ESSENTIAL READING

Supply Stocktake (9/10)

Note title: Labour Supply Stocktake – Summary Note

STRUCTURAL ECONOMIC ANALYSIS DIVISION

Authors:

MPC MEMBERS Copies to:

From:

LABOUR SUPPLY STOCKTAKE – SUMMARY NOTE

Key Message

A review of our judgements on labour supply suggests there is slightly less slack in the labour market than we previously thought, due to a lower participation gap. Labour supply is expected to be boosted though by stronger net inward migration. The risks around our labour supply assumptions are substantial. They also imply that we need to appeal to other explanations for the surprising weakness of wages.

Main points

- There is little evidence that a substantial cyclical rebound in participation is still to come. Much of the initial cyclical hit is likely to have unwound. We propose, therefore, to narrow the participation gap at the start of the forecast. Over the forecast, the trend is likely to continue to be pulled in opposite directions by demographic effects and increasing participation rates for older people, but we think a flat trend where these effects broadly net out remains a reasonable central case.

- Average hours have already recovered strongly from their post-crisis trough, but there are still signs of underemployment, most notably from part-time workers. We do not see a case for large changes to the trend for average hours, although we have proposed some small tweaks to the profile. Upside risks from the number of extra hours people say they would like to work are balanced against downside risks if the recent reduction in the amount of holiday people take unwinds.

- We do not see a strong case for changing our view on the equilibrium unemployment rate. The risks are probably weighted towards it being lower, although the pickup in recruitment difficulties and intelligence from the Agency network might suggest a smaller unemployment gap.

- Net migration has picked up strongly, likely reflecting the relatively strong UK labour market. Our proposed population profile assumes that migration will slow from its current level but remain above our previous assumption. This adds 0.7% to the population by the end of the forecast. Job searching by overseas workers could be placing downward pressure on UK wages, but some simple calibrations suggest the size of this effect is likely to be small.

- Our proposed changes to trend supply reduce the current level of slack slightly. There are substantial uncertainties around our assumptions. An important challenge to our view that there is relatively little slack in the labour market is the continued weakness of wages. We will explore other potential explanations for weak wages as part of the May forecast round.

I. Introduction

1. We have made substantial revisions to the outlook for labour supply over the past two years (these changes to the forecast are explored in more detail in a box at the end of the note). This note summarises the work undertaken as part of the 'supply stocktake' requested by MPC members.

2. Labour supply can vary along a number of margins – participation, unemployment, average hours and population – and we often consider these margins separately to build a 'bottom up' view of the amount of slack in the labour market. These elements do not operate in isolation, of course. For example, a household's decision to supply more labour could take the form of an additional person looking for work (participation) or an existing worker looking to work more hours (average hours). But a disaggregated approach can often reveal richer stories about developments in the labour market.

3. This note explores each of these components, but a summary of the assumptions about trend labour supply in the February Inflation Report is shown in Chart 1. Population growth typically provides much of the growth in potential (or trend) hours, but movements in other components can lead to fluctuations. For example, the trend decline in average hours in the early 2000s (part of a long-run downward trend) pulled down on potential labour supply, partially offset by a trend increase in participation. After the crisis, the increase in U* (our estimate of the medium-term equilibrium unemployment rate) pulled down on the effective supply capacity of the economy, before recovering over the past couple of years.[1] Over the forecast, potential hours growth slows as the boost from U* abates, but the profile also rests on the assumption that the trends in other variables will be stable, which is far from certain.

Chart 1
Decomposition of annual growth in potential hours from the February Inflation Report

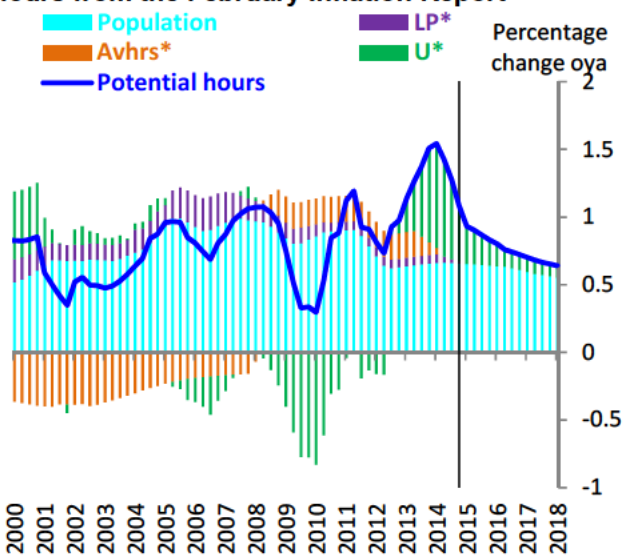
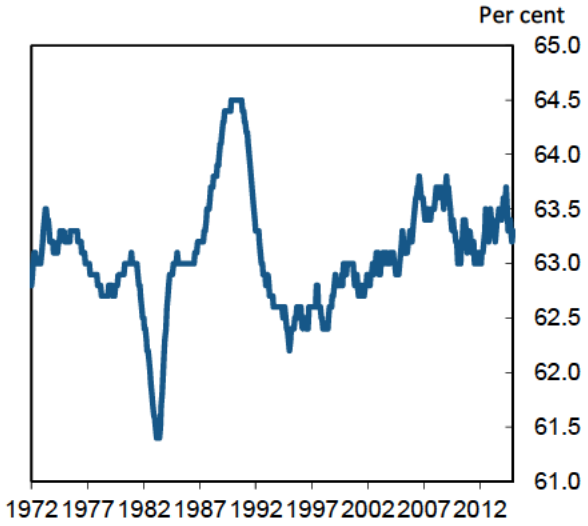


Chart 2
Participation rate (16+)



[1] As discussed later on in the note, our concept of U* reflects the idea that the longer-term unemployed may exert less downward pressure on wages than the short-term unemployed so that the 'effective' slack in unemployment is lower when the long-term unemployment rate is unusually high. This makes the profile for U* move with the cycle.

