



BANK OF ENGLAND

# Speech

---

## **Covid-19 and monetary policy**

Speech given by

Michael Saunders

External Member of the Monetary Policy Committee

Bank of England

Online webinar

28 May 2020

The views expressed here are not necessarily those of the Bank of England or the Monetary Policy Committee. I would particularly like to thank Michal Stelmach and Matt Swannell for their help in preparing this speech. I have received helpful comments from Jonathan Haskel, Clare Macallan, Rebecca Maule, Silvana Tenreyro and Jan Vlieghe, for which I am most grateful.

The Covid-19 outbreak is chiefly a global health emergency. Let me start by expressing my deepest sympathies for all those who have suffered during the outbreak. And my gratitude to the NHS health professionals, carers and volunteers who have been the front line of defence across the UK. The outbreak, and measures designed to tackle it, have also had very large economic effects, and this is what I will focus on. I also want to explain my recent vote for further monetary easing through asset purchases. I will make four key points.

First, after the plunge in output in recent months, some recovery in economic activity is likely as the lockdown eases.

Second, there is considerable uncertainty over the outlook, but I suspect that risks are more on the side of a relatively slow recovery.

Third, a weaker recovery would probably be especially damaging. As well as probably leaving inflation below target, it would increase longterm costs from scarring on potential growth. Moreover, with limited monetary policy space, we would have less scope to get the economy back on track.

Fourth, as a result, risk management considerations favour a relatively prompt and aggressive response to downside risks. The costs of policy error are, to an extent, asymmetric at present. It is safer to err on the side of easing somewhat too much, and then if necessary tighten as capacity pressures eventually build, rather than ease too little and find the economy gets stuck in a low inflation rut with increased hysteresis costs.

\*\*\*

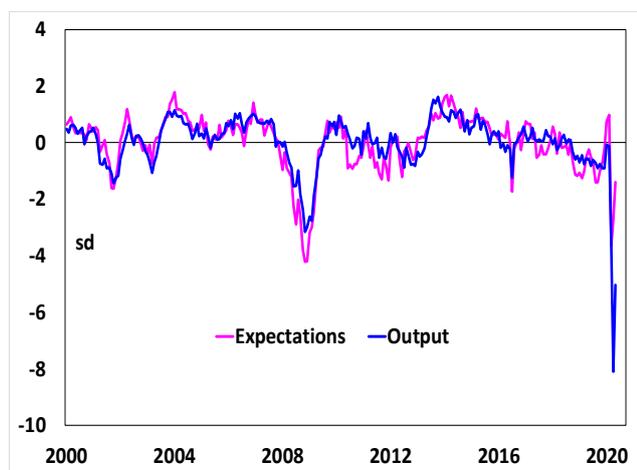
### **The economic impacts of Covid-19 to date**

It is clear that the Covid-19 outbreak and measures designed to tackle it have led to a very large and rapid decline in economic activity that is without precedent in recent times. Social distancing, both enforced and voluntary, has caused some businesses to close temporarily. In others, activity has been reduced by disruptions to complex supply chains, including through reduced availability of imports. The resultant sharp reduction in incomes, jobs and profits has further hit demand. At the same time, uncertainty has risen sharply, as more people worry about losing their jobs and companies face risks of failure. With the economy weakening, risk premia have risen, with declines in equity prices and wider credit spreads. As a result, even with the drop in riskfree rates, financial conditions have tightened since the start of the year.

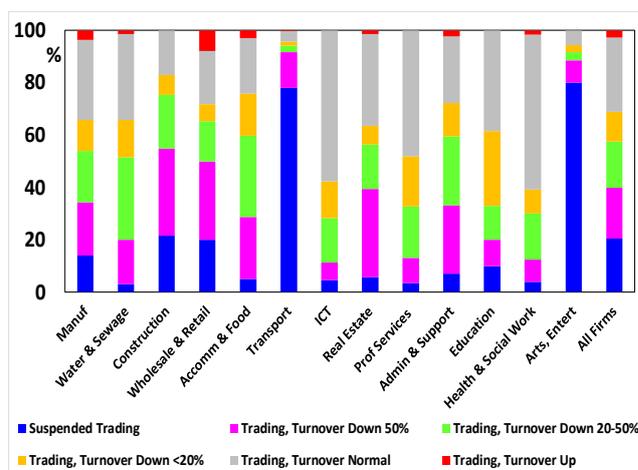
As these effects began to develop, GDP fell by 2% in Q1 (with a 5.8% MoM drop in March), and a range of business surveys have shown unprecedented weakness since then. For example, the PMI indices have fallen well below previous record lows and continued to show falling output in May (see figure 1). The ONS's Business Impact of Covid Survey (BICS) suggests that about 20% of firms have temporarily closed or

paused trading, and a similar share have seen turnover fall by at least 50%. There is some variation across sectors, but weakness is widespread and a sizeable net balance of firms report lower turnover in every major sector of the economy (see figure 2). In general, small firms are doing worse than large firms. In the May MPR, the MPC's illustrative scenario showed Q2 GDP falling about 25% QoQ, a far bigger decline than any recorded previously.<sup>1</sup> There are, of course, many uncertainties around this figure, but the picture of a dramatic fall in output is clear-cut.

**Figure 1. UK – Composite PMI Survey Measures of Output and Expectations Among Businesses**



**Figure 2. UK – Change in Turnover Among Firms Due to Covid-19 Outbreak (Pct of Firms In Each Category)**



Note: In the right chart, data are for the period 20 April to 3 May. The firms that report they suspended trading includes those that have paused, suspended temporarily or closed permanently. Sources: IHS Markit/CIPS, ONS BICS and Bank of England.

With the collapse in activity, the labour market has weakened dramatically. The surge in new Universal Credit claims, and other indicators, suggest that the jobless rate has risen from 4% to about 9%. Workforce participation has probably fallen, because some of those who are not working but would like to work might not actually be classified as unemployed.<sup>2</sup> In addition, over 8 million jobs (more than a fifth of the total) have been furloughed.<sup>3</sup> Among those in work, a substantial portion has experienced a reduction in working hours. The regular BoE/Ipsos surveys of households suggest that, in all, slightly more than 50% of people have either stopped working or are working less than usual.<sup>4</sup> Again, such a rapid deterioration in labour market conditions is without precedent in recent decades.

