



BANK OF ENGLAND

Speech

Monetary policy in an uncertain economy

Speech given by

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At the Institute of Directors breakfast, Liverpool

10 December 2014

I would like to thank Marilynne Tolle for her help in preparing this speech. The views expressed are my own and do not necessarily reflect those of the other members of the Monetary Policy Committee.

Over the past eighteen months, the economy has seen a remarkable turnaround. Since mid-2013, UK GDP growth has been the strongest among the G7. Output has grown on average by 0.8% per quarter and now stands some 3.5 percent higher than its pre-crisis peak. Over the same period, employment has risen by 765,000 and the unemployment rate has come down from 7.7% to 6.0%.

One key characteristic of this recovery has been the near-continuous fall of economic uncertainty, and by extension an improvement in business and consumer confidence, since the start of last year. You can see in **Chart 1** that measures of economic uncertainty have fallen markedly since early 2013, following the twin peaks of the global financial crisis of 2008-2009 and the euro-area sovereign debt crisis of 2011-2012. The rise since the summer looks small by comparison, but it comes as a reminder that uncertainty – how confident we are about the future – is an important feature of the economic landscape.

Today I would like to share my views on the economy and monetary policy. I will set out my judgment of the balance of risks surrounding some of the difficult issues faced by the Monetary Policy Committee (MPC) as it assesses the likely path of the economy and inflation over the next few years. It is, in large part, my assessment of these risks that motivated my decision in August, September, October and November to vote to raise Bank Rate to 0.75%. The MPC met again to decide on Bank Rate at the beginning of December. Consistent with MPC convention, my vote, along with those of the rest of the MPC, will be revealed as part of the publication of the committee's official meeting Minutes, on 17 December. As such, my comments today will reflect my assessment of developments through the November Bank Rate decision.

First I will briefly consider past developments in and the outlook for the demand side of the UK economy, where uncertainties about the sustainability of domestic demand and the outlook for external demand have resurfaced. I will then discuss the sizeable uncertainties we face in assessing the supply side of the economy, in particular in estimating the level and absorption rate of spare capacity (slack), as well as the signal we can extract from the various measures of pay as we try to gauge inflation pressures ahead. I will argue that, while there is a high degree of uncertainty, and while members of the MPC have different views, I have judged that there has been mounting evidence to support the narrative that spare capacity has been absorbed rapidly; that not much slack is left in the economy; and that wage pressures, though still benign, can turn around pretty quickly, and may do so in the relatively near future. I will then look at the arguments as to how far the current weakness of inflation should influence our monetary policy decision-making.

Demand: a strong and sustainable recovery?

The recovery of activity over the past year or so has been remarkable, confounding most economists' expectations. GDP has grown at a faster rate than its long-term average, and, although the latest evidence from output surveys suggests that some of this momentum is waning in some sectors, these surveys remain consistent with healthy growth rates in the vicinity of 0.6-0.7% in the current and coming quarters.

In line with previous cycles, the mainstay of the recovery has been private domestic demand. Although pay has been weak, strong employment growth has supported household spending. And reduced uncertainty about employment and income prospects, together with easier credit conditions, have encouraged and enabled households to bring forward consumption by running down their savings (**Chart 2**).

While there is room for further reductions in household saving – indeed that is the central projection embedded in the November *Inflation Report* – that process cannot go on indefinitely. I should say at this point that our assessment of the likely path for the saving rate has been complicated by the ONS's new definition of income. Based on that new definition, which records more of household income as flowing directly into pension funds, the saving rate currently stands close to historical lows, suggesting there is little room for further dissaving. However, for many employees, pension saving is in the hands of their employers, and is not available for immediate alternative use. The savings ratio derived from *available* income has been revised less and remains above its pre-recession trend, suggesting that further dissaving looks plausible.¹ It remains the case, however, that there are limits to how far the savings ratio can decline, so the sustainability of household spending growth will require a recovery in take-home pay, such that incomes grow at least as fast as consumption in coming years.

Alongside the recovery of consumer spending, business investment has picked up. The ONS's latest Blue Book revisions show that the recovery in business investment growth over the past year has been stronger than previously estimated, corroborating the steer from business surveys at the time (**Chart 3**).² The quarterly fall of business investment in the latest estimate of Q3 GDP is disappointing, but these data are extremely volatile and prone to revision, and it is unlikely that this weakness will prove to be persistent.