II. Trend participation.

For more details, see the note by

4. Prior to the crisis there had been a gradual drift up in the participation rate since the mid-1990s, reflecting an increase in female prime-age participation and people working for longer into old age (Chart 2). Following the crisis, there was a sharp fall in the participation rate of around ¾pp to a trough of 63.0%. That mainly reflected movements in the participation of young (18-24) and older (50-64) age groups (Chart 3). The younger age group saw a sharp fall in its participation rate, alongside a pickup in the number of students. The older age group saw a flattening off in its longer-term upward trend, possibly as some people chose to retire earlier. Both of these effects are likely to reflect cyclical responses to the deterioration in labour market conditions.

5. Since 2011 there has been a recovery in participation, despite the demographic drag from the 'baby boom' generation starting to reach retirement age, although the participation rate has fallen again since the middle of 2014, in part due to a flattening off in the participation rates of older people. You can see these participation dynamics in the flows into and out of the labour force (Chart 4). Initially, the fall in participation as the crisis hit reflected lower inflows – consistent with younger people staying in education in the face of rising unemployment. Increased outflows from the labour force followed, consistent with some people taking early retirement. Since 2011, outflows have been weaker, as the trend increase in older participation reasserted itself, but inflows into the labour force have also been stronger, which might reflect a cyclical recovery in participation as people returned to the labour market as conditions improved.

Chart 3
Participation rates for 18-24 year olds and 50-64 year olds

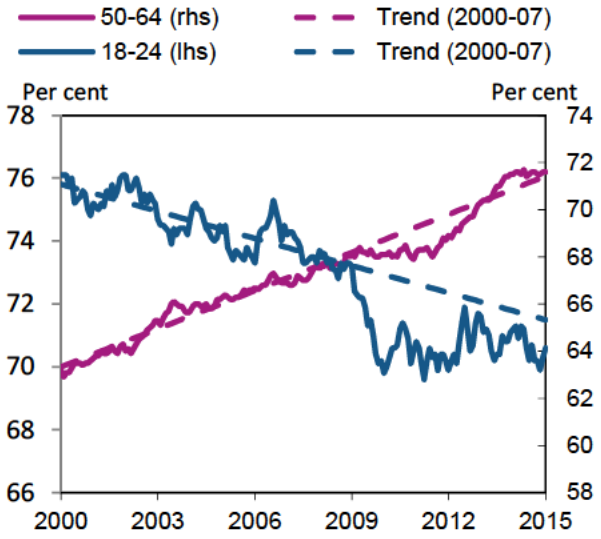
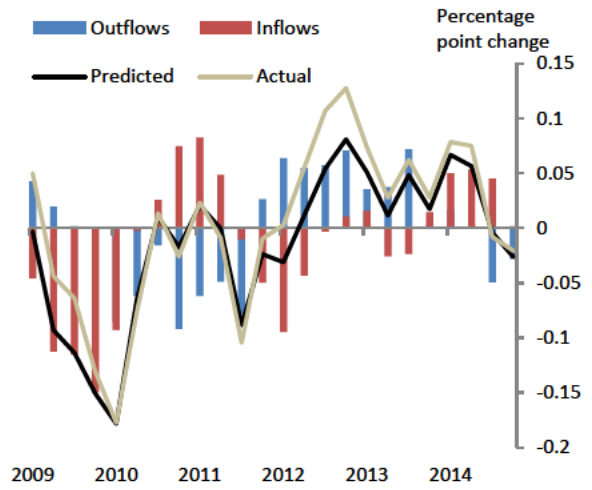


Chart 4
Flows into and out of the labour force (four quarter moving averages) (a)



(a) The predicted changes do not match the actual changes due to a number of biases in the flows data.

6. A key question for our assessment of the outlook for participation is the extent to which there may be a cyclical recovery still to come through. In the February Inflation Report we had a participation gap of 0.5pp for 2015 Q1. On the basis of our latest analysis, we think that should be smaller, and we are proposing to reduce that gap to 0.2pp in Q1.

7. It is difficult to take a strong steer from the latest falls in participation. The participation rate can be volatile and sampling confidence intervals in the Labour Force Survey are large (around 0.3pp either side of the central estimate). But there are a number of indicators that point to a relatively small gap. The Labour Force Survey asks inactive people whether they would like a job. People discouraged from participating in the labour market due to high unemployment are likely to fall into this category, and we saw a pickup in this 'involuntary inactivity' group following the crisis.[2] However, the proportion of the 16-64 population in this category has since fallen back to pre-crisis levels, which might indicate no gap at all.

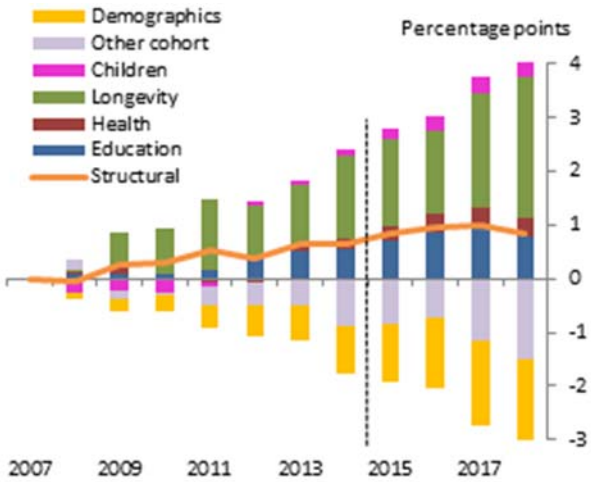
8. An alternative measure is to look at how participation within those age groups apparently most affecting by the cyclical downturn has evolved. The 50-64 participation rate has returned to its pre-crisis trend, while the 18-24 group is only slightly below its pre-crisis trend. Closing that gap completely could be worth 0.1-0.2pp on the aggregate participation rate.