Even with the exceptional level of government support measures, the decline in activity has caused widespread strains on household and company finances. Roughly 40% of households report that their

<sup>1</sup> The May MPR was published on 7 May 2020.

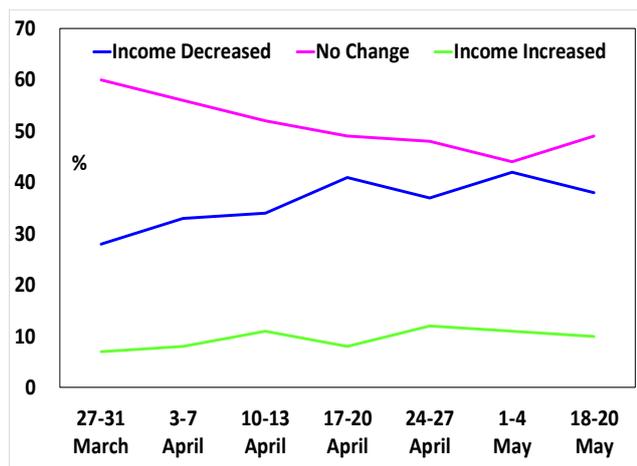
<sup>2</sup> The unemployment total counts people who are out of work, have actively sought work within the last four weeks and are available to start work within the next two weeks. So people who are either not seeking work, or not available, would not count as unemployed.

<sup>3</sup> Source: HM Treasury, data as of 27 May. By comparison, ONS data suggest there are just under 36 million workforce jobs in the UK. Some people have more than one job. The ONS BICS results suggest that over the period 22 April to 3 May, on average 29% of firms' workforce were on furlough.

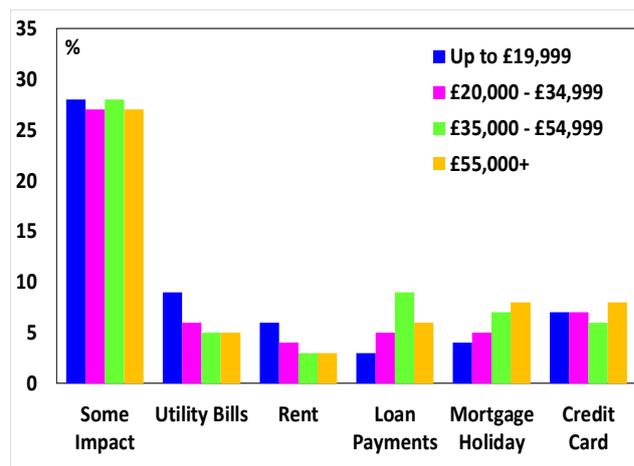
<sup>4</sup> This includes people who are now not working at all or on furlough, as well as those still working but fewer hours than usual. 15% of people are working more hours than usual.

income (including benefits and government support measures) has fallen since before the Covid-19 outbreak (see figure 3). The drop in incomes has been particularly marked among the self-employed. Around a quarter of households report that they have faced financial difficulties in recent weeks (see figure 4).<sup>5</sup> Likewise, the regular BCC surveys suggest that each week a high share of firms report their cash reserves are worsening.

**Figure 3. UK – Pct of Households Reporting Weekly Income Higher/Unchanged/Lower Since February**



**Figure 4. UK – Pct Households Who Report Increased Financial Strains Since February, Split By Income Level**



Note: In the right chart, we show the share of households who report difficulties in meeting various financial commitments. We have shown the main categories but the survey covers other financial commitments as well. Sources: Ipsos MORI and Bank of England.

The drop in activity reflects reductions in supply as well as demand. Even so, it is clear that the net effect has been highly disinflationary so far, with lower oil prices and a substantial squeeze on margins. Headline CPI inflation has now fallen into letter-writing territory below 1% and the MPC expects that inflation will fall to about zero around the end of this year.

Guided by its remit, the MPC in recent months has had two key aims. First, to ensure that inflation returns to the 2% target. Second, to support activity and financial conditions in order to limit the longer-term damage to the economy from hysteresis and scarring. As economic prospects and financial conditions worsened, the MPC has eased monetary policy markedly in recent months, cutting Bank Rate to a record low of 0.1%, reinforced by the launch of the TFSME, and announced a further £200bn increase in asset purchases that includes both government bonds and investment grade corporate bonds. These actions have complemented those taken by other parts of the BoE and by the Government.

<sup>5</sup> For example, falling behind on payments for utility charges, bills, rent, unsecured loan payments, or making increased use of credit card debt or overdraft.

## The economic outlook

In the May MPR, the MPC published an illustrative scenario for the economy over the next three years. The economy's path will depend in part on the extent of the measures aimed at protecting public health. The scenario is based on stylised assumptions as to how these will unfold and assumes that the lockdown eases gradually over several months. As this occurs, constraints on activity will diminish as some businesses reopen and some people resume work. Some purchases that were deferred will be able to take place. This is likely to produce a temporary period of very strong growth rates in the economy as activity rebounds towards its pre-Covid trend. In the MPC's illustrative scenario, this rebound occurs over several quarters from the middle of this year, and leaves GDP close to its pre-Covid trend three years ahead, with unemployment at that stage slightly below 4% and CPI inflation close to the 2% target (see figures 5 and 6).

