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Speech

How to do more

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We do want more, and when it becomes more, we shall still want more.
And we shall never cease to demand more until we have received the results of our labor.
- ***Samuel Gompers, May 2, 1890***

Something's better than nothing, yes!
But nothing's better than more.
- Stephen Sondheim, Sung by Madonna in the movie, Dick Tracy, 1990

Both the UK and the global economy are facing a familiar foe at present: policy defeatism. Throughout modern economic history, whether in Western Europe in the 1920s, in the US and elsewhere in the 1930s, or in Japan in the 1990s, every major financial crisis-driven downturn has been followed by premature abandonment—if not reversal—of the macroeconomic stimulus policies that are necessary to sustained recovery. Every time, this was due to unduly influential voices claiming some combination of the destructiveness of further policy stimulus, the ineffectiveness of further policy stimulus, or the political corruption from further policy stimulus. Every time those voices were wrong on each and every count. Those voices are being heard again today, much too loudly. It is the duty of economic policymakers including central bankers to rebut these false claims head on. It is even more important that we do the right thing for the economy rather than be slowed, confused, or intimidated by such false claims.

Make no mistake, the right thing to do right now is for the Bank of England and the other G7 central banks to engage in further monetary stimulus. If anything, it is past time for us to do so. The economic outlook has turned out to be as grim as forecasts based on historical evidence predicted it would be, given the nature of the recession, the fiscal consolidations underway, and the simultaneity of similar problems across the Western world. Sustained high inflation is not a threat in such an environment, and in fact the inflation that we have suffered due to temporary factors in the UK is about to peak.[1] If we do not undertake the stimulative policy that the outlook calls for, then our economies and our people will suffer avoidable and potentially lasting damage. I will recap the argument for doing more in a moment.

My main purpose in speaking to you today is to explain *how* the Bank of England, and by extension other central banks, should do more to ease monetary policy at this juncture. I hope to convince you that doing more would be not only desirable, but constructive for the economy as a whole, effective as stimulus, and feasible without political compromise. A large part of this argument rests on asking you as sensible listeners to see through the distortions and falsehoods that have cropped up again in the aftermath of this crisis as in the past. Some common sense can be just as useful in appraising monetary policy as in evaluating the

[1] Unless there is a sufficiently persistent supply shock to energy prices to more than offset the influence of declining rates of global growth on those prices for the next couple of years – something oil futures markets do not price in at present (in fact, they price in the opposite).

overall worth and likely success of other services for which the public contracts with technical experts. After such appraisal, I hope that you will agree with my arguments that:

- More monetary ease will lead to greater restructuring of the economy in the right and necessary direction;
- More of the same Quantitative Easing [QE] program that the Bank already undertook would be where to start, especially if done on sufficient scale;
- More cooperation between the Bank and HM Government to promote investment and credit to small and medium business should be the beneficial next step.

Monetary policymakers must also free themselves from unfounded concerns and take these necessary actions. There are too many excuses for passivity being offered, none of which stand up to scrutiny or to the data. In essence, central banks can improve matters by doing more, even if we have to act alone. In so doing, we would make constructive actions by other policymakers in the fiscal and financial arenas outside of our remit more – not less – likely, and those actions more likely to succeed when undertaken.

Almost certainly, even if we were to do everything right on monetary policy (and we certainly will not get everything right, despite the best of intentions), there will still be suffering and ongoing problems from economic adjustment. And the benefits of our right policies may not turn out to be self-evident. But it is our responsibility and our duty to make things better if we can. Central bank officials have wasted too much time over the last year worrying about how their institutions would appear to markets, to politicians, and to the public, were we to undertake more stimulus. Sometimes you have to do the right thing even if it may be misperceived. I believe that by explaining how doing more would work, as I am trying to do today, the chances may increase that we will do the right thing on monetary policy now, and that it will be recognized as right later if not immediately.

The Case for Doing More Confirmed

About a year ago, I gave a speech in Hull titled "The Case for Doing More." [Posen (2010c)] A primary component of that case was my assessment of the outlook for the UK economy, which was rather gloomy. Past experience suggested that in the aftermath of banking crises, overall recovery would be weak, wage pressures would be limited, low credit availability and high risk aversion would limit investment, and consumption growth would be well below trend.[2] By the time of the MPC's November 2010 *Inflation Report*, I more formally registered my belief that the Committee's modal forecast – and that of most external forecasters – was too bullish on consumption and wage-growth, and that inflation expectations would not feed a trend of higher inflation on its own. [Posen (2010e); Transcript (2010)].

[2] For what that pattern looks like in general, see Abiad, et al (2009), Meier (2010), Reinhart and Rogoff (2010).

In addition, I expected fiscal contraction would lead to more significant downward pressures on demand and thus wages than most people in the UK were expecting. [Posen (2010f)]. While inflation has exceeded our target temporarily, this has largely been due to the VAT increase and unforeseeable energy price shocks. Both of these factors I believed would reverse within a year without de-anchoring long-run inflation expectations. [Posen (2011c)] I was not alone in this forecast, nor should I have been, given that it was based on mainstream empirical macroeconomics. [Krugman (2010)] But this turned out to be a minority view of the UK outlook on the Committee and in the broader debate.

Things have now turned out in the UK economy about where I and some others expected them to end up as a result of the crisis. Core inflation, which measures consumer inflation excluding the volatile prices of petrol, utilities, food and beverages and any movements in VAT, has been running around 2.3% for the last couple of years.[3] [Figure 1] During the period when UK inflation was generally close to target from 2001-2007, core inflation averaged 1.4%. This 0.9% is a meaningful difference to British consumers, but is not a huge deviation compared to the variation in inflation over even recent UK history, especially given the global volatility of the last few years (also seen in other countries' core inflation in Figure 1). In any event, the lion's share of that difference is attributable to the subsequent impact of the decline of Sterling in 2008.[4] That means domestically generated inflation in the UK was quiescent, as would be expected in a period of weak demand.

Inflation targeting monetary policy must be about hitting the target where inflation is going to be in two-plus years' time, and figuring out what shocks are temporary. Since Sterling has been essentially flat or up since January 2009, and the rates of UK goods and services price inflation have converged, we should not expect any further inflation from this source in the next 2-3 years, the time-horizon for monetary policymaking. With energy prices having reversed part of their earlier rise, and likely to come down given the global slowdown, it will be domestic factors that determine UK inflation. Both core and headline inflation are about to peak this fall and then come down – and not solely due to the past VAT rise dropping out of the figures.

Consistent with this view, earnings growth in the UK has been quite weak since the crisis. [Figure 2] Average annualized weekly earnings growth has risen to 2.3% of late since the end of the crisis, whereas it averaged 4.3% over 2001-2007. This is also a meaningful difference for British households, and one difficult to square with fears of 1970s style wage-price spirals which would be required for a sustained upward inflation trend. A simple Philips Curve type model (estimated in Posen (2011c) which relates wage growth to productivity growth, unemployment, past wages, and implied future inflation from market long gilt rates fits

[3] British households have indeed suffered from higher petrol and gas prices, and the rise in VAT has cut their real incomes. Focusing on core inflation is about concentrating on where inflation will be in a couple of years' time, and not jerking around monetary policy – and thus the economy – in response to movements that will fluctuate too rapidly to constitute meaningful or sustained trends. See Posen (2011a).

[4] The usual rule of thumb would suggest that a sustained 25% decline in the trade weighted value of Sterling would add around 2.0-2.5% to the CPI over the subsequent two years. If so, that would more than explain the entire difference with the pre-crisis average rate of core CPI. That in turn implies that domestically generated inflation was below normal levels during the post-crisis period, consistent with my assessment [Posen (2010f)].

the data reasonably well – meaning unemployment has a significant negative effect on British wage growth that is little changed for the last 25 years.

My forecasting model did underpredict the recent return of earnings growth to (only) half of its pre-crisis trend rate. There is strong evidence, however, that few companies impose wage cuts or even near zero wage growth outside of periods of overt recession (as the model ignoring this institutional reality predicted).[5] In short, there is something of a wage floor around zero. Allowing for that, the model captures what is going on. That means in practice that there is no more effective real wage resistance than there was in the late 1980s. Given that unemployment is likely to be stable or rising in coming months, UK earnings growth will continue to be far lower than the rate consistent with the inflation target over the medium-term.