9. We can also estimate the cyclical response of participation econometrically. Simple time series relationships might suggest a cyclical rebound of around 0.3-1.0pp, but given that the participation rate has already risen by 0.3pp from its trough, that might also point to a relatively small remaining gap. Our more detailed cohort model, which is discussed below, would point to a cyclical drag of 0.6pp, only half of which might still be to come through. Econometric estimates based on regional variations would point to a larger cyclical effect and hence more of a potential recovery to come (of around ½-1pp), but on balance the evidence seems to point to a small participation gap. These metrics are summarised in Table A.

Table A
Summary of metrics for the remaining cyclical recovery in participation

Metric	Estimate (pp)
Inactive who would like a job	0
Deviation of 18-24 participation from pre-crisis trend	0.1 to 0.2
Time series estimates of cyclical response	0 to ¾
Cohort model	0.3
Regional panel estimate	½ to 1
Proposed gap	**0.2**

Chart 5
Structural drivers of participation from a cohort model



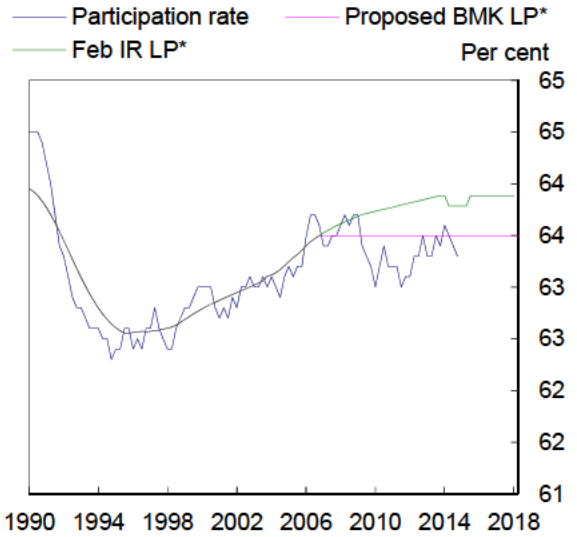
10. A gap of 0.2pp in 2015 Q1 would imply the trend participation rate is at 63.5%. That is close to the level prevailing in the run-up to the crisis. So why might we think that the trend has been broadly flat over the post-crisis period? The ageing of the population would, other things equal, have generated a considerable drag on the participation rate, of around 1½pp. But a number of factors are likely to have operated in the opposite direction. Increased longevity and improved health have allowed people to work longer, and changes to pension rules such as the increase in the female state pension age and ending the ability of

[2] Inactive people who say that they would like a job are far more likely to move into the labour market than those that say they do not want a job, with probabilities of moving into the labour market each quarter of 14% and 8% respectively.

companies to force people to retire at 65 are also likely to have encouraged later retirement. This is not unique to the UK either – many other countries have seen the effects of ageing populations offset by increases in older participation Benefit reforms over many years are also likely to have boosted participation. The proportion of the 16-64 population classified as inactive due to long-term sickness, for example, has fallen by over a percentage point since 2000.

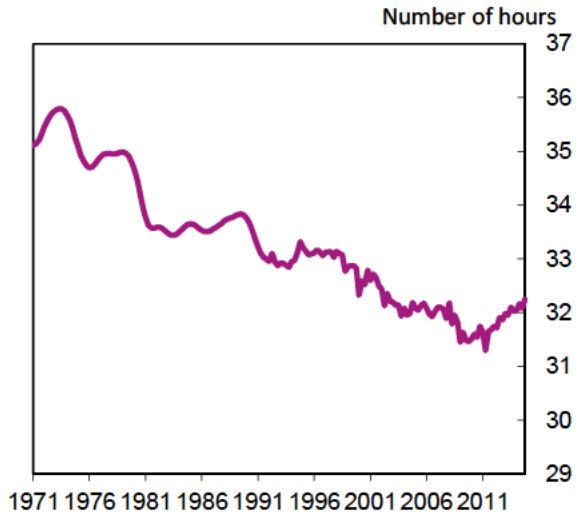
11. Both the drag from demographics and the boost from the continuing trends in older participation are likely to continue. For example, the increase in the female state participation rate will continue through to 2018 (after which both male and female state pension ages will rise to 66). For the November 2014 round we produced a cohort model that estimates the impact of various cyclical and structural factors on different age groups. It also allows those effects to vary according to when a particular cohort was born. This model would suggest that structural factors, on balance, have pushed up slightly on participation over the post-crisis period, and would leave the trend participation rate flat over the next few years (Chart 5). This model does not explicitly capture changes to benefits or pension rules which could pose risks to these projections, but they may be captured implicitly in some of the other variables (such as cohort effects).

Chart 6
Trend participation projections



(a) We have removed the temporary dip in 2014-15 which was due to an unusual LFS cohort distorting the figures from June, but has since disappeared in subsequent waves of that cohort.