Figure 5. UK – Level of Real GDP

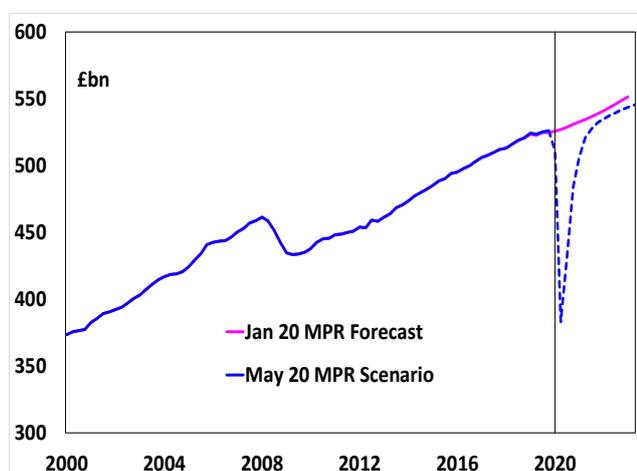
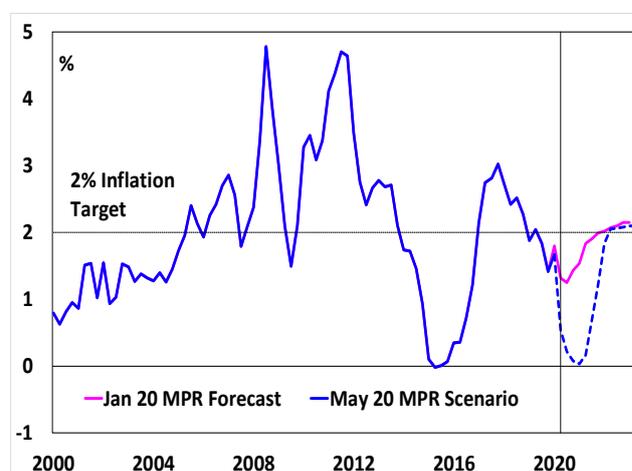


Figure 6. UK – CPI Inflation



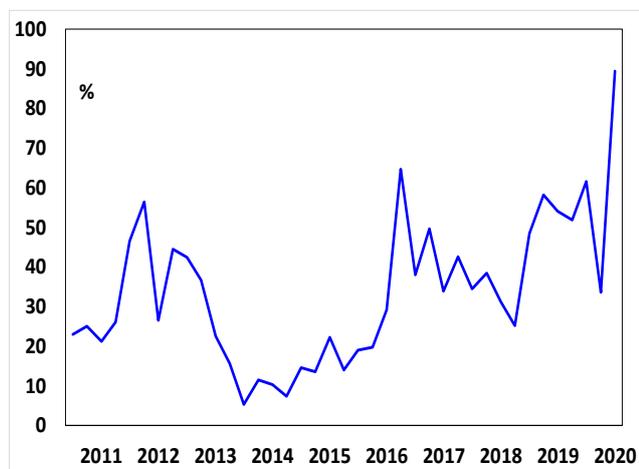
Sources: ONS and Bank of England.

I agree that some recovery in activity is likely over time as the extent of social distancing eases. Some firms have reopened in recent weeks. More will be able to open in coming weeks. Moreover, as a first approximation, it is reasonable to aim to return the economy to something like the pre-Covid trend for activity and unemployment. After all, unlike previous recessions, the pre-Covid economy did not have substantial excesses in terms of inflation or credit growth which might imply that activity was beyond sustainable limits. At the start of this year, before the full extent of the Coronavirus outbreak, headline inflation was slightly below the 2% target, the jobless rate (at around 4%) was close to equilibrium, while there had been little change in the private sector debt/GDP ratio over recent years.

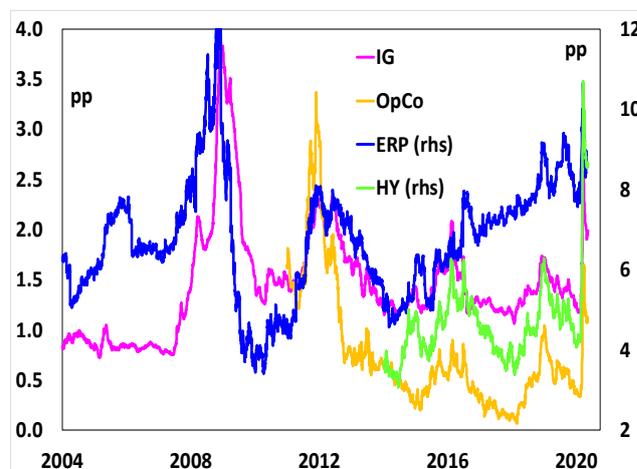
But I want to discuss some uncertainties around that scenario. My top concern is that **risks lie on the side of a relatively slow recovery**, reflecting persistently high levels of uncertainty and risk premia (see figures 7 and 8).<sup>6</sup>

<sup>6</sup> See Bernanke, Gertler and Gilchrist (1999), Di Tella and Hall (2019).

**Figure 7. UK – Pct of Firms Reporting ‘High’ or ‘Very High’ External Uncertainty**



**Figure 8. UK – Measures of Risk Premia**



Note: In the right chart, IG and HY: option-adjusted spreads on government bond yields. Investment-grade (IG) corporate bond yields are calculated using an index of bonds with a rating of BBB3 or above. High-yield (HY) corporate bond yields are calculated using aggregate indices of bonds rated lower than BBB3. OpCo: Senior unsecured bond spread (operating company). Calculated as constant-maturity unweighted average of secondary market spreads to mid-swaps for the major UK lenders' five-year euro-denominated bonds or a suitable proxy when unavailable. ERP: Equity Risk Premium for UK-focused equity index. Based on a geographic decomposition of the FTSE All-Share, derived from companies' primary source of revenues using annual financial accounts data. UK-focused companies are defined as generating at least 70% of their revenues in the UK. Sources: Deloitte CFO Survey, Eikon from Refinitiv, ICE/BoAML Global Research, Bloomberg Finance L.P. and Bank of England.

Even as the lockdown eases, households and businesses will still face considerable uncertainty and downside macro risks, for example because of fear of further job losses or business failures, and the possibility of a renewed escalation of the Covid outbreak that requires some lockdown measures to be reimposed. Individual firms will also face substantial micro uncertainties because of the heterogeneous impacts of the Covid-19 outbreak, and the measures to tackle it, on the longrun outlook for their sector and company. For example, will persistent social distancing require businesses that involve a high degree of social contact to totally rethink their business model? Should companies with complex global supply chains assume that they will have to completely revamp their operations? Or should they assume that things will “get back to normal” soon? The economy will continue to face other major uncertainties, for example over Brexit and global trade policies. At the moment, and I suspect for some time to come, many firms will not be able to plan ahead with much confidence. As we have seen previously, when there is high uncertainty with downside risks, households and businesses tend to defer major spending decisions, especially those that would be costly to reverse.<sup>7</sup>

Moreover, private sector balance sheets will be in worse shape, especially among companies, with higher debts, depleted cash reserves and (with asset values having fallen) reduced collateral.<sup>8</sup> As a result, companies will be more fragile, and less able to take risks or to absorb further losses.

