

**Slack, pricing pressures and the outlook for policy**

Speech given by

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A year ago I delivered a speech entitled “The UK economy: the road ahead?” where I envisioned a moderate pickup in growth through 2013 and into 2014. I am pleased to say today that, as a policymaker behind the steering wheel, that road has felt more like a highway than a country lane. The UK economy has forged ahead over the past year, exceeding my then relatively upbeat expectations.

The recovery – after a prolonged period of stagnation – has been striking. GDP has grown on average by 0.8% per quarter since the start of last year and almost half a million jobs have been created over that period, pushing the unemployment rate down to 6.9% in February. Inflation has declined and stood at 1.6% in March, the lowest level in more than four years and below our 2% target.

But these are still early days. Despite continued buoyant growth – indeed GDP grew by 0.8% in the first quarter of this year according to this morning’s release, the current level of activity is still just shy of its pre-crisis peak, more than five years after the onset of the Great Recession. And some questions remain about quite how sustainable the recovery will prove to be. So far it has been driven largely by private

consumer spending – as is typical in the early stages of cyclical upturns – but that has reflected a decline in the private saving rate, which can only have so much further to go. The recovery in business investment, still in its infancy, will need to become more entrenched on the back of stronger demand, both domestic and foreign. And it would be nice to see a more sustained revival in net exports.

It was to help sustain and secure the recovery that the Monetary Policy Committee (MPC) introduced explicit forward guidance about monetary policy last August, committing not to raise Bank Rate until we saw a period of sustained growth, rising incomes and employment – so long as there was no threat to either price or financial stability. The goal was two-fold: to prevent a premature tightening at the short end of the yield curve and to boost confidence by providing reassurance to households and businesses that they should not fear imminent increases in interest rates.

Forward guidance sets out how policy will react to future economic developments, rather than setting any predetermined calendar. In particular, it sets out how we will respond, as the economy recovers, to the gradual erosion in the degree of slack – the balance between supply and demand, which is an important determinant of the degree of inflationary pressure in the economy.

The state-contingent nature of our guidance is inevitable because, for all the effort put into our economic forecasts, the exact evolution of the economy remains uncertain. So the future path of interest rates will depend critically on how the economy evolves, not a predetermined amount of time elapsing.

But while the economic outlook itself remains uncertain, we can provide guidance on our “reaction function” – how we will respond to the unfolding recovery – to those changes in economic slack and their associated effects on inflation, which is of course the variable we are ultimately responsible for.

So today I would like to share my thoughts on the nexus between slack, pricing pressures and what that means for policy. I will argue that while *quantitative* estimates of the amount of slack are a useful guide to the direction of travel of spare capacity in the economy, the high degree of uncertainty associated with these estimates also necessitates close and direct monitoring of the *pricing* pressures they give rise to. As we steer the economy back towards full-capacity operation, it is crucial we watch out for incipient upward pressures in price- and wage-setting behaviour. I believe that the specific pricing signals associated with diminishing slack provide critical signposts for policymakers.

# Measuring economic slack – the pitfalls of spurious accuracy

Economists think of slack as the level of spare, or ‘underutilised’, capacity, arising either within companies or in the labour market.

Let me deal briefly with spare capacity within firms first. As I argued in a recent speech,1 business surveys suggest that companies are now operating at close to “normal” levels of capacity utilisation (shown by the position of the swathe relative to the zero line in **Chart 1**). Analysis of answering practices to such surveys indicates that there is a subtle difference between “normal” utilisation and absolutely full capacity,2 suggesting that a modest increase in demand could still be accommodated within existing fixed capacity, without causing material upward pressure on inflation. It is also the case that a pickup in business investment, which according to recent business surveys is likely to gain pace in coming quarters, will help expand the level of available capacity. That said, there will come a point at which the more intensive utilisation of capital and labour is likely to incur higher costs, putting pressure on companies to increase wages and/or output prices. I will return to these pricing pressures in a moment.

Spare capacity in the labour market is a more complex concept because it can take several forms. When we introduced the first phase of forward guidance last summer, pledging not to raise Bank Rate until unemployment fell to at least 7%, our choice of the unemployment rate as a measure of slack was dictated not just by practical concerns (unemployment is widely reported, does not get revised and is well understood by the public), but by the need to work around the large uncertainties that surround estimates of the economy’s productive potential. Using the unemployment rate as our gauge of economic slack has meant that we have not had to take strong views on the ‘productivity puzzle’ – why productivity has remained weak as activity has recovered – making policy robust to supply-side uncertainties.

