As the UK economic downturn accelerates, the government is trying to devise a policy response to slow and eventually reverse the contraction. The Monetary Policy Committee has made a contribution by cutting interest rates drastically, sending the sterling exchange rate to an all time low against the euro. Many commentators are now also advocating fiscal policy action in the form of tax cuts or higher expenditure.

This raises three questions. First, can the UK afford a fiscal stimulus, given that the budget deficit is already 3 per cent of GDP? Second, would a fiscal stimulus be effective? Third, how should any such stimulus should be designed? Is a tax cut better than a boost in expenditure? If so, which taxes should be cut? This note addresses these questions, drawing on recent contributions from academic research.

Is a fiscal stimulus affordable?

Our view is that a fiscal stimulus is affordable and would be effective if designed properly. It is affordable despite the fact that the current government deficit is high, and must be corrected at some point. Figure 1 shows that the current deficit in the UK is already high relative to other countries. And in the first half of 2008-9, UK public sector net borrowing was £37.6 billion, 75% higher than the same period last year. This is likely to rise still further, as tax revenues fall and expenditure on benefits rises.\(^2\)

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\(^2\) For example, in 2007/8, the financial sector contributed over a quarter of the £46 billion collected in corporation tax. This is likely to fall substantially, although there is as yet no indication of this in corporation tax receipts. A fall should be expected in the October 2008 receipts, although these have not yet been published.
However, as Figure 2 shows, UK government debt as a percentage of GDP is relatively low, both by historical and international standards. At just under 38% it is much lower than most other European countries. Japan’s debt exceeds 150% of its GDP. In asking whether the UK can afford a fiscal stimulus, it is more reasonable to focus on this overall stock of debt than on the new borrowing in any particular year since it is the stock which determines both the soundness of government finances in the UK and the need for corrective action in the future.

Some commentators argue that the government’s recent capital injections to UK banks may be a threat to fiscal sustainability. But whether these injections will be a burden to the taxpayer is an open question. In the long term, the value of the assets acquired may also be higher than the cost. Current market valuations of financial instruments such as credit default swaps do not indicate that financial markets are concerned about the soundness of UK government finances. Of course, this doesn’t mean that the long term stock of debt should rise: but given the rapid slowdown in the economy at present the UK is in a good position to support a temporary rise in the debt to GDP ratio.

Excluding Northern Rock; including Northern Rock the figure is 43.4%, still considerably lower than other countries.
Would a fiscal stimulus be effective?

But even if the UK can afford a fiscal stimulus, would it be effective? Economic research has moved on from the simple Keynesian analysis that a budget deficit would stimulate the economy. Recent research has focused on the conditions under which a fiscal stimulus or a fiscal contraction would stimulate the economy. This indicates that there may be circumstances in which a fiscal stimulus would reduce economic activity, and a fiscal contraction expand it.4

However, under current conditions there are two broad reasons to expect that a fiscal stimulus would help to slow the downturn. First, the relatively low level of government debt itself will help. A fiscal stimulus in a highly indebted economy may raise concerns amongst consumers and investors about government solvency and lead them to spend even less; but this is unlikely to be a problem in the UK at present. Second, the effects of fiscal policies on consumer spending have proved to be stronger in recessions than in booms because people are more likely to be credit constrained.

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How should a fiscal stimulus be designed?

The effectiveness of a fiscal stimulus package depends, though, on how it is designed. We propose a package with three elements:

1. An increase in the Child and Working Tax Credits.
2. The introduction of accelerated depreciation allowances for one year.
3. An increase in government spending on infrastructure projects.

These three elements aim at increasing aggregate demand for goods and services by private households, investors and the public sector itself. This package addresses the main components of aggregate demand: consumption, investment and government spending.

Stimulating aggregate household consumption faces at least four problems. First, the share of private consumption in GDP in the UK has been unusually high in the last few years. Figure 3 shows household consumption expenditure rose from just under 90% of real disposable income in the mid 1990s to close to 100% in the early part of this year. Such consumption levels are not sustainable. So, while consumption is likely anyway to fall sharply, some correction is needed.