<sup>7</sup> See Broadbent (2019) and Saunders (2019).

<sup>8</sup> See Bahaj *et al.* (2019).

In addition, even if and when this virus is contained, the searing experience of such a dramatic drop in incomes, jobs and profits is likely to have lasting behavioural effects, as after previous crises.<sup>9</sup> Before this year, the idea that GDP could fall by more than 25% in two quarters, or that something like 25% of the workforce could suddenly become unemployed or furloughed, was almost unthinkable. Quite reasonably, many people and firms did not build such possibilities into their decision-making. Having seen that such dramatic swings in economic activity can happen, I suspect that people's expectations for the future will put much more weight than previously on extreme downside possibilities. The desire to self-insure against such adverse tail risks is likely to lead to lower risk appetite than in the pre-Covid period.

All this is likely, I suspect, to create a continued mood of caution among households and businesses over major spending decisions, with a lasting preference for greater financial resilience, stronger balance sheets and less debt than in the pre-Covid period. Lenders also will probably be more cautious, pricing in higher credit risks and wanting to see greater resilience and extra collateral before lending. There are signs of such a shift in the latest Deloitte CFO survey. Even with the policy rate at a record low, the survey shows that a sizeable net balance of CFOs now judge that corporate balance sheets are over-leveraged.

Note that a slow recovery would probably not mean no recovery. And even a period of high growth might still imply that output remains well below its pre-Covid levels. If, for example, GDP falls by roughly 27% over Q1 and Q2 combined, consistent with the May MPR scenario, then even a 20% rise in output over the subsequent year would still leave activity substantially (more than 10%) below the pre-Covid level.

Of course, one cannot be too precise about the balance of risks at present, given the high degree of uncertainty. But, and this is my second big concern, while a range of outcomes are possible, some are clearly more undesirable than others. **A relatively slow recovery would be costly**, not just in terms of leaving inflation below target and the economy operating with spare capacity for a longer period, but also because it would increase the long term costs to the economy from hysteresis and scarring.

Periods of economic weakness tend to damage potential output through various channels.<sup>10</sup>

Some of these channels occur through cutbacks in investment, R&D and training – which often fall severely in downturns, for example because worsening trends in credit availability and cashflow oblige firms to prioritise survival and cost-cutting over longer term gains from such spending.<sup>11</sup> The same financial pressures may cause otherwise-viable firms to fail, leading to more capital scrapping. As a result of these effects, recessions are usually followed by lower growth of the capital stock and capital services in future years (see figure 9). Deteriorating credit availability is likely to inhibit new business formation, slowing the pipeline of firms that will take the lead in future expansions. These channels are evident in recent business

---

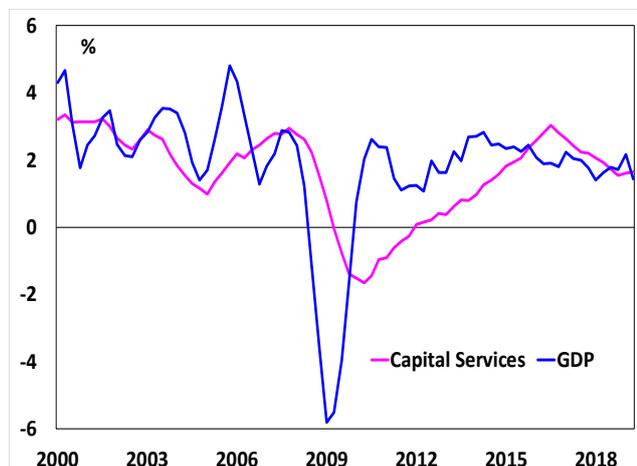
<sup>9</sup> See Guttentag and Herring (1986), Haldane (2015), Kozłowski, Veldkamp and Venkateswaran (2015) and (2020), Jorda, Singh and Taylor (2020).

<sup>10</sup> See for example Haltmaier (2012), Reifschneider, Wascher and Wilcox (2015).

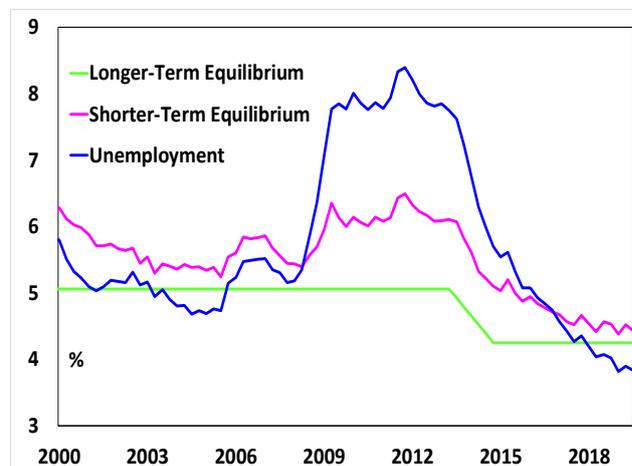
<sup>11</sup> See for example Aghion *et al.* (2012), Dosi *et al.* (2018), Bianchi, Kung and Morales (2019).

surveys. Firms' investment intentions have fallen very sharply,<sup>12</sup> with weaker readings also for spending on training and process innovation. All this is likely to hit productivity growth, including total factor productivity.

**Figure 9. UK – Real GDP and Real Capital Services YoY**



**Figure 10. UK – Unemployment Rate and Measures of Equilibrium Unemployment**



Note: Capital services refer to the flow of productive services provided by an asset that is employed in production. Capital services reflect a (physical) quantity, not to be confused with the value, or price concept of capital. Sources: ONS and Bank of England.