In what should have been an unsurprising development, given the situation, UK consumption growth has fallen off a cliff. When real incomes are falling because of the potent combination of shocks to purchasing power (even if one-time, not trends), weak earnings growth, and consumption tax increases, households will cut back on consumption. As shown in Figure 3, over the course of the last 18 months, the average of private-sector forecasts for consumption growth in 2011 have fallen by over 1.5% points to below zero. In contrast, the perspective I have set out expected consumption to be over 1.0% lower in 2011 than the MPC modal forecast, because it assumed a larger multiplier on fiscal contraction and lower earnings growth[6] – which turned out to be the case.[7]

Some will claim, however, that the surprise rise in energy prices this past spring was a major contributor to the slowing of consumption, and thus that the underlying UK economy was not weak and/or that fiscal contraction was not that important. This strikes me as mistaken. For one thing, it fails the simple test that about 1.0% of the 1.5% decline in forecasts shown in Figure 3 occurred prior to the unanticipated oil shock. Similarly, forecast (and actual) consumption growth continued to decline even when the price rise of oil partially reversed itself. Recent studies by Bank staff (Harrison, et al (2011); Millard, et al (2011)) suggest that when taking the entire impact on the British economy into account – including the effect of energy prices on British energy producers and their shareholders –, the cost to income from sustained changes in energy prices is smaller than many assume.[8]

Finally I would note that in the past, the energetic UK consumer has at times shrugged off energy price increases and kept on spending. If the energy price rise had a large impact, that would just reflect the unsure footing of our consumers in a time of fiscal contraction, ongoing high unemployment, and slow earnings growth, as well as great uncertainty. Any increase in uncertainty regarding developments across the Channel and across the Atlantic may explain only the very latest additional downturn.

[5] See Akerlof, Dickens, and Perry (1996) and Bewley (1999), and more recent empirical work in that vein.
[6] On the effectiveness of fiscal policy in such contexts, see Kuttner and Posen (2002) and Leigh, et al (2010).
[7] Unpublished, but given the Committee's published GDP forecasts one may surmise that the modal consumption forecast was at any given time near or a little higher than, the average presented here.
[8] I am grateful to Marilyne Tolle for discussions of these and related analyses.

The point is that the UK's economic recovery is weak, and has been weak in precisely the ways that fit with a mainstream view of what happens following a financial crisis.[9] Given that dynamic, there is no reason to think that there will be sustained higher inflation in the UK, and or even that core inflation will remain at current levels. Given that dynamic, there is plenty of reason to think that British aggregate demand is below potential, and will continue to be for some time. Given that dynamic, there is still room for monetary ease to stimulate demand further. And given that dynamic, a failure to adequately close the output gap and reduce unemployment through demand management could permanently erode the productive capacity of the United Kingdom and some of its workers. (Posen (2010c)) That is the case for doing more, confirmed by recent experience.

The MPC's mandate is to meet the inflation target over the medium-term. Responding to these facts appropriately does nothing to compromise our pursuit of that mandate. In fact, I would argue (and have argued and voted accordingly) that, given the path of consumption, wages, fiscal consolidation, and of GDP more broadly, it is likely that inflation will be below target by a year from now and beyond. Thus, monetary stimulus is consistent with fulfilling the inflation target, and that was to be anticipated a year ago for hitting the target a year from now. The only domestically generated reason to be worried about inflation would be if inflation expectations rose, despite this outlook, and translated into higher prices and wages, despite the lack of confidence. This was not going to happen and has not happened. (Posen (2011c)).

As I have put it recently, such concerns are chasing economic ghosts that are not there. Posen (2011b). As shown in Table 1, measures of long-run inflation expectations for the UK, particularly those of market participants and extracted from gilt prices, have remained near their average levels consistent with meeting the inflation target. Some surveys of short-run household inflation expectations have risen along with observed CPI; they have also bobbed up and down with recent CPI movements, and shown no sign of becoming unanchored. And to the degree they have drifted up, they have little implication for the outlook or thus for monetary policy. Critically, my estimated model of earnings growth does not include measures of household inflation expectations as a determinant of future wages. That is because the data simply do not offer any evidence in support of such a role for those expectations. As I said before the Treasury Select Committee in June, "The household [inflation] expectations measures are signs of concerns and experience by households. They matter, but they are not a good forecast for what is going to happen."
(Transcript (2011))

[9] Again, see Abiad, et al (2009), Meier (2010), Reinhart and Rogoff (2010), and the references therein.

More Monetary Ease Means More Restructuring

Every downturn is a combination of cyclical and structural factors. One can and should acknowledge that there is a substantial output gap in the UK and in other post-crisis economies, and still recognize this reality. [Pisani-Ferry and Posen (2010)] There is clearly a supply aspect to the UK's current economic problems. As many have observed, we do need to rebalance the economy from imports to exports, consumption to savings, public to private spending, and from the financial sector to everything else.

The process of rebalancing will require movement of capital from older industries and activities to newer ones—that is, investment. And investment opportunities arise from real developments in technology, in entrepreneurial insights, in changing economic structures at home and abroad. That means that individual projects' long-run returns exist to some degree independently of swings in markets and of the economy in general. Sometimes, short-term revenue prospects may be lowered by general slow growth. And an ability to attract investors may be limited by the overhang of others' pre-existing debt. (Koo (2008); Eggertsson and Krugman (2011)) In other words, restructuring the British economy is inhibited by a financing problem.

This is evident in Figure 4, showing the level of business fixed investment in the UK, as well as in the US, France, and Germany since 2000. The boom of 2007-08 is evident (though not as striking here as it would be on a chart of real estate prices, an important distinction), as is the collapse of 2008-09. Except for France, recovery in investment has been limited, and most limited in the UK.[10] Figure 5 presents the catching up the UK has to do in business fixed investment, if we were to project the trend from 2002:Q1 to 2007:Q1 to the present day - a shortfall of about 2.0% of GDP by now. This seems to me to be an underestimate of the investment to make up for two reasons. First, as we know, a lot of what was termed 'investment' during the boom years was misallocated wasted capital. Rather than talking about a capital overhang from the boom, we should think about what projects were ignored. Second, if we are to restructure, for example to make lasting advantage of the boom in UK manufacturing at present, we will need more than trend investment to get the expanding activities up to speed.

While diminished investment demand due to uncertainty and slow growth plays some role, credit supply issues are seen logically to be the predominant source of the investment shortfall – especially since there are positive net present value real opportunities going unfunded.[11] As Daly and Paul (2011, p.5) recently and rightly pointed out, the combination of weak lending growth and high lending spreads suggests that limits on credit supply are the bigger source of low investment than lack of demand. They also note that observed spreads on lending rates "only reflect the rates on lending that has been approved, the 'shadow cost' of new

[10] This is, of course, a variant in the same spirit on Governor King's justifiably famous remark "It's the levels, Stupid" regarding how to judge the recovery of the UK economy. (Bank of England (2009)).
[11] See among others Barrospide, et al (2010), Claessens, et al (2009), Duke (2011a), Mach and Wolken (2011), Posen (2010d), Puri, et al, (2011), and Robb and Reedy (2011).

loans – i.e., reflecting the cost of loans that have been refused and, therefore [for which] no interest rate has been set – is likely to be even higher." Recent increases in British and other banks' CDS spreads will make credit conditions significantly tighter going forward, if sustained.[12]

This can be seen in Figure 6, where growth in credit to non-financial corporations is tracked since 2000. While the heights of lending growth seen in the mid-2000s could not be sustained (especially in the UK, where we had the biggest credit growth boom), having negative credit growth in aggregate, as remains the case in the UK and Germany, is a reflection of the damaged lending system. As with the investment number, this also hides the fact that many of the over-indebted borrowers are crowding out new lending and borrowers. Thus, the level in the past should have been discounted and the current effective level is even worse. And as I am sure this audience is well aware, business lending is even scarcer for non-corporates, that is most small businesses, as seen in Figure 7. The UK has a generalized financing problem for domestic non-financial businesses, one that is in part structural and long-term, but one that has been made much worse by the economic crisis and its aftermath. (Posen (2009c))

Easing monetary policy can partially alleviate generalized financing problems. You may have heard some opposing claims that monetary ease will only impede restructuring. The Austerians (as Paul Krugman has termed them) insist that easier credit keeps the bad businesses open and thus prevents capital flowing to the new opportunities. Supposedly, a tightening of monetary policy will thus accelerate the pace of restructuring. This, however, makes no sense, and has failed everywhere it has been tried.

Many of you are businesspeople, some running small and medium-sized enterprises (SMEs). Let's think this through from your experience and the experience of those you know. As credit conditions tightened precipitously during the crisis, and then loosened only somewhat since early 2009, have those denied credit been primarily undeserving firms? Have positive net present value investments in your businesses, let alone in new firms or industries, been readily funded? Have banks been more likely to cut off "bad" borrowers who happened to owe a lot than good low-risk borrowers who can be asked to pay their debts in full? Have banks been more willing to look at a company's fundamentals and prospects, underneath any short-term liquidity difficulties? And as the UK banking system has become more concentrated in fewer, larger banks, has banks' willingness to deal with small and new growing businesses gone up?

Of course not. Even discounting the inherent tendency of SMEs to whine about their bankers (which you realize that I have to do), I am sure that your experience and that of other businesspeople shows the opposite is the case. The aggregate data on credit and investment in the UK clearly demonstrates that

[12] I am going to leave aside the contentious issue of regulatory capital requirements for banks versus their short-term willingness to lend, since that is outside the MPC's remit, and the Independent Commission on Banking has just issued its report. I would note, however, that my research published *prior* to joining the MPC suggests that the negative impact of forcing banks to hold sufficient capital on lending is usually vastly exaggerated by self-interested parties. This is in large part because better capitalized banks attract more stable funding (retail and wholesale), have a lower cost of capital, make better allocation of loans across borrowers, are more willing to write-off legacy bad loans, and reduce uncertainty in the economic system more generally. All of that combined can offset much if not all of any transitional cut back in lending as capital is raised. See Posen (1999a, 2009a, 2009c). Miles, Yang, and Marcheggiano (2011) using a model come to the similar bottom line that the impact on lending of bank capital raising is exaggerated.

tighter credit conditions among fewer banks are not leading to better lending decisions. If anything, the availability of credit remains especially low for SMEs and for new firms. The creation of new firms is essential to the recovery of employment and the restructuring of the economy, and they require financing (Haltiwanger, et al (2010); Beck, et al, (2004))—and it's just not happening now.

