011

Abstract: The evolving response of the UK fiscal authorities to the financial crisis and recession are briefly outlined with a focus on the fiscal austerity programme introduced by the incoming Coalition government during 2010. The reasoning for that programme are critically examined and largely dismissed. It is argued that the drive for major cuts in public expenditure comes from seeking to achieve a balanced structural budget and the reductions in estimated potential output. The significance of the latter are discussed. The paper is completed by a brief consideration of alternatives.

Journal of Economic Literature classification: E62

Key words: fiscal policy, budget deficits, financial crisis, UK

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1. Introduction

The signs of the global financial crisis emerged in August 2007 gradually developing during 2008 with its full blast apparent in September/October 2008. There were some rescues of financial firms (e.g. Northern Rock in UK, Fannie Mae and Freddie Mac in USA), but any significant fiscal and monetary policy responses to the crisis and developing recession only came into effect in late 2008, especially so after the collapse of the Lehman Brothers in September 2008. In this paper we begin with a brief outline of the fiscal policy responses in the UK and the shifts in those responses with the change of government from Labour to Conservative-Liberal Democrat coalition in May 2010 with its commitment to fiscal austerity and an emergency budget of June 2010 bringing within year public expenditure cuts and the announcement of a programme to eliminate the structural budget deficit over five years. After a brief resume of the fiscal policy responses in section 2, a critique is provided of the rationales given for this fiscal austerity programme, and the assumptions on which it is based is provided in section 3. Section 4 argues that the estimated reduction in potential output has a major impact on the formulation of fiscal policy without any realisation of the significance of the idea that falls in aggregate demand impact adversely on supply potential. Section 5 argues that the aim of a balanced structural budget is unlikely to be achieved and that the construction of fiscal policy has to incorporate private sector behaviour. Section 6 offers some concluding comments on approaches to the budget deficit.

2. The evolving response

In March 2008, the Treasury argued that ‘the economy is stable and resilient, and continuing to grow, and that the Government is meeting its strict fiscal rules for the public finances’ (HM Treasury 2008a, p.1) and the economy displayed ‘much improved resilience – the ability to cope with economic shocks quickly and with low economic costs – which has resulted in an unprecedented period of macroeconomic stability’ (HM Treasury, 2008a, p.2). This complacent attitude changed in the face of the events of September/October 2008, with an emergency budget in the Pre-Budget Report of 24th November 2008 including a temporary reduction in value added tax from 17.5 per cent to 15 per cent (reversed at the end of 2009) and £3 billion worth of capital spending brought forward. With the onset of recession the estimate of public sector net borrowing (PSBR) for 2008/09 was raised by 2.4 per cent of GDP (in March 2008 Budget, HM Treasury, 2008a) to 5.3 per cent (in the November 2008 Pre Budget Report, HM Treasury, 2008b) of which 0.6 per cent of GDP was attributed to discretionary budget changes: the eventual outturn for 2008/09 was 6.7 per cent of GDP. For
the year 2009/10, the forecast PSBR rose by 5.5 per cent of GDP to 8.0 per cent of which 1.1 per cent of GDP was attributed to discretionary changes; the outturn was a PSBR of 11.8 per cent of GDP. The discretionary budget changes were relatively small (given the scale of the recession) and largely time limited. The major changes in the PSBR came from the operation of the automatic stabilisers, though as indicated above through changes in the estimates of potential output the changes appear as a shift in the structural deficit.

The fiscal rules under the Code for Fiscal Stability, the centre piece of the Labour government’s fiscal policy since 1997, were ‘temporarily suspended’ until 2015/16. In their place the Government set ‘a temporary operating rule: to set policies to improve the cyclically-adjusted current budget each year, once the economy emerges from the downturn, so it reaches balance and debt is falling as a proportion of GDP once the global shocks have worked their way through the economy in full.’ (HM Treasury, 2008b, p.13). The Fiscal Responsibility Act 2010 laid on the Treasury the responsibility to ‘ensure that, for each of the financial years ending in 2011 to 2016, public sector net borrowing expressed as a percentage of gross domestic product is less than it was for the preceding financial year … [and] that, for the financial year ending in 2014, public sector net borrowing expressed as a percentage of gross domestic product is no more than half of what it was for the financial year ending in 2010’ (Fiscal Responsibility Act, 2010, Chapter 3, section 1).

The Budget of March 2010, with some adjustments to previous plans, set out proposals to bring down the structural budget deficit over a five year horizon. The 2009/10 cyclically adjusted current budget deficit of 4.8 per cent of GDP and corresponding public sector borrowing requirement of 8.4 per cent of GDP, were scheduled to fall to 1.8 per cent and 3.1 per cent of GDP respectively in 2013/14 and 1.3 per cent and 2.5 per cent respectively in 2014/15. Thus there were plans for fiscal tightening (‘fiscal consolidation’) of 3.6 per cent of GDP on the current budget and a reduction of public investment by the equivalent of 2.4 per cent of GDP.