In addition, downturns tend to make people more reluctant to switch jobs, choosing the comfort of keeping their existing job rather than risk the uncertainties that come with a change of job (e.g. probation period, loss of 'length of service' benefits including redundancy package). This also may hit productivity growth, by hindering the reallocation of employment from less productive to more productive firms.<sup>13</sup>

Downturns also may hit potential GDP through adverse effects on equilibrium rates of unemployment and/or workforce participation.<sup>14</sup> In the long run, the equilibrium jobless rate (ie the rate consistent with meeting the inflation target over time) is determined by structural factors, eg tax and benefit system, skills mismatch, demographics, labour market flexibility. In the shorter term, cyclical factors can have an impact as well.<sup>15</sup> For example, when unemployment is high, the workplace skills of those out of work might deteriorate, while new entrants to the workforce never acquire them. People who have been unemployed for a long period (eg over six months, over a year) tend to be less likely to find work than those unemployed for a short period. Using a standard filter, figure 10 shows the estimated path for the UK equilibrium jobless rate that best explains the observed behaviour of wages, based on a Phillips curve relationship. One could quibble about the details of such estimates, but the key point is that episodes of persistent high unemployment seem to become embedded for a period in a higher equilibrium jobless rate. Moreover, when unemployment is high and job openings are scarce, discouraged job-seekers tend to become less engaged with the workforce such

<sup>12</sup> For example, the April DMP survey suggested that on average firms expected their investment spending to fall by about 50% in Q2. The Quarterly CBI Industrial Trends survey showed investment intentions among manufacturing firms at a record low.

<sup>13</sup> See Haltiwanger, Hyatt and McEntarfer (2017), and Haldane (2019).

<sup>14</sup> See for example, Blanchard and Summers (1986).

<sup>15</sup> See Gordon (2013), Berry *et al.* (2015), and Section 3 (pages 19-27) of BoE *Inflation Report* February 2018.

that participation falls, especially among younger and older age groups.<sup>16</sup> A lengthy period of high unemployment would tend to exacerbate these adverse effects on equilibrium unemployment and participation, as well as leading to increased social deprivation.

The extensive range of government measures taken during the crisis may help limit these scarring effects. Even so, in the May MPR scenario, these effects imply that the level of potential GDP three years ahead will be 1%-2% lower than in the January forecast. In my view, that would be a relatively benign outcome. Research based on prior recessions suggests that scarring effects could be much larger, especially given the likely scale of the drop in GDP and employment in Q1 and Q2.<sup>17</sup>

The likelihood of more substantial scarring on potential growth would probably be greater with a relatively slow recovery.<sup>18</sup> A slow recovery would leave more people out of work for longer, increasing risks that workplace skills are eroded such that people find it harder to get back into work or drift out of the workforce. It would increase financial pressures on companies, with a longer period of weak cashflow and rising debt. This would increase the likelihood of cutbacks to business investment, training and R&D, as well as the prospect of more business failures. These financial pressures would also make it less likely that firms will retain existing staff, and bring back those on furlough. Thus far, the cost of the furlough programme has been borne by the government. But decisions for firms on whether to retain staff will come into much sharper focus in coming months as the costs of the furlough scheme start to fall more directly on employers. Moreover, it must be noted that other government support measures for businesses such as the BBL and CBILs, valuable though they are, leave businesses with higher debts. The aim that support measures can allow households and businesses to bridge through the downturn will become less viable if recovery proves disappointing.

As a result, the more that uncertainty and caution weigh on spending, the greater the likely extent of persistent scarring on potential GDP through high unemployment and business failures. In turn, the greater the loss of potential GDP, the greater the likelihood that consumers and businesses downgrade expectations for future income gains and hence cut spending. If unchecked, there are risks of a vicious circle, whereby the economy gets stuck in a self-feeding loop of weak activity, pessimistic expectations and low investment.<sup>19</sup>

What about risks on the other side, that **inflation** might pick up significantly even while output is well below its pre-Covid trend?

So far, this seems a pretty negligible risk. The crisis has led to lower inflation, both here and overseas. Oil prices have fallen and a range of other short-term guides point to lower inflation. For example, the ONS's BICS results suggest that more firms have been cutting selling prices than raising them in recent weeks, not

---

<sup>16</sup> See Duval, Eris and Furceri (2010).

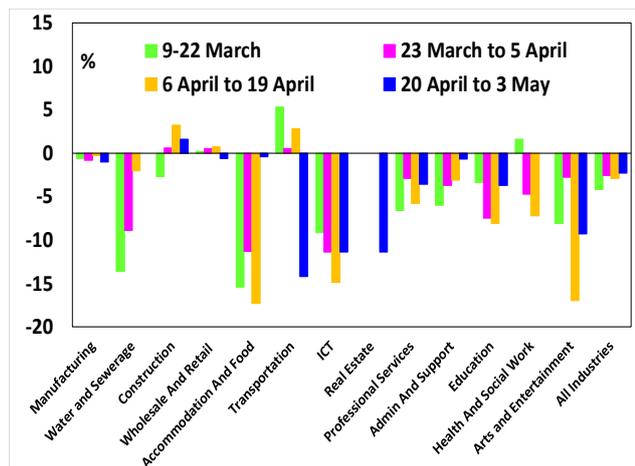
<sup>17</sup> See Haltmaier (2012) and Ball (2014).

<sup>18</sup> For example, simulations using the BoE's COMPASS model suggest that a sustained 1% drop in the level of real GDP (triggered by a generic adverse demand shock) cuts potential output of by ½% through lower workforce participation and capital stock growth. If the demand shock is all due to lower investment, then the drop in potential GDP would be roughly ½% of GDP.