Years of accumulated economic research are consistent with this sensible assessment of what happens in a credit crunch. Financial intermediaries and markets allocate credit less well under conditions of stress, with a bias against small firms who need to be carefully assessed and against new firms who have no track record.[13] Larger banks in more concentrated, less competitive banking systems are also biased against small and new firm lending in a similar fashion.[14] In the UK right now, we have both: financial stress and overly concentrated high street banking. The amount of stress on and competition in the financial system is in large part a structural matter, subject to regulatory rather than monetary policy. But only in part, and only as part of overall credit conditions. Greater provision of liquidity and easier credit terms more generally, as well as greater appetite for risky assets, can all be provided by monetary ease. Those conditions also directly influence the behavior of financial intermediaries.

For all the talk about monetary austerity promoting creative destruction, it does not work that way. In Japan in the 1990s for example, a period of insufficiently aggressive monetary stimulus fed the lending to zombie companies, i.e., unproductive borrowers on whose loans the banks could not afford to take losses (Caballero Hoshi and Kashyap (2008)). It was only when macroeconomic policy led a recovery in Japan in the 2000s that capital flowed out of the places it had been trapped and into new and growing businesses. Posen (2009a, 2010a) Similarly, in the aftermath of the U.S. savings-and-loan crisis, real reallocation of credit from bad banks and borrowers to worthwhile investment only began in earnest when monetary policy eased in the late 1980s. In short, sometimes destruction is just destructive.[15]

Of course, it would be better if there were fundamental reform of the British banking system as well as monetary ease. (Posen (2009c)) Greater competition in high street lending in the UK is essential, both in the short- and the long-run. It will be easier, however, for new entrants to the banking system to succeed and for the Government to encourage such entry when liquidity is readily available and when interest rates are low. And until such time as the banking system is restructured, we need to encourage the currently operating banks to make better decisions. Easing monetary policy helps on both counts. (Posen (2011b))

[13] The literature starts with the insights of Akerlof and of Stiglitz regarding imperfect information in financial markets and their macroeconomic effects. Recent evidence on how new firms get hurt during credit crunches includes Erel, et al (2009, 2011) and Robb and Robinson (2010). See also Blanchflower and Oswald (1998) and Aghion, et al (2009) on financing constraints and entrepreneurship.
[14] See Berger, et al (2002), Guiso, et al, (2002), Strahan and Cetorelli (2004), and Carow, et al (2004, 2005).
[15] See Caballero and Hammour (1998, 1999, 2000a, 2000b) and the discussion in Posen (1998, ch. 6).

More Good Old Fashioned QE is Needed, Much More

Another source of policy defeatism is widespread claims that our previous "unconventional" efforts to stimulate the economy either were not terribly effective or are likely to be ineffective if extended today. This is another false belief. It is as though the fact that the British economy (or the American, for that matter) is not fully recovered after our previous rounds of QE is evidence that QE failed to work. Even on the face of it, that is a strange type of logic. We know that infusions of QE to the economy have been closely associated with large falls in interest rates out the yield curve of comparable size in the UK and the US. We know that the relative price of riskier assets has gone up, indicating greater demand for them, when QE has been undertaken. And we know that banks have received increased deposits and investors and households have expressed increased confidence in the wake of each round of additional QE, in both the UK and the US.[16] In any understanding of how the economy works, this has a stimulative impact, just as a cut in Bank Rate does through the very same channels.[17]

Again, let's return to common sense and our personal experience. You (or probably better, you and me both) might be taking medicines right now to reduce your blood pressure and your cholesterol levels. A huge body of scientific research as well as basic chemical logic tells us that these prescription medicines do reduce the intermediate targets of cholesterol and blood pressure. A huge body of scientific research establishes as well that high blood pressure and cholesterol are associated with a higher risk of heart disease and stroke (god forbid). Millions of people like you and me take these medicines as a result, serious side effects are rare and can be easily discerned, and we can see readings of our BP and cholesterol decline. As a result, our doctors and even our public health officials recommend they be widely prescribed. Yet, it is difficult to prove directly that taking these medicines prevent heart disease and stroke, given how many other factors are involved in those outcomes. Only after a lot of time passes and a lot of cases are seen has the statistical association between some of these medications and the ultimate health goals been established. And even then, it is no guarantee that any individual taking these medicines will not develop heart disease. But still we should take them and our doctors should prescribe them if we have the unfortunately right indications.

This is the same situation we are in with QE. We know it has a discernible significant effect on things like credit conditions, confidence, relative asset prices, and liquidity, as well as bank lending, in the expected and desired direction. We know that moving credit conditions, et al, in the expected and desired direction has a significant effect on macroeconomic outcomes in the desired direction, all else equal. We cannot on the basis of a handful of instances of QE programs in total estimate definitively the size of the impact that our

[16] For assessments of the impact of the Bank of England's QE program, see Bean (2009), Dale (2010), Daly and Paul (2011), and Joyce, et al, 2010). For assessments of the impact of the Federal Reserve's QEI and QEII, see Chung, et al, (2011), Gagnon, et al (2010), and Yellen (2011). On prior QE experience in Japan, see Bowman, et al (2011) and Posen (2010a). All support this picture.
[17] Strong statements in support of the effectiveness of QE can be found in Mervyn King's answer to Question 14 from the November 2010 Treasury Select Committee in Transcript ("I have as much confidence in the impact of asset purchases as I do in interest rate changes.") and in Miles (2010). See also Gagnon (2009).

programs to date have had on our economies – in part because these economies are busy having financial arteriosclerosis and rising blood pressure for a bunch of other reasons at the same time (that is why the QE was prescribed in the first place, after all). Evaluations of the fiscal stimulus program in the US at the start of the Obama administration have faced the same misperception for parallel reasons, and policymakers just have to do more of what is right in either case and get over being unappreciated.

Given the measurable impact that QE had on all these various channels of the economy – which by the way is no different than tracking the impact of a move in Bank Rate, which also works through all these various channels of the economy – it seems reasonable to think that GDP is at least 1.5% higher and inflation at least 0.5% higher in the UK than it would have been in the absence of QE.[18]

The state of the British banking system of course does matter to QE. That particular channel of transmission from QE – or from a cut in Bank Rate, were we not effectively at the Zero Lower Bound, for that matter - is impeded at present, for all of the reasons I listed in the previous section. This can be seen clearly in Figure 8, where broad money growth is anemic in the UK.[19] But as argued in Bean (2009), Dale (2010), and Fisher (2010), part of the point of QE was to go around the damaged banking system, and it still works to do so. True, the level of longer-term interest rates is lower than it was when we started QE in 2009, and the yield curve is flatter. But as Weale (2011) notes, there is still room to bring down the longer end of the yield curve. And as David Miles has pointed out on several occasions, as interest rates get lower, smaller moves in them will produce larger shifts in the prices of risky assets. QE also has a bigger impact via the confidence and liquidity channels when there is panic in financial markets and the substitutability between gilts and other types of financial assets decreases.[20] That would presumably be lower than in early 2009, although recent developments in financial markets suggest that these potential effects of QE are becoming larger again and arguably more necessary.

Bottom line, the MPC and our counterparts in the G7 central banks can do more QE without any delay, and should. It will help by affecting risk appetite, relative asset prices, liquidity, confidence, and available fund to banks significantly, even if the bank lending channel is still impeded. If anything, that is an argument to do more QE than we did before. If it will take somewhat more purchases to have the same effect as when the

[18] These are back of the envelope calculations for which I am solely responsible, and should only be taken as magnitude estimates. More careful estimates are being worked on by Bank and Federal Reserve staff as well as by independent researchers, and will appear in coming months.
[19] Two of the factors at work here do depend upon the structure of the UK banking system. First, the UK, like Japan, has many fewer banks and many fewer small banks than Germany or the US, so damage in our system has a bigger effect on monetary transmission. (Posen (2009c); my exchange with MP John Thurso in Transcript (2011)). Second, France and Germany have not yet undertaken the needed amount of bank recapitalization in their banking systems, which artificially keeps broad money growth higher, and that must end, preferably sooner than later. (Ackerman (2011); Lagarde (2011); Posen (2007); and Posen and Veron (2009)).
[20] See the discussion of this issue by Paul Tucker and myself before the Treasury Select Committee in Transcript (2010).

economy was in overt crisis, but we know that effect is significantly greater than zero, we should simply up the dosage. There is no sign that negative side effects of this medicine increase with dosage, or are really evident at all.[21]

So we should start with a minimum of £50 billion in gilt purchases in secondary markets, titled toward the longer-end of the maturity spectrum, over the next three months – arguably, given that the forecast appears likely to turn worse due to external developments than the largely domestic UK one I have based my call for more QE upon up until now, that number should be £75 or 100 billion.[22] Of course, there would be less leakage of its macroeconomic impact and more limitation on any exchange rate spillovers on our trading partners that do occur if the G7 (including Japan) were to undertake QE simultaneously.[23] But the UK can certainly do it alone, and cannot cause any global commodity price bubbles by so doing.[24] Runaway inflation is not in the cards, so we should do more.

