BANK OF ENGLAND

Speech

The choice between rebalancing and living off the future

Speech given by

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Recent weeks have reminded us just how volatile financial markets can be. Indeed, since the Monetary Policy Committee met in August the stock market has fallen by just over ten per cent.[1] At the same time current data point, at the very least, to weak economic growth in the major advanced countries, and concerns about debt in parts of the euro area remain. So I would like to begin by reviewing some of the recent developments and discussing how the Monetary Policy Committee might need to respond if things turn out worse than the forecasts of our August *Inflation Report* suggested. I would then like to focus on the longer-term question of just how much the United Kingdom can afford to spend and comment on how we either rebalance the economy or live at the expense of future generations.

We have seen sharp stock market movements in the past. Sometimes they preceded recessions and economic dislocation and sometimes they did not. Indeed the distinguished economist, the late Paul Samuelson, remarked that the stock market had forecast nine of the last five recessions. Of course if policy-makers act to support asset prices on the downside, perhaps because of concerns about the economic consequences of falling asset prices, but seem unconcerned when prices are rising, then investors may assume they can make a one-way bet. This risks becoming a source of eventual instability.[2] In any case people who buy things like shares and houses should never need reminding that their prices can go down as well as up. But, if the stock market is right about recessions on as much as one occasion in two, that in itself is useful information for policy-makers trying to establish what is going to happen to the economy.

Earlier this year, data for the United States had suggested that it was recovering from the recession appreciably better than most other advanced economies. Its productivity also appeared to have improved sharply during and after the recession, unlike other countries such as Britain and Germany whose productivity is now lower than it was in 2008. In July, key US data were revised and, while US performance still appears relatively good, it is rather less outstanding. This downward adjustment has weakened the belief that the recovery from the recent recession would be as rapid as recoveries had been in the past. One undesirable feature of the United States economy is that unemployment has risen much more sharply than in most European countries. And recent work (Stock and Watson, 2010) points to the risk that a substantial proportion of the post-crisis rise in unemployment in the United States will prove long-term, limiting the scope for a full recovery.

While a weak recovery in the US does affect the international environment, the problems of the euro area will, if they intensify, turn out to be more important for the UK. We are exposed to financial contagion from both the euro area and the US, but the risks of renewed banking problems seem rather higher in the former. And of course while the United States buys over seventeen per cent of our exports of goods and services, about forty-three per cent – equivalent to almost thirteen per cent of our GDP – are sold to our neighbours in

[1] Evaluated as a fifteen-day moving average.
[2] See Miller, Weller and Zhang (2002) for an account of the so-called Greenspan Put.

the euro area. So it is a cause for concern that there was very little growth in the euro area in the second quarter and that leading indicators do not point to a revival underway.

Of course on top of this, but perhaps also a factor behind the economic weakness of our neighbours, are the problems of euro area sovereign debt. It is worth mentioning that these arise, at least in part because markets have not functioned in the way that some might have hoped. When the currency union was planned, the risks of relying on market forces to police sovereign debt were noted (European Union, 1990). Indeed, for many years, market rates showed very little sensitivity to the different rates of borrowing and levels of public debt in the different countries of the Euro Area; at the same time there were no obvious institutional constraints to public borrowing. The original Stability and Growth Pact was abandoned after Germany breached the borrowing limit.

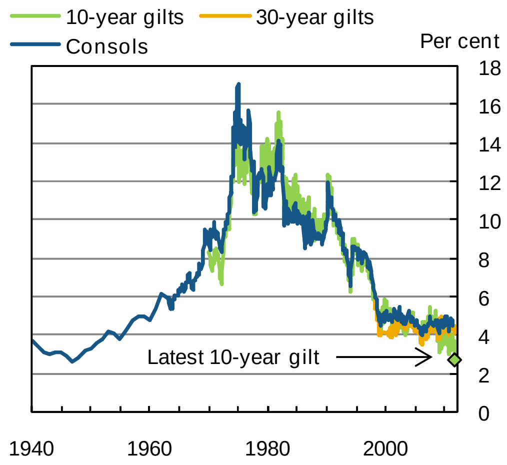
Now markets have had second thoughts and pushed up yields on the debts of countries thought at risk of default. Policymakers in the euro area have of course responded with the aim of bringing down the interest rates faced by indebted countries; most recently the European Central Bank has intervened to reduce the yields on Italian and Spanish debt. But to any casual observer it is obvious that there is a tension between the market pressures for much greater support and the political problems this pressure gives rise to in a number of countries in the euro area. The result is political uncertainty about how the issue will be resolved and this is itself a source of economic instability.