Although there has been much dispute between the political parties as to how sharp the changes on deficit reduction were, it is the case that the incoming Coalition government placed deficit reduction as central and played much more on doomsday scenarios of the reactions of credit ratings agencies and financial markets if actual and planned deficit reduction measures were not introduced. The Coalition agreement between the Conservative and Liberal Democrats ‘recognise[d] that deficit reduction, and continuing to ensure economic recovery, is the most urgent issue facing Britain’. It committed to ‘significantly accelerate the reduction of the structural deficit over the course of a Parliament, with the main
burden of deficit reduction borne by reduced spending rather than increased taxes’ with a plan for deficit reduction to be set out in an emergency budget which followed in June 2010 (Cabinet Office 2010, p.15).

3. **The spurious justifications of the Coalition programme**

The emergency budget of June 2010 put in place public expenditure and taxation plans which are summarised in Table 1. By comparison with the March 2010 budget, by 2014/15 the structural current budget appears to be tightened by 1.6 per cent of GDP, and 1.9 per cent of GDP in terms of public sector net borrowing. The discretionary reductions in public expenditure under the Coalition government are intended to be around 60 per cent greater by 2014/15 as compared with the Labour government’s intentions (an additional reduction of £32 billion as compared with £52 billion) and discretionary tax increases around 40 per cent larger (additional £8.2 billion as compared with £21 billion). A feature of the fiscal consolidation is the share of public expenditure in the deficit reduction amounting to 80 per cent by 2014/15 in the additional measures announced in the Emergency Budget. The Treasury claimed that ‘this approach is consistent with OECD and IMF research, which suggests that fiscal consolidation efforts that largely rely on spending restraint promote growth. Tax measures can be an effective tool for reducing the deficit quickly, allowing for phased reductions in public spending. The Government’s consolidation plans therefore involve a rising contribution from public spending over the forecast period’ (HM Treasury 2011, p. 15) (for critique see Sawyer, 2011b).

Table 1 near here

The justifications for the austerity programme which were announced in June 2010 are now critically examined.

The argument against the need for fiscal policy and budget deficits essentially rests on a proposition that the private sector is self-correcting and through appeals to Says’ Law that demand will come into balance with supply, and that through appeals to some form of Ricardian equivalence theorem with fully rational agents, public expenditure would only displace private expenditure leaving the overall level of demand unchanged. Direct appeal to the latter argument is difficult to sustain in view of its assumptions on ‘rational expectations’, absence of credit rationing etc., but also in the face of recession when private expenditure has fallen so significantly. Although there has been little, if any direct, appeal to these arguments, there is a sense in which the Coalition government’s budget deficit plans relies on a recovery in private demand, which not only offsets the depression of public demand but also is sufficient to carry the economy back by 2015/16 close to a position of a zero output gap.
We question below the concept and measurement of potential output but here make the point that the Coalition government is relying on the recovery of private demand. It is not clear how far this recovery of private demand is viewed as a result of the budget deficit plans or is seen to come about fortuitously. But in the forecasts of the Office for Budget Responsibility (hereafter OBR) the reductions in the structural budget deficit are accompanied by rises in private expenditure (further discussion on this below; see Office for Budget Responsibility 2011 for example of forecasts, and Fontana and Sawyer, 2011 questioning the plausibility of the postulated growth in investment and net exports).\(^1\)

The claim that budget deficits burden future generations has often been made: for example, ‘public borrowing is, in essence, taxation deferred, and it would be irresponsible and unfair to accumulate substantial debts to fund spending that benefits today’s generation at the expense of subsequent generations’ (HM Treasury, 2010b, p.11). But this claim is, of course, spurious. The interest payments on government debt are a transfer between taxpayers and bond holders within the same generation. The burden on the present generation of a balanced budget in the face of recession would be the foregone consumption and public services which result from a budget deficit. The burden on future generations of a balanced budget in the face of recession would be foregone investment which would yield future benefits where investment here is widely interpreted to include not only infrastructure but also in education and health.

One argument deployed against a budget deficit is that it is unsustainable based on notion that continuing borrowing leads to ever rising debt. ‘Tackling the deficit will ensure that future generations are not burdened with unsustainable debt and will underpin private sector confidence, supporting growth and job creation over the medium term’ (HM Treasury 2011 p. 34), where there is also reference to the need to shift from ‘unsustainable public spending’. (HM Treasury, 2011, p. 8). Some basic relationships can be invoked to show that this can be misleading: a total budget deficit relative to GDP of \(d\) would lead to a debt to GDP ratio of \(b = \frac{d}{g}\) where \(g\) is the nominal growth rate. This would however involve a primary budget deficit of \(d' + rb\) where \(d'\) is the primary budget deficit, and hence \(d' = (r - g).b\) and hence positive or negative depending on the relationship between \(r\) and \(g\). The case where the rate of interest and the rate of growth are approximately equal is of particular relevance. Empirically this appears often to be the case: for example in a report on the funding of higher education and student loans, a real interest rate on loans of 2.2 per cent was proposed which would be ‘equal to the Government’s cost of borrowing (inflation plus 2.2%)’ (Browne
Report, 2010, p.35), which would be a little below the trend growth rate of the UK economy. Under that condition the sustainable position would be a primary budget in balance and deficit equal to interest payments, and hence borrowing would cover interest payments.