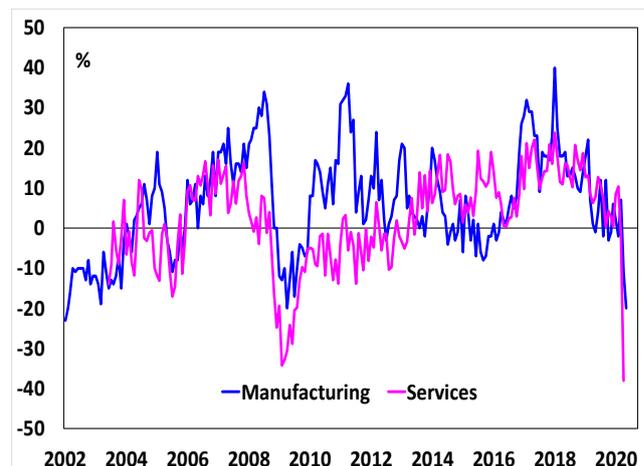
<sup>19</sup> See Acharya *et al.* (2018) and Benigno and Fornaro (2018).

just in aggregate but across most sectors of the economy (see figure 11). Business surveys show a sizeable balance of both manufacturing and service sector firms expect to cut their selling prices in coming months (see figure 12). CPI inflation fell to just 0.8% YoY in April and, as noted above, the MPC's scenario shows headline CPI inflation falling to about zero around yearend.

**Figure 11. UK – Net Balance of Firms Reporting Increases in Prices of Goods and Services Sold**



**Figure 12. UK – Selling Price Expectations over the Next 3 Months (Net Balance)**



Note: In the left chart, there were no figures for the real estate sector in the first three waves. Both charts show net balances, and hence a negative figure implies that more firms report/expect falling prices than rising prices.

Sources: ONS, European Commission, CBI and Bank of England.

To be sure, it is conceivable that recovery may create some temporary supply-side frictions that could lift costs and prices for a period. For example, social distancing measures might create a one off rise in costs in some sectors (e.g. airlines and restaurants). Some firms may temporarily switch to very simple and resilient supply chains, even if more costly, and gradually revert to more complex but cheaper supply chains over time if that proves possible.

However, I think it is likely that, provided inflation expectations remain contained, the background of ample labour market slack and subdued activity levels will keep a lid on labour costs and margins, so that inflation will remain fairly limited as long as activity is well below its pre-Covid trend. After all, even before the Covid outbreak, domestic inflation pressures had been modest in recent years, not just in the UK but in other advanced economies.<sup>20</sup> The resources that allowed the UK and other major economies to operate at their pre-Covid levels are, to a large extent, still intact. Or, to put it a different way, when considering risks of persistent above-target inflation before we have recovered most of the lost ground, my attitude is I will believe it if and when I see it.

<sup>20</sup> See Teneyro (2020).

## Risk management considerations

At the start of this year, before the Covid-19 outbreak had any economic significance for the UK, I argued that risk management considerations called for a relatively prompt response to downside risks.<sup>21</sup> I stress this view was nothing to do with Covid-related risks. Rather, it was based on the observation that the economy had some slack and seemed likely to remain sluggish, and risk management considerations implied that monetary policy should respond promptly to such downside risks. This is because, with a low neutral rate and limited monetary policy space, the MPC's ability to return inflation to the 2% target is asymmetric.<sup>22</sup> If the economy were to overheat and lift inflation above target, the MPC would have ample scope to tighten policy to push inflation back down to target. But if the economy were to be stuck with sluggish growth and below-target inflation, the MPC would have more limited scope for stimulus to lift inflation back to target. In such conditions, risk management implies that policy should react in an asymmetric fashion – if tightening is needed, it should be gradual; if easing is needed, it should occur promptly. And when the economy is soft, as it was early this year, it is better to err on the side of somewhat too much stimulus rather than too little.

I think these risk management arguments apply even more strongly now. This is in part because the prospects for the economy are tilted more on the side of a slower recovery, in my view, stemming from high uncertainty, elevated risk premia and reduced risk appetite. It is also because a slow recovery would be especially costly, since it would probably imply greater longterm losses from scarring on potential growth.<sup>23</sup> In addition, the Covid crisis and headwinds associated with it seem to have put further downward pressure on the neutral level of interest rates, such that the need to take account of the limited extent of monetary policy space is even more pressing.<sup>24</sup>

Estimates of the neutral level of rates are inherently uncertain. Back in 2018, the MPC estimated that the trend neutral interest rate in coming years will be in a range of 2-3% in nominal terms, with a central estimate of 2¼% (ie just above zero in real terms, assuming inflation in line with the 2% target).<sup>25</sup> That was already well below typical estimates of the neutral level of rates in the pre-GFC period, reflecting factors such as demographics and lower productivity growth.<sup>26</sup> Even before the coronavirus crisis, it appeared that the neutral level of rates had fallen since then. With the Covid outbreak, the forward path of interest rates implied by gilt yields has declined further and does not even reach 1¼% at any point in the next few decades

---

<sup>21</sup> See Saunders (2020).

<sup>22</sup> See Evans *et al.* (2015), Kiley and Roberts (2017), Mendes, Murchison and Wilkins (2017), Evans (2019), and Williams (2019). In one key respect, my argument differs from that in Evans *et al.* (2015). In arguing that risk management considerations become increasingly important when monetary policy space is limited, Evans *et al.* defined monetary policy space in terms of scope to cut interest rates to the effective lower bound. In my speech in January, and again now, consistent with Carney (2020), I am referring to monetary policy space in terms of the MPC's current toolkit, namely the scope for rate cuts to the effective lower bound, purchases of government and high grade corporate debt, and forward guidance. Policy space is limited because, unless term premia become substantially negative, asset purchases probably could not push longer term rates much below the effective lower bound for the policy rate. The MPC could still expand QE or reintroduce forward guidance even if the entire yield curve is at or below the ELB. But the effectiveness of such measures may be less – and surely is less certain – under those conditions.

<sup>23</sup> See Reifschneider, Wascher and Wilcox (2015).

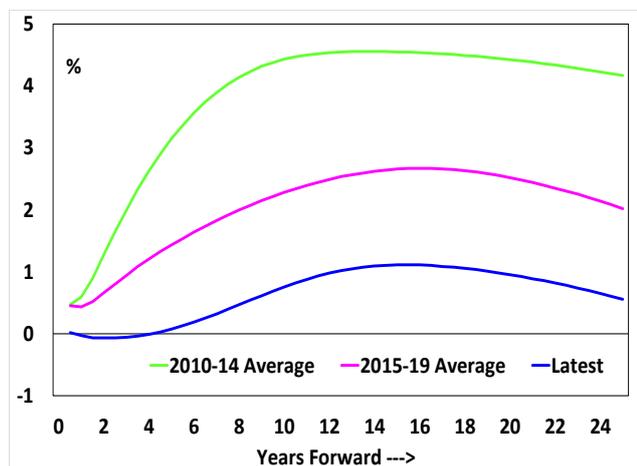
<sup>24</sup> See Acharya *et al.* (2018), Garga and Singh (2018), Poloz (2020).