The outlook for business investment depends on two key factors: the outlook for consumer demand, which informs firms' investment plans, and the availability of finance, which enables firms to realise those plans. Financing conditions, both external and internal, remain conducive to business spending – credit conditions have improved, especially for large corporates; net bond issuance has been strong; and improving profits mean that firms have internal funds available. But the outlook for final demand is more mixed. The persistent weakness of activity in our main trading partner, the euro area, is likely to limit an important source of external demand, while the recent revival of uncertainty about the global outlook more generally could weigh on businesses' willingness to invest. In 2011, for example, the main blow to the UK economy came not from the hit to direct exports from the uncertainty in the euro area, but from the additional damage via a collapse in business confidence and a rise in financial market volatility. However, business surveys suggest that this time confidence is more resilient, and investment intentions continue to point to healthy growth in business investment (**Chart 3**). Consistent with that, our central expectation in the November *Inflation Report* is for investment to continue to grow faster than its historical average rate over the next couple of years.

¹ See Chart C in Box on p.19 of the November 2014 *Inflation Report*.

² Also see Chart 3 in McCafferty (2014d).

Supply: uncertainty about the level of slack

In assessing the outlook for inflation, the key consideration, as we have underlined in recent issues of the *Inflation Report*, is how the economy's supply capacity will evolve as demand continues to expand. That requires us to answer three key questions, namely: what is the current level of spare capacity in the economy, at what pace will remaining spare capacity be absorbed and what is the relationship between the amount of spare capacity and the behaviour of wages?

Considerable though uncertainties are on the demand side, they are small compared with those concerning supply. Estimates of spare capacity are far from precise, reflecting uncertainty about the measurement of its different components – slack as arising within companies and in the labour market.

Let me deal with the utilisation of capacity within companies first. Business surveys suggest that companies are operating at close to “normal” levels of capacity utilisation (**Chart 4**), an indication that there is little, if any, underutilised capacity left. The slight downtick in the latest utilisation data does little to alter that point in my view, especially given the unusually wide range amongst the survey indicators.

Slack in the labour market is a more complex concept, drawing on the different elements that make up labour supply. It is also where measurement uncertainty is perhaps the greatest, creating more room for divergent interpretations among policy-makers.

To gauge the degree of slack in the labour market, the levels of unemployment, labour force participation and average hours worked are assessed in relation to how far they depart from estimates of their ‘normal’ or ‘equilibrium’ levels e.g. how far unemployment is above its medium-term equilibrium level (the unemployment gap), how many of the population are actively in or seeking work relative to “normal” (the ‘participation gap’), and how much average hours worked are below ‘desired’ hours (the ‘average hours gap’).

The difficulty is that these equilibrium levels cannot be observed directly, and their measurement is subject to great uncertainty. As unemployment has fallen sharply, estimates of the amount of spare capacity accounted for by the participation and average hours gaps – which are perhaps the most difficult to estimate – have become ever more important in our calculations.

For instance, estimates of the proportion of people who would be willing to participate in the labour market (‘trend participation’) could capture cyclical, in addition to structural, reasons for a readiness to join the labour force, perhaps in reaction to weak incomes or lower wealth following the recession. It is clear that structural factors have buttressed participation since the financial crisis, in particular greater participation by older workers, reflecting the abolition of the default retirement age and the prospective rise in the state pension age. But how far these changes are supplemented at present by other, more temporary, factors, is unclear. The most recent weaker data on participation may well be telling us that the recent upward trend is coming to

an end at a somewhat lower level than previously thought. As such, I am less than willing to rely on estimates of the participation gap as evidence of a continuing source of substantial slack in the labour market.

In the same vein, I think caution is needed when interpreting estimates of people's 'desired' hours worked. Much like trend participation, estimates of trend average hours could encompass cyclical factors, such as a desire to work longer hours to compensate for the current weakness of pay. Again, caution is needed in how these data are interpreted as a continuing indicator of slack.