The most cited argument advanced by the Coalition government, and its supporters, for a programme of budget deficit reduction, set out over a four to five year time horizon has been the idea that, without such a programme deemed credible by the financial markets, there would be substantially higher interest rates on government borrowing (and often by implication on private borrowing) and substantial difficulties in government borrowing. The argument has often been expressed in terms of the responses of credit ratings agencies and fears of downgrading of a government’s credit rating and consequent higher interest rates. This has been reinforced by finger pointing at countries whose credit rating has been reduced (e.g. Greece during 2010)². ‘Last year our budget deficit was the largest it has ever been in our peacetime history. This year it is set to be among the largest the world. … This is the legacy of thirteen years of fiscal irresponsibility. And it poses a very real threat to the recovery. Those who argue that action can be safely delayed for another eleven months would put our economy at risk for the sake of short term political advantage. The last few weeks have shown quite how urgent the necessary action has become. Greece is a reminder of what happens when governments lack the willingness to act decisively and quickly, and when problems are swept under the carpet. The result is sharp increases in interest rates, worsening recession, growing unemployment. At one point, interest rates in Greece increased by a full 10 percentage points. .. if we fail to tackle the deficit we inherited from the previous government, the consequences could be disastrous. (Osborne, 2010)

The ‘fear of the credit rating agencies’ argument is a convenient scare tactic and needs to be critically examined. It may first be noted that the credit rating of a government should be based on the ability of government to service its debt. It is well-known that a government can always service debt provided that it is denominated in its own currency. This was a feature which clearly distinguished the situation of the UK government from that of the Greek government (and indeed other members of the Eurozone) where the latter does not issue its own currency. At the limit the UK government can ‘print the money’ in order to service the debt: this would not take form of literally ‘printing money’ but rather the Central Bank being a willing purchaser of government debt.

The second point is that credibility of a budget deficit programme cannot be only judged by the perceived commitment of the government to make public expenditure cuts and raise taxes. A reduced budget deficit has to involve some combination of lower net private savings
and higher net exports, from the national accounts identity $G$ (government expenditure) minus $T$ (tax revenue) = $S$ (private savings) minus $I$ (private investment) plus $M$ (imports) minus $X$ (exports). But the major fear is that this comes about in effect from reduced economic activity following the attempts to reduce the budget deficit, and even then the reductions in public expenditure may suppress economic activity and tax revenues to such an extent that there is little if any actual reduction in the budget deficit. Thus credibility of deficit reduction programme does not just depend on the strength of commitment of the government to public expenditure cuts and tax rises but also on the responses of the private sector. A credit rating should depend on more factors than the size of deficit (or debt ratio) amongst which would be the ability of the government to levy higher rates of tax if necessary, and the growth of output (and thereby tax revenues). Reductions in public expenditure which are not matched by increases in private expenditure will reduce output, damaging growth prospects and may have rather little impact of the budget deficit. As some countries have found to their cost, reductions in public expenditure can lead to lower credit ratings rather than the maintenance of a high credit rating.

The third point is that the reputation and judgement of the credit rating agencies had been severely undermined by their roles in the build-up to the financial crisis. An oft-quoted example has been the degree to which triple A ratings were given to mortgage backed securities and credit default swaps. This would not deny that in the event of the credit ratings agencies downgrading government debt the government concerned could well be faced with higher interest charges and difficulties in borrowing, as funds are moved from that government’s debt to others. But what is questioned is the basis on which the ratings are made, and what actions by a government would lead to a downgrade.

It is though worth considering the implications of the argument that government’s borrowing is limited by the financial markets (whether or not influenced by credit rating agencies). Suppose for example the effective limit on government borrowing is $A < A^*$ where $A^*$ is the level necessary to secure a level of output $Y^*$. Then $A = (S – I) + (M – X)$, and the level of economic activity $Y$ follows, and here would be $Y < Y^*$. The budget deficit of $A$ for whatever reason decided upon is still deflationary. An exception to this would come if the constraint on the budget deficit somehow stimulates investment, consumer expenditure and net exports. But such expansion of expenditure requires financing and funding, and that in effect credit constraints do not prevent investment and foreign trade expanding. It is also worth considering here what would be a suitable policy response in the event of credit rating downgrade (and such cannot be ruled out as the credit rating may respond, rationally or
irrationally, to events such as a failure of deficit reductions to materialise when private demand responds negatively to public expenditure reductions). One response would be to ensure that the Bank of England stands ready to buy government debt as required. Another would be to require pension funds and life assurance companies to place some minimum proportion of their investment portfolio into government stocks.

The thrust of the argument here is that there has been a failure to provide sound justifications for the fiscal austerity programme.