More Coordinated Credit Creation is Needed As Well

So far, I have argued that more monetary ease will promote desirable restructuring, and so the benefits of doing more are clear on the supply as well as the demand side. I have also argued that increasing significantly the amount of gilts purchased and held by the Bank of England in secondary markets will provide monetary ease through multiple channels as it already has done. So it will be effective doing more through that means. Just because we have one effective tool, however, does not mean we should stop there if the situation is sufficiently serious.

Unfortunately, the underlying economic situation in the UK and throughout the G7 is that serious. That central banks have failed to take sufficient additional stimulative action over the last year has made the prospects worse. Recent developments both across the Channel and across the Atlantic, even if largely foreseeable, may make things much worse in turn, especially since that would mean a simultaneous contraction in much of the advanced world. At a minimum, credit conditions in the UK have eroded

[21] I am not going to review at this time the arguments for why QE has ***not*** contributed to bubbles in asset prices, or commodity prices, or exchange rates, or the legendary price of tea in China, beyond its effect on the macroeconomy through growth and domestic price developments. Just look at Sterling stable over the entire period of QE and since, the dollar down a grand total of 10% over two-plus years of downwards growth revisions and fiscal surprises as drivers more than two rounds of QE, the supply non-speculative driven moves in oil prices, etc. See Posen (2011b); Yellen (2011).

[22] I never was under any illusions about the strength of recovery post-crisis in the US or in central Europe, both for the reasons I have outlined today about the general pattern of post-crisis dynamics, and because of my expectations for fiscal problems in the US causing a W-shaped recovery (Posen (2009); Pisani-Ferry and Posen (2011)), and for banking problems in the euro area coming home to roost (Posen (2007); Posen and Veron (2009). While I got the timing on the former right in my forecast, I must admit to being sadly surprised at how long and far central European governments have been able to kick their banking problems down the road, and the effect of those on Euro Area developments. (Posen (2011d))

[23] It is worth reminding people that as an external member of the MPC, I never represent the Bank of England or the MPC in any official meetings, certainly not in any international fora. I am speaking solely for myself as an analytic matter.

[24] This would not spare Australia, Brazil, Switzerland, and other 'innocents' who are victims of their relative victory in the current least ugly contest in bond and currency markets, were the currencies of the G7 depreciate together. Were such a joint depreciation to put pressure on the China-bloc and other economies impeding global rebalancing, however, that would not be a bad thing. Even so, that would only be a side –effect of such a policy, and frankly I expect that sufficient stimulus would do enough to raise growth prospects and reduce deflationary risks that the western currencies might rise on net against the world.

sufficiently that our outlook in the face of continued fiscal consolidation at home and lower export prospects abroad could be very grim, even absent worst case scenarios eventuating.

In my personal opinion, it is time for the Bank of England and HM Government to explore ways in which we can jointly make up some of that credit and investment gap I spoke about earlier that is our particular problem in the current crisis. Improving the macroeconomic outlook and increasing financial stability in general through additional monetary stimulus will improve the situation, by whatever means we do that, including good ol' fashioned QE. But we need not settle for only working on the general economy. We can engage in forms of coordinated action that will target this shortfall more directly.

There are several very good reasons why the Bank of England has primarily purchased gilts so far, and only accepts for discounting high-quality assets that meet transparent previously set criteria. It is for the Bank's executive, in consultation with HM Treasury, to set the terms of what we may buy or what we may lend against. It is not for the MPC to decide. I agree with the Governor and my colleagues that getting into credit risk assessment through buying specific assets both is not a strength of the Bank, and would expose the Bank excessively to the perception of favoring specific interests. Fortunately, what I would like to propose today is completely consistent with the rules and limits under which the MPC and the Bank currently operate our lending and purchasing procedures.

I would suggest that the Government set up two new public institutions to address the investment gap by increasing the availability of credit to SMEs and to new firms.[25] One would be a public bank or authority for lending to small business, as already exists in many other countries (and thus can readily be designed in compliance with EU state aid rules). The Small Business Administration in the US and the Kreditanstalt fuer Wiederaufbau in Germany are two examples of the various forms this could take. The many recently unemployed lending officers from British banks, particularly from branches outside of the City of London, provide a ready skilled labor pool with which to staff such an institution.

A specific size limit on businesses having access to this lender would be set, and interest rates on loans could be set as a mark-up from LIBOR or other market rates (again, there is precedent for this kind of structure in other operations undertaken previously). Essentially, SMEs or new businesses which already applied to private-sector banks for loans and were turned down, can dust off their loan applications and collateral and offer them to this new lender. This should include as well trade credits and invoices due from larger customers which can be discounted short-term. Not all of these loans will be approved – we can set up incentives for the loan officers such that excessive losses are punished, probity rewarded. All that matters is that the new institution does not have the overhang of bad loans and insufficiency of capital that our previously existing large banks do. That will increase competition and drive down spreads, as well as

[25] Presumably, HM Treasury and BIS would do this, but that is for them to decide.

making more credit available.[26] Again, this institution would in the first instance be choosing among loan applications already rejected by pre-existing banks, or which were told not to apply.

The existing banks will scream about the unfair cost of capital advantage such an institution would have, but that is a good impetus for them to write down more of their bad debts and raise more capital. Moreover, since the major banks in the UK have benefitted from a too-big-to-fail situation, any disadvantage they have in funding conditions is offset by the funding advantage they have over smaller or newer financial institutions, which they have gladly accepted. We should not get too worked up about creating some increased competition for market-dominating private entities.

Yes, over the long run of several years, and in normal times, the evidence is clear that public sector banks do tend to underperform private banks in credit allocation, and do tend to erode private banks' profits. Yet most if not all countries have ongoing public lenders of various types (even the US has the SBA), and their existence on a limited scale, while perhaps wasteful at the margin, does not lead to the destruction of the private-sector banking systems in those countries. (Posen (2009a)) Let us remember that the UK and other western private-sector banks did that themselves during a period of financial liberalization and privatization unprecedented in postwar economic history.

In any event, these are not normal times. The existence of such a public institution for lending to SMEs and new business is a response to the dysfunctional credit system we now have, and is likely to allocate capital better under such circumstances than in the normal situation. Since adverse selection is at work in the banking system, it will be easier to find good investment projects and borrowers that were overlooked than in normal times. Ultimately, this entity can and should be privatized, perhaps in more than one part depending upon its scale, when the situation improves. And just like with the financial institutions currently in the government's hands, such privatization would be an opportunity to restructure the British financial system to a more competitive one which provides better high-street lending, our historic financial weakness.[27]

The other institution I would encourage the Government to set up would be an entity to bundle and securitize loans made to SMEs. Essentially, we need a good version of Fannie Mae and Freddie Mac to create a more liquid and deep market for illiquid securities which can then be sold off of bank(s) balance sheets. It is worth remembering that for decades the mortgage 'agencies' in the US provided a vital service and did not undermine financial stability. It was only in recent years when they were allowed to keep mortgages on their own books in pursuit of excessive short-term payouts to their management, and were not strictly enough supervised given their perceived government guarantees, that they did harm (admittedly quite serious).

[26] As has been pointed out, the Government as controlling shareholder in LBG and RBS could order those institutions to pursue much the same lines. I see some merit in this idea, but it would do nothing to increase competition and new entry, and cds and equity prices for those banks show the depressive power of the bad debt overhang on lending, even when government guarantees are in place. One could also do lending through local development agencies (Blanchflower (2011)) or buy other forms of corporate bills (Weale (2009). To my mind, however, in terms of economics and accountability, it is better to start fresh.

[27] See my responses to Questions 40, 43, and 44 from the Treasury Select Committee in Transcript (2011).

That is why I suggest that such an entity should be a separate institution than the bank or banks which do the new SME lending, so it can be incentivized to scrutinize the loans being offered for securitization. I would also suggest requiring that the securities being issued by this agency – let's call it Bennie, the "British Enterprise Investment Entity" –be comprised of loans very transparently sorted and distinguished by type, so segregated (no general Bennie securities). And I would say we should insist that the securities that emerge meet all the standards for high quality assets that the Bank of England currently insists upon to be willing to lend against something.

And this is where the Bank of England comes in. Both of these entities, the new SME lender(s) and Bennie, would need an initial infusion of capital. The Bank could then commit to discounting the securities from Bennie (so long as they meet our previously set standards) and, as needed, various loans and other assets from the new SME bank (though obviously not individual corporate loans and not those bundles of loans rejected by Bennie as sub-standard). Some might say the Bank can already do that without any further agreement or announcement. I would suggest that this misses the point and perhaps an opportunity.