Measurement of the unemployment gap is also uncertain, but as the labour market approaches full employment, it is probably a more dependable indicator of the effective level of slack. The unemployment rate fell to 6% in August, lower than we were projecting back in the summer, and is closing on its medium-term equilibrium level of about 5.5% (our best estimate). The pace of employment creation has slowed in recent months, but when set against the continued rise in vacancies (**Chart 5**), the shift in the source of new employees from the short-term unemployed towards the longer-term unemployed, and the evidence that recruitment difficulties have picked up and that skill shortages have become more widespread across sectors,³ I think it is clear that it has become more difficult to match jobs to workers, indicative of a diminution of effective slack. Overall, I think that the risks around our central estimate of slack in the November *Inflation Report* are probably skewed to the downside, and that in practice there may not be that much spare capacity left in the labour market.

Uncertainty about the pace of slack absorption

What can we say about the pace at which slack is being absorbed? Well, it is clear that, with GDP growth markedly above its average rate in recent quarters, and with unemployment declining rapidly, slack has been absorbed quite rapidly over the past year or so.

Looking forward, the pace of absorption of slack over the next three years is, in the November *Inflation Report* central forecast, much more gradual, such that it is fully used up only by the end of the forecast. This depends on two key assumptions, related to the interplay between supply and demand dynamics as the recovery progresses.

The first assumption is that output growth is forecast to slow to its average rate at the turn of this year and remains at that pace until the end of the forecast. While I think that this is a plausible projection, it is worth bearing in mind that a period of only slightly faster growth in demand over coming quarters would materially change the date by which slack would be fully absorbed, from later in 2017 to the middle of 2016 – unless one assumed that supply responded immediately to that higher demand.

³ See the October 2014 Agents' Summary of Business Conditions. The November 2014 Summary notes that recruitment difficulties remain somewhat above normal.

This takes me to the second assumption. A key judgment underpinning the *Inflation Report* forecast is that the recovery of demand is accompanied by a pickup in productivity growth, such that the pace at which slack is absorbed slows substantially. Yet the pace, timing and degree of endogeneity of any recovery of productivity are highly uncertain. As I argued recently, with a substantial part of the weakness of productivity likely unrelated to cyclical factors, it may take some time to see a solid recovery in productivity growth, and the timing is very uncertain.⁴

The key point is that small changes in either the pace of demand growth or in the revival of productivity have a sizeable impact on when slack is likely to have been fully absorbed. If my concerns about the current level of slack are correct, then this issue is magnified further. Overall, I think the risks around our central profile for slack are such that we may well see the economy return to full capacity somewhat earlier than implied by our central forecast in the November *Inflation Report*.

Uncertainty about signal extraction from pay measures

With quantitative estimates of slack so uncertain, we should pay close attention to more direct evidence of incipient inflation pressures, particularly in the labour market. So, what insights do measures of pay have to offer?

Well, here too policymakers have had to grapple with heightened uncertainty, related to the interpretation of divergences in pay measures. The main puzzle has been the recent weakness of average weekly earnings (AWE), which has been at odds with the strength of survey indicators (Banks' Agents, BCC, REC) over the past couple of years (**Chart 6**). Part of the difference is that the surveys tend to measure marginal pay.

At about 1% over the past 18 months, private-sector regular AWE growth (excluding bonus payments) has been remarkably subdued. On the face of it, that weakness would be consistent with the existence of a substantial amount of slack in the labour market. But other factors have been at play, which complicate the analysis.

The first has to do with changes in the composition of employment. Bank staff have done analysis showing that in recent quarters, employment growth has been concentrated among the low-skilled and the young (apprentices, graduates and trainees). The increasing share of their relatively low-paid jobs has depressed average pay growth. Anecdotal evidence gleaned from the Agents' contacts suggests that this phenomenon is unlikely to persist. Greater low-skilled employment seems to have reflected the nature of hiring at this stage of the cycle, with broad-based growth, including in activities that are relatively low-skilled labour-intensive. It may also be that the real income squeeze of recent years has shifted consumer demand towards low-value-added activities (warehousing, distribution for internet retail/discount retailing/budget

⁴ See McCafferty (2014c).

hotels) that require lower-skilled workers. As real pay recovers, this effect should dissipate. Another factor behind the pickup of low-skill hiring may be cost-cutting. Hiring low-skilled workers and training them is cheaper than hiring skilled workers, especially for small and medium-sized enterprises with low profit margins. The desire to drive down costs may also be associated with some re-engineering of work processes making greater use of lower-skill inputs.