4. **Potential output**

It is notable, but little noticed in public discussion, that the estimates of UK potential output have been substantially reduced since 2007. This becomes significant given the attention paid to the ‘cyclically adjusted budget deficit’ (hereafter CABD, structural budget deficit is used as a synonym) as a target for fiscal policy since the relationship between actual output and potential output (‘output gap’) is used to adjust budget data to calculate the CABD. This reduction in the estimated potential output has in effect become a driving force behind the public expenditure reductions programme. This becomes clear from the following consideration. A severe recession leads to a substantial increase in the budget deficit as tax revenues fell sharply and the automatic stabilisers soften the blows. This increase in the budget deficit would be reversed when the economy recovers from recession, and output restored to a more usual level. The role of fiscal policy in that scenario would be the application of discretionary measures to support the operation of the automatic stabilisers and then to reverse the discretionary measures as the economy recovered. The only sense in which a programme of public expenditure reductions would be required would be to reverse discretionary increases made in response to the recession; for example public investment programmes implemented to support demand and employment would not be repeated.

In the context of the 2008/09 recession, the reduction in estimated potential output has the appearance of turning a cyclical budget deficit into a structural budget deficit. This is clearly illustrated from the Pre Budget Report 2008. In that report, the estimate of potential output was reduced by 4 per cent as compared with the estimate given in the Budget 2008. The reduction took the form of a drop in the level of potential output (rather than a slower rate of growth) over the period 2007Q3 to 2009Q3, that is the estimate was provided before the time period to which it related was complete. The estimate was provided with little indication of how the estimation had been undertaken, without regard to the issues of estimating potential output and with no allowance for the uncertainties attached to such estimates.
The forecast budget deficit for 2008/09 increased between the two reports, and essentially all of the increase was ascribed to a deterioration in the structural deficit even though there had not been any changes made to public expenditure plans or to tax rates. The structural deficit deteriorated simply because estimated potential output had been reduced. Indeed despite the onset of recession, the output gap forecast for 2008/09 barely changed between March and November even though the forecast for output was reduced by 2 per cent.

The scale of these effects can be seen from the Pre Budget Report 2008 and the figures given in Table 2.

Tables 2 and 3 near here

The changes in the estimates of potential output as made by a range of authors are summarised in Table 3. The significance of the reductions in the estimates of potential output arises in seven ways.

First, it appears quite widely accepted amongst economic analysts that potential output in the UK has been reduced substantially in the order of 5 to 10 per cent (as compared with previous estimates). At the same time, there appears little recognition of the implications of such a decline in potential output. The precise causes of the decline in potential output are not clear in part because there is a general lack of transparency over how the estimates of potential output have been made.

The effects of recession and financial crisis on potential output are a major example of path dependency and the long lasting effects of the path of aggregate demand on supply potential. The mainstream approach to macroeconomic analysis and macroeconomic policy has been firmly based on ideas of ‘natural rates’ (of unemployment, interest rate and growth) in which the use of the term ‘natural’ is ‘to try to separate the real forces from monetary forces’ (Friedman, 1968, following Wicksell, 1898). The supply side of the economy is almost universally modelled in the mainstream literature as unaffected by the demand side, and that whereas demand may influence the level of economic activity in the short run the long run is ruled by the supply side.³

Second, the estimated fall in potential output can be interpreted to imply that the costs of financial crisis in terms of lost present and future output are substantial. The full set of calculations would have to take account of the possibility that the build up to the financial crisis stimulated output and investment and that there may be some future recovery of potential output. Andrew Haldane Executive Director, Financial Stability, Bank of England provides some illustrative figures for the present value of global output losses and for the UK based on ‘assuming different fractions of the 2009 loss are permanent - 100%, 50% and 25%.
It also assumes, somewhat arbitrarily, that future GDP is discounted at a rate of 5% per year and that trend GDP growth is 3%. Present value losses are shown as a fraction of output in 2009’. On that basis his Table 1 ‘shows, these losses are multiples of the static costs, lying anywhere between one and five times annual GDP. Put in money terms, that is an output loss equivalent to between $60 trillion and $200 trillion for the world economy and between £1.8 trillion and £7.4 trillion for the UK’ (Haldane, 2010, pp.3-4).

Third, the lowering of the estimates of potential output leads directly to changes in the measured output gap. This has two related effects: first, the economy appears closer to its potential and operating with less spare capacity, and second, the estimates of the CABD are thereby raised. This then gives the appearance that the previous Labour government had been operating with a much larger structural deficit and charges of fiscal irresponsibility levied. But it should rather be seen that the structural deficit (as calculated) is also to be ascribed to the financial crisis through the effects of the crisis on potential output.

Fourth, there is the impact on fiscal policy through to 2015 with target of near balanced CABD. If estimated potential output had not diminished by the order of 6 per cent, then even with growth of demand as portrayed by OBR then there would still be an output gap of circa 6 per cent in 2015 and the CABD would be of the order of 4 to 5 per cent of GDP rather than near balance.

