



BANK OF ENGLAND

Speech

Why is their recovery better than ours? (Even though neither is good enough)

Speech given by

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“So here I am, my affections torn between a [UK] postal service that never feeds me but can tackle a challenge and one [US] that gives me free tape and prompt service but won't help me out when I can't remember a street name. The lesson to draw from this, of course, is that when you move from one country to another you have to accept that there are some things that are better and some things that are worse, and there is nothing you can do about it...Now if you will excuse me I have to drive to Vermont and collect some mail from a Mr. Bubba.” — Bill Bryson, *I'm a Stranger Here Myself: Notes on Returning to America After 20 Years Away*

Why is Their Recovery Better than Ours? (Even though neither is good enough)

Adam S. Posen

Comparing economic policy and performance across countries is a rewarding pursuit intellectually, and sometimes in the form of policy relevant insights. Tonight, I would like to directly compare policy and performance in the United Kingdom and the United States since the current less-than-satisfying recovery began in both countries in mid-2009. Perhaps obviously, this comparison is of great personal concern to me, given my residence and work here in London, while retaining ongoing ties personally and professionally in Washington and throughout the US. But it is worth attention for more than just that, or even just for Anglo-American bragging rights. While there are obviously some real differences between these economies, there are many reasons that I will argue that this is a fair and revealing comparison. And just as Bill Bryson found when comparing his experiences with the Royal Mail with those he had with the US Postal Service, even if apparent efficiency seems to be greater in the US, there are some advantages to UK institutions that also have to be taken into account when fully assessing performance. Flexibility – that defining aspect of liberal market systems, which both of our economies can credibly claim to be – takes different forms on the opposite sides of the Atlantic, leading to different results. And unlike in Bill Bryson's quote, I believe that we can do something about some of them.

My basic goal is to offer an explanation why the US economy has had a better recovery than the UK economy from the global financial crisis so far. Our economies suffered largely the same type and size of shock at roughly the same time, and our respective central banks have pursued roughly the same type and size of counter-cyclical policy response – thankfully, in my view. Yet, the US has had significantly more GDP growth with somewhat lower inflation over the last thirty-two months than in the UK. Why is that? It seems to me that there are three sets of explanatory factors:

- Corporate investment rebounded much more in the US than the UK because
 - there were more non-bank options available to provide financing for investment
 - there was less spillover from euro area risks on to the US than the UK banks
- Household consumption rebounded much more in the US than the UK because
 - there was significantly less net withdrawal of fiscal stimulus in the US than UK

- there was a greater rise in energy costs faced by the UK than US consumer
- Inflation was higher in the UK than in the US because
 - the UK fiscal tightening took in part the form of a Value-Added Tax increase
 - Sterling depreciated more and more rapidly than the Dollar did

The vast majority of these factors are temporary or cyclical in nature, with the exception of the structural failures of the UK financial system for domestic credit, whose importance I have long stressed (Posen (2011a)). Many of the factors that some would suggest indicated a structural, and thus harder to change, reason for the relative weakness of the UK recovery than in the US – such as differences in the indebtedness of households or the desire to make risky investments or the housing markets – play no real role in explaining the performance gap, to my mind. If anything, I fear that the structural issues in the US labor market may turn out to make recent productivity growth rates there unsustainable over the medium-term. Despite that fact, I am hopeful that we are on the cusp of a more robust recovery in both economies - in the absence of premature policy tightening – and though the UK will take some time to catch up with the US, it largely will.

I am grateful to be able to tackle this comparison here on the podium at NIESR tonight in the company of two friends and close colleagues. Our host and chair, Jonathan Portes, is continuing the proud tradition of NIESR Directors, as set by my MPC colleague Martin Weale, of keeping NIESR at the center of UK public discussion about economic policy through publishing rigorous but sensible non-partisan analysis by the NIESR staff. I am grateful to him for gathering this crowd for our joint discussion tonight. Our esteemed guest, Eric Rosengren, President of the Federal Reserve Bank of Boston, has generously carved out time to spend a few days with us at the Bank of England, as well as here at NIESR tonight, to promote learning from each other. Eric was way ahead of the curve in his influential research on the importance of credit supply and transmission of financial shocks, and went from that to showing true intellectual leadership on the FOMC from the first signs of the global crisis through today. We can definitely learn a lot from him. I hope my own remarks tonight will offer my two friends as well as all of you something to think about as well.

The recovery gap to explain –

The US recovery from the global financial crisis has been faster, stronger, and less inflationary than that in the UK, at least so far. Both economies hit the trough in GDP in the second quarter of 2009, and have been expanding since then. This is the period on which I want to focus. More than just the similarity in timing, there is a strong similarity in other factors as well. The initial shock was quite similar in size and nature for these two economies. Equity prices, house price inflation, bank lending, and residential construction all fell at very similar sharp rates over the 2007-08 period, and obviously both countries faced the same global

contraction.¹ Both countries are in the grand scheme of things liberal market economies, with democratic institutions, secure property rights, low average inflation for more than a decade pre-crisis, and so on. The UK is of course much smaller and more open to the world economy than the US is, as well as much more tied to Europe (less tied to Asia). Both economies, however, actually *gained* similar amounts of GDP from net trade during the downturn of 2008-09, because imports fell rapidly with the contraction.

As can be seen in Figure 1, however, the US has bounced back in GDP terms much more strongly, especially since 2010:Q3 (remember that date). This is because the UK economy has been largely stalled since then, while the US continued on its recovery trend. At this point, the US GDP is back to its pre-crisis level, up over 6% from the trough, and had we in the UK continued along our initial recovery path, we would be on course to return to pre-crisis GDP level by third quarter of this year. Even the better US recovery is rather weak compared to most prior post-war recoveries, considering how long it took to regain the past output level, and our present UK recovery is historically quite paltry. No one should be satisfied with the levels of unemployment and underemployed resources in either economy, even though there is ample historical precedent for slower recoveries following financial crises than following other types of recessions. But for tonight, the key question is why has the US recovery been so much stronger?

Figure 2 reveals the proximate causes of the differences. These bar charts decompose the total increase in GDP since 2009:Q2 into the main income accounting components (Public and private investment, public and private consumption, stock building/inventories, net foreign trade, and a small residual). The left pair of stacked bars gives the percentage breakdown by component, and the right pair of bars gives the cumulative contribution by component. Hence, on the right, the US stacked bar nets out to 6.2%, while the UK stacked bar cumulates to 3.4%. Two components make this already sizable 2.8% growth gap to explain even bigger. One, the UK had much greater increase in net trade in the recovery than the US. This befits a more open economy whose currency depreciated more and more rapidly than its comparator. Two, government consumption rose in the UK while contracting in the US during the recovery. This is because fiscal automatic stabilizers are much bigger in the UK, and the UK was further from growing at trend in the recovery than the US, both of which pushed up the amount of outlays (which State and Local budget constraints in the US caused cuts offsetting Federal level transfers). These factors combined add another 2% or more to the gap in growth between the UK and the US economies that has to be explained.