These uncertainties remain and it is not clear to me that the sizeable fall in unemployment since last summer has yet taught us any definitive lessons about whether the weakness of productivity is likely to be permanent or not, and therefore how much spare capacity remains in the economy. Yet assessing that amount of slack,

1 See McCafferty (2014).

2 Analysis of the CBI Industrial Trend Survey shows that respondents deem normal capacity working to be around 84% of absolutely full capacity.

the pace at which it is being eroded and the attendant effect on inflationary pressures is central to the conduct of monetary policy.

That is why, in the second phase of forward guidance that came into effect this month as the unemployment rate passed 7%, the MPC expanded the range of indicators of labour market slack that we are formally monitoring. Rather than focussing on the level of unemployment and trying to assess what is happening to productivity, we are studying closely a broader range of indicators, such as the number of people entering the labour force and the number of hours people work on average.3

The idea is that in addition to the pool of unemployed workers able to compete for jobs, there are also pools of potential workers that might start looking for a job, as well as underemployed workers – people who are working fewer hours than they desire e.g. part-timers wishing to work full time. They too represent a form of spare capacity, helping control pay pressures as demand recovers.

To gauge the degree of inflationary pressure coming from the labour market, these measures are assessed in relation to how far they depart from estimates of their ‘normal’ or ‘equilibrium’ levels, that is, how far unemployment is above its medium-term equilibrium level or how much average hours worked are below ‘desired’ hours.

At present, these indicators suggest that the current level of slack in the economy, as reported in the February *Inflation Report*, is in the region of 1-1½% of GDP, suggesting that there remains some room for demand to recover further without exerting upward pressure on inflation.

However, we need to recognise that there is a great deal of uncertainty around the exact level of each of the quantitative indicators of labour market slack that combine to give our estimate of available slack.4 The equilibrium estimates against which current readings are compared are not directly observable. They are based on informed assumptions, for example about how likely the long-term unemployed are to find work again, or the extent to which the reported rise in ‘desired’ hours is a good proxy for the number of hours people would like to work after adjusting for cyclical factors such as the squeeze on take-home pay. And in some cases they are currently at odds with more qualitative intelligence – the Bank of England Agents’ reports of recruitment difficulty and skills shortages already point to tightening in some parts of the labour market.

It is also the case that the February *IR* estimate of the level of slack – the 1-1½% of GDP – is a *central* estimate, not in any sense a statistical confidence range in the manner of the fancharts we publish on inflation and growth. If we were to take a one standard deviation range of each of the components of labour market slack, and sum the lower and upper estimates of each, we would reach a range estimate for the level

3 See Chart 3.11 ‘Selected indicators of labour market slack’ of the February 2014 *Inflation Report*.

4 See, for example, Weale (2014).

of slack of between nought and 2.5%. That is quite a wide range, and although quarterly *changes* in our central estimate provide a direction of travel, it leaves a good deal of uncertainty about the exact *level*. Moreover, even if we were able to estimate the exact level of slack with greater precision, it is still is not entirely clear, given the frictions and inflexibilities in the labour market, at what level of slack we should expect in practice to see early inflationary pressures emerging.

# Pricing pressures to watch

For this reason, I believe it is equally important to look directly at the indicators that might give us early signs of emerging inflationary pressures in domestic wage- and price-setting. Broadly, these fall into three categories, which I will be monitoring closely, as this is where the erosion of slack is likely to show up first:

* Wage bid and wage settlement activity
* Firms’ pricing behaviour and movements in profit margins
* Signs of firming prices early in the supply chain, such as advertising, transport and distribution

*Wage negotiations and settlements*

Monitoring pay pressures is particularly important at the moment. Roughly 70% of annual pay settlements take place in the period January to May, and the evidence suggests that the settlements reached in January set the tone for the rest of the year (**Chart 2**).5 So the pickup in January settlements reported by a number of data providers certainly suggests that nominal pay is finally on the rise.

As activity recovers and new business expands, companies do not just increase the remuneration of their existing employees in order to retain them, they also increase the pay of new recruits, to attract the best prospective employees. In fact, such measures of marginal pay, as captured by the Recruitment and Employment Confederation (REC)’s survey, have been a reasonably good leading indicator of average pay growth over the past 15 years (**Chart 3**). Taken at face value, the sharp pickup in the proportion of REC survey respondents reporting higher salaries for permanent new recruits suggests that broader nominal pay is on the cusp of a strong recovery.