The credit crisis of 2007/8 was an earlier reminder of the limits to market signals as a source of information – in that case about the state of the banking system. Of course a great deal of progress has been made since we learned the hard way about the fragility that had built up. The regulatory structure is being completely overhauled. Banks are better capitalised and have much more liquidity than they did three years ago. So they are in a much better position to deal with difficulties than they were then.

Our August *Inflation Report* showed, as best we could judge, that, if interest rates were to follow the market profile, we should expect inflation to be marginally below target in the medium term. That suggested there was no need either to tighten or to loosen monetary policy. In the past I have argued that an early increase could be thought of as a prudent insurance policy. In the economic circumstances of earlier in the year that was certainly the case; the market path for interest rates, which was then expected to bring inflation close to target, implied a fairly sharp rise in rates. An early increase would have put us in a better position to address things should the picture for inflation have worsened while it could have been reversed if inflationary pressures had reduced. Given the weaker economic outlook outlined above, and its implications for UK inflation, the need for insurance is less than it was; by the time we produced our August forecast the market path for interest rates consistent with keeping inflation close to its target was much less steeply sloped. Averaged over the next two to three years the interest rate did not need to be as high. As a result I did not see the case for an immediate increase in Bank Rate at our last meeting in August.

A discussion of recent economic developments should not, of course, pass over one silver lining. The price of oil has fallen[3] by eight per cent since the MPC met at the start of the month. This is enough to reduce the consumer price index by around 0.2 per cent. Should this fall in wholesale energy prices persist and feed into utility bills in the new year that could knock a further 0.2 percentage points off inflation. These are larger changes than could have been achieved over the next few months by the increase in Bank Rate for which I had voted. They could point both to inflation lower than I had feared next year and to a substantially reduced risk of the sort of second-round effects on wages which have so concerned me over the last few months. Substantial further weakening of inflationary pressures would, of course, mean that additional monetary support rather than a withdrawal of that support would be the appropriate policy.

Chart 1: UK long-term interest rates



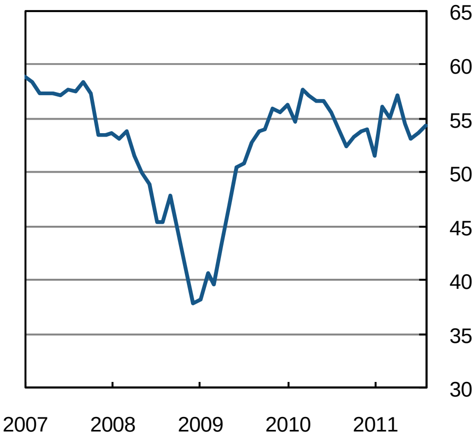
Sources: Bank of England and ONS.

So I would now like to turn to what monetary policy could do to prevent inflation dropping too far below its target, should economic and financial developments make that appear a likely outcome. Interest rates are much lower than they were last time the economy needed substantial support in the Autumn of 2008, and it is unlikely that there is practical scope for a further reduction. On the other hand, the Bank does have the option to buy more government debt, reducing longer term interest rates. We are frequently reminded that gilts yields are at record lows; this is, however, true only of short and medium dated stock. These yields are strongly influenced by the expectation that Bank Rate will remain unusually low for some time; the fact that 5-year yields are at record lows must be at least partly because, before 2009, the Bank Rate had never been set below 2 per cent. At the long end of the market, however, yields are not historically low. For example, as Chart 1 shows, the yield on Consols remains above 4 per cent while long-dated stocks are paying more than 3½ per cent. These are well above the levels reached in the middle of the last century; there is undoubtedly scope for further asset purchases to trigger further reductions in yields on government debt should the need arise. The resulting capital gains will provide support to consumption and a general reduction in the term structure of interest rates is likely to lead to knock-on capital gains on other assets which will provide further support to consumer spending. Higher asset prices and lower interest rates are also likely to support business investment. The extra demand which results will both support output and help to underpin the rate of inflation.

[3] Evaluated as a fifteen-day moving average.

While these are the routes through which I see asset purchases working, I should make clear that I do not think our August forecast or the more recent market movements since then as yet make a case for such a policy. As Chart 2 suggests, although the economy is weaker than we would like, business surveys do not suggest the picture is, at present, like that of the summer of 2008. Indeed the most recent CBI survey of manufacturers pointed to some improvement in August.