So where did the US growth come from? It is clear from figure 2 that both private consumption and investment grew much more strongly in the US than in the UK – so much more strongly that they more than offset the UK's boost from net trade and bigger stabilizers. Consumption grew by a whopping 3.8 percentage points in the US since mid-2009, while only growing by 0.7 percent cumulatively in the UK; investment grew by 1.7% in the US and only 0.6% in the UK over the course of this recovery (Also a factor

¹ In the interest of time and space, I am not presenting here figures showing these parallel paths, but they are available. Technical note: the similarity of UK-US house price inflation moves holds if one uses the Case-Shiller index of house prices for the US; using the FHFA measure there is a greater divergence.

was three times the growth from stockbuilding in the US than the UK, but that should be seen as the result of the greater growth from these domestic demand sources, amplifying them, but not even a proximate cause in and of itself). These are in the Bank of England parlance rather chunky numbers, and are what we have to explain.

Reasons for the difference in investment growth –

One way to explain the difference in the recovery of private investment in the US from the UK would be to say that businesses were (correctly) more optimistic about growth prospects in the US than the UK, and invested accordingly. I find this kind of argument rather circular in nature, except to the degree that there was a foreknown driver of consumption growth in the US that was not really present in the UK. I address this possible explanation in the next section of my remarks. But taking this claim on its own terms, it seems suspect in the current recovery as an explanation for the US' relative investment boom:

- Equity prices, which should offer some indication of the prospects for future growth in corporate profits, have risen by very similar amounts in the UK and US²;
- Net exports, and manufacturing in particular, in the UK and US have both “come back” roughly to the degree that the countries' respective currency adjustments would have predicted, and thus more so in the UK than in the US, consistent with adaptability;
- Corporate bankruptcy rates rose by similar amounts (50%) versus their pre-crisis averages in both countries, and were more volatile in the US than in the UK;
- Corporations in both the UK and US are sitting on historically unprecedented hoards of cash rather than investing that cash (or returning it to shareholders), although a little more so in the UK than in the US; and,
- The share of private gross fixed capital formation in GDP has been stable in both countries at the same level (around 12% of GDP), so investment rose in the US only proportionately with the growth as it came through, rather than shifting upwards in prospect.

So what explains the difference in investment - besides stronger growth in something else, aka consumption, which may be it?

Monetary policy certainly is not a source of difference, at least in intent. The Bank of England's MPC and the Federal Reserve's FOMC responded to the global crisis with largely the same aggressive – and to my mind wholly justified – scale and pace of monetary easing. Both central bank policy boards cut their instrument interest rates rapidly to zero, and when that was not enough, given the scale of the shock, they engaged in quantitative easing. Figure 3 shows what is probably a by now familiar picture for those who bother coming

² This holds true when looking at the broader stock indices which have a much higher component of companies with domestic markets in them. The American and British equity indices in fact followed almost precisely the same time path – disturbing for diversification, but indicating no difference in optimism.

to talks about macroeconomics by central bankers on a warm Tuesday evening: the FOMC and the MPC tripled the size of their central banks' respective balance sheets as a share of GDP, to 19% on current programs. The balance sheet expansion took place mostly from mid-2008 through early 2009, and then the Fed and the Bank of England undertook smaller additional expansions in late 2011 to present. One can make something out of the differences in composition of what the two central banks purchased, or how the purchases were communicated in the context of the monetary policy regime, and on another occasion I will add my take on those issues. But to a first approximation, these are the same policy stance, offering roughly the same amount of stimulus to the economy.

The similarity of stance makes sense given the similarity of shocks in scale and the comparable estimates on both sides of the Atlantic of the impact on markets and the broader economy of a given amount of QE.³ That is, our best guess is that the transmission of monetary policy stimulus is largely the same in the UK and the US during this recovery. One way to see this is through Figure 4, which shows that the growth in non-financial credit has been largely similar in the US and UK during the recession and recovery. Their paths have begun to diverge in the latter stages of the recovery, with the US recovering faster again from mid-2010 onwards. This could reflect constraints on the growth in lending in the UK to SMEs and new businesses which I had expressed concerns would kick in during the recovery; it also could reflect the altogether stronger growth in the US than UK over this period. Either way, the marked trans-Atlantic divergence in credit growth trends over the last two years is worrying, but is not yet sufficient in levels to explain much of a difference in investment looking backwards.

The broadly parallel pattern of credit growth, however, does rule out the possibility that UK banks are responding very differently in quantity terms to the same QE from the way that US banks responded. The cumulative amount of bond and equity issuance by British and American non-financial corporate is roughly the same as a percentage of GDP since mid-2009 as well – a little bit higher total bond market issuance by US corporates (8% versus a little over 6%), a little lower total equity issuance (1.7% versus 2.5%).⁴ Thus, to the extent that QE makes it relatively more attractive for companies to pursue non-bank financing, it is having a similar effect on both sides of the Atlantic as well.⁵

What is happening then is that the US is getting more private investment than the UK (as a percent of GDP) for the same amount of growth in bank credit and other forms of securities (as a share of GDP). One could perhaps explain this by an accumulation of various small factors, some of which I have already mentioned. This usually is an accurate way of understanding the situation, even if less than elegant. But I think two broader factors are at work inhibiting the UK investment per pound financed in the current recovery versus

³ Bridges and Thomas (2012), Gagnon, et al (2010), Joyce, et al (2011), and Kapetanios, et al (2012) are studies that find reasonably consistent, if understandably imprecise, estimates of the immediate impact of QE announcements on interest rates and eventually on the broader economy. More recent studies in progress by Bank and Fed staff and independent academics that I have seen also seem to reach similar estimates, though of course this is always subject to empirical challenge by fresh research.

⁴ I am grateful to the Bank staff, working with Tomas Hellebrandt, for gathering this data for me.

