

**Inflation: Finely balanced risks**

Speech given by

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City and Islington Sixth Form College 11 March 2015

I am grateful to Nicholas Fawcett, Tomas Key and Lotte Adams for their assistance in preparing this text. In addition I would like to thank Stuart Berry, Richard Blows, David Bradnum,

Rupert de Vincent-Humphreys, Kristin Forbes, Chris Jackson, Roger Loxley, Becky Maule, Emma Sinclair and James Talbot for their help and advice.

# Introduction

Thank you very much for inviting me here to talk to you this afternoon. I would like to talk about my work at the Bank of England. It can broadly be described as deciding on the monetary policy that is appropriate to keep the inflation rate close to its target. Why is it important to keep inflation under control? If you put money into a bank account you want to know that you will get it back. And you want to have some confidence that the money, when you draw it out, can be used to buy much the same sorts of things as when you paid it in. For that to be the case, inflation should not be too high.

At the same time, however, inflation should not be too low. If prices are falling, people who have borrowed money may find that they cannot afford to repay it. It is with these sorts of considerations that the Government has settled on an inflation target of two per cent. The job that I and my eight colleagues on the Monetary Policy Committee have is to keep inflation close to that target.1

The French have a proverb: “Money always goes bad”. Sooner or later, inflation erodes its purchasing power. You can see from Figure 1 that this has not always been the experience of those living in the United Kingdom. In fact, there was a long period from the 1830s to the start of the First World War when the inflation rate was very close to zero.2 In the second half of the twentieth century, however, high inflation has been much more common. Indeed the current regime of inflation targeting was introduced in 1992 as a reaction to the bad experience of the 1970s and 1980s. For most of my life the concern has been that there would be too much inflation rather than too little.

**Figure 1: Inflation in Britain**

Percentage increase in prices p.a., decade averages

12

10

8

6

4

2

0

-2

-4

1760 1790 1820 1850 1880 1910 1940 1970 2000

Sources: ONS and Bank calculations

Today, however, there is concern internationally about deflation, or falling prices. Indeed, it is likely that inflation will fall below zero at some point in the next six months. But I would like to explain why I don’t think that this will morph into a sustained period of falling prices in the UK.

The Monetary Policy Committee can’t stop inflation fluctuating in the short term. But it has no intention of letting very low inflation become entrenched.

In fact, despite the international concern about very low inflation, I see the decision of whether or not to tighten policy as finely balanced. So, after talking about how we go about keeping inflation close to target,

1 And subject to that, to support the Government’s targets for output and employment.

2 This was because the value of the pound was fixed in terms of gold. Once the link with gold ended, in 1931, inflation rose markedly.

I will finish with an account of what I see as the main opposing forces that are pushing up or pulling down on it.

# Delivering the Inflation Target: adjusting the Bank Rate

Having a target for inflation is no use without the means of delivering that target. The traditional approach to keeping inflation under control is that the Bank Rate, the interest rate that the Bank of England pays on reserves deposited there by commercial banks, is adjusted in the light of the state of the economy. As you know from macroeconomic theory, an increase in the interest rate acts as a brake on household spending and investment by firms reducing aggregate demand. Since it is also likely to cause the exchange rate to appreciate, there is a further impact through net trade, caused by a rise in imports and fall in exports because a rise in the exchange rate makes internationally traded goods cheaper. Taken together, these effects feed through into lower inflation. A cut in Bank Rate works in the opposite direction.

Our work suggests that a change to Bank Rate takes about two years to feed through fully to inflation.3 The implication of this is that we should not try to keep inflation very close to target all the time; if we did that, we could be sure that interest rates would be extremely volatile, in a way that no one would find very helpful.

Since we are considering how to set the Bank Rate in order to bring inflation to its target in two years or so, a forecast is required. Every quarter, therefore, the Monetary Policy Committee publishes in the

*Inflation Report* our best collective judgement of the outlook for inflation and output. The forecast depends on all sorts of things, such as what we think is going to happen to the economies of other countries. It also has to depend on an assumed path for interest rates. We produce forecasts based on two assumptions about this path. The first is an assumption that Bank Rate stays where it is. The second and, in my view, more relevant assumption draws on dealings in London’s financial markets. We can infer from these what people, or at least those who are market traders, expect interest rates to be in the future. So we can forecast the path for inflation on the assumption that the Bank Rate follows the path that market traders expect. If this results in inflation being above target in two years or so, then Committee may consider either raising rates immediately or suggesting that rises are likely to come earlier than the market curve implies. A forecast inflation for inflation below target similarly may imply the need for a lower Bank Rate now, or at some time in the future.