The Bank has already set up various facilities and programs to try to stimulate the creation of private sector markets in forms of finance that are underserved but include good potential assets – including one facility to discount when large commercial customers have invoices outstanding to smaller businesses. (Fisher (2010)) These have failed to create such markets. The Bank need not limit itself to expressing its willingness to deal with such assets passively if they come. By announcing a commitment to lending the initial (gilt-backed) capital for these proposed entities, assuring all that such entities if well managed can have liquidity from the central bank as needed, and publicly supporting their creation, the Bank can do a lot to fill financing and investment gap in the UK. Furthermore, but aggressively pursuing more old fashioned QE, we can keep the economy and the credit system going until Bennie and SME Bank(s) are up and running.

Independent central bankers tend to get very squeamish about expressing support for any particular government proposal, especially when it comes to agreeing to buy government bonds (even on the secondary market).[28] Tragedies have occurred, however, when independent central banks let worries about the perception that they are too close to the fiscal authority prevent them from doing something constructive in times of crisis. That was an important cause of the policy passivity that led to the ongoing Great Recession in Japan in the 1990s: publicly expressed distrust and games of chicken between the Bank of Japan and their Ministry of Finance locked in mutual inaction. (Posen (1999b, 2000)) It was only when these institutions worked together publicly that Japan's macroeconomic policy stance credibly and sufficiently turned around. (Posen (2010a)) That kind of distrust and fear of fiscal and monetary officials being perceived as too close has also been a major cause of the tragic inability of the Euro Area to resolve its

[28] As I said to the Treasury Select Committee in November 2010, I believe that the line should be drawn such that central bankers do not comment on broad political decisions about long-term goals of deficit reduction and their pace, especially around the time of elections.

problems. (Posen (2010a)) The willingness of the Federal Reserve to do the right thing on QEII, and thereby face down those critics who were ideologically opposed to the central bank doing what it always has done, buying government securities, is the right model.

Clearly, we do not suffer from such a tragic flaw in the United Kingdom at present. The Bank of England has had constructive relations and good cooperation with HM Treasury under all recent Chancellors, of whichever party. Governor King has made clear on behalf of the MPC the comfort we feel with coordinating policy as necessary at the present juncture.[29] I believe that the combination of now 19 years of the Bank's transparent and accountable inflation targeting regime, and 14 years of central bank independence under that regime, combined with the well-functioning political institutions of the UK largely assures this happy result.

All the more reason then, for the UK to take advantage of this happy situation at a time when coordinated activist macroeconomic policy is desperately needed, and when confidence in the effectiveness or willingness of policymakers to act is eroding. It is critical, however, that we do not get caught up in an "You first, my friend," "No, after you, my good sir," routine over who should make the first overture to whom to go through the door to more.[30] Even in places where relations between fiscal and monetary policymakers are constructive and not fraught by distrust, there is a tendency for joint efforts to fall between the cracks due to turf considerations and natural divisions of labor. We just have to be transparent about this, and we should get going.[31]

Other central banks facing different political environments may prove more reluctant to undertake such policy coordination and activism. While I feel my counterparts at other G7 central banks' pain, they have to rethink and overcome that reluctance. If the Bank of England and HM Government do implement something like the coordinated program that I am advocating today, and provide a successful example to other independent central banks in similar economic situations, so much the better. As I said in June 2010:

> Central bank independence is not primarily a matter of reputation, but of reality—what matters is what central banks do, not whether they maintain an appearance of public disdain toward the messy realities of economic life…As a result, the counter-inflationary credibility of central banks is not fragile to *voluntary* purchases of bonds, public or private, made with reference to clear economic (as opposed to political) justification…Therefore, it is my contention that by acting responsibly to respond to the global financial crisis utilizing the tools available, including large-scale bond purchases, the major central banks will have enhanced their credibility and independence for the future.[32]

[29] "This has to be a decision for government, because it is a decision about the allocation of credit and distorting the way in which the banking system is operating. There may be good reasons to do it, and the Bank will certainly be willing to play its role as an agent for government in any scheme that the government decides that it wants to put in place." King (2011)
[30] Known in the US (at least to us old folk) as an Alphonse and Gaston routine. See Appendix below.
[31] In my opinion, we still have to avoid having the Bank or MPC comment on the overall stance and goals of fiscal policy because they are inherently political issues and for the voters to decide. I do not see how any limited joint program that falls under the heading of monetary transmission and financial sector functioning and that mostly involves exchange of assets, as I propose here, could run afoul of that line I have drawn.
[32] Posen (2010b, p. 1-2). See also Posen (1999b): "Central bank independence is, however, a means to an end of good monetary policy, not a blind commitment to refusing any policy request, no matter how reasonable, just because it happens to come from elected officials."

I stand by that contention, and am proud to be working at a central bank that transparently and accountably deals with the more than messy economic realities we now face.

The specific government institutions and programs supported by the central bank must be targeted to the needs of the economy in question. Whereas for the UK the primary need is investment for SMEs and new firms, as I have argued here today, in the US it would be real estate and mortgage restructuring,[33] and in the Euro Area it would be bank recapitalization and restructuring.[34] But the general idea that the current economic situation is critical, and that coordinated monetary and fiscal action could turn the tide in the right direction, applies to all of the G7 economies.

Monetary Activism to Restore Our Risk-Taking Capacity

My intent today in explaining how central banks can do more, and how the Bank of England in particular should do more right now, is to make a call to action. The British economy and the economies of our major trading partners are still badly damaged by the global financial crisis of 2008-2009. As a result, our recovery has been weak, and we remain highly vulnerable to economic setbacks – even in the absence of major external shocks. Also as a result, there is little threat of sustained higher inflation in the coming years. In fact, despite the one-time price shocks that hit British households, the best forecast for UK inflation given the current situation is that it will be below target in two years' time and beyond, if not well before then. Thus, there is a strong case for us to do more macroeconomic stimulus, and the case is only getting stronger.

The primary hesitation about doing more in many circles and among many economic policymakers is not regarding the goal, but the means. Mistakenly, there are doubts that more stimulus either could be beneficial on net, could be effective, or could be done without politically compromising central bank independence. These are indeed mistaken beliefs. As I have argued today:

- More monetary stimulus will encourage the right kind of restructuring, while excessive austerity will make useful reallocation of capital less likely, so stimulus is good for both demand and supply;
- More quantitative easing through large-scale purchases of government bonds will have a positive effect on monetary and credit conditions, but should be done on a large enough scale so as that effect is evident as well as sufficient;
- More explicit and active cooperation between monetary policy and governmental programs to rectify our resulting investment shortfall is not only good policy, but likely to enhance the credibility and viability of our monetary regime.

[33] Bernanke (2011), Duke (2011b), Raskin (2011).
[34] Ackerman (2011), Lagarde (2011), Posen (2011d).

That is why I propose that the Bank of England undertake more QE on a large scale immediately, and that the Bank and HM Government work together to create, capitalize, and make liquid new institutions for lending to new businesses and SMEs. Our current credit allocation problems and resulting investment shortfall is one of the biggest specific barriers to recovery and to sustainable price stability in Britain. Monetary policy in the form of more QE will address this shortfall. The Bank of England, however, can and should go further than just doing more QE to remove this barrier to investment and growth in new and smaller businesses. We can do so completely within the bounds of our mission, our legal mandate, and our responsibility to stay out of politics and out of specific investment decisions.

I propose this specific program because, at its core, our economic problem today is inability of our private sector to finance and take enough constructive risks. This is the result of the excessive accumulation of debt by many households and the losses our banking system incurred through mismanagement.[35] Non-financial corporations are sitting on piles of cash rather than investing it (Figure 9). Investors are demanding higher risk premia to invest in even well-rated corporate bonds (Figure 10) and in equities in general (Figure 11). New businesses cannot get investors interested, as seen in the dearth of initial public offerings (Figure 12). Some correction from the risk-taking behaviour of the boom years is justified, but this has gone too far and persisted far too long.

More importantly, while it is rational for any given individual household or even any one bank to cut back on risk as a result of this legacy of bad debt, that means that a substantial (and sub-optimal) number of worthwhile real investment projects are going unfunded and thus are not undertaken. The cost to this investment shortfall in terms of the immediate growth outlook are substantial, and the longer-term costs are even greater in terms of impeded restructuring, diminished aggregate supply, and foregone innovation and productivity growth. Expansionary monetary policy, both on its own and in concert with constructive investment supporting policies by government, can provide the risk financing and the risk bearing capacity the economy currently lacks. As I quote Samuel Gompers at the start of my text, “we shall never cease to demand more until we have received the results of our labor.” In this economic context, we will know that monetary policy has done enough for long enough when long-term interest rates rise due to demand for capital from our private sector taking on risk and making investments.

At present, when there is too much risk aversion in the private sector, the British public can ill-afford unjustified risk aversion on the part of its monetary policymakers as well. The Bank of England and other central banks can do more for our economic recovery effectively, beneficially, and without political taint. And we can do more without causing high inflation. Therefore, we must do more to fulfil our responsibility to the British people. We are obliged to look past the unfounded fears of others and to get past any unwarranted reluctance on our own part, and do the right thing with the monetary tools at our disposal.