⁵ Of course, much more careful econometric work needs to be done than comparing aggregates, although under the circumstances this is a pretty fair first cut. Again, see the references in footnote 4.

the US investment per dollar financed. One, I believe that there is greater misallocation of credit going on in the UK economy at present than in the US, even if aggregate lending quantities are comparable. (Posen (2011a, 2012)) This is due to the lack of competition in the UK banking system compared to the US, and the smaller proportion of non-financial businesses which have access to loans, bonds, and/or securitization thereof in the UK than in the US. Two, I believe that the ongoing financial and macroeconomic risks to the euro area raise both the cost of credit and the need to provision for UK banks far above that for most US banks, which further inhibits reasonable allocation of risk capital. This is due to the inherent exposure of the UK economy to the euro area economies as well as the accumulated foreign lending to the euro area by UK banks during the boom years. (Broadbent (2012))

If credit misallocation due to these factors is what leads to a lower rate of growth in private investment in the UK than the US, then the difference in investment is not due to a difference in QE or its impact. Combine this with greater actual domestic demand growth, not greater optimism, and quite a divergence in investment emerges, as shown in Figure 5. UK investment has barely moved cumulatively throughout the recovery, while US investment has risen by 12 percent from the trough. Had the MPC not followed a similarly aggressive path of monetary stimulus to that of the FOMC, right up through the additional measures undertaken since October 2011, it is frightening to imagine what would have happened British private investment.

Reasons for the difference in consumption growth –

As I previously noted, the difference between American and British private consumption paths during this recovery period has been if anything as marked as those in investment. US consumption only fell by half as much as UK consumption did, peak to trough, and has since more than recovered to its pre-crisis level (see Figure 6). Meanwhile, UK consumption did grow from 2009:Q2 through 2010:Q2, but has declined in five of the last six quarters (of data) since that time. This is an even more unusual pattern than flat investment growth, for the UK or almost any market economy, to have no recovery in consumption growth from the time that the economy troughed in GDP terms.

Economists have a reasonably good understanding of short-term movements in household savings rate as a share of income. As shown in the recent work of Carroll, et al (2012), a ‘buffer-stock’ model of savings behaviour, where households respond to changes in their wealth-to-income ratio, in their uncertainty about future income (usually proxied by unemployment measures), and in their access to credit (to smooth income fluctuations), fits US data quite well. We have found that a quite similar but not identical approach in the UK also fits the household consumption data quite well.⁶ Thus, it is worth trying to understand the slow growth in consumption through this lens.

⁶ The Bank staff and I have benefitted from input by Chris Carroll and by John Muellbauer. See Aron, et al (2010) for an example of the latter and co-authors’ similar approach to UK and US data. This is not to say that either of these publications is the basis for any part of the Bank’s ‘official’ model, let alone the MPC forecast.

There have been rather similar movements in household wealth in the UK and the US over this period (to be shown below). Availability of credit to consumers, whether in the form of mortgages or unsecured loans and credit cards, contracted greatly in both economies as well. It is uncertainty which accounts for a big part of the difference. Unemployment rose by a greater amount in the US than in the UK, and peaked at 9.9% in December 2009, before coming down to its current level of 8.3%; in the UK, unemployment rose to 7.9% in June 2009, fluctuated between 7.7% and 8.0% until March 2011, and has since risen slowly to 8.3%. Declining income uncertainty in the US, as proxied by unemployment, clearly played a role in the surge of consumption growth from mid-2010 forward while uncertainty remained high in the UK.

Another large factor was stagnant or contracting real incomes in the UK versus in the US in recent years. As household income declines, even a rising savings rate can get swamped in terms of net effect on consumption. What has hit real disposable income in the UK over the last two years to cut off the recovery of consumption? Two big factors: first, a tightening of fiscal policy, greater than that in the US; second, a sharper rise in British energy prices than experienced by American consumers.

Figure 7 presents the general government fiscal balances of the UK and the US as compiled by the OECD from national data. A bigger negative number indicates a larger deficit. Crucially, this general measure includes the contributions of state and local governments (much bigger in the US than in the UK). This general measure is also unadjusted for the business cycle, so it includes the effect of the differences in automatic stabilizers between the US and UK.⁷ For almost the entire period since March 2007, and particularly since March 2010, the US has run a looser overall fiscal stance – a more stimulative fiscal policy – than the UK, even taking the full operation of the larger automatic stabilizers in the UK into account. Cumulatively, since 2007Q1, the difference has amounted to 3% of GDP.⁸

As with monetary policy, one has to think about the transmission of fiscal policy to understand the size and nature of the impact. What would the respective multipliers be on the UK's and the US's fiscal policy measures? The usual assumption is that the larger, less open economy would have bigger multipliers, since there would be less leakage from its fiscal policies. Yet, the impact of different fiscal policy measures varies also by their design and incidence.⁹ As has been widely argued, much of the recent US Federal Government stimulus had relatively low multipliers, while the cutbacks at the state and local government level had high multipliers. Similarly, I would argue, that the raising of the Value Added Tax in the UK was a relatively high multiplier form of policy, as were the cutbacks by local authorities (though much smaller in

⁷ If one were assessing the amount of discretionary fiscal stimulus or tightening, one would want to look at cyclically adjusted central government primary balances. That captures what the central government is choosing to do (while state and local governments are constrained, particularly in the US, by budget rules). On that measure, the central UK government is closing its deficits at a faster rate than the US federal government by a larger margin than shown here. While extremely important for the projection of fiscal sustainability and the normative assessment of fiscal discipline, those measures would overstate the relative size and impact of the UK's fiscal contraction relative to the US in explaining the recovery to date.

⁸ In 2007-2008, the differences in fiscal stance between the British and American governments were small. They widened from 2009H1 forward, and did so at an increasing rate over 2010-11. On current stated policies by the respective incumbent governments, the difference will continue to widen further through 2012.

⁹ Romer (2011) gives a masterful and policy relevant overview of the empirical evidence on countercyclical fiscal policy.

scale than in the US).¹⁰ Furthermore, because all of the UK's main trading partners besides the US, making up over 70% of UK export markets, were simultaneously undertaking fiscal austerity programs to varying degrees, the amount policy leakage was less in this case – if anything, UK austerity was being reinforced. So it seems reasonable to believe that the multiplier on UK fiscal measures since mid-2010 was on the order of 1.0 or higher. That would then constitute a sizable share of the growth differential between the US and the UK over this recovery period.¹¹

Figure 8 shows the other significant drag on UK household incomes during this period, the rise in oil prices. Given the depreciation of Sterling over 2008, the increase in UK domestic prices in oil costs was 25% higher than in the US over 2009-12. Additionally, the amount which home energy suppliers raised their tariffs in 2010-11 in the UK was much higher than in the US, further cutting into real incomes (this was partially offset by some reductions in home energy prices in fall 2011). And of course, while a currency depreciation aids in adjustment and increases net exports under normal circumstances, and has done so for the UK since 2008, it also cuts real purchasing power of foreign goods. All told the UK consumer suffered a set of severe one-time shocks to real income in 2009-2012, most of which we can hope are now coming to an end.