The adjustments to potential output have been given a precise numerical figure, and policy (in terms of the implied output gap and structural budget deficit) based on that numerical figure. But the estimates of changes in potential output must be subject to considerable uncertainty, with consequent uncertainty over size of output gap etc. It would not seem sensible to base policy firmly on those estimates without any consideration of the uncertainty surrounding them. It is paradoxical that uncertainty (in terms of fan charts) is considered in the forecasts of demand but not in the forecasts of supply potential (and indeed in the estimates of current and recent past supply potential).

Fifth, the rationales behind the reduction in the estimates of potential output (sometimes its level, sometimes its growth rate) have varied between different authors and have included hysteresis effects on unemployment, higher cost of capital, lower levels of investment through lower demand or higher cost of capital, and lower immigration. Some of these are more clearly related to the financial crisis (higher cost of capital) whilst others relate to recession and low demand. It is important to establish what is viewed as the causes of the fall in potential output in that the appropriate policy responses depend on the causes. For
example, insofar as the fall has arisen from a higher cost of capital, then it may be appropriate to seek tax and other policy measures which offset those higher costs.

Sixth, although this is no way spelt out, it would seem reasonable to assume that the decline in potential output relates to the private sector and not to the public sector. With public sector output of the order of 20 per cent of GDP, this would imply that the decline in private sector potential output would be of the order of 7 ½ per cent (corresponding to 6 per cent decline in overall potential output). It is worth considering the implications of this. The ability of the private sector to supply output appears to have diminished. The policy response then appears to be to reduce demand for public services and that itself involves reducing the supply potential of the public sector – through closure of facilities etc.. There has been some loss of productive capacity in the private sector, and the policy response is to lose productive capacity in the public sector!

Label potential output of the private sector as $Y_p = aL_p$ where $a$ is the output labour ratio and $L_p$ private sector employment, corresponding for the public sector $Y_g = bL_g$. For a given tax rate the structural budget deficit (corresponding to potential output) would be $bw_gL_g (1-t) – taw_pL_p + T$ where $T$ is government transfers. A reduction in potential output in the private sector would raise the structural budget deficit. From the supply perspective, there could be a range of responses, and in order to consider those we have to make some postulates on the causes of the fall in potential output. Two are considered: (i) where labour productivity has diminished in the private sector (due say to lower capital stock), (ii) where the employment level is constrained to be lower through hysteresis effects reducing the effective supply of labour or a rise in the non-accelerating inflation rate of unemployment.

Under scenario (i) there is a decline in $a$ and it could be assumed a corresponding decline in $w_p$, thus tax revenue would decline and budget deficit increase. There would be little point in now seeking to cut government (potential) output as that would merely cut further the potential output of economy. The scale of the budget deficit could be reduced to operate a policy of constant wage ratio between public and private employees.

Under scenario (ii), one policy response would be to accept that the employment and thereby potential output have declined, and adopt an ‘equal pain’ approach and scale down the size of the economy. Another policy response would be to address the causes of the decline in constrained employment – if hysteresis effects coming from low levels of economic activity, then stimulate demand to create high levels of economic activity to seek to reverse those effects, targeted employment programmes to create jobs for the long-term unemployed etc..
Seventh, we may ask what is meant by potential output, and should it be treated as a constraint on the average level of economic activity. The term potential output may suggest some maximum output or at least output at some notion of desirable full capacity in terms of the cost conditions (e.g. full capacity corresponding to minimum average costs). But in the macroeconomics literature, potential output is generally related with a constant rate of inflation. This may be directly from a Phillips’ curve of the form \( p = p_e + a(y - y^*) \) where \( y \) is (log of) output and \( y^* \) (log of) potential output; or it may be more indirect in that potential output is derived from a production function based on the capital stock and employment where the employment rate is consistent with a NAIRU (non-accelerating inflation rate of unemployment, e.g. Dicks, 2010) or a NAWRU (non-accelerating wage rate of unemployment, e.g. OECD, 2011). The acceptance of this concept of potential output relies on acceptance of the underlying and simplistic approach to inflation. Further, it is surely relevant that the inflation rate moved within narrow range during the decade or more from mid-1990s to mid-2000s (indeed a claimed success of the ‘great moderation’) and variations in the rate of inflation bore little relationship to variations in output (or employment). This led some to argue that the claimed vertical Phillips’ curve had become more a horizontal Phillips’ curve.

The acceptance of potential output as a form of inflation barrier is to accept that the barrier cannot be shifted to more socially desirable levels of output and employment. For the OECD area as a whole ascribe the fall in potential output to ‘reductions in capital endowment as firms have adjusted to the end of cheap financing and increases in long-duration unemployment resulting in hysteresis-type effects leading to higher structural unemployment. (OECD, 2011, p. 228). In a more general setting (following along the lines of Arestis and Sawyer, 2005) the promotion of investment and increasing the capital stock is required to help shift any inflation barrier.