Chart 2: CIPS indicator of aggregate output growth[(a)]



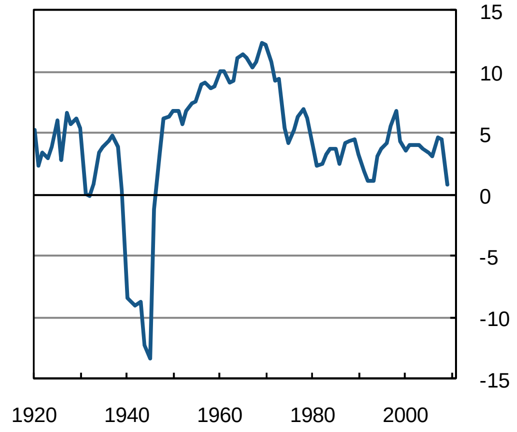
Sources: CIPS/Markit, ONS and Bank calculations.
(a) This measure is produced by weighting together surveys from CIPS/Markit (manufacturing, services and construction) using nominal shares in value added, and then taking the three-month moving average.

The Monetary Policy Committee is obviously keeping a very careful eye on immediate developments. But we also need to think about the long-run position of the economy. An important part of any assessment of the long run is to ask what the appropriate balance between consumption and saving is. Recent *Inflation Reports* have often discussed the rebalancing of the economy towards exports and away from imports. This is predicated on the belief that in the long run the United Kingdom (among other countries) cannot continue to sustain current account deficits on the scale of those seen over the past (see, for example, King 2011). But, external imbalances are only one aspect of the balance of saving and investment in the economy. In any economy, domestic investment and the surplus on the current balance of payments equal saving as a matter of identity. On those grounds the balance of payments surplus can be described as net foreign investment. Home investment typically involves the acquisition of what we think of as investment goods such as buildings or productive equipment while net foreign investment appears as a surplus of exports and net property income from abroad over imports.[4] But both deliver incomes which can support future consumption. From this perspective, then, it is overall saving and investment, and not just domestic investment, that is the mechanism by which countries provide for the future.

[4] In equilibrium the need for domestic investment is determined by technology and the productive structure of the economy. So variations in the amount of saving will be reflected in variations in the balance of payments. But both domestic investment and the balance of payments have to be taken into account to address the more basic question of whether we can afford current patterns of consumption.

Today I will argue that the United Kingdom as a whole has a long history of not saving enough. In Chart 3 I show national saving, net of depreciation, as a proportion of our GDP going back to 1920. The chart shows that, since the early 1980s, saving has been at a low level. And in the last ten or fifteen years before the crisis there was no obvious tendency to save much more, despite the fact that we have been aware both that we are living longer, and that the baby boom generation was at an age where one would expect high rates of saving to pay for its retirement. Indeed, our saving record would have made sense only if we either planned to retire much later than most people do, or could be confident of earning the sort of returns delivered to successful investors in Doncaster's most famous horse race. But, as we know, when the outcome is a certainty the returns are bound to be poor. As people who are now noticing the impact of past under-saving on their pensions are discovering, it does not make sense to plan for the future on the basis of the sort of returns generated only by a successful bet on an outsider winning the St Leger.

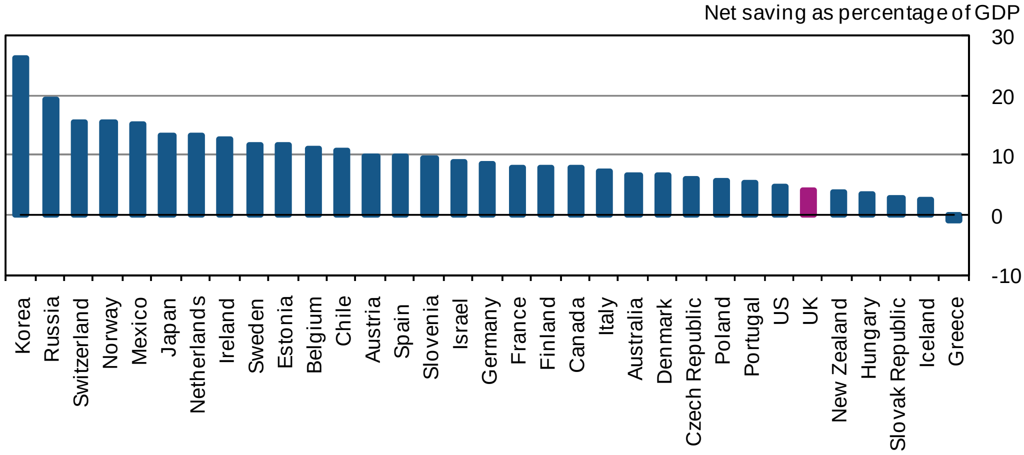
Chart 3: UK net savings rate 1920-2009



Sources: ONS, Sefton and Weale (1995) and Bank calculations.