Some have asserted that it is UK household indebtedness which has kept consumption growth down here relative to the US, where there was less debt and more deleveraging. As my MPC colleague Ben Broadbent (2012) has rather convincingly argued, this contention does not seem to hold water. One way to see this is to look at Figure 9, which shows the level and the change in household gearing, that is households' total liabilities divided by total assets. This is arguably more relevant for consumption behaviour than comparing debt to income ratios. As can be seen in the left panel of the figure, UK and US household gearing have been essentially equivalent since gearing peaked at the start of the crisis, and in fact UK gearing has declined a touch more rapidly. As seen in the right panel, the broad swings in gearing have been little different across the two economies, at least on average, in timing or even in amplitude (except at the height of the boom and bust).

In the UK, this has been driven by the relative matching of household assets and liabilities, because most debt has gone into housing, and housing in the UK has seen smaller price falls than in the US, while mortgage rates have adjusted downwards in the UK. This pattern arguably reflects the lack of expansion in British housing supply during the boom years. I do not wish to sound overly sanguine on this point – UK housing prices have fluctuated more than US housing prices over the long run, in part because supply is less elastic, and a major decline in housing prices when adjustable rate mortgages are already at low rates could

¹⁰ See Posen (2012b). As I stated before the TSC then, and on several prior occasions, I do not offer a normative evaluation of the merits of the current or prior government's fiscal policies. It is elected officials, and not technocrats like central bankers, who should make the political decisions about tradeoffs between long- and short-term concerns, as well as about the risks to credibility. But I do need to be as objective as possible about the past impact of fiscal policies in order to make my forecasts and to set monetary policy. It is in that pursuit that I offer these assessments.

¹¹ There is a long record of officials and economic commentators underestimating the short-run multiplier on consumption tax increases. A notable example was Japan in 1997.

do real damage to household balance sheets. But looking backward to explain the difference in consumption patterns, there is little to appeal to UK household debt as a factor.

Inflation differences are temporary –

It is necessary to explain why inflation was higher in the UK than in the US when recovery was stronger in the US than in the UK over this period. The answer, however, is very simple, and has been offered by my MPC colleagues and myself on several occasions, so I will be brief: temporary factors from one-time shocks pushed up the inflation rate. There was no drift in overall inflation trend and minimal wage- or domestically generated inflation. Figure 10 shows comparable core inflation measures for the UK and the US. The vertical move in January 2010 is the VAT increase, and the subsequent one is visible in December 2010/January 2011. These factors are now dropping out of the UK inflation rate.

If UK core inflation does not continue to fall relatively steadily and quickly back towards target, then there has been some sort of shift in the inflation process, and that would be cause for worry. (Posen (2012b)) There is, however, no convincing evidence to date that such a shift has occurred. Wage growth continues to be quiescent in line with what a Phillips curve approach would forecast, and financial market expectations for longer-term inflation have remained well anchored in the UK. (Posen (2012a))

There has been some relative rise in inflation expectations for the UK versus the US. Figure 11 shows UK minus US instantaneous inflation forward rates from traded options at the five- and ten-year horizons, and they have of late settled at 0.5 and 1.0 percent higher respectively for the UK versus the US.¹² But this differential is *smaller* than it was prior to the crisis, and in fact the differential has been *coming down* on average during the period that inflation overshot the MPC's target and we were pursuing QE. Why the differential began to rise in mid-2006 is a question for future research, but clearly UK inflation has become more anchored in financial market expectations by this measure over the course of the recovery, not less.

This pattern is borne out by some recent research completed by Kenneth Kuttner and myself (2012). We examined whether the flexibility with respect to responding to short-term inflation movements (justifiably) exhibited by the MPC over the crisis period cost us versus the FOMC, where no explicit inflation target was in place. We found that inflation targeting can be quite flexible without losing counter-inflationary credibility. Figure 12 shows how quickly the Consensus Forecasts of inflation thought that inflation would come back to target level in the UK (on the right) and the US (on the left). The likelihood and speed of returning to target derived from analyzing these professional forecasts was just as high in the UK as in the US over even the crisis period (through 2010). This is another way of showing that inflation expectations remain well-anchored.

¹² The difference is not because markets decided to start expecting deflation in the US.

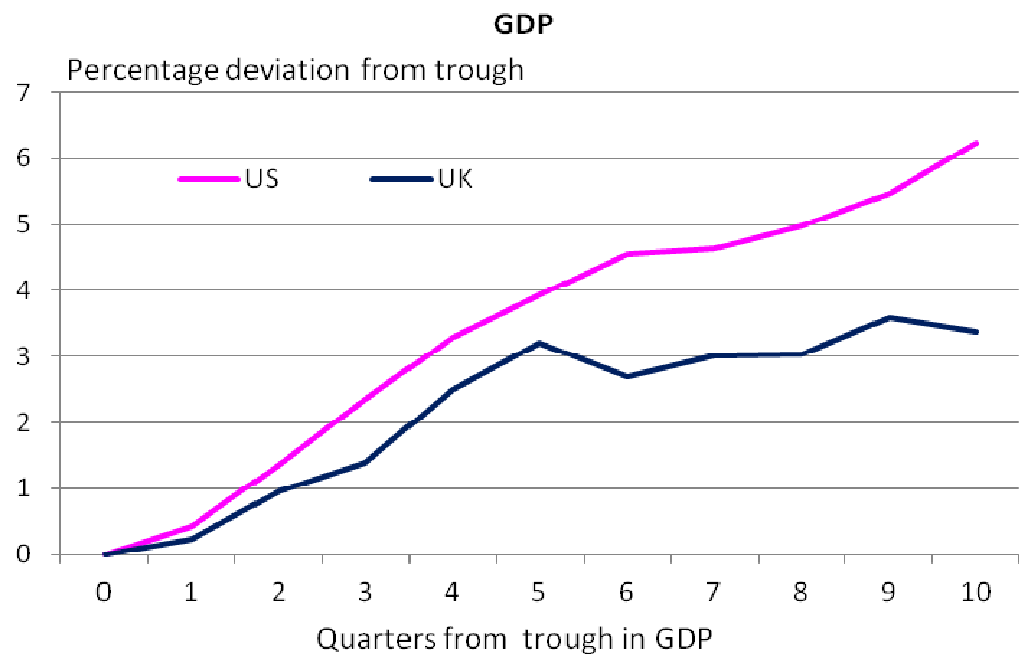
Why was it better over there? Will it remain so? –

Why was the US recovery since the global crisis stronger than in the UK, particularly since mid-2010? The shocks were almost the same for both countries, and net trade and automatic stabilizers only add to the gap to be explained. The key differences were in investment and consumption behaviour. Investment responded similarly in quantity terms of lending and issuance, as well as in interest rate effects, to the similarly scaled quantitative easing undertaken on both sides of the Atlantic. Monetary policy and its effectiveness were not the source of difference, nor was business optimism (especially since forecasts for UK growth, not just the MPC's, surprised on the downside). Credit was more poorly allocated in the UK, producing less investment for a given pound of credit or financing issued. The spillovers of risk from the euro area on the UK financial system, inherently much less of a problem for the US financial system, also distorted the cost of capital and risk taking behaviour.