Given this context, what does the MPC think is likely to happen to inflation over the next few years?

# The Near-term Outlook for Inflation

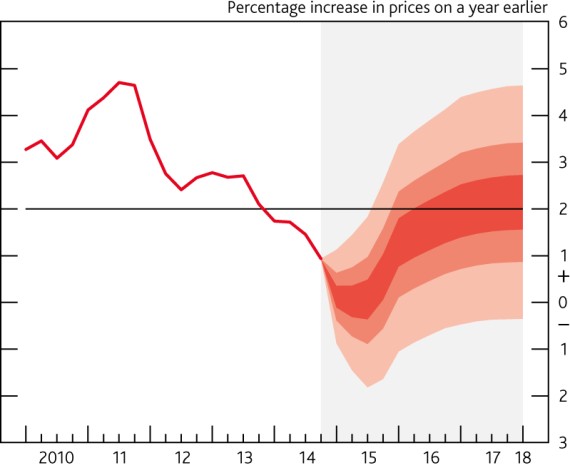
The backdrop to our most recent forecast is that price inflation has fallen very sharply in the last few months. The rate of inflation has dropped from 2 per cent at the end of 2013 to 0.3 per cent in January. On our

3 See Monetary Policy Committee (1999).

current forecast, shown in Figure 2, a further fall is likely in the near term. Since the future is uncertain, I find it more helpful to talk about the likely range of values for inflation, rather than a particular number.

This is illustrated in the figure by different colour bands. Each band of red shows an outcome which – the MPC judges – has a three in ten possibility of materialising. You can see that in each of the next few months we think there is a high chance of the inflation rate falling below zero. Indeed, at the time we constructed our

February forecasts, we thought it was more likely than not that it will drop below zero at some point between now and the middle of the year. Beyond this the Monetary Policy Committee is expecting the inflation rate gradually to pick up, and indeed to return to its



**Figure 2: The Monetary Policy Committee's Inflation Forecast. Feburary 2015.**

Source: Bank of England February 2015 Inflation Report

target in about two years’ time, before rising slightly further.

Nearly three-quarters of the recent fall has been driven by sharp falls in the price of energy and food, as shown in Table 1. The price of petrol fell by nearly twenty per cent in the twelve months to late January, and food prices are down two and a half per cent. You might wonder how these can account for so much of the

change in overall inflation. As you know, the inflation rate is calculated by looking at the cost of a “basket” of goods and services and each item is given an importance which reflects its share in average household spending. Figure 3 shows, in broad terms, the composition of the average basket in 2015. Movements in prices of items which have a large share in spending have more of an impact on the overall price level than do fluctuations in prices of things people do not spend much on. You can see that a large chunk – nearly one tenth of spending – goes on fuel, energy and food combined, highlighted in light blue.

# Table 1: Arithmetic contributions to January 2015 CPI inflation relative to the pre-crisis average

|  |  |  |  |
| --- | --- | --- | --- |
|  | **1997-2007**  **average** | **January 2015** | **Difference** |
| Energy, food and other goods (a) | 0.4 | -0.8 | -1.2 |
| Services | 1.6 | 1.1 | -0.5 |
| Total (a) | 2.0 | 0.3 | -1.7 |
| (a) Adjusted for the close to 0.4 percentage point downward bias from clothing that existed until 2010  Sources: ONS and Bank calculations. | | | |

Since the inflation rate compares overall prices today to their level a year ago, it will not be next winter that the falls in energy and food prices drop out of the twelve month comparison. On top of this, some of the effects of oil price falls take time to work through the system. Many businesses use oil products in different

ways. Other companies buy from these businesses, and so lower oil prices work gradually through the supply chain. That is why we expect the biggest impact to come in March or April, even though oil prices have not fallen further since the start of January; indeed they have risen somewhat. I see the effects of this on the price of petrol at the petrol station in City Road which I walk past on my way to and from the Bank.