An important question is how such increases in labour costs will affect companies’ pricing decisions. Companies’ labour costs do not just depend on wages, but also on how productive employees are. As such, pay pressures must be considered alongside movements in productivity – the inflationary implications of a pickup in pay growth will be mitigated by a recovery in productivity. Combining this morning’s GDP release with data on nominal private-sector pay and employment when they are released will give us an indication of the degree of pressure on unit labour costs – labour costs per unit of output (**Chart 4**) – in Q1.

5 An analysis based on IDS average settlement data between February and December in each year since 1993, weighting each month by its importance for settlements, shows that more than 95% of the January settlement level is locked into settlements over the rest of the calendar year.

*Output prices and profit margins*

Companies’ pricing behaviour, in particular how they adjust their output prices to changes in input prices, is also a key metric to watch. When input costs fluctuate, companies have a choice. They can either pass on all of the change or absorb some of it. In the case of weakening costs (e.g. through falling commodity prices), they can thus preserve or rebuild their margins by not reducing output prices fully. Crude measures of margins implied by the difference between input and output prices in manufacturing have picked up in some sectors since the turn of the year, reflecting reduced input prices not fully passed through, as can be seen in **Table 1**.

*Early supply chain prices*

Finally, as recovery takes hold, companies also spend more on services that help them win new business, such as advertising, pushing up the price of advertising services. In addition, those services that underpin the wide range of activities across the economy, such as transport and distribution, are early indicators of diminishing slack, and rising price pressures. So specific pricing behaviour in these sectors can also be a good early indicator of a tightening economy. At present, these indicators, by and large, are still showing little sign of upward price pressure (**Charts 5 and 6),** but will need to be monitored closely as the upswing unfolds.

So, at this stage of the recovery, it appears that the early supply chain pricing environment remains benign. But turning points are hard to predict and can be quite abrupt, and, in light of the revival in pay – which after all makes up companies’ main input cost – we must not be complacent. As demand recovers and slack is eroded, price pressures might pick up relatively quickly, a fact we must be alert to.

# Implications for policy

Keeping a close eye on such early stage price and pay pressures (as well as their relationship to changes in productivity) should give us greater precision as to the timing of necessary increases in interest rates, as it reduces the degree of uncertainty inherent in many of the quantitative estimates of slack. This will allow us to help support the recovery, without risking an acceleration in underlying price pressures and thus an overshoot of the target in the medium term.

The evolution of these early indicators of pricing pressures, as well as the quantitative estimates of slack and our interpretation of them will therefore guide the timing of the first rise in Bank Rate. I am sure that as the recovery develops, we will see some lively debate within the Committee as to the implications, but so far there has been general agreement that there is room for further slack to be absorbed as the recovery progresses, implying that there is no need for an immediate rise in Bank Rate.

But there are additional considerations when deciding the optimal path for Bank Rate to support the recovery, close the effective output gap and deliver our inflation target. We need to consider not only the “lift-off” point – the timing of the first rise in Bank Rate – but also the pace of tightening thereafter, as well as the likely “neutral” rate in 2-3 years’ time (the rate that will at that point be consistent with inflation at target and output at trend). That is why the new guidance that we outlined in February, on how monetary policy

would be conducted after unemployment reached our 7% threshold, gave indications on these elements too.

In essence, the second phase of our guidance states, subject to inflation remaining under control, that

* the current level of slack is such that we see no reason for an immediate rise in Bank Rate;
* once Bank Rate does start to rise, changes are likely to be gradual . This reflects an environment where the transmission mechanism of monetary policy is perhaps more uncertain than usual, and in which households and businesses may be more than normally sensitive to the initial changes in interest rates; and
* the “neutral” rate in 2-3 years’ time is likely to be materially lower than the 5% level that prevailed before the crisis (reflecting the ongoing headwinds from balance sheet adjustment, elevated credit spreads, fiscal restraint and subdued foreign demand that will still be weighing on the economy).

To my mind, these three elements of policy normalisation – the timing of the first rise, the pace of tightening thereafter, and the longer term equilibrium level of Bank Rate – are inextricably linked, and there are potential trade-offs between them. To the extent that the endpoint of our normalisation journey – the level of the ‘neutral’ rate – is materially lower than before the crisis, we clearly have less far to travel, which might make the first rate rise appear less pressing than if we had to return to a neutral rate of 5%. On the other hand, a gradual trajectory for rates can be ensured only if the first rate rise is not held back, such that we start the normalisation process before the economy reaches effective capacity constraints, so that inflation expectations and pressures are kept well in check.