Other measures of pay, less affected by the changing composition of the labour force, are less subdued. For example, notwithstanding the slight tick-down in the most recent data, survey evidence from the Recruitment & Employment Confederation (REC) suggests that the pay of new recruits has been increasing at a rapid pace, as captured by the REC's pickup in the proportion of survey respondents reporting higher salaries for permanent new recruits. A corollary to this is the emergence of 'defensive pay' awards – when employers increase the pay of prospective leavers to entice them to stay put. Survey evidence suggests that retention difficulties have started to exert upward pressure on pay-setting.

Measures of marginal pay have reasonably good leading properties (**Chart 7**), although past relationships suggest that it takes quite some time for increases in marginal pay to feed through to measures of average pay, such as AWE. So the second reason behind the weakness of average pay growth may well be the existence of lags.

One mechanism through which marginal pay increases can be expected to feed into average wages eventually is via an increase in the rate of job turnover. As the recovery progresses and people become increasingly confident about finding a new job, employers will need to increase the wages of existing staff to entice them to stay put. There are signs that this may not be long in coming. Job churn, in particular the number of people moving from one job to another, has increased sharply over the past couple of years, and picked up even further in the first half of the year (**Chart 8**). This echoes the intelligence picked up by the Bank's Agents, who reported in their November *Summary of Business Conditions* that staff churn was rising as employees were becoming more confident about securing a job with a new employer.⁵

In light of this, the pickup of AWE growth to 1.6% in the three months to September – higher than consumer price inflation, which stood at 1.2% that month – may well be the turning point we have been waiting for. Indeed, although volatile, three-month-on-three-month annualised private-sector regular pay growth picked up to 3.1% in September. Accelerating nominal wages, together with subdued inflation, certainly augurs well for the recovery of real incomes and, as such, is welcome news for consumers, as well as necessary to ensure a sustained recovery. But we need to be sure that the pickup, as we look forward not only to the 2015 wage round, but into 2016 too, remains consistent with our inflation target.

⁵ See the November 2014 Agents' Summary of Business Conditions.

Now of course, any increase in wages should be considered alongside movements in productivity. What matters to companies when setting prices is the cost of labour associated with the production of one unit of output – unit labour costs (ULC). Annual growth in ULC has fallen over the first half of the year, turning negative in the second quarter (**Chart 9**). Although part of that decline has reflected a fall in the non-wage component of labour costs, in addition to unflattering base effects from tax forestalling in 2013 Q2, on the face of it these data suggest that domestic pricing pressures remain extremely benign.

But it is primarily the *marginal* cost of producing output, rather than the average (unit) cost of production, that matters for price-setting. And while the marginal cost of producing an additional unit of output cannot be observed, the sharp pickup in measures of marginal pay, such as the REC survey, provides an indication that these domestic pricing pressures may be less dormant than we think, and might surprise us faster than we expect.

How far should current low inflation influence our policy decisions?

Yet at the moment, inflation pressures feel remarkably benign. After falling to a low of 1.2% in September, headline inflation stood at 1.3% in October, materially below our 2% target. The most recent falls in crude oil prices suggest that it is likely to weaken slightly further in the near term, such that it is more likely than not that the Governor will have to write a letter to the Chancellor on behalf of the MPC in coming months, explaining why inflation has undershot our target by more than 1 percentage point. Thereafter, the central *Inflation Report* projection sees it returning only very gradually to target over the forecast horizon.

But how much should that current weakness of inflation, and its projected persistence over the coming year, influence our policy deliberations? There a number of reasons why we might wish, at least in part, to “look through” the current data.

The first is that the current data captures performance over the recent past, while monetary policy has to be forward looking. It takes a good eighteen months for the full effects of any policy change to feed through the economy, so we need to be looking not at inflation now, but expected inflation pressures that far ahead when setting policy.

The second reason has to do with the source of the weakness. The sharp decline of inflation over the past year largely reflects falls in food and energy prices, as well as the 10% appreciation of sterling (since 2013 Q1), which has weighed on the price of imported goods and services (**Chart 10** – the dampening effects of the appreciation are captured by the ‘other’ bar).⁶ Much of the projected weakness in inflation through 2015 reflects the continued downward pressure from these factors, with the prices of energy, food and other

⁶ In a recent speech, my colleague Kristin Forbes estimated the drag on headline inflation from the appreciation of sterling to be around 0.8pp at present, and to reach around 1pp by the end of the year. See Forbes (2014).

imported goods and services expected to subtract on average just under 0.5pp a quarter from annual inflation.⁷

Such relative-price movements are referred to as ‘price-level’ shocks. Their impact on the price level may be permanent, but, importantly, their effect on the rate of inflation is essentially temporary, and falls out of the equation after a year – a period over which policy has only a limited impact.