It is also worth making the point that the United Kingdom has a poor record by comparison with other countries. Chart 4 shows net saving as a proportion of GDP for the period 1987-2006 for those countries for which data are available.

Chart 4: Net Saving by OECD countries (1987-2006)



Sources: OECD and Bank calculations.

So both history and a comparison with other countries suggest that our past saving was low. Rebalancing of the economy will not be complete until there is good reason to believe that saving is adequate. How far this increase in saving is reflected by an increase in domestic investment should depend on the extent to which there are socially profitable investment opportunities at home and I would not like to judge this. But the key point is that the appropriate degree of rebalancing needs to be defined with reference to our overall savings requirements.

How we might assess whether the country as a whole is making adequate provision for the future? Such a question obviously cannot be answered without making assumptions about what the future is going to look like. But I do not think the uncertainty about this should be turned into a justification for not thinking seriously about what lies ahead. The question I want to consider is whether the economy operates in a sustainable fashion and, if not, what sort of changes in our spending pattern would be needed to put it on a sustainable basis. Arrow *et al* (2010) have argued that this question can be addressed simply by looking at saving net of resource depletion and depreciation. They suggest that a sustainable economy is one in which saving per capita is positive. But this measure does not allow for the circumstances of a population expected to live for longer and longer. Britain's consumption needs are expected to rise in the future and, in the nearer term, saving is needed to make this possible. Thus I prefer to assess the position by thinking about a comprehensive balance sheet for the United Kingdom. In this I need to consider our assets and liabilities broadly defined.

Let me say a bit more about what I mean by assets and liabilities. We are accustomed to the idea that the nation's assets are its capital stock. This comprises both produced capital goods such as houses, factories, machinery, roads and transport equipment, stocks and work in progress, and naturally occurring capital. We are used to thinking of naturally occurring capital as being resources such as North Sea oil and gas and perhaps other environmental assets such as Yorkshire's beautiful countryside. I do not feel able to put any value for the latter, but the Office for National Statistics does provide an estimate of the value of land in the country as a whole. "This blessed plot" is thought to be worth about two years' GDP, only slightly less than the value of our produced capital. But beyond this, there is a much larger asset which does not appear in conventional balance sheets but which we need to take account of if we are to assess the overall resources of the nation This is the capitalised value of current and future labour incomes, the so-called human capital of the nation. Its computed value depends on assumptions about how fast real wages are likely to grow and also, of course, on how much people will work and when they will retire but, subject to assumptions about these and about the appropriate rate of return used to discount future income, it can be calculated reasonably straightforwardly.

On the liability side we have one rather small item, Britain's net overseas liabilities. Despite many years of external deficits, these remain remarkably low. But a much larger item is the total cost, discounted back to today, of our current and future consumption. Here I am including both the spending that we do on our own behalf, such as shopping for food and clothes, and also the spending which the government does for our benefit through the provision of services such as health and public administration. As with the calculation of human capital, in estimating the total value of consumption as a liability, it is necessary to make assumptions about how fast consumption will grow in the future and to choose the appropriate discount rate.

I want to represent the effects of carrying on largely as we are. By this I assume that the wage income per woman or man of any given age grows at a steady rate, 1½ per cent per annum in real terms; population increase means that the overall growth rate is faster than this. The total labour income available at any time in the future then also reflects the demographic mix of the population; the Office for National Statistics helpfully forecast this for almost a hundred years ahead. So from these assumptions and the ONS figures I can estimate the total discounted value of that labour income.

Consumption can be projected in much the same way. Starting with estimates of spending by age and assuming that consumption per person at any given age grows at the same rate as labour income I can produce projections of total consumption over time. Crucially, this method of calculation means that the annual figures for consumption, which I discount to give a capital value, reflect the spending associated with an ageing population. Because I start with, say, a figure for the consumption of an eighty-year old in 2009, the base year, and work from this, an increase in the number of eighty-year olds (arising either because people are living longer or as a result of the ageing of the baby-boom generation) results in an increased cost.