Chart 7
Average hours



12. As a further cross-check on the plausibility of a flat trend participation profile, we looked at how age-specific participation rates would need to evolve in order to deliver a relatively flat participation profile. A continuation of pre-crisis trends in age-specific participation rates would broadly offset the demographic drag, so we do not need to assume a significant change in longer-run participation dynamics for our assumed path to be realised.[3] The flow rates between inactivity and activity seen over the past year would also imply a fairly flat profile for participation if they were maintained. We would propose maintaining a flat profile for trend participation over the forecast (Chart 6), although clearly there are significant risks on either side of that – age-specific participation rates may flatten off more persistently leaving demographics to pull

[3] UK participation rates for older workers do not look particularly high by international standards, with a range of countries having higher participation rates for 50+ people While older participation rates will depend on the structural features of the labour market in different countries, such as pension arrangements, it does not seem implausible that increases in older participation could continue.

down the participation rate, or they may pick up more strongly, as the 65+ rate has done in recent years for example.

III. Trend average hours

For more details, see the note by

13. There has been a long-run downward trend in average hours, falling from around 60 hours per week in the 1850s to 32 hours per week in the run-up to the crisis. Average hours dipped further following the crisis, mainly as a result of the shift in employment from full-time to part-time, but also due to a fall in paid overtime. They have since recovered to 32.2 hours, slightly above their pre-crisis level (Chart 7). Despite that recovery, indicators of underemployment remain elevated. The proportion of part-time workers that would like a full-time job remains above its pre-crisis level, and a measure of 'desired' hours originally put forward by Bell & Blanchflower implies that people would like to work more hours than they currently do. The question is how much further average hours might be able to increase as the labour market strengthens. The February Inflation Report assumed that by 2015Q1 the gap would be small at 0.1%. Having assessed the evidence, we do not see a strong case for changing that gap substantially but, updating for the latest data, we propose increasing it slightly to 0.3%.

14. One notable feature of the recovery in actual average hours is that it has not been matched by an increase in the 'usual hours' reported by workers in the Labour Force Survey. There is always a wedge between actual and usual hours due to sickness, holidays or parental leave, but that wedge has narrowed over the past few years (Chart 8). This reflects people taking less holiday. The change in the wedge has been stable for the past couple of years, suggesting it may well be persistent, and that is what we assume in calibrating our proposed trend for average hours, but there is a risk that it will unwind. For example, as job security improves, people may feel better able to take leave.

Chart 8
Decomposition of the change in actual hours worked since 2008Q3

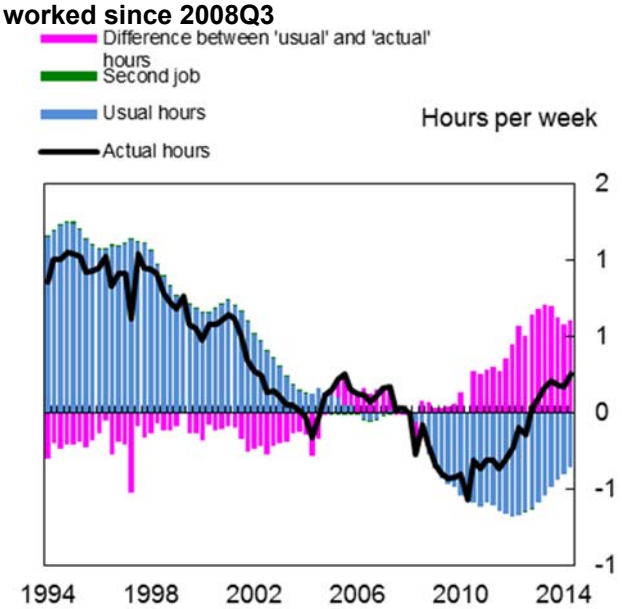
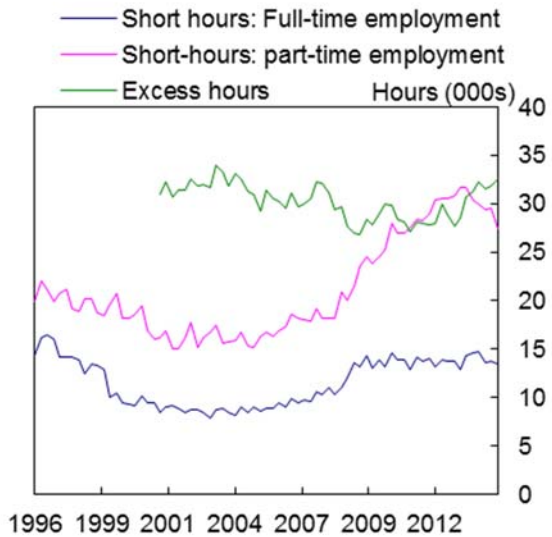


Chart 9
Desired hours by type of employment



15. We use the increase in desired hours as a key metric for calibrating our estimate of trend average hours. Further analysis of the LFS data highlights that most of the increase in desired hours has come from part-time workers (Chart 9), and most of that increase is accounted for by part-time workers who could not find a full-time job, consistent with the pickup in the share of this type of worker. Our calibration of the trend assumes that only part of the increase in desired hours will feed through to increases in actual average hours. This is based on evidence that workers are typically satisfied with a smaller number of hours than they initially say they want. Martin Weale provided such evidence in a speech last year, and we have extended that by looking at a more recent sample period and looking at the involuntary part-timers separately. The results are very similar. We therefore assume that only around 40% of the increase in additional desired hours should be included in our estimate of the trend. That implies an additional 0.2 hours in 2014 Q4, the latest available data point. We have also adjusted the profile of the trend over the post-crisis period slightly (Chart 10).