**Figure 3: Shares of expenditure on items in the CPI inflation basket**

Recreation and Culture

Transport (excluding fuel)

Restaurants and Hotels

Food and Non-Alcoholic Beverages

Miscellaneous Goods and Services

Housing and Water

Energy costs (including transport and household energy)

Clothing and Footwear

Furniture, Household Equipment and Maintenance

Alcoholic Beverages and Tobacco

Communication

Health

Education

Sources: ONS and Bank calculations.

0 2 4 6 8 10 12 14

Percent of spending in basket

The Committee expects, therefore, that, in the absence of further sharp falls in oil prices or some other important movements, once these effects drop out of the system, the rate of inflation will gradually recover towards our target. Notwithstanding my own concerns about upside risks, I think this is a reasonable and coherent view. What, then, is the evidence that people are giving a substantial weight to the risk that the inflation rate, instead of recovering to its target, is going to remain low, and possibly negative for a protracted period? To answer this, I think we need to look at the signal that financial markets are currently sending about the likely path of interest rates in the future.

# Short and Long-term Interest Rates

As I mentioned earlier, the Monetary Policy Committee sets the Bank Rate, which is a short-term interest rate – the interest rate that the Bank of England pays on reserves deposited there by commercial banks. I am sure you all are familiar with the idea that if you lend money to people today, they are expected to repay it with interest tomorrow. Many people borrow at an interest rate linked to Bank Rate even if they expect to need credit for a long time. Others, however, are in a position to organise long-term loans; they borrow at an interest rate which may be fixed for twenty years or even fifty years. The UK government is a large borrower and it has a preference for borrowing long term.

A consequence of this is that we can see market rates for long-term debt. You might expect that the interest rate charged on a twenty year loan would be closely related to the average Bank Rate which is expected over the next twenty years. Figure 4 uses the assumption that long-term rates reflect expected future Bank Rates to estimate expected interest rates from now until 2040. I show the figures both for the end of last week and for the same day in 2014. You can see that expected future rates are now much lower than they were a year ago. To give an example, the expected rate in 2026 is now three per cent while this time last year it was expected to be above four per cent; the average rate up to 2026 is of course below this.

2015 2020 2025 2030 2035

06-Mar-15 06-Mar-14

Sources: Bloomberg and Bank calculations

5.0

4.5

4.0

3.5

3.0

2.5

2.0

1.5

1.0

0.5

0.0

Per cent

**Figure 4: Implied Future Interest Rates**

Future interest rates have not always been that low and they are sometimes very volatile. To give an extreme example, at the end of December 1974, the expected interest rate for December 1994 was

33 per cent up from 11 per cent a year earlier. This episode offers a warning, should it be needed, against attempts to use long-term interest rates to predict the future. The actual figure for Bank Rate was

6 ¼ per cent.

You might wonder why interest rates were much higher in the 1970s than they are now. The short answer is that inflation was expected to be much higher. In the short-term interest rates are set by policy-makers. In the longer term, however, it is hard to see that policy makers can impose rates which do not reflect the underlying economic environment. If inflation is high, as it was in the 1970s, then people will want to be compensated for the fact that their savings are losing value rapidly. If they do not receive high rates of return, they may go out and spend their money. Over and above this, there are good reasons to expect the interest rate to reflect the underlying growth rate of the economy. Insofar as any sense could be made of the panic in 1974, it was that people were concerned that it would prove impossible to bring inflation down from the levels it reached in the aftermath of the oil crisis. The peak value in August 1975 was 26.9 per cent!

Looking at today’s interest rates through the same lens, an interest rate averaging below 3 per cent for the next ten years just about makes sense if i) inflation is on average at its target and ii) economic growth is materially below 1 per cent over the period. The first assumption is eminently reasonable. As I will argue, the Monetary Policy Committee has the means to bring inflation to target. The second point is, perhaps, open to more debate. To grow at only one per cent for the next ten years would be extremely disappointing. The population of working age is expected to grow at around 0.2 per cent per annum and it is likely also that working lives will be extended somewhat. So, if average hours do not change, you might expect that productivity growth of 0.7 per cent per annum would be enough to deliver growth of around 1 per cent overall.