Equally critical to investment and to stockbuilding as sources of the US relative growth advantage, however, was the underlying growth that drove them. Consumption grew more strongly in the US than in the UK, with consumption growth stagnating in the UK from Spring 2010 onwards. Deleveraging by households was not a major factor, given the comparable state of US and UK balance sheets. The contrasting directions of employment trends raised uncertainty in the UK over the US during the latter half of the recovery, which weighed on consumption. Fiscal policy, however, played an important role as well. Cumulatively, the UK government tightened fiscal policy by 3% more than the US government did – taking local governments and automatic stabilizers into account – and this had a material impact on consumption. This was particularly the case because a large chunk of the fiscal consolidation in 2010 and in 2011 took the form of a VAT increase, which has a high multiplier for households. The fact that British real incomes were hit harder than American households' incomes by energy price increases could be ascribed in large part to the past depreciation of Sterling, which also hit real incomes directly. All combined, these factors significantly dampened consumption growth in the UK, with knock on effects on investment and stockbuilding.

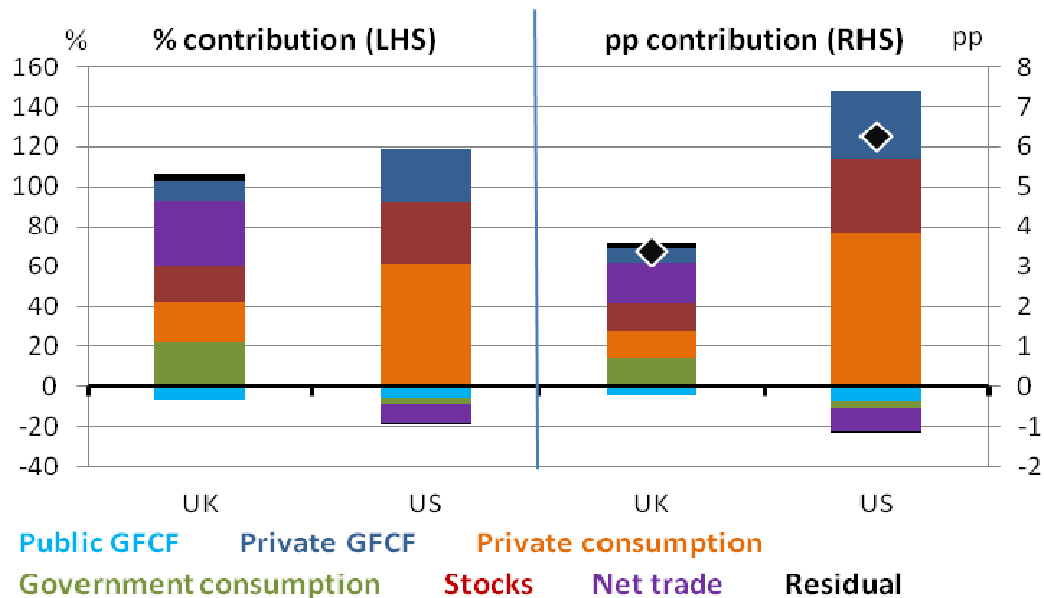
Going forward, most of these factors causing the difference between UK and US behaviour will recede. Inflation is only a temporary difference, and the national rates are now converging on their long-run targets. On official forecasts, fiscal policy is likely to remain more contractionary in the UK than the US for a couple of years to come, but the difference will shrink significantly from both ends over the next couple of years. Monetary policy is continuing to support recovery of investment in both economies, and must continue to do so. A longer-term troubling difference is in the apparent relative inefficiency of the British domestic finance system in allocating capital to businesses. While some of that should recede when the banks build up their capital buffers, and if and when euro area risks themselves recede, there remains a clear structural agenda for the UK to deal with in its financial system. (Posen (2011a, 2012a))

Figure 1: GDP recovery since mid-2009



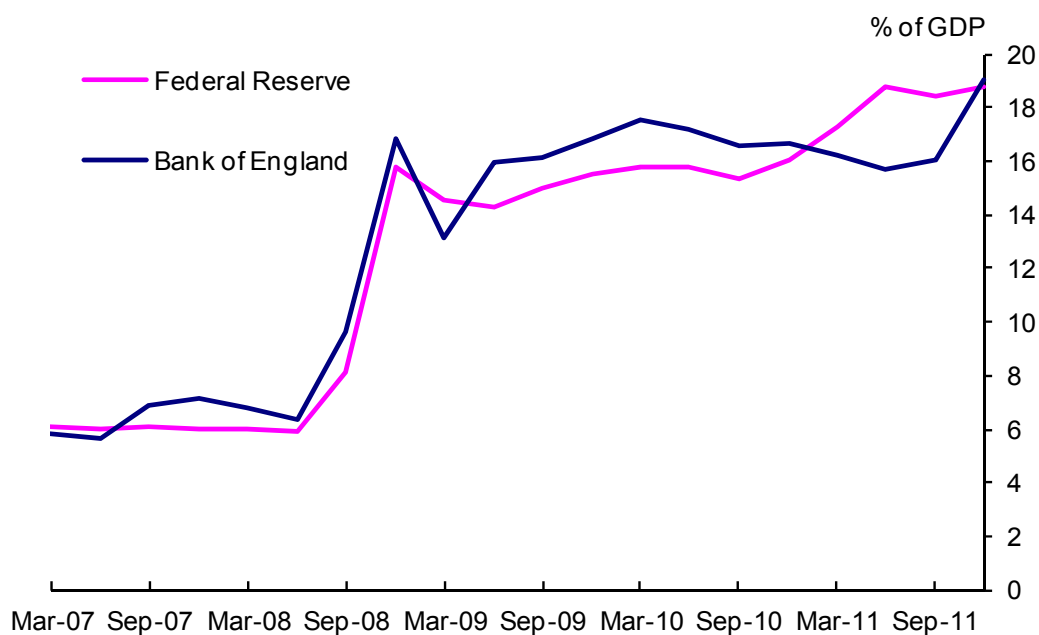
Source: Quarterly national accounts, OECD.
Note: trough in GDP is in 2009 Q2.

