

Speech

An update on the economic outlook

Speech given by

Gertjan Vlieghe, External Member of the Monetary Policy Committee

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In this speech I will focus on recent developments in the evolution of the pandemic and how these affect the outlook for the economy and monetary policy.

1. The current economic situation

The economy has been on an extraordinary trajectory since the start of last year, and it is important not to lose sight of where we are. After falling by about 25% last spring, GDP recovered sharply over the summer, but has stagnated since the late autumn, and has probably fallen outright at the start of this year. In December, the latest available data, GDP was just under 7% below its level of 2019 Q4. Compared with the evolution of GDP in the financial crisis (see Chart 1), we are still only at levels comparable with the trough of the financial crisis. Our expectation is that the recovery will be more rapid than it was then, as illustrated by the red diamonds showing our February central projection. I will discuss that in more detail in a moment. But for now I want to emphasise how far we still have to travel in this recovery.

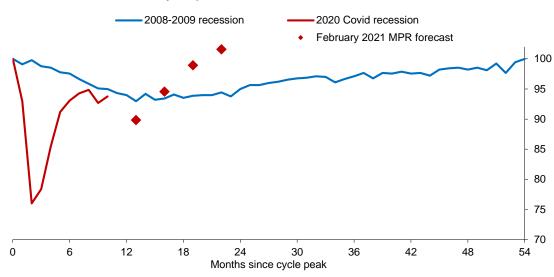


Chart 1: Real GDP indexed to cycle peak

Source: ONS. Latest observation: December 2020 (realised), 2021 Q4 (forecast).

A second perspective on the evolution of the economy is the one in Chart 2, showing successive MPC forecasts since the pandemic began, as well as actual GDP. You can see that we have made forecast errors in both directions so far. We were too pessimistic initially about the depth to which we thought the economy would fall. That forecast error was large in historic terms, but small relative to the scale of the shock, as the chart clearly illustrates. We have made smaller forecast errors in both directions in subsequent periods: where the economy ended up in 2020 Q4 was exactly in line with our May scenario, but somewhat weaker than in our August projection, and somewhat stronger than in our November projection.

105 100 95 90 Actual 85 January 2020 MPR forecast May 2020 MPR scenario 80 August 2020 MPR forecast ···· November 2020 MPR forecast ····· February 2021 MPR forecast 75 70 2022 2019 2020 2021 2023 2024

Chart 2: Real GDP and MPR vintages (index 2019Q4 = 100)

Source: ONS. Latest observation: 2020Q4 (actual).

Consistent with the fact that economic activity is well below its pre-Covid trajectory, the UK's labour market is running well below any measure of full employment. In addition to the 800K job losses since the start of the pandemic (representing around $2 \frac{1}{2}$ % of the workforce), 20% of the private sector workforce are currently on furlough.¹

When discussing economic cycles, I think numbers are more informative than letters. But for those who insist, in the lexicon of recovery shapes² we are experiencing something between a swoosh-shaped recovery and a W-shaped recovery, as Chart 2 shows. We are clearly not experiencing a V-shaped recovery.

2. News since our November projection

Since our November projection, there have been three major developments that relate to Covid and its impact on the economy. We are learning to cope, we have vaccines, and we have variants.

By learning to cope, I mean that for a given level of social restrictions, the economy appears to be able to operate at a higher level than in the first lockdown. As I said a moment ago, the level of GDP in Q4 was higher than we projected in November. In part this was due to more firms being able to continue operating within the health-related restrictions, contributing to a less severe drag on consumption than in the first lockdown. Despite that improved ability to cope, consumption in Q4 was still 9% below its level a year earlier.

¹ In December, the latest period for which we have monthly GDP data, an average of 12% of the private sector workforce were on furlough. This has subsequently increased to 20% (period 8-16 February).

² See e.g. Sheiner & Yilla (2020), "The ABCs of the Post-COVID Economic Recovery", available at: https://www.brookings.edu/blog/up-front/2020/05/04/the-abcs-of-the-post-covid-economic-recovery/

Chart 3 uses high frequency payments data to gain some perspective on spending developments at the start of this year. It suggests that in the January lockdown, spending fell below November levels, but remained above the levels seen in the first lockdown.

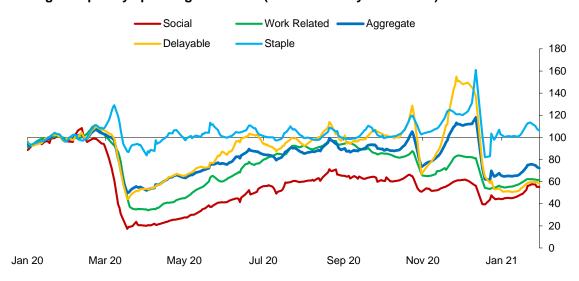


Chart 3: High-frequency spending indicators (index February 2020 = 100)

Source: Bank of England via ONS Faster Indicators. Notes: Based on the CHAPS payments that a sample of around 90 UK companies receive from their merchant acquirers on a daily basis. These payments reflect the sales that companies make through debit and credit card purchases, which are summed to estimate rolling seven-day revenues. Latest observation: 11 February 2021.

The second development since November is that effective vaccines have been created and are being rolled out successfully. As recently as November last year, we were uncertain whether <u>any</u> successful vaccines would be found. Now we have several that are approved, and more on the way. Vaccines are being rolled out particularly quickly in the UK, and that is excellent news for both our health outlook and our economic outlook. In our central forecast, a successful vaccine rollout allows social distancing restrictions to be lifted in the coming quarters, and voluntary social distancing is also eased as health concerns fall back significantly. That is projected to drive rapid economic growth over the course of this year.

The third development is that we are discovering variants, or mutations, of the virus. This is not an unusual development in any epidemic, and one that scientists have warned us about all along.