The MPC’s forecast is for productivity growth to recover to just under two per cent per annum over the next two to three years. Figure 5 might suggest that this is an optimistic view but it is lower than we enjoyed before the financial crisis. With productivity growing in other countries and Britain having plenty of scope to catch up with more productive countries like France and the United States, I do not think it is a particularly unreasonable assumption. In principle the

Sources: ONS and Bank calculations

2008 2009 2010 2011 2012 2013 2014

Quarterly Growth Growth over year

8

6

4

2

0

-2

-4

-6

-8

Percentage change per quarter and per annum

**Figure 5: Productivity Growth (Output per hour)**

market for indexed securities should allow us to separate inflation effects from growth effects. In practice, however, for a variety of technical reasons it is not possible to draw a clear message from this.4 Nevertheless, the fact that expected inflation-adjusted interest rates are negative for the next twenty-five years is quite remarkable and does suggest that expectations of weak growth are an important factor behind low expected interest rates.

There are two other interpretations of the figures beyond very low inflation and weak growth. One is that they do not reflect underlying

expectations but are instead the consequence of investors, instead of demanding a premium for tying their money up, accepting a lower than expected rate because of the certainty that this gives. There is plenty of uncertainty in the world at the moment. We do not know how Greece’s problems will be resolved or what will be the outcome of the war in the Ukraine. That may be a factor driving down long-term rates lower and thus the expected values of the Bank Rate calculated from them.

4 The indexed market is based on the Retail Price Index, not the Consumer Price Index. The relationship between these has varied over time. Pressure on pension funds to buy indexed stocks rather than equities has also affected the relationship between the returns on indexed and ordinary debt.

A third explanation, however, is that other people do not share my confidence in the monetary framework. They may be assuming not only that growth will be weak, but also that inflation will remain persistently below its target. There are some grounds for believing that this is the case and it does pose a downward risk to inflation. However, before discussing that, I would like to explain why, even though I cannot be sure about the timing, I am confident that the Monetary Policy Committee can return inflation to target.

# Monetary Policy in Abnormal Times

The approach of changing Bank Rate in order to keep inflation close to target that I described above has its problems when inflation and the Bank Rate are very low. In the United Kingdom, Bank Rate has been at

0.5 per cent since March 2009. There have been occasions in the past when I think the MPC would have liked to reduce it further; they were, however, concerned that this could lead to banks running at a loss, which would weaken their ability to lend to businesses.

Recent improvements to banks’ finances mean that this is less of an issue now, and the Committee is no longer ruling out a further reduction to the Bank Rate. Nevertheless, there remain very real questions about whether it is sensible to reduce Bank Rate to or below zero. Two years ago Bank of England work pointed to a number of obstacles to negative interest rates.5 If the question became material, we would no doubt review whether those obstacles still exist.

Are there other tools that the MPC has at its disposal to push inflation back to target? In March 2009 my predecessors wanted to provide further support and they had already reduced Bank Rate to what they saw, at the time, as its floor. They therefore adopted a policy of quantitative easing (QE) – creating electronic money and using it to purchase long-term government debt. In effect this meant that long-term government borrowing was being replaced by money.

Academic work identifies two necessary conditions for the policy to be effective. First of all, the literature focuses on the difference between a permanent asset purchase and one which is expected to be unwound6. Secondly the transaction must be in securities which differ in substance as well as in form.7 As to the first point, I think the key issue is not that it is promised that the intervention is permanent, but rather that people are confident that it will not begin to be unwound until, in order to prevent inflation rising above its target, interest rates have risen from their floor. The Monetary Policy Committee has collectively expressed the view that, when the need for tightening does eventually arise, the first move will be to raise the interest rate;

5 Bean (2013).

6 Sargent and Wallace (1981) consider a monetary tightening rather than a monetary easing. They identify circumstances in which tight money today implies loose money in the future and that any effects of tight money on its own are likely to be at best temporary.

Sargent (1980) looks at mechanisms by which the private sector may unwind the effects of open market operations. These mechanisms may be interesting from a theoretical perspective rather than a source of practical concern. Auerbach and Obstfeld (2005) show that a permanent monetary expansion can help lift an economy out of stagnation. Woodford (2012) argues that a commitment to deliver lower interest rates than otherwise the case once the stagnation has come to an end will do the trick, and also that this is equivalent to Auerbach and Obstfeld’s proposal.