There are two departures it is sensible to make from the assumption that expenditure is age-determined. First, it is well-known that a large amount of health spending occurs in the last year of people's lives. It may therefore make some sense to assume that health spending is related not to people's ages but to their mortality rates. The ONS again gives us projections for these, and estimates of the health component of total expenditure can take them into account (McCarthy, Sefton and Weale, 2010). Secondly, it is obviously necessary to reflect the plans for public consumption announced in the Emergency Budget of 2010.

The results depend on the real rate of discount as well as the rate of growth. I set the former to 4.4 per cent in real terms, since this is approximately the average real return in the economy as a whole over the period from 1989 to 2006. Table 1 shows a preliminary estimate of the balance sheet for 2009. The relationships between the numbers are much more important that then numbers themselves. If I compare discounted total consumption, on the liabilities side, with available resources on the assets side, my preliminary results suggest that discounted consumption needs to be reduced by over ten per cent in order to be brought into line with the resources available. It is worth noting that this is not a problem solved by faster productivity growth. Indeed a faster growth rate makes things worse, because it has the effect of raising the amount of consumption people are likely to aspire to in their retirement relative to their earnings while they are at work.

Table 1: Comprehensive balance sheet for the United Kingdom in 2009

				(£bn, 2009 prices)
Assets		**Land**		2,856
	Factors of Production	**Exhaustible resources (Oil & Gas)**		182
		Produced capital		3,182
		Human capital		29,361
	Total			**35,580**
Liabilities	**Final Demand**	**Consumption**	**Public**	10,947
			Private	28,755
	Net Financial Claims			83
	Total			**39,785**
Balance				**-4,205**

Suppose that, despite these figures, we try to carry on as we are without increasing saving. Then eventually people and particularly old people will be disappointed by their living standards. It is quite likely that this will create pressures to transfer resources from young people to old people reducing the consumption of the former to support the latter. But transfers do not create extra goods and services for people to enjoy. So either young people or old people will find that they cannot consume as much as they might hope given the growth performance of the economy. If an increase in saving is delayed and no other change takes place to ease the situation, then the eventual adjustment to consumption will have to be larger than that indicated above.

In interpreting this, it is important to remember that net national saving was, at 0.8 per cent of GDP, unusually low in 2009 with little improvement in 2010[5]. The average for the ten pre-crisis years was 4.2 per cent of GDP. Restoring the savings relationship of the pre-crisis years would reduce the required fall in consumption by over three percentage points. But such a cyclical improvement would come about only if income were to rise faster than consumption; it is unlikely that this could be generated by a purely consumer-led revival.

We can of course think of increasing resources instead of reducing consumption. Indeed, the cyclical improvement in income discussed above has that effect. Another way of raising resources is for people to work longer; this increases human capital. But our calculations suggest that, even if working life is extended by three years immediately, there will still be a shortfall of around six per cent in total resources. Since no

[5] Gross saving as a proportion of GDP fell slightly, from 11.7 per cent in 2009 to 11.4 per cent in 2010. Data on depreciation for 2010 are not yet available.

one expects working lives to rise to this extent in the short term it follows that a bigger increase will be needed in the long term. And we probably need to save more as well.

I should mention one important caveat. I am describing necessary conditions for a sustainable long-run path but not sufficient conditions. Both Spain and the Irish Republic had high levels of saving in the period before the financial crisis, as chart 4 shows. They also had high levels of gross capital formation, with investment in buildings taking up, in 2005 and 2006, an average of eighteen per cent of GDP in Spain and twenty-one per cent in the Irish Republic as compared to nine to ten per cent in Britain and Germany. They now find that they have large numbers of houses that cannot be sold and the people who built them risk losing most of their money. In essence it has turned out that their savings were very poorly invested; instead of delivering a positive return they may have earned a large negative return. Poor business decisions are risks to which any economy is exposed and policymakers cannot be expected to prevent these, although one might hope that the new arrangements for banking supervision and the oversight of the Financial Policy Committee will prevent the sort of domestic capital formation bubble whose aftermath is now causing so much havoc in Spain and in the Irish Republic.

How can I reconcile this analysis of the importance of that Yorkshire virtue of thrift with the widely heard observation that we need a revival in consumer confidence and an increase in consumption to get the economy moving again? Unemployment is much increased and businesses probably also have some spare capacity. Extra consumption could add to demand and create employment for some of those who are now, sadly, unable to find work. Income will be increased, but perhaps not by as much as the increase in consumption, and our external indebtedness is also likely to rise. It might, nevertheless, be thought that, in our present circumstances, the increase in consumption now more than compensates for the loss of consumption which could eventually follow. In an economy with spare capacity, the sort of monetary policy needed to keep inflation close to target by supporting the employment of otherwise under-used resources tends to support consumption. This is desirable despite the likelihood that a boost to current consumption reduces future consumption.