[35] This analysis is in the spirit of Koo (2008) and Eggertsson and Krugman (2011).

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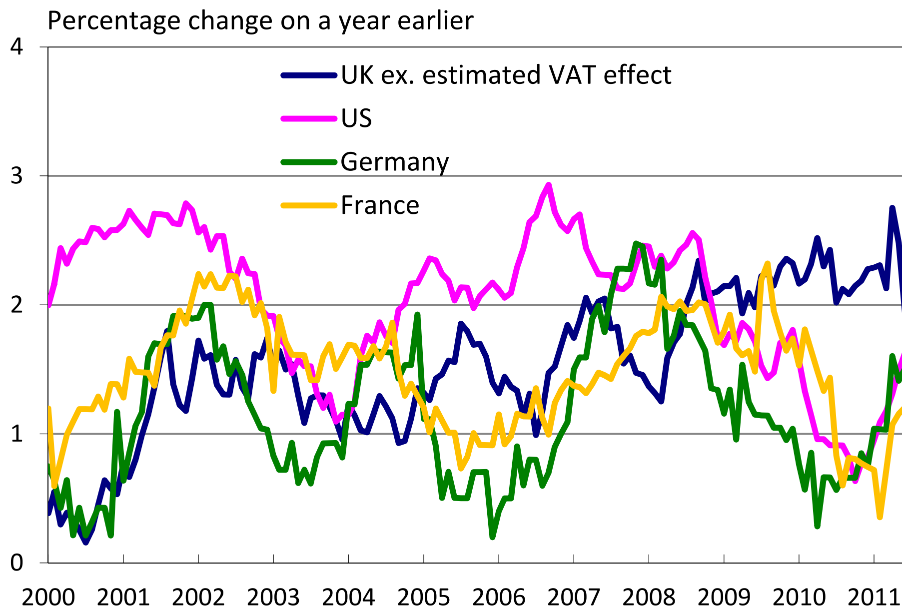
Figure 1: Core inflation [(a)]

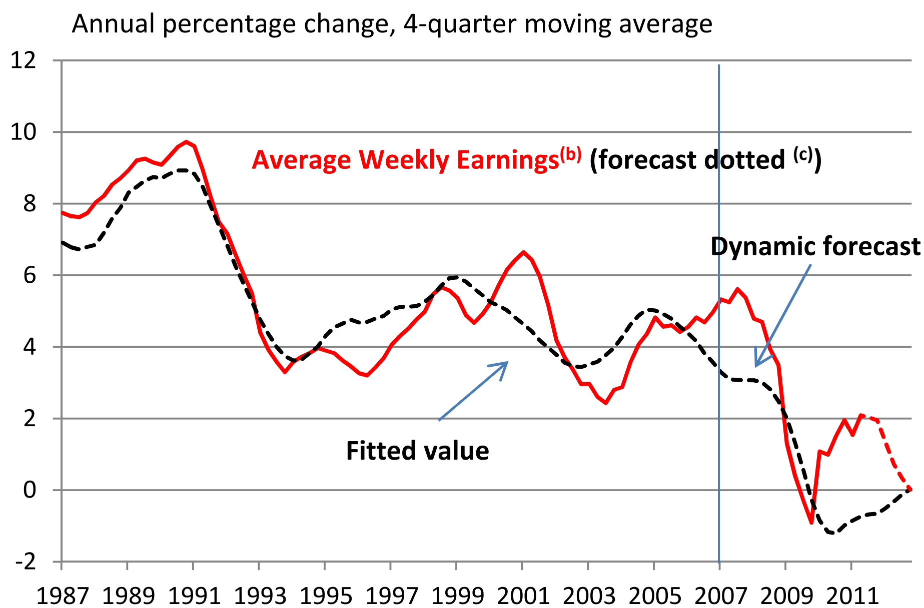


Averages over 2001-2007: UK (1.4%); US (2.2%), Germany (1.3%) and France (1.5%)

Sources: Bank of England, US Bureau of Labor Statistics, German Federal Statistical Office, and INSEE.

[(a)] UK: CPI excluding petrol, utilities and food & non-alcoholic beverages
US: CPI excluding food and energy
Germany: CPI excluding seasonal food and energy
France: the index excludes public services and products with volatile prices (some limit to comparability)

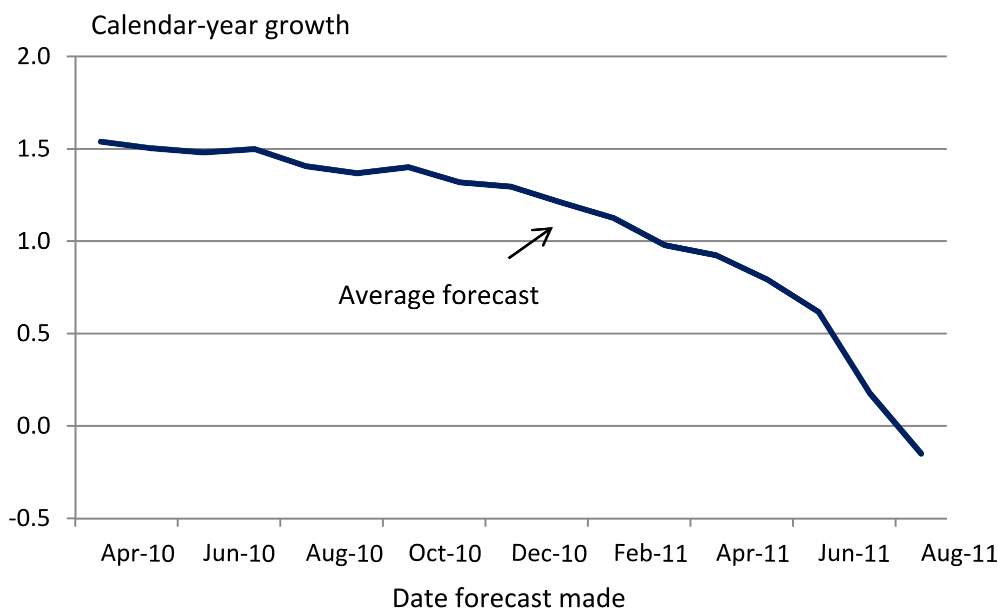
Figure 2: A simple wage Phillips curve model of wage behaviour in the UK [a]



Average earnings growth over 2001-2007 was 4.3%.

(a) The model relates wage growth to long-run inflation expectations (10 year inflation break-evens from index linked bonds), productivity, cyclical unemployment (based on OECD estimate) and to previous deviation of real product wages from productivity: awet – awet-1 = β1 breakevent + β2 (prodt-1 – prodt-2)+ β3 ugap + β4 [awet-1 – 3.69 – prodt-1 – pydeft-1]
(b) Private-sector Average Weekly Earnings. Prior to 2000 Average Earnings Index data is used
(c) Forecast runs through 2012 Q4.

Figure 3: Consumption growth forecasts for 2011



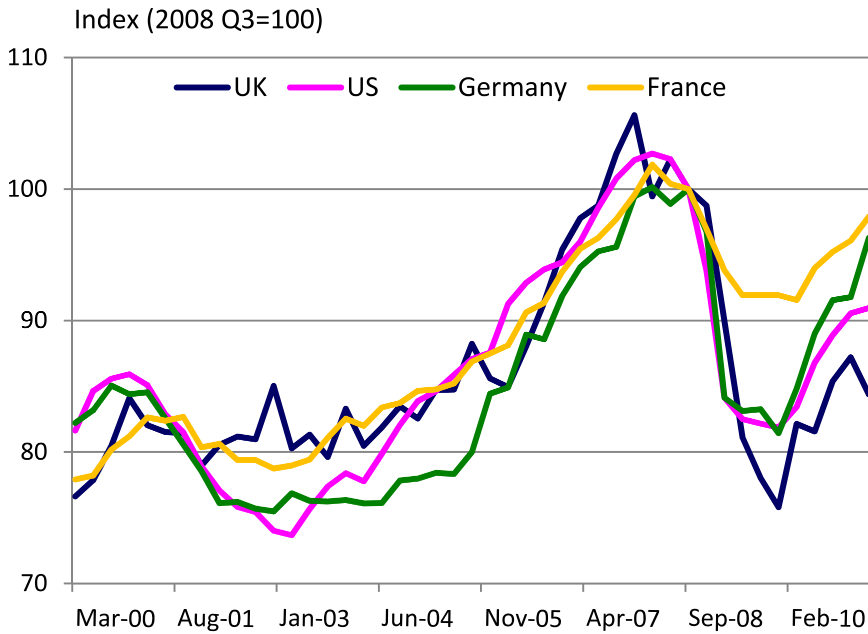
Note: Based on forecasts of consumption growth in calendar year 2011 made by about 35 external forecasters.