7 That is certainly the case if interest-bearing government debt is replaced by non-interest bearing money as Auerbach and Obstfeld suggest. It is also true if investors treat long-term government debt as materially different from rolled-over bank deposits, perhaps because it offers protection against a different set of risks (see King, 1999).

people can conclude that any further asset transactions we make will be done to be consistent with the inflation target. However, the fact that it was possible to produce theoretical frameworks in which asset purchases had no effect led Ben Bernanke, the former Chairman of the United States Federal Reserve Board to say,8

“The problem with QE is that it works in practice but it doesn’t work in theory."

More practically, we made asset purchases not only in 2009 but also in 2011 and 2012 and it seems to have stimulated the economy. Some people suggested that the later rounds were less effective than the first round.9 My work does not suggest that10, and I have every reason to think that asset purchases remain a practical means of pushing inflation up towards target today should that be needed.

I hope I have explained that the Committee has the means to ensure inflation is brought back to target. I would now like to set out what I see as the main downward risks to inflation.

# Downward Risks to Inflation

I see two main types of downward risks to inflation. The first is that expectations of low inflation may become entrenched. Expectations may matter

2009 2010 2011 2012 2013 2014 2015

CPI Inflation Two-year expectation Five-year expectation

Sources: Bank/NOP survey, ONS and Bank calculations

5

4.5

4

3.5

3

2.5

2

1.5

1

0.5

0

Per cent

**Figure 6: Inflation expectations from the Bank/NOP survey**

because both wages and prices are set with reference to expected future movements in prices.11 If, therefore, expectations of future inflation are low, it may become difficult to raise actual inflation from today’s very low level.

Figure 6 shows two and five year ahead inflation expectations, taken from the Bank/NOP survey.12 In this survey, a representative sample of households is asked what inflation is expected to be at

8 Brookings Institute, 16th January 2014

9 E.g. Miles and Schanz (2014) have expressed doubts as to whether the policy is effective when financial markets are not dysfunctional, as was the case in 2009. Martin and Milas (2012) argue that later phases had a weaker impact on interest rates than did earlier phases, but it does not follow from this that their effect on inflation or GDP was weaker.

10 Some recent work I did on the effects of quantitative easing (Weale and Wieladek, 2014) suggested that the asset purchases the Bank made in 2009 had the effect of raising the level of GDP by a peak amount of 2 ½ per cent. We also found that the peak effect on

inflation was 4 per cent, appreciably more than earlier Bank estimates (Kapetanios, Mumtaz, Stephens and Theodoridis, 2012). No one can say that one estimate was right and another was wrong. Nevertheless, if the impact were greater than the Bank had assumed that would explain both why inflation remained high in the period 2010-2012 and also why it has now fallen rather more than the Bank had expected.

1. At least in theory: the evidence that I have seen does not point to an important role for inflation expectations in determining wage

growth in the United Kingdom in the period since the practice of targeting inflation was adopted.

1. These data have recently been released to the public as part of the Bank’s new Research Agenda - see

<http://www.bankofengland.co.uk/research/Pages/onebank/datasets.aspx#1>

certain points in the future. The most recent data, collected last month, do suggest that households are expecting inflation to be lower over the next one to five years than they did in 2014; though the forecast remains above the 2 per cent target. But it might simply be that expectations – even of inflation in two years’ time – are overly affected by the experience of current inflation. Previous vintages of this survey have asked what items households find most important when forming price expectations over the following year. By far the most important are petrol, energy and food prices, and I find no reason to think that this has changed significantly over the recent past. As I said earlier, these three happen recently to have experienced the sharpest falls in prices. So provided that we return to more typical inflation rates for these items, we might reasonably anticipate that inflation expectations will pick up alongside.

I should also note that households in the survey are more confident that inflation will be between 1%-3% in two to three years’ time than they have been since we started asking them in 2011.13 Nevertheless, the prospect that expectations of low inflation become entrenched has to be seen as a downward risk.

If that risk can be explained in terms of economics, I am afraid the second risk cannot. It is simply the statistical phenomenon that inflation shocks, even more than buses, rarely seem to come on their own. During the period from 2010 to 2012 the Monetary Policy Committee found it faced a series of “one-off” upward shocks to the price level. We adopted a policy, which I supported, of looking through these one-off shocks on the grounds that they were of little direct relevance to the inflation rate two years later. Because we did not allow for the bus-like nature of these shocks, we were repeatedly surprised by the way in which inflation remained above target. Our inflation fan chart has built some of this effect in over the next year, and the recent recovery of the oil price makes it perhaps less of a worry than I would have said in January.