Second, not all households react to a tax cut by spending more. In the current economic situation, many may just increase their savings. Given this, it is important to target households who would spend more if their disposable income increased now. Low income households are most likely to do so. Third, even where there is more spending, this may partly be spent on imports of goods and services. This reduces the effect of the stimulus on the UK economy, and highlights the benefits of international cooperation. Fourth, given that the fiscal stimulus is intended to be temporary, and
that the aim would be eventually to maintain the current overall stock of debt, then forward-looking households may not respond strongly, believing that their long term position is barely affected. This suggests targeting measures aimed at consumption to those who are more likely to face credit constraints.

These considerations lead us to propose that a significant part of the package should be used to boost the Child Tax Credit (CTC) and the Working Tax Credit (WTC). In April 2008, just over 6 million families were in receipt of one or both of these, at a total cost of just under £20 billion. These credits are targeted primarily to lower-paid workers, although CTC is also available to out-of-work families. It seems appropriate to target relief to such families, not just because they are likely to suffer more heavily from the economic downturn, but because they are likely to spend a higher proportion of the additional income. There would therefore be a greater impact on aggregate consumption than cuts in other taxes, such as VAT or income tax.

It is worth briefly comparing this measure to that recently proposed by the Conservative Party. The Conservatives propose to offer credits against employers’ national insurance contributions to employers that hire new workers who have been unemployed for three months or more. The cost is intended to be met by savings from unemployment benefits, and so it is argued would not represent a fiscal stimulus. In some ways increasing the WTC is a similar proposal in that resources would be targeted towards low-paid employees. But offering support only for hiring the unemployed creates no incentives for firms to hold on to existing workers, and introduces the need for rules to prevent firms sacking workers and hiring new ones. The two schemes also differ in that the immediate impact of an increase in the WTC would be captured by the employee rather than by the employer.\(^5\)

The second element of our package is to introduce accelerated depreciation allowances for a temporary period of probably a year. The introduction of accelerated depreciation would create a strong incentive for investment. Businesses are currently postponing or abandoning investment projects because of the gloomy economic situation. Higher allowances would help to make these projects economic. But because the incentive would be available only for a fixed period, businesses would also have a considerable incentive to bring forward investment projects. There is considerable empirical evidence that the timing of investment expenditure responds significantly to announcements of temporary measures such as this.\(^6\) One objection to this incentive could be that loss-making firms would not be able to benefit from accelerated depreciation because they do not pay corporation tax. This could be addressed by allowing loss-making businesses to claim an equivalent credit in exchange for the accelerated depreciation.

One caveat to introducing even temporary measures to boost investment is that there would be a deadweight loss. That is, investment which would have taken place in any case would still receive the accelerated allowance. This reduces the impact of each £1

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\(^5\) In the long run, it is possible that wages would adjust so that this distinction becomes unimportant; but to the extent that wages are reduced as a result of higher credit being paid, then at least that would help to boost the demand for labour.

\(^6\) For example, evidence from the USA of the strong effects of the bonus depreciation allowance passed in 2002 and increased in 2003 is given in C. House and M. Shapiro “Temporary Investment Tax Incentives: Theory With Evidence from Bonus Depreciation”, NBER Working Paper 12514.
of foregone tax revenue. In principle it would be possible to mitigate this by offering the additional allowances for investment only above some baseline – such as level in the previous accounting year. However, that would introduce considerable complication and would be likely to lead to a smaller overall effect. We therefore propose that it be applied to all investment, and believe that the impact of a temporary measure would be large enough to justify the cost.

The third element of the package would be an increase in funds available for public investment. Public investment projects have to be planned carefully to be productive, and increasing demand does not mean that the government should waste money. Expanding public investment in the short term is therefore difficult. But at present the temptation is to cut back on public investment projects, for example, those for the 2012 Olympics. This should not happen. Another option trailed recently has been the possibility of increasing subsidies for insulation. Like the measure for investment, this would be more effective in the short term if it was announced as a temporary measure.

The overall impact

How large would the effect of these measures be on GDP? Of course that depends on the size of the measures themselves. But the effect can be measured in terms of multipliers. For example, a multiplier of two would imply that £1 of additional government spending would increase GDP by £2. Estimates of these multipliers vary, but a broad consensus of economic research suggests that we unfortunately cannot expect the multiplier to be much more than one. A multiplier of one would imply that a fiscal stimulus package of, for example, £30 billion – about 2% of GDP - would increase GDP by no more than this. But adding 2% to GDP in the coming year would be a significant success and would improve the basis for a subsequent recovery.