The estimated decline in potential output leads to a recalibration of the budget deficit as split between the cyclical component and the structural component. How does this affect our view of fiscal policy? Suppose that, despite the change in potential output, the target structural budget deficit relative to potential output has remained unchanged. Also assume that consumer expenditure and investment has fallen dramatically (in greater proportion than the decline in potential output), and then begin to recover. Over what time horizon should the adjustments to the level of public expenditure take place (for convenience here we treat the tax rate as unchanged). As the level of potential output has fallen, this implies a reduction in public expenditure of the same proportion. Further when consumer expenditure and
investment return to the same proportions of potential output, public expenditure would do likewise and in effect the economy would have shrunk. The reduction in public expenditure should be phased in as consumer expenditure and investment recovers from their sharp drop but only recovering to the initial relationship with potential output (for example, if potential output dropped by 10 per cent, consumer expenditure may initially fall by more than 10 per cent, but then recover to a fall of just 10 per cent).

These considerations point to two implications. First, there is still a need to use fiscal policy to address the fall in demand and economic activity. Second, the eventual decline in public expenditure would be of the same order as the decline in potential output. In the UK context this would imply a reduction in public expenditure of the order of 5 per cent (this of course assumes that the public:private split is the relevant one to be maintained).

5. Fiscal policy alternatives

There have long been two essentially conflicting views on fiscal policy and budget deficits. One of these has taken the form of setting numerical rules for the budget position (e.g. balanced budget each year, balanced current budget over the cycle). At some level such an approach has to assert that market forces and/or the setting of interest rate at the ‘natural rate’ will generate equality between savings and investment intentions at full employment (or equivalent phrase). The other, that of ‘functional finance’ (Lerner, 1943, Kalecki, 1944) views the budget deficit as a tool in securing high levels of economic activity and full employment, where there is no presumption that savings and investment intentions will be in balance at a high level of economic activity. It is then clear from this perspective that there should in general be an unbalanced budget, usually but not necessarily in deficit, and this has been reflected in most governments running budget deficits most of the time.

Our approach is very much along the lines of ‘functional finance’. As such we can pose the question as to what would the budget deficit look like if savings, investment (and net exports) were at some ‘normal’ level. Thus with regard to investment, for example, we would seek to know what level of investment would be forthcoming if ‘animal spirits’ were at some ‘normal’ level A and the level of output at some ‘desired level’ labelled Y*. The resulting budget deficit would be:

\[
(1) \quad BD(Y^*) = s(Y^*) - i(Y^*,A) - NX^* 
\]

where A is ‘average’ animal spirits, NX* some ‘normal’ level of net exports (and ignore variations in savings behaviour for simplicity).
The estimation of a budget deficit in accordance with equation (1) would, of course, be fraught with difficulties and including the need to specify what is to be regarded as the ‘desired’ average level of output.

In that context, the budget deficit in a period where ‘animal spirits’ are A’ would be:

\[ G^* - t^*(Y) = s(Y) - i(Y, A') - NX \]

Hence the cyclical component of the budget deficit is:

\[ t^*(Y) - t^*(Y^*) = s(Y) - s(Y^*) - i(Y, A') + i(Y^*, A) - NX + NX^* \]

The policy approach as signified in equation (1) raises two major questions about the fiscal policy approach of the current UK government. First, is there any reason to think that the equation

\[ a = s(Y^*) - i(Y^*, A') - NX^* \]

holds where \( a \) is a small budget deficit (basically equal to level of net public investment)?

The second is that \( Y^* \) is taken to be potential output of the economy as estimated by the HM Treasury. As noted above there is a range of estimates of potential output, and any estimate must necessarily be subject to a range of doubt.

There is a basic inconsistency in the estimates of the structural budget deficit, which can be seen by reference to equation (1). Consider two separate years T1 and T2 which differ in their estimates of the structural budget deficit, and the differences between the years is ascribed to changes in public expenditure and tax rates. But for consistency it would have to be assumed that there were some corresponding changes to savings, investment and/or net exports. Yet the concept of savings etc on the right hand side is the level which would be forthcoming at \( Y^* \) with a ‘normal’ level of animal spirits. But there is no reason why behaviour should have changed in that way (unless there is some appeal to a form of Ricardian equivalence).

Table 4 near here

The figures in Table 4 are designed to be illustrative and certainly not definitive. The comparison between the first line (relating to the average for 2001-08) and the second (2009/10) reveals the dramatic shifts which occurred during the ‘great recession’ and its impact on the budget position. The third line relates to the forecasts of the OBR for 2015/16 by which time the current structural budget deficit is supposed to be in balance, with the overall budget deficit equal to public net investment. It can be seen that this represents a fall in savings propensity, a sharp rise in investment and an improvement in the current account position (which is based on historically high growth of exports) as compared with 2009/10. Much of those types of changes could be expected as an economy emerges from recession, though perhaps not on this scale.
The forecasts contained in Budget 2011 are for a public sector borrowing requirement equivalent to 1.5 per cent of GDP in 2015/16, and with an output gap of 1.3 per cent a cyclically adjusted net borrowing equivalent to 0.5 per cent of GDP. On those figures the government would have achieved its objective of a cyclically adjusted current budget surplus (at 0.8 per cent of GDP) with actual current budget virtually in balance. The structural position of a deficit of 0.5 per cent would then require some combination of savings ratio lower, investment and net exports higher to the combined extent of 1 per cent of GDP. The forecasts of the OBR for 2015/16 are then close to an average over the cycle position (on the basis that a zero output gap would be the average over a cycle). As compared with the average for 2001-08, the structural position would represent a tightening of the fiscal position by around 1.5 per cent of GDP. Now consider the implications for the structural budget position of a couple of alternative scenarios with respect to savings, investment and current account position.