Chart 10
Average hours and trend assumptions

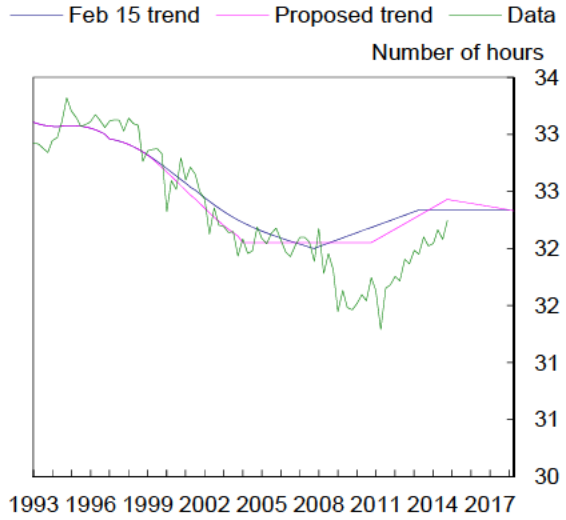
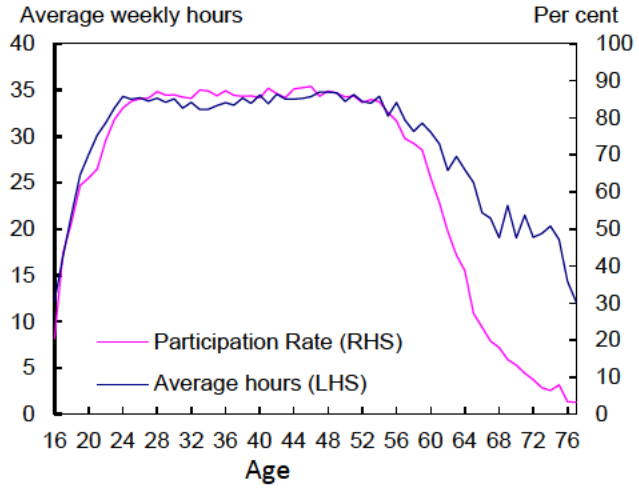


Chart 11
Average hours and participation rates by age



16. Looking ahead, demographic factors are likely to affect average hours, but to a much lesser degree than for participation. In part that is because the fall-off in average hours for older workers is much less marked than for participation (Chart 11), but also because a small proportion of older workers are employed and hence have less of an effect on aggregate average hours (whereas for the participation rate they remain in the denominator which is the overall population). Nevertheless, the ageing workforce is expected to pull down average hours a little over the next few years.[4] This is partly offset by the continuing switch from public to private sector employment due to the fiscal consolidation. Public sector workers typically work around three hours less than private sector workers, so the change in the mix is likely to push up on average hours slightly, but the impact is small (around 0.1 hours over the forecast horizon). Overall, we have assumed that trend average hours fall by 0.1 hours over the next three years (Chart 10)

17. The risks to our estimate of the average hours gap are two-sided. On the upside, more of the increase in desired hours may flow through to actual hours than has typically been the case in the past. On the downside, the narrowing of the wedge between actual and usual hours may unwind as people take more

[4] There is little sign that the average hours for particular age groups have changed much in recent years.

holiday. In terms of the profile over the forecast, another risk is that the longer-run downward trend reasserts itself.

IV. Equilibrium unemployment

18. The unemployment has fallen by 1½pp over the past year, and at 5.7% is now close to our estimate of the current medium-term equilibrium unemployment rate (U*) of 5.3%, implying a relatively small unemployment gap. The medium-term equilibrium is based on an assumption that the longer-term unemployed exert less downward pressure on wages than the short-term unemployed, such that the 'effective' slack in unemployment is smaller when the long-term unemployment rate is unusually high. As a result U* is slightly above our estimate of the long-run equilibrium of around 5%. As discussed in the box, the scale of this wedge was reduced in the August 2014 round in light of the surprising weakness of wages. The wedge is assumed to unwind over the forecast.

19. Our estimate of the long-run equilibrium is based on a search and matching framework and in particular the intersection of the Beveridge curve and the job creation curve (for more details Shifts in the Beveridge curve – the relationship between vacancies and unemployment – could signal a change in the equilibrium unemployment rate, but frictions in the labour market mean that the curve can often display a 'loop' as it appears to shift out initially before returning to its original position. An increase in vacancies (labour demand) can take time to feed through to falls in unemployment. For this reason, we have not been overly concerned about the apparent outward shift in the Beveridge curve during the recovery (Chart 12). Given that it now seems to be tracking back towards its pre-crisis position, there is even less reason to think that matching efficiency in the labour market has deteriorated which might imply a higher equilibrium rate. Whether the Beveridge curve might have shifted inwards, implying a lower equilibrium rate, has not been tested yet given that unemployment remains elevated.

Chart 12
Beveridge curve

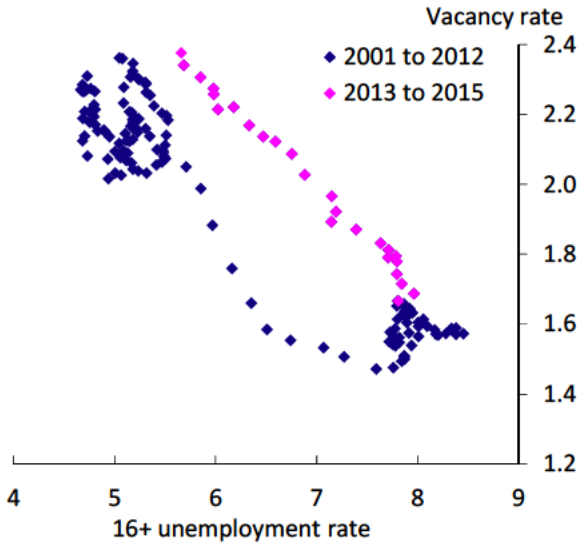
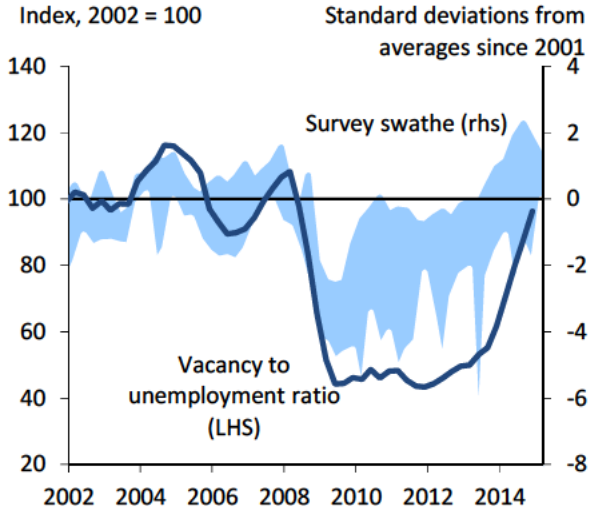