# Conclusion

So where does that leave us? The exact path of Bank Rate over the next few years will depend on how the economy develops, a path that still contains a high level of uncertainty and some critical risks. I – and my colleagues – will not compromise our primary objective of hitting the 2% inflation target; if inflationary pressures were to pick up sharply, we would need to react. But, in setting policy over the coming period, we also aim to deliver a recovery that is fully self-sustaining and robust to a normalisation of policy after an extended period of record low rates.

Looking at the economy today, I am encouraged by the progress that has been made over the past year, and believe that the chances of a fully sustained recovery are now the highest they have been for some time. The long period of persistent above-target inflation came to an end at the turn of the year, and the outlook for

inflation looks more benign than for some time. But if I have learned one thing in economics, it is that we can never be complacent, and that we on the MPC still face challenges in ensuring that the improvement in the outlook for both inflation and growth is maintained.

13

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| --- | --- |
| **Chart 1: Capacity utilisation surveys**  Differences from averages over 1999-2007 (number of standard deviations)  3  2  1  0  -1  -2  -3  -4  -5  -6  1999 2001 2003 2005 2007 2009 2011 2013  Source: Bank of England, BCC, CBI, CBI/PwC and ONS. | **Chart 2: Pay settlements**  Average monthly settlement over 1994-20 as a percentage of January settlement  Whole economy Private sector    Source: IDS and Bank of England calculations. |
| **Chart 3: Salary of permanent new recruits (REC) and private-sector regular pay (AWE)**  Diffusion index Percentage change on a  70 (50 = no change) year earlier, 3mma 6  65 5  60 4  3  55  2  50  1  45 0  40 -1  Private sector regular AWE (rhs)  35 REC (lagged 12 months, lhs) -2 2000 2002 2004 2006 2008 2010 2012 2014  Source: ONS, KPMG/REC/Markit and Bank calculations. | **Chart 4: Private-sector unit labour costs**  Percentage changes on a quarter ea Labour costs per  worker  Unit labour costs  Output per worker 2001-2007  (inverted) average  2007 2008 2009 2010 2011 2012 2013  Source: ONS. |

110

100

90

80

70

60

50

rlier 6

4

2

0

-2

-4

# Table 1: Heatmap of manufacturing producer prices

**Three-month-on three month inflation rates expressed as number of standard deviations from average since 2011**

**Manufacturing** Mar 2014 Feb 2014 Jan 2014 Dec 2013

# Input PPI

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Total** | **-0.8** | **-0.7** | **-0.8** | **-0.9** |
| Ex energy | -0.8 | -0.8 | -0.8 | -1.1 |
| Ex petrol, food, beverages and tobacco | -1.5 | -1.3 | -1.1 | -1.1 |
| Oil | -0.7 | -0.7 | -0.9 | -0.9 |
| Imported parts & machinery | -0.9 | -0.9 | -0.9 | -1.1 |
| Imported chemicals | -0.9 | -1.1 | -1.0 | -0.9 |
| Home produced food | -0.5 | -0.2 | -0.2 | -0.9 |
| Fuel | -0.7 | 0.5 | 0.9 | 0.8 |
| **Total** | **-0.4** | **-1.0** | **-1.3** | **-1.4** |
| Ex energy | 0.8 | -0.1 | -0.2 | -0.3 |
| Ex petrol, food, beverages and tobacco | 0.9 | 0.2 | -0.6 | -1.1 |
| Food products | -1.2 | -1.5 | -1.5 | -1.5 |
| Motor vehicles | -0.3 | -0.8 | -1.4 | -1.4 |
| Computer and technical products | -0.1 | -0.2 | 0.1 | 0.5 |
| **Aggregate** | **0.4** | **-0.3** | **-0.5** | **-0.5** |
| Ex energy | 1.5 | 0.7 | 0.6 | 0.8 |
| Ex petrol, food, beverages and tobacco | 2.4 | 1.4 | 0.5 | 0.0 |

**Output PPI**

**Implied Margins**

Dark blue indicates more than two standard deviations below average

Light blue indicates more than one but less two standard deviations below average Green indicates within one standard deviation of average

Orange indicates more than one but less than two standard deviations above average Red indicates more than two standard deviations above average

Source: ONS and Bank of England calculations.

# Chart 5: Transport prices

Percentage change on a quarter earlier

Transportation and storage Rail freight

Freight transport by road Storage & warehousing

Freight fowarding

2000 2002 2004 2006 2008 2010 2012

10

5

0

-5

-10

# Chart 6: Companies’ expectations about changes in their own prices over the next year

Per cent 5

All sectors Distributive trades

4

3

2

1

0

-1

2008 2009 2010 2011 2012 2013

Source: ONS.

**References**

Source: CBI.

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