Nevertheless, my view is that it poses a substantial downward risk which is not fully represented in the fan chart of [Figure 2.](#_bookmark0) The exchange rate rose by 2 ½ per cent in February and I am starting to wonder whether a rising exchange rate might be the next of these shocks. Even if, as with oil price movements, we look through the immediate effects of this on the price level, there remain the sort of influences coming through the trade balance which I described earlier. .

There are other downside risks; perhaps the most obvious is that, following the recent election in Greece, the outcome of its negotiations with its creditors must be in some doubt. There are obviously also risks associated with the war in the Ukraine. Let me now, however, turn to what I think is the main source of upward risk.

# Upward Risks to Inflation

The upward risk which concerns me is provided by the recent performance of the labour market. When demand for labour is strong relative to supply there is likely to be upward pressure on wages. Firms respond to this increase in costs by raising their prices and that feeds through to inflation. The impact is not always

13 In the February 2015 survey, 49% report that they are ‘Very’ or ‘Fairly’ confident of inflation being between 1% and 3% in two to three years’ time; 35% report that they are ‘Not very’ or ‘Not at all’ confident; and the remaining 16% say they don’t know.

immediate; it may well be that initially a surge in costs leads to a fall in profit margins. In the longer run, however, rising costs are likely to result in higher inflation. These effects are built into the Committee’s forecast, but I fear their magnitude may be underestimated.

What then is happening in the labour market? Figure 7 shows the level of unemployment, measured as a proportion of the labour force. You can see that the unemployment rate has been falling rapidly, and we have also seen the employment rate reach a record high. The number of unemployed people is measured from the Labour Force Survey; this is the best guide we have, but it can be subject to short-term fluctuations arising from the way in which the sample is selected. I therefore also show the number of people claiming Jobseekers’ Allowance.

Source: ONS

Claimant Count

LFS Unemployment

2008 2009 2010 2011 2012 2013 2014

9

8

7

6

5

4

3

2

1

0

Per cent

**Figure 7: Unemployment**

This is not as comprehensive a measure of

unemployment but it avoids the survey problems of the Labour Force Survey and has the advantage that it is more up to date. You can see that this measure has also declined markedly over the last year or two. A steady decline has continued into January of this year.

An alternative view of the way in which the labour market is becoming tighter can be gained by looking at vacancies. Figure 8 shows vacancies measured as a proportion of the work force and also the number of unemployment people per vacancy. On both measures, the labour market has returned to the sorts of levels experienced before the financial crisis in 2008.

2001 2003 2005 2007 2009 2011 2013

Vacancies as per cent of labour force (LH Scale)

Number of unemployed people per vacancy

(RH Scale inverted)

Sources: ONS and Bank calculations

0

1

2

3

4

5

6

7

Number of unemployed

per vacancy

Per cent of labour force

3.5

3.0

2.5

2.0

1.5

1.0

0.5

0.0

**Figure 8: Vacancies**

How far this matters depends, of course, on what is actually happening to wage growth. The best short-term indicator of wage growth is provided by the ONS measure of Average Weekly Earnings. This is collected every month from a survey of several thousand businesses. Each business is asked how many

employees they have and what their total pay bill is. As you can imagine, it would place a bigger burden on businesses to collect information on, say, hourly pay or the distribution of all individuals’ pay; this would not really be practical.

its fastest rate since before the crisis.