<sup>25</sup> See BoE *Inflation Report* of August 2018.

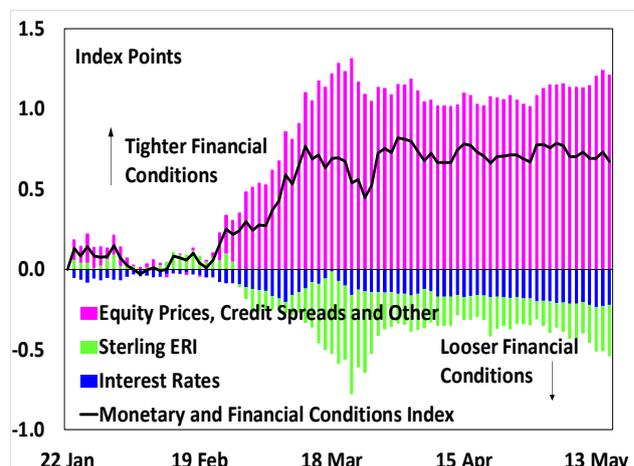
<sup>26</sup> See Lisack, Sajedi and Thwaites (2017).

(see figure 13). Even so, as noted earlier, financial conditions have tightened since early this year (see figure 14). With a lower neutral rate, the likelihood that the economy gets stuck in a low inflation rut is higher and hence the case to respond strongly to downside risks is correspondingly greater.

**Figure 13. UK – Forward Path of Short-Term Rates Implied By Yield Curves**



**Figure 14. UK – Changes in the Monetary and Financial Conditions Index since Jan 20 MPR**



Note: The UK Monetary and Financial Conditions Index (MFCI) summarises information from the following series: short-term and long-term interest rates, the sterling ERI, corporate bond spreads, equity prices, and household and corporate bank lending spreads. The series weights are based on the estimated impact of each variable on UK GDP. The chart shows changes in the MFCI from the average level over the 15 working days to 22 January 2020. An increase in the MFCI signals tighter financial conditions and a decrease signals looser conditions. Sources: Eikon from Refinitiv, Bloomberg Finance L.P., ICE/BoAML Global Research and Bank of England.

I wouldn't advocate the language of aiming to "run the economy hot"; in my view, it is not really sensible to regard an economy that is still operating well below the pre-Covid level and with relatively high unemployment as "running hot". Nor are risk management considerations a recipe for unlimited stimulus. It is more a question of managing the risks on both sides. At present, if we overdo the stimulus somewhat and then find the economy recovers strongly, we have ample tools and time to tighten policy again before persistent excess demand and inflation become a problem. And such a scenario would have the benign side effect of cutting long-term costs of hysteresis. Conversely, if we provide too little stimulus, the economy could slip into a lowinflation trap that is much harder to escape, with greater long-term costs from business failures and high unemployment.

These risk management considerations played a considerable role in my vote to raise the target stock for asset purchases at the May meeting, both in terms of the judgement that more stimulus was appropriate and that it was useful to announce it at the May meeting. To be sure, given that the existing £200bn asset purchase program (announced in March) will not be completed before the June MPC meeting, there was a reasonable case to wait until the June meeting and see more data before, if necessary, announcing further asset purchases. My view was that it was unlikely that data available at the June meeting would negate the case for further stimulus and that it would be preferable to remove uncertainty about the MPC's willingness to

expand asset purchases further. Even if the announcement of extra asset purchases would not push gilt yields much lower, it would help to limit the chances of an undesirable tightening in financial conditions and thereby reduce downside risks to the recovery. Again, it was about risk management.

Finally, for the removal of any doubt, let me make it clear that a policy of asset purchases is not monetary financing, and nor are we seeking to keep bond yields low as an aim in itself. Asset purchases are a monetary policy tool, used to help achieve our remit to return inflation to target and in a way that helps to sustain growth and employment.<sup>27</sup> At the May meeting, my view was that some further stimulus was required to achieve our remit. If and when that is no longer the case, or if achieving our remit requires tighter monetary conditions, then I will vote accordingly.

---

<sup>27</sup> See Vlieghe (2020).

## References

**Acharya, S, Bengui, J, Dogra, K and Lin Wee, S, (2018)**, 'Slow recoveries and unemployment traps: monetary policy in a time of hysteresis', *Staff Reports*, Federal Reserve Bank of New York.

**Adrian, T (2018)**, 'Remarks on optimal monetary policy', Federal Reserve Bank of Boston, 7 September.

**Aghion, P, Askenazy, P, Berman, N, Cetto, G and Eymard, L (2012)**, 'Credit constraints and the cyclical nature of R&D investment: evidence from France', *Journal of the European Economic Association*, European Economic Association, vol. 10(5), pages 1001-1024.

**Bahaj, S, Foulis, A, Pinter, G and Surico, P (2019)**, 'Employment and the collateral channel of monetary policy', *Bank of England Staff Working Paper*, No. 827, available at <https://www.bankofengland.co.uk/working-paper/2019/employment-and-the-collateral-channel-of-monetary-policy>

**Ball, L (2014)**, 'Long-term damage from the Great Recession in OECD countries', *NBER Working Papers*, No. 20185.

**Benigno, G and Fornaro, L (2018)**, 'Stagnation traps', *Review of Economic Studies*, Oxford University Press, vol. 85(3), pages 1425-1470.

**Bernanke, B, Gertler, M and Gilchrist, S (1999)**, 'The financial accelerator in a quantitative business cycle framework', *Handbook of Macroeconomics*, edition 1, volume 1, chapter 21, pages 1341-1393, Elsevier.