Chart 13
Survey measures of recruitment difficulties



20. It is possible that the equilibrium rate has fallen in recent years. There are a number of factors that might support that. Demographics are likely to push down to some degree, as older workers tend to have lower unemployment rates. Furthermore, the benefits system has been tightened. The tax and benefit

system has also made work more attractive for those in low paid jobs, for example through the increase in the personal allowance. More generally technology has probably made it easier for people to find the right jobs.

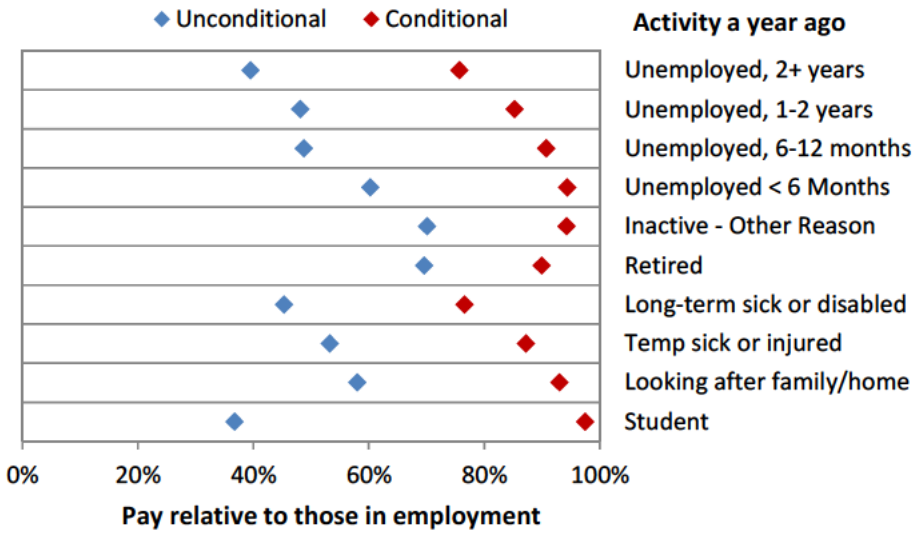
21. There are arguments in the other direction though. The impact of demographics may be less marked if older people feel they need to remain in the labour market, such that their unemployment rates rise. And to the extent that changes to benefits have encouraged people to move into the labour market from inactivity, that could push up the unemployment rate if those people moving into the labour market find it harder to get jobs. In addition, there seems to have been a longer-run increase in skills mismatch which could put upward pressure on equilibrium unemployment. This would be consistent with measures of recruitment difficulties, which are back to pre-crisis levels (Chart 13), and the recent challenge from the Agency network that U* could be higher than we are assuming based on their discussions with companies

22. Overall, we do not have powerful evidence to support a reduction in the assumed equilibrium unemployment rate. It is difficult to assess the quantitative importance of the various factors, although the risks are probably to the downside. An assessment of the equilibrium unemployment rate has not been the main focus of this stocktake, given the risks to other elements of supply such as participation and average hours, and that our previous assessment for the November round appeared to hold (see for more details). It may be that further in-depth work on this aspect of labour supply would be helpful ahead of the next stocktake in six months.

V. Slack and productivity

23. In our calculations of the output gap, we assume that workers are identical, so unemployed and inactive people have the same productivity as the average worker. That may not be the case, for example, if the non-employed have lower skills or experience than the typical worker. If that were the case, a given amount of slack would be able to generate less output than we assume and hence inflation pressures could build more quickly. The output gap would be smaller for a given level of labour market slack.

Chart 14
Pay differences for people moving into employment



24. There is evidence that this is the case. The average pay of people moving into employment from either unemployment or inactivity is around 60% of the level for those already in employment. Part of that is likely to reflect a penalty for having been out of work that is unrelated to an individual's productivity, but regressions on LFS microdata suggest that differences in the characteristics of the non-employed relative to the average worker can account for between 20% and 60% of the lower pay level depending on what type of non-employment people are leaving (Chart 14).

25. Given that we are suggesting that there is relatively little slack in the labour market, this is unlikely to make a substantial difference to our estimate of the output gap. A one-third reduction in the labour market component of the output gap would reduce it in 2015 Q2 by 0.1-0.2pp. Furthermore, it may have few implications for the forecast itself. We already have a weak profile for productivity growth in the near term, which could implicitly capture these small effects already.

VI. Population and migration

For more details, see the note by

26. The February Inflation Report projections were based on ONS projections of 16+ population growth of around 0.6% per year. By contrast, projected growth in the 16-64 year old population was just 0.2% per year, highlighting again the importance of the judgements on participation discussed earlier. Those ONS projections incorporated net inward migration of around 165,000 per year. The latest figures showed net migration of 298,000 in the year to 2014Q3[5]. That is close to its record high of 320,000 in mid-2005. As a result we are proposing to revise up the population profile, both over the recent past and over the forecast.