As I argued in a speech last summer,⁸ at a time when the MPC was facing well-*above*-target inflation, there are good reasons – other than their short duration – why we might wish to look through the impact of such one-off effects on the headline inflation rate. Chief among these in the current situation is that the disinflationary effects of falling commodity prices and a rising exchange rate could mask a pickup in domestic inflationary pressure, requiring a more rapid policy response later on.

More generally, it is appropriate to look through the first-round effects of such relative-price shocks so long as there is no evidence of second-round effects taking hold. In plain language, this means that temporary divergences from the inflation target driven by one-off price shocks can be tolerated as long as inflation expectations do not drop materially, depressing underlying inflation.

Important in this regard, in the current environment, is the existence of the Zero Lower Bound (ZLB). Presently very low nominal interest rates leave less scope for loosening policy (other than through unorthodox policy measures such as QE) in the event that inflation expectations became de-anchored, or that growth weakened, presenting a risk of deflation. This is a legitimate concern. But as inflation has fallen back over the past year, there is, so far at least, little evidence of such disinflationary second-round effects emerging: inflation expectations remain anchored,⁹ and the weakness of wages, which in any case pre-dated the falls in headline inflation, seems to be coming to an end.

But what if such relative price shocks prove more persistent, such that they continue to depress the inflation rate over a period in which policy could have an impact?

In this case, the argument becomes more complicated. If monetary policy can offset such shocks, why not use it, given that both undershoots and overshoots of our 2% target are equally important? The considerations set out above, about the causes of the undershoot and their impact on underlying inflationary pressures, in my view, still apply. But in addition, the “optimal policy rule” can be brought to bear. This states that “looking through” an *over*-shoot in inflation is more justified if the real economy is operating *below* full capacity, and vice versa. Following the depreciation of sterling in 2008, for example, the rate of inflation

⁷ See November 2014 *Inflation Report*.

⁸ See McCafferty (2013).

⁹ See Table 4.D of the November 2014 *Inflation Report*.

overshot the target for 48 consecutive months, yet the economy languished with considerable spare capacity, justifying the decision of my predecessors on the Committee not to tighten policy in response.

But in applying the optimal policy rule, it is not only the current level of spare capacity that is important. Whether that spare capacity is diminishing or growing, and whether the output gap moves from negative to positive over the forecast horizon, are also important considerations. Putting all these considerations together, I believe there are, at least for now, some good reasons to justify “looking through” the recent sharp fall of inflation, at least partially.

Considerations for monetary policy

So to summarise: My votes in the August through November MPC meetings for an increase in Bank Rate were not based on one single reason, but more on the cumulative weight of a number of different arguments.

First, have been my concerns about the balance of risks around some aspects of our central forecast. If either the effective current level of slack is smaller, or the pace of future absorption somewhat faster, than envisaged, then, given the lags involved, there is a risk that pay and unit cost growth will begin to rise faster than is consistent with our inflation target. It takes some 18 to 24 months for the full effects of any change in interest rates to feed through to the economy. So I am thinking not only about the coming wage round in 2015 but about the wage round in 2016 when considering inflationary pressures over the policy horizon.

Second, I have been concerned that, at a time in which the economy has been growing consistently above its likely potential, we remain sensitive to the effective level of stimulus that we are providing. Bank Rate has now been stable at the historic low of 0.5% for 5½ years. But to gauge the amount of monetary stimulus that that provides, the level of Bank Rate needs to be assessed relative to a ‘neutral’ rate – the rate that is consistent with inflation at target and output at trend. That neutral rate will vary, depending on such factors as the level of confidence in the economy, and the functioning of the credit system. In recent years, the neutral rate too has been extremely low and, at the height of the recession, was probably negative, given the risk aversion of consumers and businesses and the disruption to credit markets. However, it is likely that as the headwinds weighing on the economy have abated, it has started to return towards more normal levels. If the neutral rate is rising, keeping Bank Rate constant effectively imparts additional monetary stimulus.