Table 1: Measures of inflation expectations

	Available Data		Average (%)		Difference compared to latest data (pp) [d]		
	Earliest	Latest	1997-2007	2002-2007	2009 Q2	1997-2007 Average	2002-2007 Average
Household survey measures [a] [b]							
Monthly							
Citigroup/YouGov (1)	Nov 2005	Aug 2011	2.47	2.47	1.68	1.01	1.01
Citigroup/YouGov (5-10)	Nov 2005	Aug 2011	3.52	3.52	0.69	0.21	0.21
Quarterly							
Barclas Basix (1)	Q4 1986	2011 Q2	2.89	2.81	0.92	0.41	0.49
Barclas Basix (2)	Q4 1986	2011 Q2	3.33	3.22	-0.04	-0.33	-0.22
Barclas Basix (5)	Q3 2008	2011 Q2	N/A	N/A	-0.83	N/A	N/A
Bank/NOP (1)	Q4 1999	2011 Q3	2.32	2.41	1.78	1.83	1.75
Bank/NOP (2)	Q1 2009	2011 Q3	N/A	N/A	1.26	N/A	N/A
Bank/NOP (5)	Q1 2009	2011 Q3	N/A	N/A	0.59	N/A	N/A
Bank survey of professional forecasters [c]							
Survey of professional forecasters (2)	Q1 2004	2011 Q2	1.95	1.95	0.57	0.14	0.14
Market-based indicators							
5y, 5y forward RPI inflation implied from gilts	02 Jan 1985	06 Sep 2011	2.88	2.84	-0.52	0.10	0.13
5y, 5y forward RPI inflation implied from swaps	01 Oct 2004	06 Sep 2011	3.04	3.04	-0.74	0.18	0.18

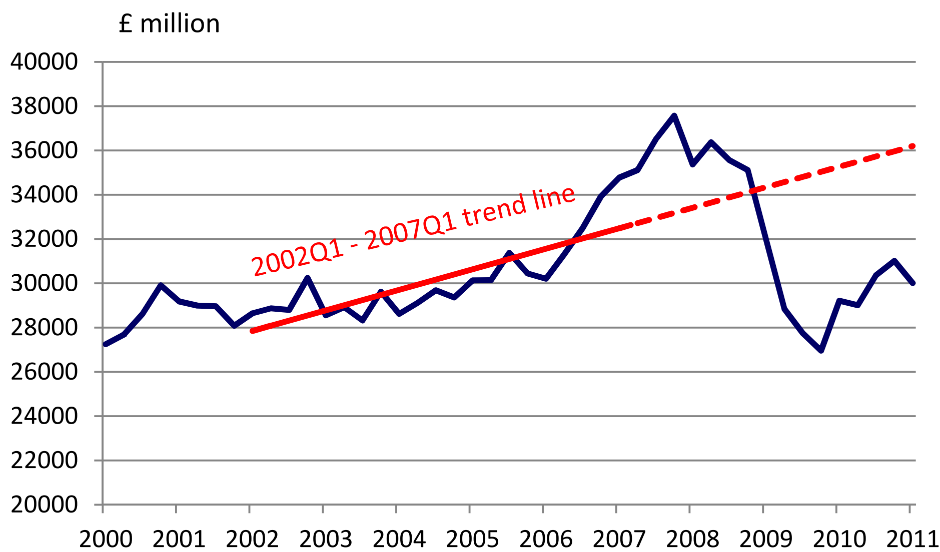
(a) The questions ask about expected changes in prices, but do not reference a specific price index. All measures are based on the median estimated price change.
(b) The number in brackets shows the window in years over which respondents are asked to report their expectations.
(c) The questions specifically refer to CPI inflation. Based on the mean estimated price change.
(d) A positive number implies that expectations have increased since the specified time period/average and vice versa.

Figure 4: Private fixed non-residential investment (levels)



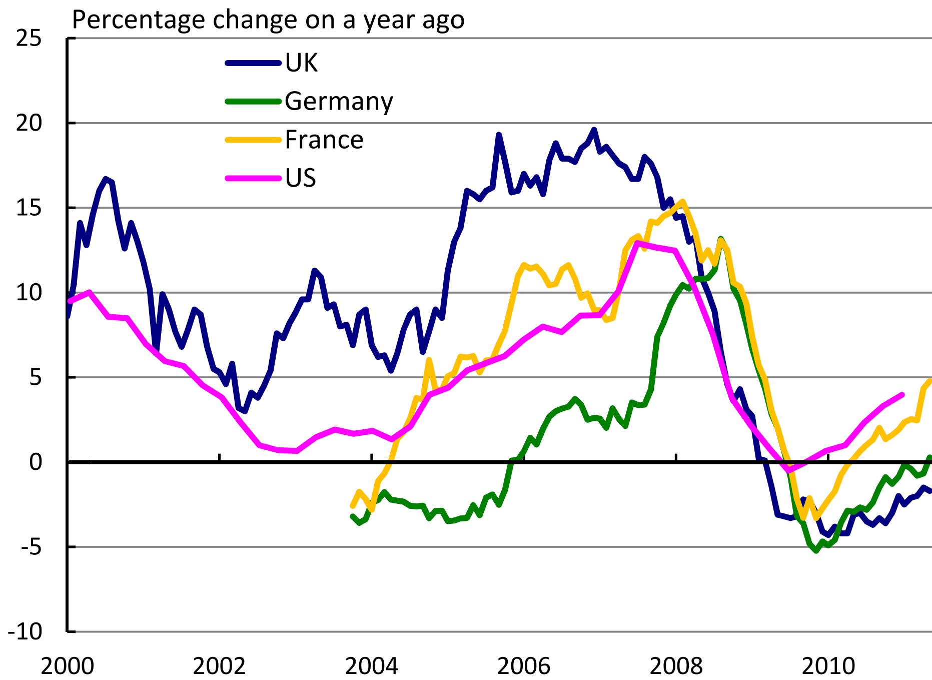
Source: OECD and Bank of England calculations.

Figure 5: UK private fixed non-residential investment



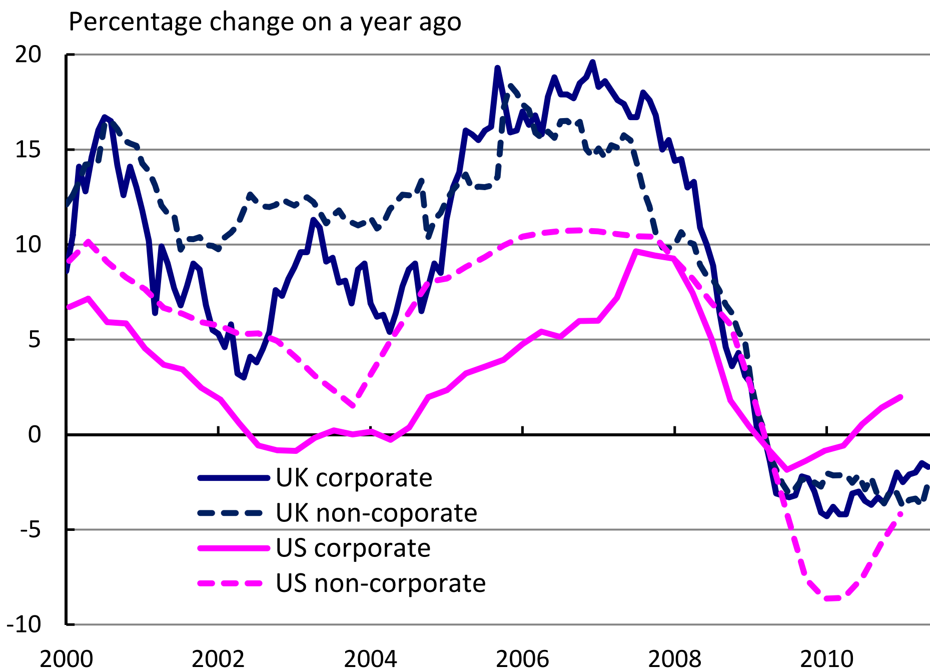
Source: OECD and Bank of England calculations

Figure 6: Lending to private non-financial corporations



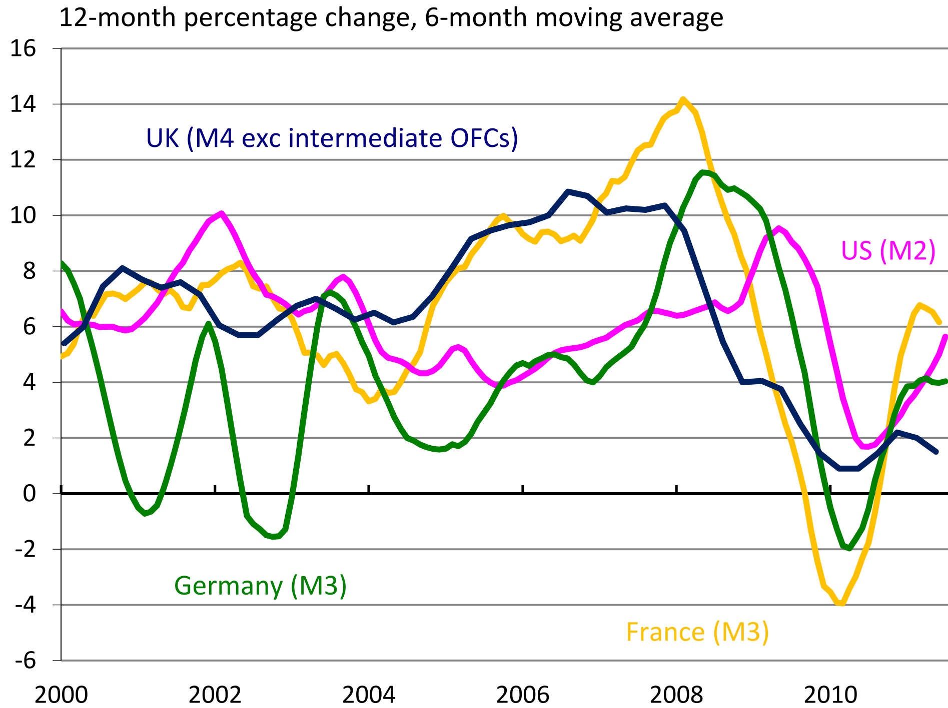
Source: Bank of England, Federal Reserve Flow of Funds European Central Bank for France and Germany. Bank of England calculations.