27. The LFS labour market data are based on ONS projections since 2012, and so do not incorporate the recent increases in migration. This would add 0.3% to the current population level. We have assumed that this does not affect labour market ratios, such as the employment rate, but instead boosts employment in heads, and hence reduces productivity. The LFS data will not be revised for the new migration numbers until 2016 so this will mean a period where we are using different backdata to the ONS numbers (which we have done before for migration). Over the forecast, we are assuming that migration will fall back to 225,000, converging towards its average over the past decade, which coincides with the high migration variant of ONS population projection that it also produces (Chart 15). That boosts the level of population by 0.7% by the end of the forecast relative to the February Report.

28. The recent strength of migration will partly reflect the UK's strong economic performance in recent years relative to migrants' home countries and alternative destinations for migrants. Inward migration from the EU is most heavily work-focused with many non-EU migrants coming to the UK to study. The outlook for work-related inward migration is likely to depend on relative wages across countries and job prospects, captured by unemployment rates (Chart 16). The incentives to migrate to the UK may dissipate over time as unemployment rates are expected to fall in many countries. But there is also evidence in the literature that friends and family effects are important, and that migration to the UK tends to be higher from countries where there is already a sizeable population from the home country in the UK, so there may be some persistence in

[5] It is worth remembering that there is substantial sampling variability within the migration numbers. The 95% confidence interval is 43,000 either side of the central estimate.

migration flows. Policy changes can also have substantial effects, of course, and remain an important source of uncertainty for future migration flows.

Chart 15
Population projections

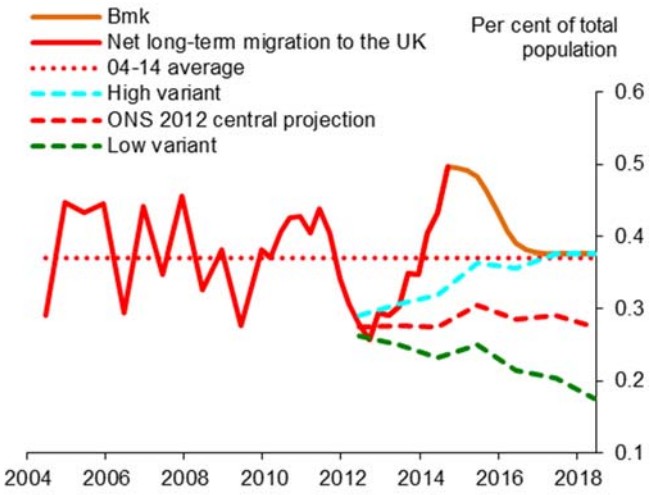
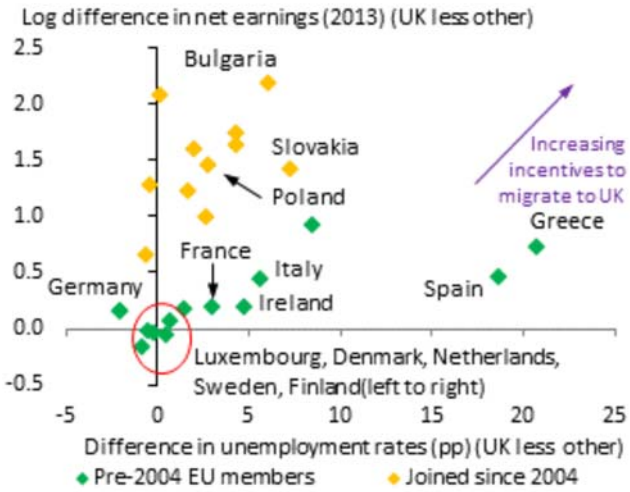


Chart 16
Pay levels and unemployment rates for EU countries relative to the UK



29. We are likely to be capturing the effects of actual migration flows on labour market slack through are regular metrics – migrants are included in the Labour Force Survey measures of unemployment rates etc. But it is possible that the pool of potential workers abroad is also influencing wage pressures in the UK. This 'latent' slack is likely to flatten the slope of the Phillips curve as labour supply becomes more elastic, and an increase in potential overseas labour could put downward pressure on UK pay levels, but it is difficult to directly observe such influences. One metric is to look at the number of migrants that arrive in the UK that already have a job. These individuals will have searched for their job from their home country and so represent part of the latent slack from overseas labour. The recent increase in migrants arriving that already have a job could imply slightly more latent slack, but if we assume that job finding rates are similar for people searching for jobs in the UK from overseas to those for domestic unemployed people, the scale of the increase is likely to be quite small, and latent slack would only be back to pre-crisis levels.

30. The literature on the impact of actual inward migration on aggregate wages is mixed. In part, it will depend on the extent to which they boost the demand for labour through their spending as well as its supply. But there is more consistent evidence that migrants can put downward pressure on pay for low-skilled roles.

VII. Implications for the forecast and key risks

31. The various changes we are proposing are summarised in Table B. Overall, they would imply slightly less current slack due to lower trend participation (the output gap is 0.2pp lower in 2015Q1 incorporating some small data news as well). But overall labour supply is actually little changed due to the offsetting impact of higher population, on account of the news on migration.[6]

32. There are substantial uncertainties surrounding the outlook for labour supply. The specific risks to the various components of labour supply are set out in Table C. Most of the risks we see as broadly balanced, but the risks to the equilibrium level of unemployment are likely to be slightly to the downside. Two

[6] The boost to population that has already occurred leads to a lower starting level of productivity.

challenges to our assumptions come from the OBR projections and the weakness of wages. The OBR has a much weaker outlook for labour supply, with its latest March forecasts for participation and average hours well below those from the February Inflation Report (Chart 17). Our downward revision will reduce the difference a little, but the overall point remains. The OBR are assuming that there is no cyclical recovery in participation to come, and that average hours will resume their longer-term downward trend.