My third argument has been linked to our policy guidance, and to our statement that we envisage that over the coming years, policy tightening will be both gradual and limited. To me, this gradualism is a critical element of our policy armoury. It minimises the disruption to consumers and businesses inherent in the normalisation of monetary policy, as well as allowing us to assess the impact of a policy change after a long period of stability – whether, for example, consumers are more sensitive to changes in interest rates currently than they were before the financial crisis. As I have articulated previously, such gradualism is more

likely to be delivered if we start sooner rather than later.¹⁰ Delaying the start of normalisation risks a greater monetary policy response later on.

My fourth argument has been that there are other risks in deferring a rise in interest rates for too long. The most obvious one is 'search for yield'. By encouraging investors to increase their exposure to risky assets to receive higher returns, persistently low interest rates can increase the risks to financial stability, potentially intensifying the need for a more dramatic policy response later on. Although risk appetite has waned over the past few months, the decline of yields on risky corporate bonds during the past couple of years indicates that some search for yield has been taking place.¹¹

Conclusion

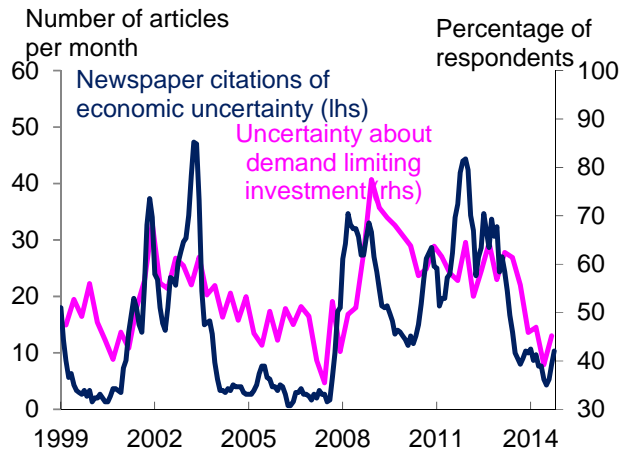
Monetary policy is always conducted amid uncertainty. But uncertainty remains particularly acute at present, especially regarding the behaviour of the supply side of the economy. In setting policy, this puts the onus on assessing the balance of risks around a plausible central projection. Differences in this assessment explain why nine reasonable economists can agree to disagree, leading to the appearance amongst the MPC of split votes, after a lengthy period of unanimity.

My assessment has led me to vote for an increase in Bank Rate in the August through November period. I have argued that a small rise in Bank Rate would ensure that we act in good time, such that we can increase borrowing costs gradually, allowing consumers and businesses to adapt with minimum disruption. This, I have explained, is the best way of supporting and sustaining the economic expansion that is now well under way, while achieving our inflation target.

¹⁰ See McCafferty (2014b).

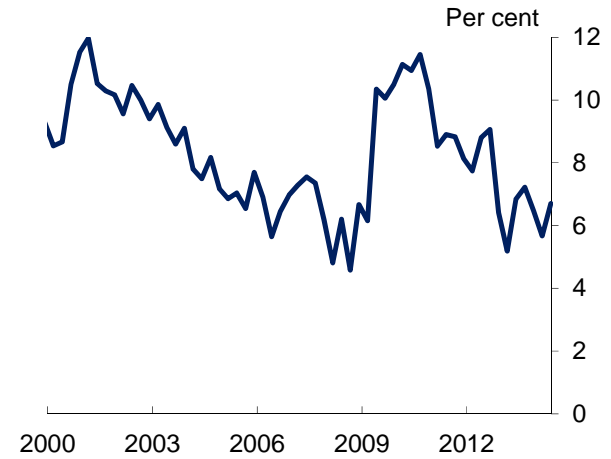
¹¹ See Table 1.A of the June 2014 *Financial Stability Report* for indicators of the degree of search for yield.