Figure 2: Decomposition of GDP growth in the recovery



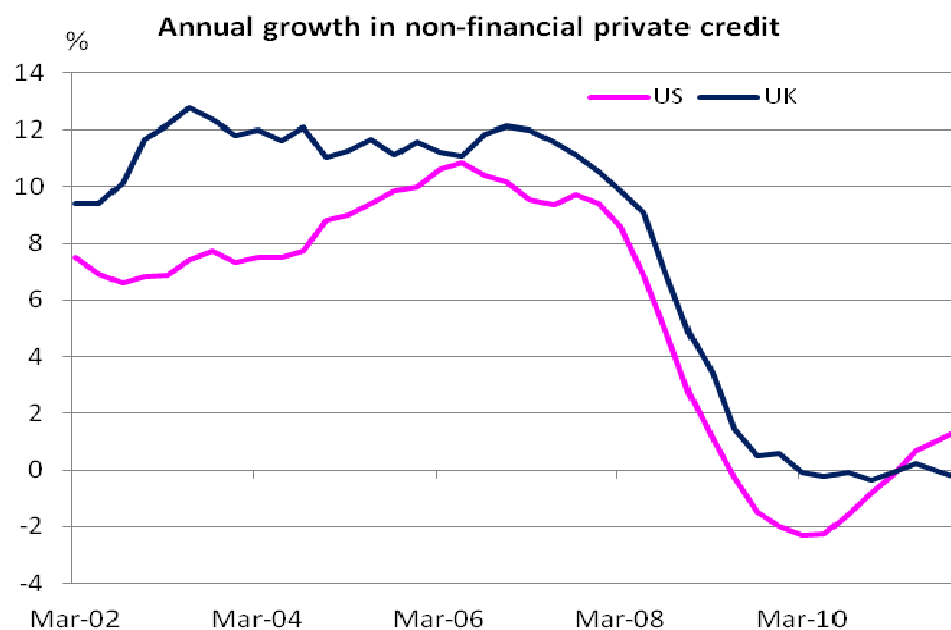
Source: Quarterly National Accounts, OECD
Note: Recovery is defined as the period from the trough in GDP (2009 Q2) to the latest data (2011 Q4)

Figure 3: Central bank balance sheets



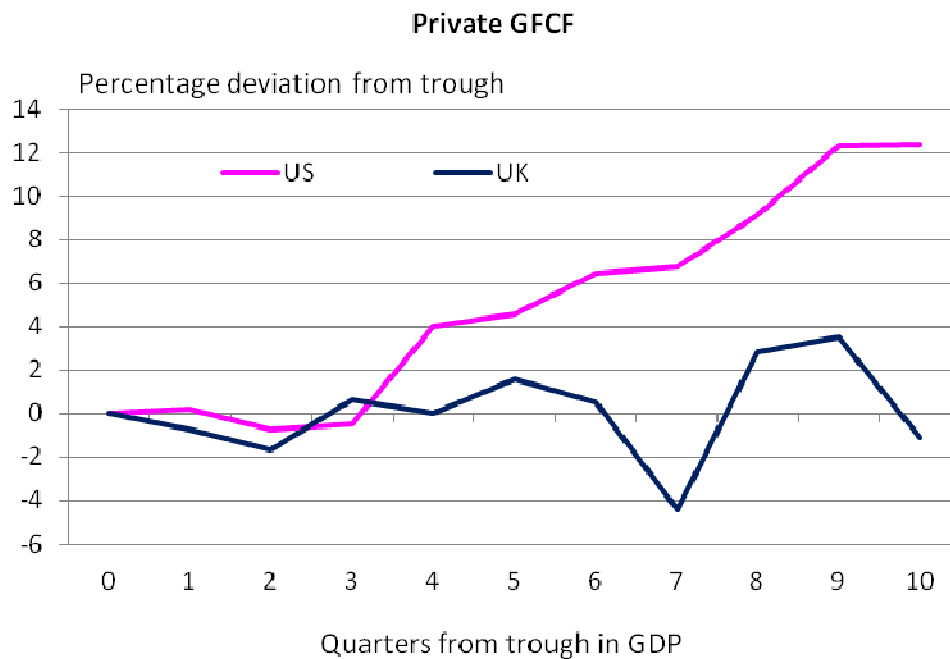
Source: Bank of England and Federal Reserve.

Figure 4: Bank lending to non-financial private sector



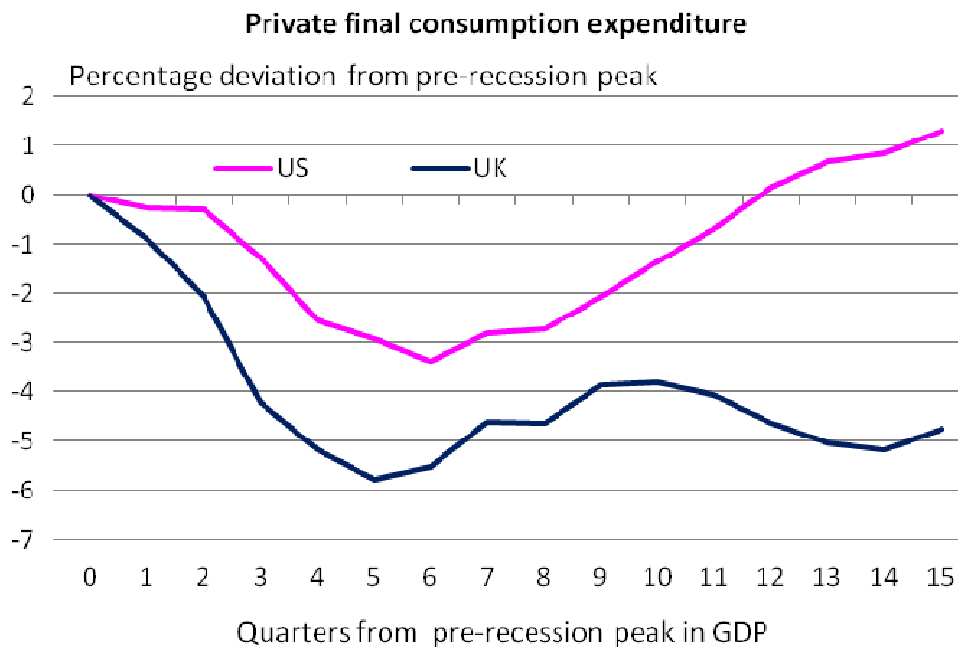
Source: Flow of funds and authors' calculations for the US, Bank of England for the UK.
Note: excludes the effects of securitisations and loan transfers.