Chart 17
Feb IR and OBR forecasts for participation and average hours

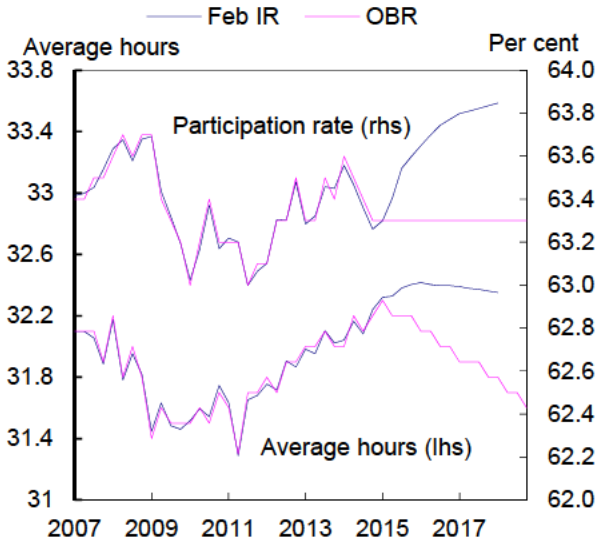


Table B
Summary of proposed changes to labour market variables

Component	Current level (2015Q1)	Trend over forecast
Participation	Less slack	Still flat but at lower level (-0.4pp)
Average hours	Slightly more slack	Slight downward slope – endpoint unchanged
Equilibrium unemployment (U*)	No change	No change (dependent on final U profile)
Population	Slightly higher	Slightly stronger growth
Total	Slightly less slack	Lower participation partly offset by higher population

33. On the other side, our proposals leave us with slightly less labour market slack than in February and do not, therefore, help us explain the weakness of wages. It is possible that this is a signal of more slack in the labour market, although we have struggled to find evidence of that in the labour market data itself. If it does not, it increases the importance of finding other explanations for the weakness of wages, something we will return to as part of the May forecast round.

Table C
Key risks to proposed labour supply assumptions

Component	Upside risks	Downside risks	Balance of risks
Participation	Trends in age-specific participation rates could be stronger than assumed (eg. 65+ has increased sharply in recent years).	Participation rates for older workers flatten off such that the demographic drag dominates.	Balanced
Average hours	More of the increase in desired hours could feed through into actual hours than has been the case in the past	The boost to average hours in recent years from people taking less holiday could unwind, or the long-run downward trend could resume.	Balanced
Equilibrium unemployment	(Lower equilibrium) Demographics, changes to the tax and benefits system, and technology allowing easier job matching could have reduced the equilibrium.	(Higher equilibrium). Recruitment difficulties have picked up, potentially signalling less slack. People encouraged into the labour market from inactivity may find it harder to find jobs.	Upside (for labour supply)
Population	Migration may remain at high levels if the UK labour market is strong relative to other countries.	Migration may fall off more quickly if macroeconomic conditions improve more quickly in other countries.	Balanced
Total			Upside

Box: Revisions to supply assumptions

Over the past two years we have made substantial changes to our view on the outlook for labour supply. Projections for trend total hours per head, which captures changes in the trends for participation, average hours and equilibrium unemployment, have been revised up substantially over the past two years (Chart A). Between the February 2013 and February 2015 reports, this measure of trend labour supply has been revised up in 2016 (the last comparable period) by 5%. The main reasons for the changes in each round are set out in Table 1. These have reflected a combination of news on labour market quantities and, in August 2014, inferences about the amount of slack drawn from the surprising weakness of wages.

Chart A
Vintages of labour supply forecasts – trend hours per head of 16+ population

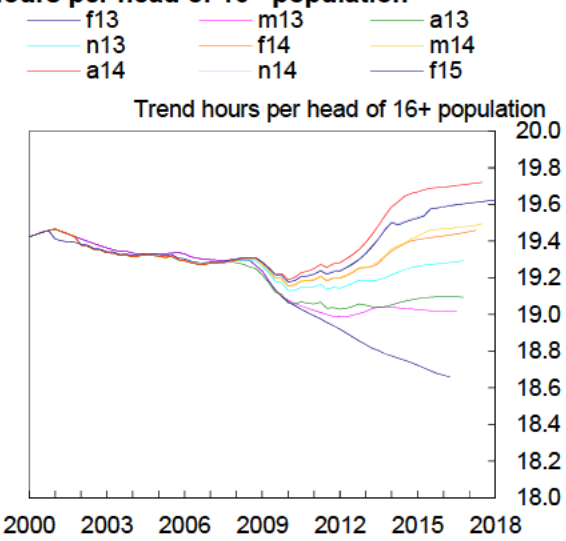


Table 1
Key changes to labour supply assumptions

Round	Main changes	Direction
May 2013	Trend participation revised up to a flat profile to reflect rising age-specific participation rates offsetting drag from ageing population. End point revised up by 1pp.	Up
August 2013	Small downward revisions to U* due to lower unemployment profile	Up
November 2013	Main change to trend average hours. Revised up to incorporate high-level of part-timers wanting to work full-time. End point up by nearly 1%. Population revised up by 0.3% due to Census revisions.	Up
February 2014	Further upward revision to trend average hours to reflect increase in full-time average hours. U* revised down due to lower unemployment profile.	Up
May 2014	Offsetting small changes to U* and trend average hours.	Neutral
August 2014	Substantial upward revision to labour supply to reflect surprising weakness of wages. Trend participation revised up by 0.5pp and U* down by 0.4pp	Up
November 2014	Census-related revisions to labour market data pushed up population profile slightly, but led to small downward revisions to trend participation and average hours (to ensure the revisions did not affect the gaps).	Down
February 2015	Offsetting small changes to trend participation and average hours reflecting latest data.	Neutral