Figure 7: Lending to private non-financial businesses



Source: Federal Reserve Flow of Funds and Bank of England. Bank of England calculations.

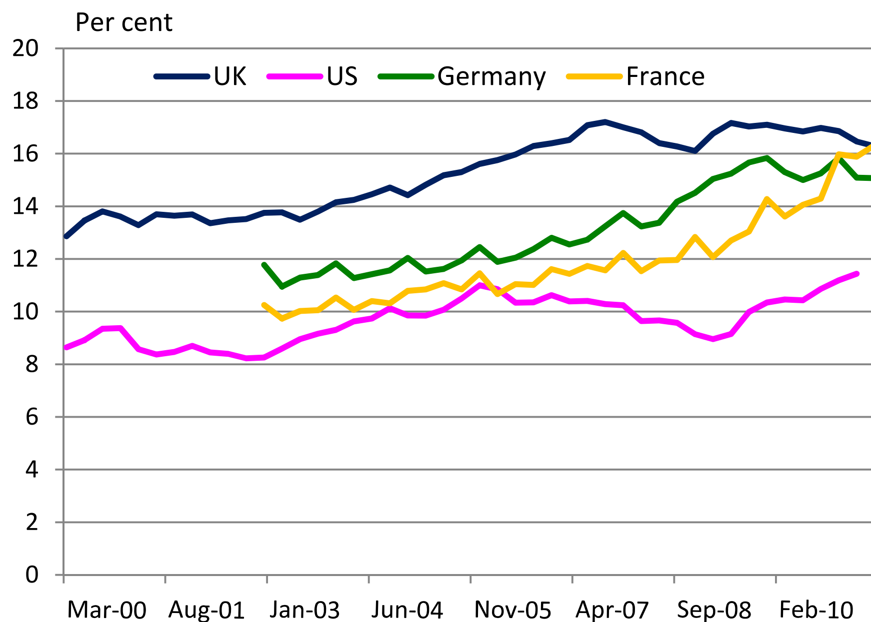
Figure 8: Broad money aggregates



Averages over 2000-2006: UK (7.6%), US (6.2%), Germany (4.1%), and France (7.2%)

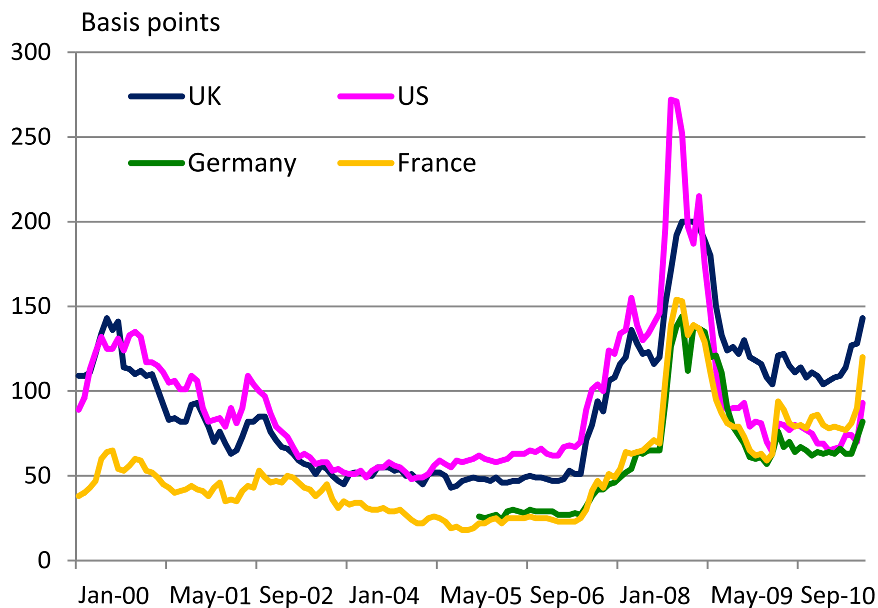
Sources: Bank of England, Federal Reserve, Bundesbank and Banque de France.

Figure 9: Non-financial corporates' money holdings as a share of GDP



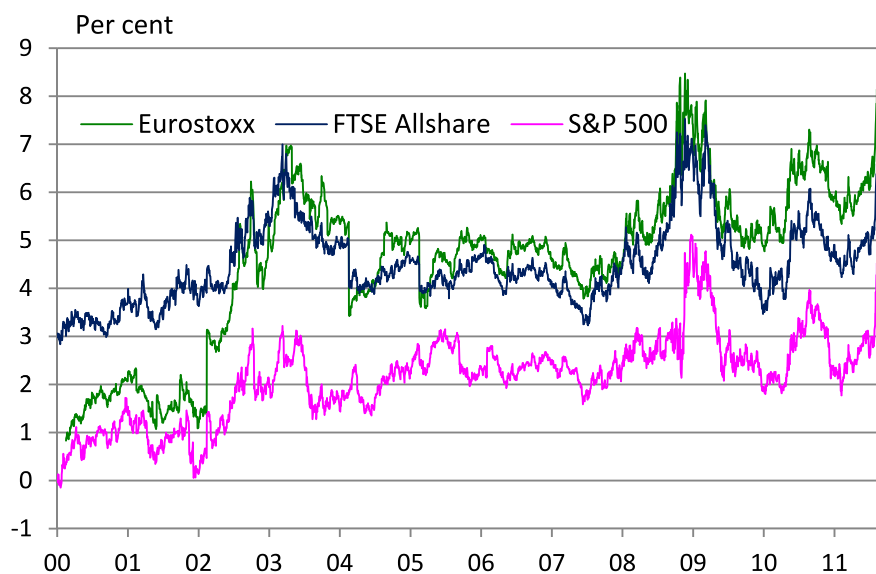
UK: PNFCs' M4 as a share of nominal GDP (Bank of England and OECD)
US: NFCs' M2 as a share of nominal GDP (Federal Reserve and OECD)
France and Germany: NFCs' deposits as a share of nominal GDP (ECB and OECD)

Figure 10: AAA-AA corporate bond spread over government bonds



Source: Bank of America Merrill Lynch and Bank of England calculations.

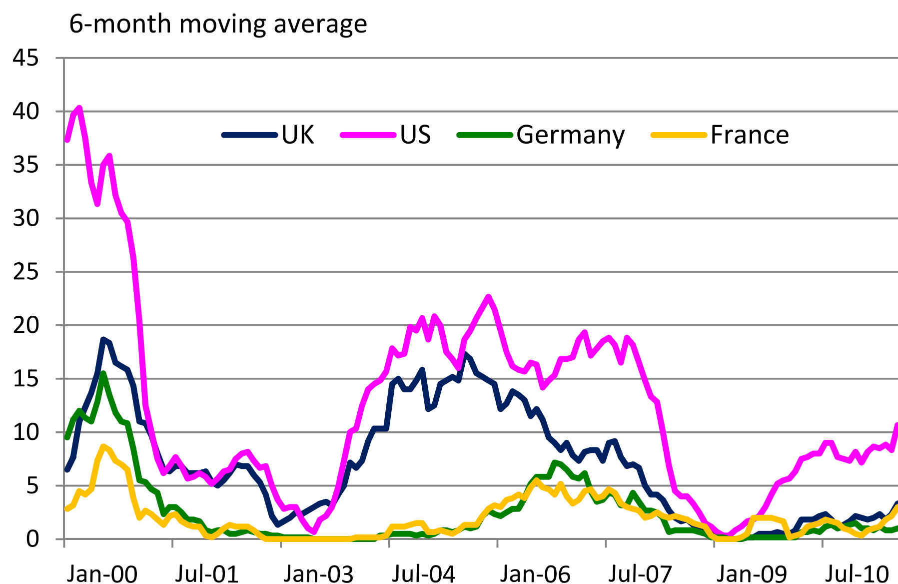
Figure 11: Equity risk premium



Averages over 2000-2007: FTSE All share (4.3%), S&P 500 (1.8%) and Eurostoxx (3.9%).

Source: Bloomberg, IBES, Thomson Reuters Datastream and Bank calculations

Figure 12: Initial public offerings



Source: Dealogic and Bank of England calculations.

Appendix – Avoid the Alphonse and Gaston Routine

Alphonse and Gaston comic strip from the *American Journal Examiner*, 1906