**Berry, S, Corder, M, Duffy, C, Hackworth, C and Speigner, B (2015)**, 'Trends in UK labour supply', *Bank of England Quarterly Bulletin*, 2015 Q4, available at <https://www.bankofengland.co.uk/quarterly-bulletin/2015/q4/trends-in-uk-labour-supply>

**Bianchi, F, Kung, H and Morales, G (2019)**, 'Growth, slowdowns, and recoveries', *Journal of Monetary Economics*, Elsevier, vol. 101(C), pages 47-63.

**Blanchard, O and Summers, L (1986)**, 'Hysteresis and the European unemployment problem', *NBER Macroeconomics Annual*, Volume 1, pages 15-90, National Bureau of Economic Research, Inc.

**Broadbent, B (2019)**, 'Investment and uncertainty: the value of waiting for news', speech given at Imperial College Business School, London, available at <https://www.bankofengland.co.uk/speech/2019/ben-broadbent-imperial-college-business-school-london>

**Carney, M (2020)**, 'A framework for all seasons?', speech given at the Bank of England Research Workshop on The Future of Inflation Targeting, available at <https://www.bankofengland.co.uk/speech/2020/mark-carney-opening-remarks-at-the-future-of-inflation-targeting-conference>

**Di Tella, S and Hall, R (2019)**, 'Financial business cycles', 2019 Meeting Papers, No. 1101, Society for Economic Dynamics.

**Dosi, G, Pereira, M, Roventini, A and Virgillito, M (2018)**, 'Causes and consequences of hysteresis: aggregate demand, productivity, and employment', *Industrial and Corporate Change*, Oxford University Press, vol. 27(6), pages 1015-1044.

**Duval, R, Eris, M and Furceri, D (2010)**, 'Labour force participation hysteresis in industrial countries: evidence and causes', OECD Economics Department.

**Evans, C (2019)**, 'Revisiting risk management in monetary policy', speech given at the 2019 Credit Suisse Asian Investment Conference, Hong Kong.

**Evans, C, Fisher, J, Gourio, F and Krane, S (2015)**, 'Risk management for monetary policy near the zero lower bound', *Brookings Papers on Economic Activity*, Economic Studies Program, The Brookings Institution, vol. 46(1) (Spring), pages 141-219.

**Garga, V and Singh, S (2019)**, 'Output hysteresis and optimal monetary policy', *Working Papers*, No. 19-19, Federal Reserve Bank of Boston.

**Gordon, R (2013)**, 'The Phillips curve is alive and well: inflation and the NAIRU during the slow recovery', *NBER Working Papers*, No. 19390.

**Guttentag, J and Herring, R (1986)**, 'Disaster myopia in international banking', *Essays in International Finance*, No. 164, International Finance Section, Princeton University.

**Haldane, A (2015)**, 'Stuck', speech given at the Open University, London, available at <https://www.bankofengland.co.uk/speech/2015/stuck>

**Haldane, A (2019)**, 'Climbing the jobs ladder', speech given at Glanford Park Stadium, Scunthorpe, available at <https://www.bankofengland.co.uk/speech/2019/andy-haldane-speech-regional-visit-to-yorkshire-and-humber>

**Haltiwanger, J, Hyatt, H and McEntarfer, E (2017)**, 'Do workers move up the firm productivity job ladder?', University of Maryland.

**Haltmaier, J (2012)**, 'Do recessions affect potential output?', *International Finance Discussion Papers*, No. 1066, Board of Governors of the Federal Reserve System.

**Jorda, O, Singh, S and Taylor, A (2020)**, 'Longer-run economic consequences of pandemics', *Covid Economics*, Issue 1, 3 April: 1-15.

**Kiley, T and Roberts, J (2017)**, 'Monetary policy in a low interest rate world', *Brookings Papers on Economic Activity*, Spring 2017.

**Kozlowski, J, Veldkamp, L and Venkateswaran, V (2015)**, 'The tail that wags the economy: beliefs and persistent stagnation', *NBER Working Papers*, No. 21719.

**Kozlowski, J, Veldkamp, L and Venkateswaran, V (2020)**, 'Scarring body and mind: the long-term belief-scarring effects of Covid-19', *Covid Economics*, Issue 8, 22 April: 1-26.

**Lisack, N, Sajedi, R and Thwaites, G (2017)**, 'Demographic trends and the real interest rate', *Bank of England Staff Working Paper*, No. 701, available at <https://www.bankofengland.co.uk/working-paper/2017/demographic-trends-and-the-real-interest-rate>

**Mendes, R, Murchison, S and Wilkins, C (2017)**, 'Monetary policy under uncertainty: practice versus theory', *Bank of Canada Discussion Paper*, 2017-13.

**Poloz, S (2020)**, 'Monetary policy in unknowable times', speech given at Eric J. Hanson Memorial Lecture, University of Alberta, Edmonton, Alberta.

**Reifschneider, D, Wascher, W and Wilcox, D (2015)**, 'Aggregate supply in the United States: recent developments and implications for the conduct of monetary policy', *IMF Economic Review*, vol. 63(1), pages 71-109.

**Saunders, M (2019)**, 'Shifting balance of risks', speech given at Barnsley & Rotherham Chamber of Commerce & Institute of Chartered Accountants, available at <https://www.bankofengland.co.uk/speech/2019/michael-saunders-speech-at-barnsley-and-rotherham-chamber-of-commerce>

**Saunders, M (2020)**, 'Risk management in a sluggish economy', speech given at the South Eastern Regional College, Bangor, Northern Ireland, available at <https://www.bankofengland.co.uk/speech/2020/michael-saunders-speech-southern-eastern-regional-college-bangor-northern-ireland>

**Tenreyro, S (2020)**, 'Monetary policy during pandemics: inflation before, during and after Covid-19', speech given during an online webinar, available at <https://www.bankofengland.co.uk/speech/2020/silvana-tenreyro-speech-monetary-policy-during-pandemics>

**Vlieghe, G (2020)**, 'Monetary policy and the Bank of England's balance sheet', speech given during an online webinar, available at <https://www.bankofengland.co.uk/speech/2020/gertjan-vlieghe-speech-monetary-policy-and-the-boes-balance-sheet>

**Williams, J (2019)**, 'Living life near the ZLB', remarks given at 2019 Annual Meeting of the Central Bank Research Association (CEBRA), New York.