The earnings data tell quite an interesting story. Figure 9 shows the growth in regular pay (i.e. excluding bonuses) of employees in the private sector, looking both at the change over the last year and the change over the last three months on the three months before that. You can see that, measured over the year, pay growth is around 2 per cent. This is broadly where it had been between mid-2010 and

mid-2012. We then had a period of weakness which seems to have come to an end. Growth comparing the last three months with the three months previously

2008 2009 2010 2011 2012 2013 2014

3m on year 3m on 3m

Sources: ONS and Bank calculations

6

5

4

3

2

1

0

-1

-2

-3

Per cent

**Figure 9: Growth in Average Weekly Earnings: Regular**

**Pay**

– though more volatile – paints a more optimistic picture. There has been a slight easing recently from above 4 per cent to 3.7 per cent and there may well be a further decline in the near term. Nevertheless, the broad impression you get is that pay is now growing at

Some sort of framework is needed to interpret this data. Various colleagues and I have recently discussed in some detail the influences on pay growth and I do not need to go through the details of that again.14 The key point is that with falling unemployment we would expect to see pay growth picking up and that is what we are seeing. You might say that what matters is not only how much unemployment is falling, but also where it is relative to the level of unemployment which we normally expect to see due to the time it takes people to look for suitable new jobs, the so-called natural rate. I agree with that completely, and in that sense the combination of rising wage growth and falling unemployment tells us that the unemployment rate is not very far from this natural rate. Bank estimates of this are inevitably imprecise but we put it at around 5 per cent, a rate which will be reached this summer if the current rate of decline of unemployment continues. The pick-up in wage growth does not come as a surprise; the surprise is rather the weakness of wages in 2013 and 2014. I had thought this might be telling us that there was more slack in the labour market than the unemployment data themselves indicated. That is of course still possible; wage growth may fall back to the levels of early last year. But an alternative account which I am starting to prefer is that it was a period of weakness that happens from time to time for which there is no very good explanation.

Faster pay growth is, on its own, a good thing, not a bad thing at least until pay growth gets too fast. How much is too much? If labour productivity (output per hour worked) grows at around two per cent per annum, and pay grows at four per cent per annum, then production costs rise at two per cent. This is consistent with the inflation target of two per cent. Is it reasonable to assume that output per hour worked will grow at

14 See, for example, Broadbent (2014) and Weale (2014a).

around two per cent? Before the crisis that would have seemed a very sensible assumption. Since then productivity has been weak in most advanced economies, but particularly so here as Figure 5 shows.15 Over the last year as a whole, despite this, pay costs have grown more slowly than is compatible with the

inflation target. However, if we look just at the last three months we would need productivity to recover before growth in regular pay would be slow enough to be compatible with the inflation target. These figures are volatile, but, with unemployment continuing to fall, that inflationary pressure seems to me to be at risk of building faster than our February forecast showed. Over the two to three year horizon which we use in setting interest rates, the effect of this is damped i) because a substantial part of the basket of goods and services used to calculate the Consumer Price Index is imported and ii) because in the near term an increase in labour costs is likely to lead to some reduction in firm’s profit margins. The MPC’s target is for the Consumer Price Index and we should not adjust policy to target domestic costs instead. Nevertheless, although the effect is damped, it does not go away. The risk of a further marked increase in pay growth over the next eighteen months or so is the main upside risk I see to inflation.

# Finely Balanced

You may wonder how these risks influence my vote. There are, after all, always things that could happen. Why not wait until inflation has already picked up before thinking about tightening policy? Indeed, given how far it is below our target why not think of easing policy? The answer is very obvious. Policy has to be set in anticipation of economic developments and not only in response to them. I see the situation as a finely balanced tug of war between these upward and downward risks, rather than a smooth journey along a clearly defined road. During the winter I think the pulls in both directions have intensified. Inflation is much lower than I had expected in November and the labour market shows clearer signs of tightness with more evidence of upward pressure on wages.

Compared with the Autumn, when I was voting for an increase in Bank Rate, the fall in oil prices has certainly provided some unexpected breathing space. It is, however, at present no more than that. The risk that expectations may be depressing wage growth is very real but, at present my concerns are that wage growth is accelerating rather than declining, while unemployment continues to fall rapidly. If wage growth continues to accelerate over the next few months, especially in the absence of a pick-up in productivity, then for me it strengthens the case for a rise in Bank Rate. As always, however, I will decide how to cast my vote in the light of economic developments and prospects; some of these developments will no doubt spring surprises.

Members of the Monetary Policy Committee are individually accountable to Parliament and thus to the public at large. This places an obligation on us to explain our voting as clearly as we can. Having, at our February meeting, described my vote as finely balanced, I have felt a particular need to take an early opportunity to explain why. Even if you are not persuaded by my arguments, I am particularly grateful that you have given me the chance to set out them out fully.

15 Weale (2014b).

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