Figure 5: Private investment recovery



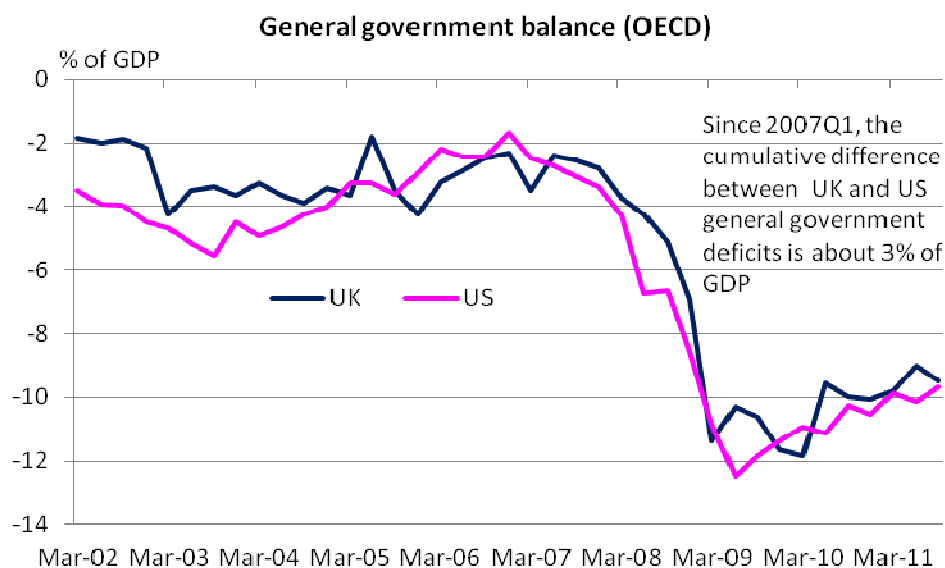
Source: Quarterly national accounts, OECD.
 Note: trough in GDP is in 2009 Q2.

Figure 6: Private consumption



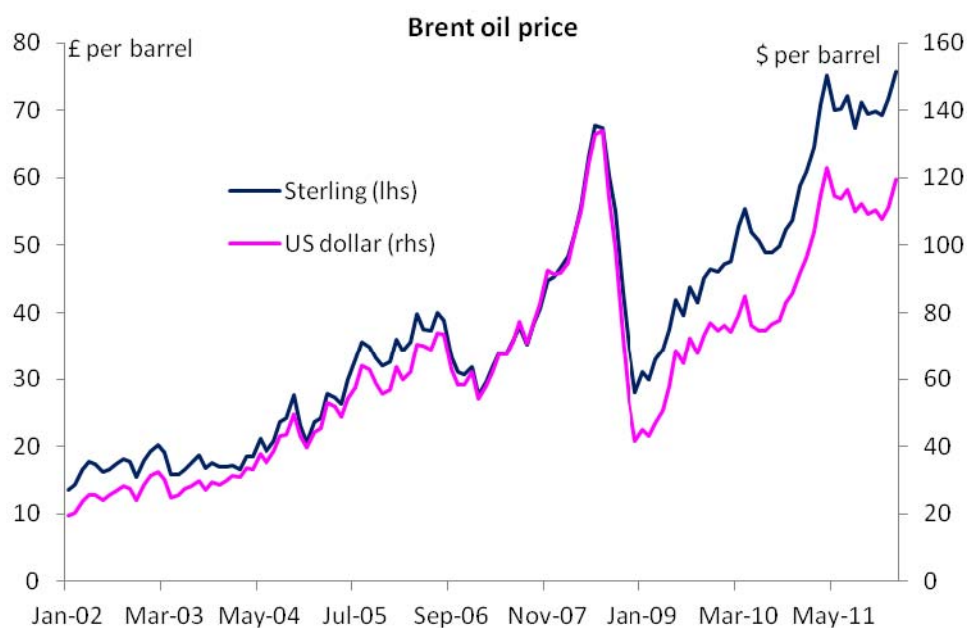
Source: Quarterly national accounts, OECD
 Note: Pre-recession peak in GDP is 2008 Q1 for the UK and 2007 Q4.

Figure 7: General government fiscal balance



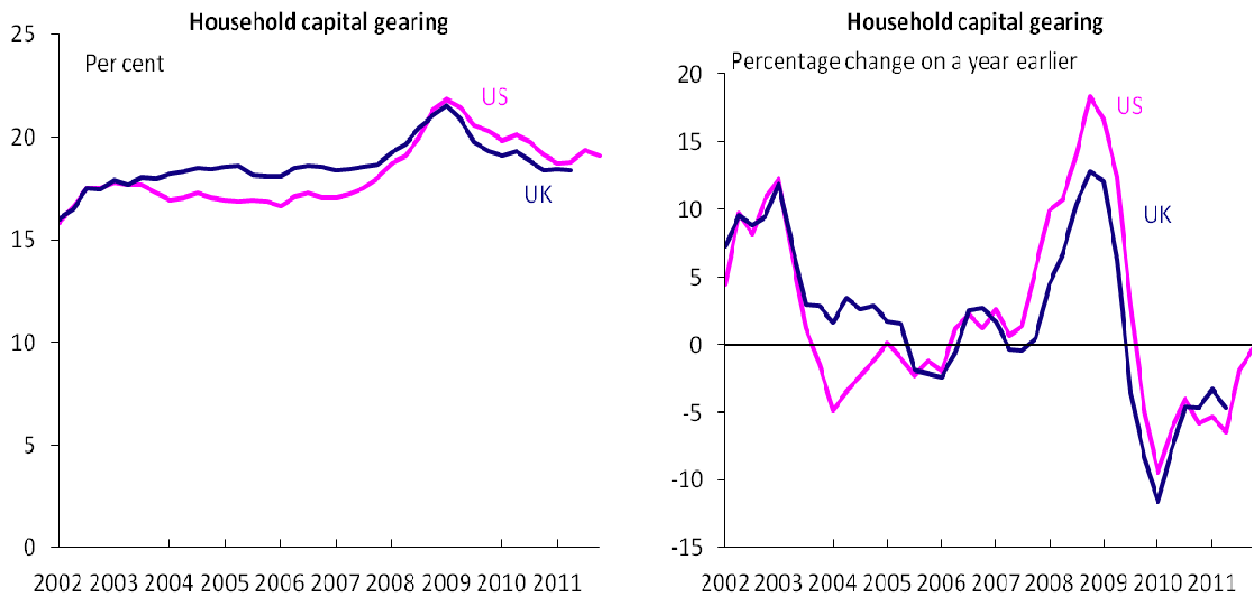
Source: OECD. General government includes Federal, State and Local government

Figure 8: Oil price (home currency)