In alternative scenario 1 the current account position is taken to be as it averaged in the years 2001-08, private investment to be slightly lower than the average for that period, and savings to be in line with the OBR forecasts. Lower investment (relative to GDP) could arise from a decline in the rate of growth of potential output (OBR forecasts)– using a capital-output of 4 a decline from 2 ¾ per cent to 2 ¼ per cent would reduce (net) investment by 2 percentage points of GDP. It could be anticipated that credit and loans may remain more constrained than during the pre-crisis years and investment thereby constrained. The figures used generate a (structural) budget deficit of 4.2 per cent. In alternative scenario 2 the current account is taken to worsen somewhat at 3 per cent of GDP, investment at 14 per cent of GDP, and savings at 18 per cent (which represents a near 2 percentage points of GDP decline relative to 2009/10), leading to a (structural) budget deficit of 7 per cent of GDP.

These alternative scenarios illustrate the sensitivity of the structural budget deficit (and hence that required to secure actual output equal to potential output) to relative small changes in current account, savings and investment. Further, the implications for public expenditure are also of interest. Under alternative scenario 1, a budget deficit higher by 2.55 per cent (as compared with the OBR ‘base case’) could imply public expenditure on goods and services higher by over 10 per cent as compared with current government intentions (assuming unchanged tax rates and transfer payments). Under alternative 2, the corresponding figures for budget deficit would be 5.45 per cent of GDP and over 20 per cent higher public expenditure on goods and services.
The main argument here starts from the notion that a structural balanced budget may not be compatible with private sector behaviour, for example that for a zero output gap to be achieved private savings exceeding private investment (with due allowance for the current account position). It is further argued that a substantial budget deficit may be required in order to achieve a high level of economic activity. The implication of that line of argument is that the present public expenditure reduction programme is unlikely to achieve its objective, and that alternatives are required involving higher (than presently planned) levels of public expenditure.

6. Concluding comments

The basic idea of ‘functional finance’ can be expressed that the need for budget deficits arise as a means of securing high levels of economic activity in the face of private sector imbalances. The approach to fiscal policy could in effect start the other way round – that is ask the question as to whether the conditions (in the private sector) can be established such that budget deficits are not required to secure high levels of economic activity. It can be readily seen from above that would entail (as compared with a situation of significant budget deficits) some combination of lower savings, higher investment and higher net exports. These changes are unlikely to occur without policy interventions and that specific policy measures would be required to bring changes. Sawyer (2011a, 2011b) elaborates on these arguments, which are briefly summarised here. The stimulation of net exports, whether through exchange rate changes, improvements in competitiveness may work for one country but clearly cannot be a universal solution. A revival of investment, particularly when focused on public and green investments, would be a substantial aid to reducing the budget deficit. Finally, significant shifts in inequality (in a progressive direction) arising from changes in the tax structure, provision of social benefits and in the wage structure (e.g. introduction of ‘living wage’) could significantly impact on consumption and savings decisions.

A range of justifications for fiscal austerity have been examined and dismissed. In terms of the fiscal calculations, there appear to be three propositions underlying the fiscal stance which has been adopted. These are:

(i) That potential output has fallen relative to previous trends and that potential output is a barrier against sustainable higher levels of output;

(ii) That although recession has damaged potential output, high levels of demand would not help restore potential output;
(iii) That there will be a dramatic revival of investment and net exports, and that this raises investment and exports on a sustainable basis to higher levels than experienced in recent years.

In contrast, we have argued that the estimates of potential output are subject to considerable uncertainty which should be reflected in policy formulation, and that as now estimated production at the level of potential output would involve substantial unemployment. But more significantly we doubt that potential output (as measured) forms a barrier against higher levels of output. Further we have argued that a long-term budget deficit is probably required in order to secure even the present measures of potential output, and that the inability to recognise that threatens to lead to a prolonged period of inadequate output and significant levels of unemployment.

References
Dicks, M. (2010), ‘The UK’s productive capacity: surveying the damage’, *IFS Green Budget* Chapter 1


Osborne, G. (2010), Speech by the Chancellor of the Exchequer, the Rt Hon George Osborne MP, on the OBR and spending announcements (http://www.hm-treasury.gov.uk/press_02_10.htm)

Sawyer, M (2010) Path dependency and the interdependences of demand and supply in macroeconomics, University of Leeds, mimeo


The Office for Budget Responsibility was established by the incoming Coalition government with the mandate of providing independent commentary on fiscal policy and its effects. However, the OBR was reliant on the Treasury for its forecasting model.