Increased demand can, however, also come about from increased domestic investment or an increase in exports relative to imports as well as increased consumption. If domestic investment opportunities are limited, then it is important for the economy to be as competitive as it needs to be to deliver an adequate excess of exports over imports which, you may remember, is more or less equal to aggregate net foreign investment. Even at today's exchange rate, one can reasonably question whether the economy is as competitive internationally as it needs to be. And that in itself poses further problems for monetary policy because, as we know, a major factor behind the high rate of inflation has been the increased import prices resulting from the exchange rate depreciation of three years ago. Monetary policy cannot, of course, be expected to deliver both inflation close to target and an economy with a more sustainable pattern of saving at the same time. But, despite my very public concerns about inflation, I should be worried if, as a result of the recent market disorder or for any other reason, the UK exchange rate were to rise markedly.

I am arguing that both domestic investment and exporting need to play a substantially bigger role in the way we use our resources in the future. How can the second of these be reconciled with the point which is often made – that every country cannot recover by increasing its exports? There are two parts to the answer to this.

First of all, as Chart 4 indicates, it is hard to imagine that most other countries have been undersaving in the way that Britain has. Britain has more need to raise its saving and increase its exports than do most countries. But some, such as China, have probably been saving more than an analysis of the type I have set out above would justify and one might certainly hope that consumption rather than exports will support demand there. Secondly, should it turn out that the world as a whole finds it has not been saving/investing enough and decides to increase its saving, the outcome would be that the return on capital would be expected to fall. As a consequence even more saving would be needed in order to finance a given level of retirement spending and one might worry that an unstable feedback loop would develop. But in fact people would look at the costs of retirement and conclude that working longer was a more sensible choice than putting away very large amounts of money to pay for retirement. So the eventual equilibrium would be one where, because the cost of being retired comfortably had risen, people would chose to spend less time retired. Our earlier analysis showed that, for the UK, this can have a substantial impact on savings needs even if currently-discussed changes to retirement patterns still point to the need for the UK to save more and consume less.

The implications of this for monetary policy depend on how this rebalancing away from consumption and towards exports and investment occurs. The MPC's current projections assume this adjustment starts now, but happens gradually, with the share of GDP accounted for by consumption falling over the forecast, and the share accounted for by investment and net trade rising. This process seems the most likely outcome. But there are risks around this forecast. For example, a faster adjustment by households and government would lead to a sharp slowdown in domestic consumption. If exports and investment do not pick up, then the MPC's mandate to deliver inflation at its target rate implies that we should do what we could to maintain demand on a path consistent with the target rate of inflation; that may well mean that consumption would be supported and rebalancing would be delayed by the policies I described earlier. On the other hand if exports and investment rise but consumption is also buoyant, then excess demand will lead to inflationary pressure and the MPC will need to raise interest rates.

But monetary policy, of course, is only one part of the overall policy environment. The framework I have outlined offers a practical way of looking at long-term sustainability. It provides a means of examining the contribution that other policies, such as the increases in state pension age which have recently been announced, can make towards rebalancing our economy. And it also provides the backdrop for the shorter-term issues with which monetary policy is directly concerned.

References

Arrow, K J, P Dasgupta, L H Goulder, K J Mumford and K Oleson (2010), 'Sustainability and the Measurement of Wealth', *NBER Working Paper*, No. 16599.

European Union (1990), 'One Money: One Market', *European Economy*, No. 44, Chapter 5.
http://ec.europa.eu/economy_finance/publications/publication_summary7520_en.htm

King, M (2011), 'Do we need an International Monetary System?', *Speech given at the Stanford Institute for Economic Policy Research in California on 11 March.*

Miller, M, P Weller and L Zhang (2002), '"Moral Hazard and the US Stock Market: Analysing the 'Greenspan Put'', *Economic Journal*, Vol. 112, pages 171-86.

Stock, J H and M W Watson (2010), 'Modelling Inflation after the Crisis', Economic Policy Symposium, Federal Reserve Bank of Kansas City.

McCarthy, D, J A Sefton and M R Weale (2010), 'Generational Accounts for the United Kingdom', *NIESR Discussion Paper*, No. 377.