Chart 1: Measures of economic uncertainty



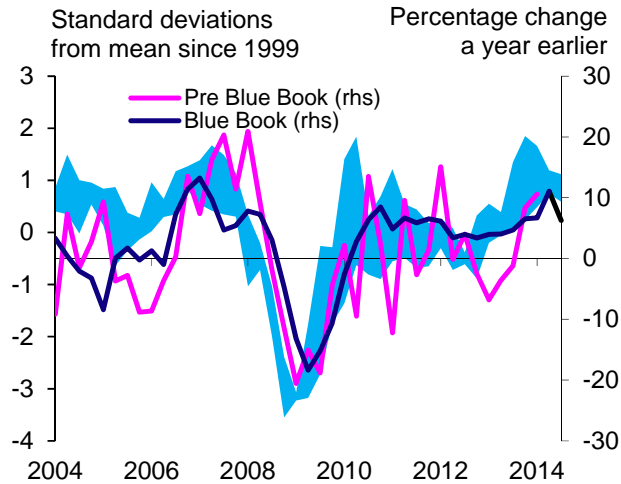
Source: CBI, FT, Guardian, Independent, Times and Bank calculations.

Chart 2: Household saving ratio



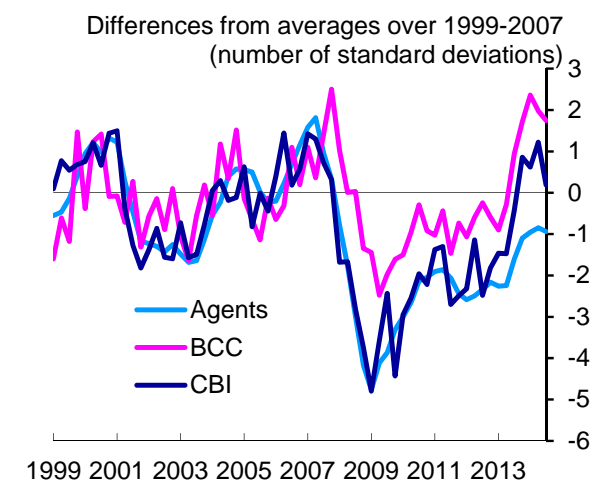
Source: ONS.

Chart 3: Business investment and surveys



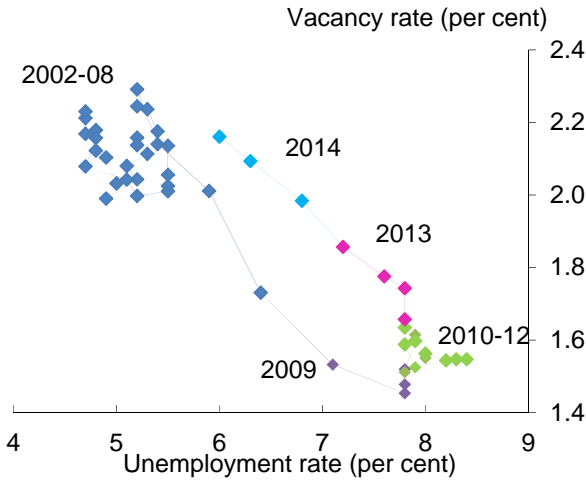
Source: ONS, Bank's Agents, BCC, CBI and Bank calculations.

Chart 4: Capacity utilisation surveys



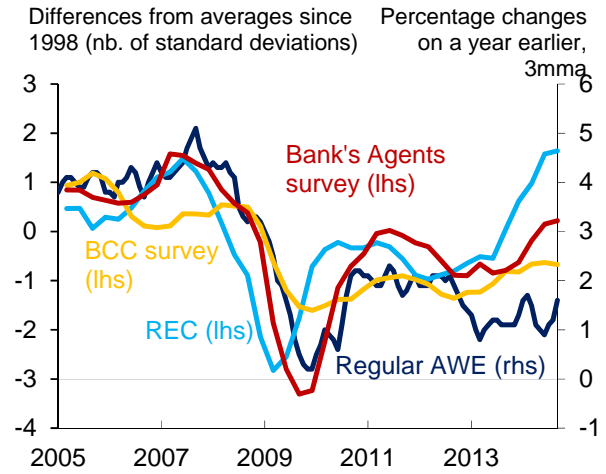
Source: Bank of England, BCC, CBI, CBI/PwC and ONS.