During the weekend of May 8th/9th 2010 there were emergency talks in Brussels to provide support for the Greek government. The UK election had been held on the preceding Thursday 6th May and talks and negotiations were underway during that weekend between the political parties which led to the formation of the coalition government on Tuesday 11th May. During the election campaign, Vince Cable, subsequently Business Minister, had argued that “The Greek position is much more serious but is a salutary warning that unless the next government gets seriously to grips with the deficit problems, as we're determined to do, we could have a serious problem,” Lord Mandelson, the then Business Secretary, rightly ‘said comparing Britain’s fiscal and economic position to that of Greece was “frankly ridiculous”’. (Source: http://www.telegraph.co.uk/finance/financialcrisis/7644204/Britain-risks-Greek-style-crisis-warns-Vince-Cable.html).

For further discussion on path dependency see Sawyer (2010), Arestis and Sawyer (2009).

Furceri and Mourourgane (2009) estimate the impact of financial crises on potential output on an unbalanced panel of OECD countries over the period 1960 to 2007. In their results ‘financial crises are estimated to lower potential output by around 1.5 to 2.4% on average. The magnitude of the effect increases with the severity of the crisis. The occurrence of a deep crisis is found to decrease potential output by nearly 4%, almost twice the amount observed for the average of crises’ (Abstract p.2).

The figure of 6 per cent is a combination of the estimates made by HM Treasury (2008b), subsequently revised and then amended by the OBR in June 2010.
### Table 1 Summary of 2010 emergency budget June 2010

<table>
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<tr>
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<td>Of which changes to welfare</td>
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<td>Spending share of consolidation (%)</td>
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<td>Total discretionary consolidation</td>
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Source HM Treasury (2010) Tables 1, 1.1
Table 2 Cyclically adjusted net borrowing

<table>
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<th>2007/08</th>
<th>2008/09</th>
<th>2009/10</th>
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<td>2008 Pre-budget report</td>
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<td>5.6</td>
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<tr>
<td>Budget 2009</td>
<td>2.7</td>
<td>5.7</td>
<td>9.8</td>
<td>8.9</td>
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<td>Budget March 2010</td>
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<td>7.3</td>
<td></td>
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<tr>
<td>Budget June 2010</td>
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<td>8.7</td>
<td>7.4</td>
<td></td>
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Output gap

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<th>Output Gap (%GDP)</th>
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<th>2008/09</th>
<th>2009/10</th>
<th>2010/11</th>
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<tbody>
<tr>
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<td>0.3</td>
<td>-0.5</td>
<td>-0.4</td>
<td>-0.3</td>
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<td>2008 Pre-budget report</td>
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<tr>
<td>Budget 2009</td>
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<td>Budget March 2010</td>
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Source: Derived from HM Treasury (2008a, 2008b, 2010a, 2010b)
Table 3 Estimates of falls in potential output following financial crisis

<table>
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<th>Source</th>
<th>Estimates</th>
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<td>HM Treasury</td>
<td>Pre-Budget Report 2008 and Budget 2009 retained the previous estimates of trend growth rates. The former postulated a ‘level effect’ of potential output amounting to a decrease of 4 per cent over the period 2007Q3-2009Q3. The latter had corresponding figure of 5 per cent over the period 2007Q3 to 2010Q3</td>
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<td>OECD</td>
<td>‘The financial crisis and the ensuing recession have reduced potential output, but uncertainty about the permanent impact remains significant. The overall effect on the United Kingdom is estimated by the OECD to be slightly larger than for the average OECD country (Figure 1.4, panel 2). (OECD Economic Survey UK March 2011, p.25) : the Figure indicates output gap of the order of 3 ½ per cent</td>
</tr>
<tr>
<td>NIESR</td>
<td>‘that the long-run effect of the crisis on sustainable output was around 3 to 5 per cent, with the rise in risk premia that has resulted from the crisis inducing a 3 per cent fall in sustainable GDP’ (Barrell, 2009)</td>
</tr>
<tr>
<td>Dicks</td>
<td>‘We estimate that potential output will be 9% of GDP (£132 billion in today’s money) lower than it would have been in the absence of the crisis’</td>
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</table>

22
Table 4 Alternative scenarios for budget deficits and sectoral balances

<table>
<thead>
<tr>
<th></th>
<th>Budget Deficit</th>
<th>Private Savings</th>
<th>Private Investment</th>
<th>Current Account</th>
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<tr>
<td>Average 2001-08</td>
<td>2.00</td>
<td>15.4</td>
<td>15.6</td>
<td>-2.22</td>
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<tr>
<td>2009/10</td>
<td>11.00</td>
<td>19.72</td>
<td>10.75</td>
<td>-2.03</td>
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<td>2015/16</td>
<td></td>
<td></td>
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<tr>
<td>Office for Budget</td>
<td>1.55</td>
<td>17.03</td>
<td>16.15</td>
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<td>Responsibility</td>
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<tr>
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<td>Alternative scenario 2</td>
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</table>

Source: Calculated from National Income Blue Book, Office for Budget Responsibility (2011)

Note: Calculations relate to ratio of variables to GDP in percentage form based on nominal figures as given in OBR