Source: Bloomberg

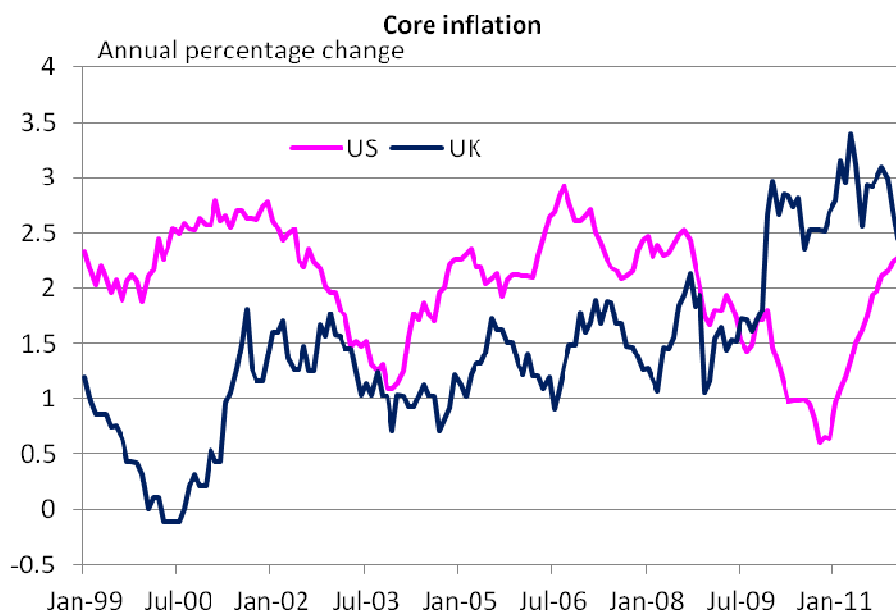
Figure 9: Household capital gearing



Note: Capital gearing is defined as total liabilities divided by total assets.

Source: ONS and Bank of England for the UK and Federal Reserve and Flow of Funds for the US.

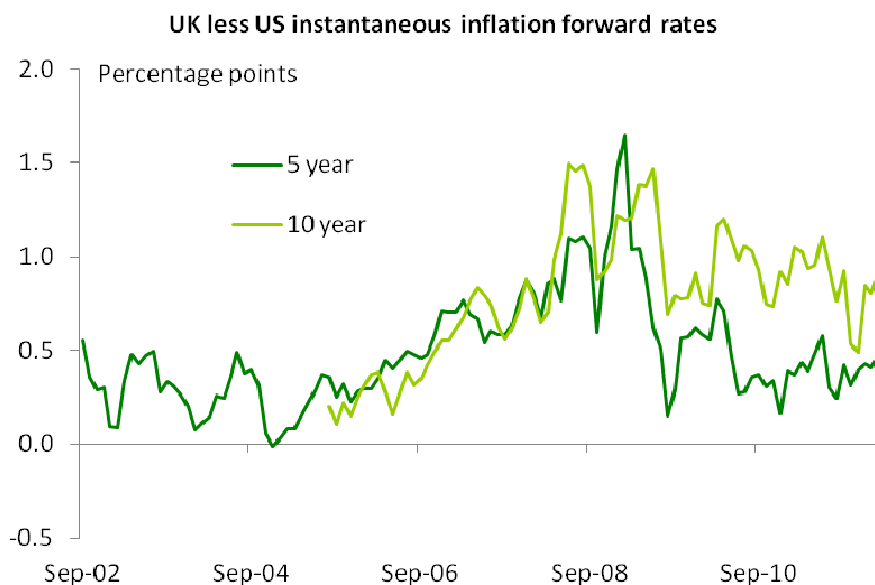
Figure 10: Core inflation



Source: Eurostat (UK) and US Bureau of Labor Statistics (US).

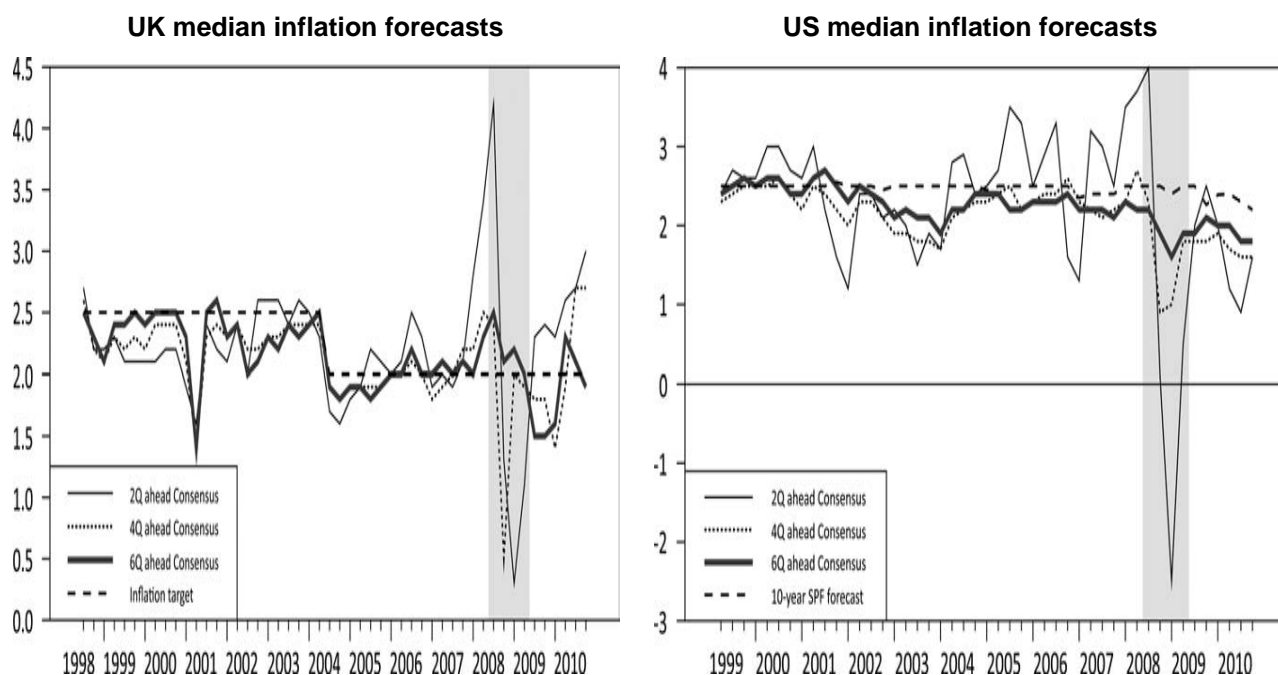
Note: Excludes food and energy (US and UK) and alcohol and tobacco (UK).

Figure 11: Long-term market inflation expectations



Source: Bloomberg and Bank of England calculations.

Figure 12: Median inflation forecasts



Source: see Figures 9 and 10, p.85 in "[How Flexible Can Inflation Targeting Be?](#)" by Ken Kuttner and Adam Posen, *International Journal of Central Banking*, Vol. 8 No. S1, January 2012.

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