Chart 5: Beveridge Curve



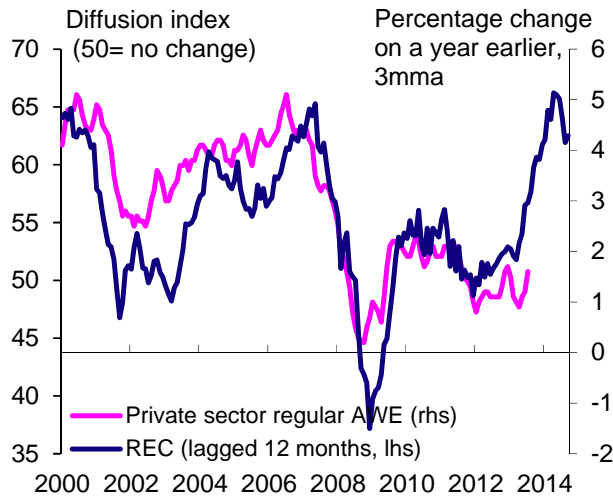
Source: ONS and Bank calculations

Chart 6: Pay measures



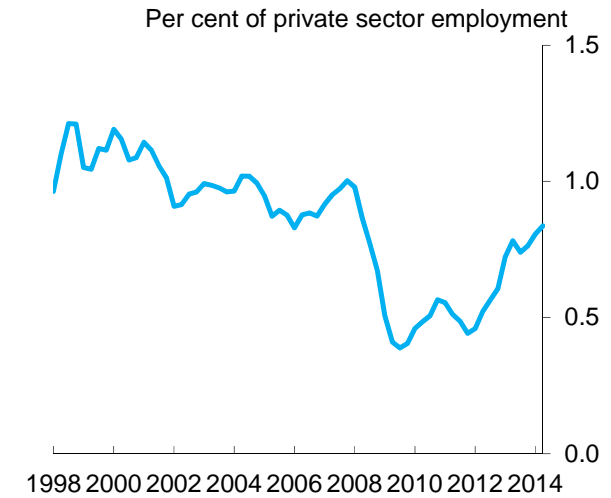
Source: Bank of England, BCC, KPMG/REC/Markit, ONS and Bank calculations.

Chart 7: Average vs marginal pay measures



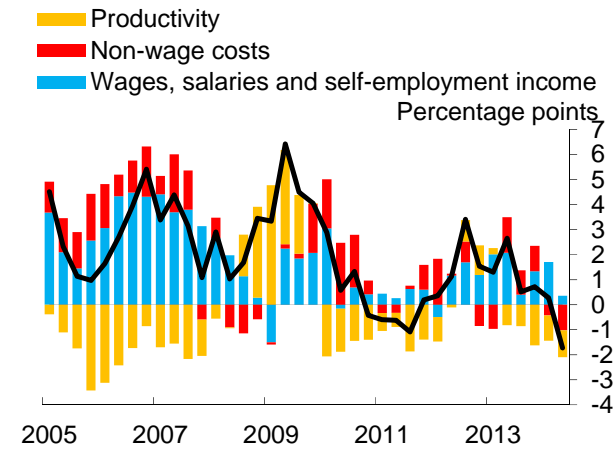
Source: ONS, KPMG/REC/Markit and Bank calculations.

Chart 8: Job-to-job flows



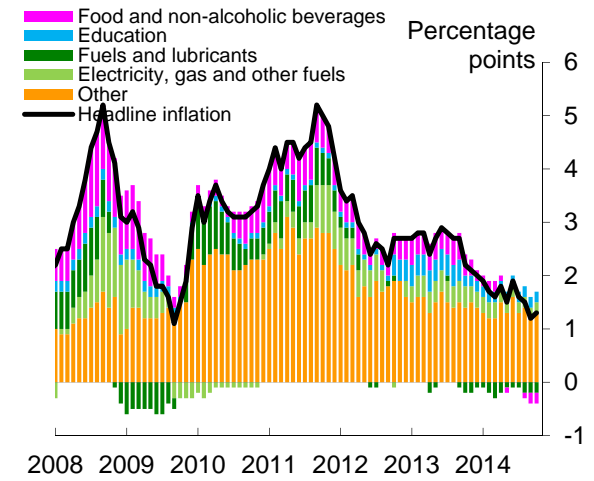
Source: Labour Force Survey and Bank calculations.

Chart 9: Whole-economy unit labour costs



Source: ONS and Bank calculations.

Chart 10: Contributions to annual inflation



Source: ONS and Bank calculations.

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