The consequence of these mutations is two-fold.

First, the spread of a more infectious variant in the UK late last year has meant that we have needed tighter social distancing restrictions in recent months to reduce virus spread. The economic recovery expected later this year will therefore start from a lower level, relative to our November projection, but it is expected to catch up faster.

Second, some mutations may render the vaccine less effective in terms of reducing infection or transmission. We have some early indications already of reduced effectiveness of the vaccine in the case of the B.1.351 variant (the variant first detected in South Africa), but further data is needed to understand the changes in effectiveness with more precision.³ And research is already underway to modify existing vaccines in order to work better with known variants. What we can say is that variants add downside risk to the success of the vaccination programme: vaccines may be less effective, may need to be modified (which takes time), and their impact may be less long-lived than initially hoped. This risks delaying the point at which the economy can be largely free of social restrictions and voluntary social distancing.

Covid is unlikely to just go away. It will be with us for years. The question, for the MPC, is whether it lingers as a health risk that does not otherwise affect the economy, and it therefore ceases to be a factor influencing monetary policy. Alternatively, it could continue to weigh on the economy to some extent, via uncertainty, or persistently elevated unemployment as the economy reallocates resources away from sectors that are affected by lingering health risks.

3. The medium-term economic outlook

The main question for the setting of monetary policy is: will demand rise all the way back to the economy's medium-term potential, fall somewhat short, or rise above it, temporarily or persistently? These considerations will be the main driver of underlying inflation pressure, and are the key to ensuring that inflation returns sustainably to the MPC's 2% target.

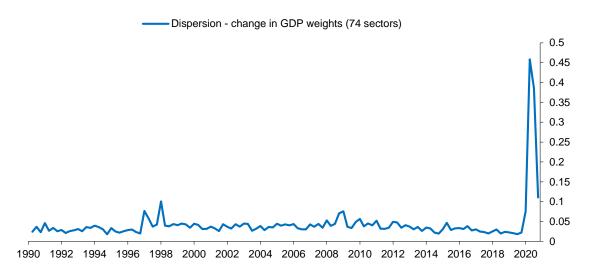
With consumption having fallen far further than aggregate income, a large amount of savings has been accumulated, in aggregate. In the period between March and November 2020, excess accumulated savings were estimated to be around £125bn, worth around 8% of annual household income. Significant further savings are likely to have been accumulated since then, possibly doubling or tripling the accumulated amount by the middle of this year.

As I have previously discussed,⁴ the effect of the pandemic on the economy has been unusually uneven. We are really not all in this together. Some sectors have experienced sharply reduced demand, some have seen little change, while others have experienced increases in demand. Chart 4 illustrates that these shifts across sectors have been much larger than in previous economic cycles.

³ Callaway & Ledford (2021), "How to Redesign Covid Vaccines so they Protect against Variants", Nature, Vol 590, available at: https://www.nature.com/articles/d41586-021-00241-6

⁴ Vlieghe (2020), "Assessing the Health of the Economy", speech available at: https://www.bankofengland.co.uk/speech/2020/gertjan-vlieghe-speech-assessing-the-health-of-the-economy

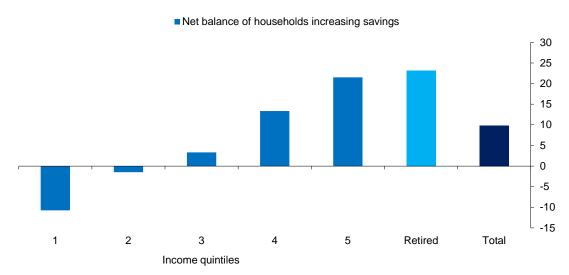
Chart 4: Dispersion of changes in GDP weights (percentage points quarter-on-quarter)



Source: ONS, Bank calculations. Series shows the cross-sectional standard deviation, period by period, of changes in each sector's GDP weight. Latest observation: 2020 Q4.

Across households, we have seen a similarly wide dispersion of experiences, illustrated in Chart 5. Households in the bottom 20%, or bottom quintile, of the income distribution have seen a marked decline in savings. Households in the next two quintiles have experienced small declines and small increases in savings respectively. It is mostly households in the top 40% of the income distribution that have experienced marked increases in savings, as their incomes have been largely maintained while consumption has fallen sharply.

Chart 5: Changes in household savings by income



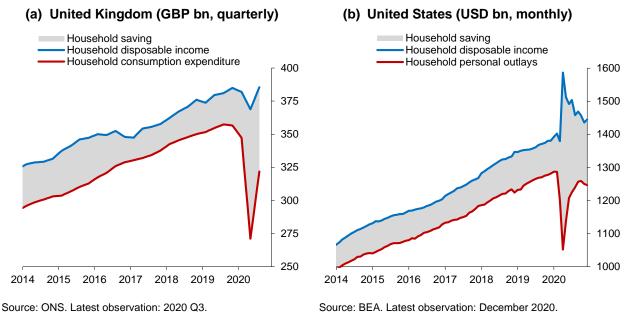
Source: NMG Consulting and Bank calculations. Notes: Net balance of increased-decrease responses to the question: 'Over the past year, did you change the amount of money you saved each month? Please exclude any contributions to pension schemes?'. Survey taken 25 August – 15 September 2020.

To what extent these savings will be spent once social restrictions and voluntary social distancing are eased is highly uncertain. The propensity to spend out of wealth is estimated to be quite small, with international estimates centred around 5%.⁵ That would suggest a boost in the level of consumption of around 1 to 1 ½ %, and this is what is already factored into our February projection.

The propensity to consume out of additional *income*, rather than wealth, is significantly higher than that, with estimates ranging from 10% to 50%. But the higher estimates relate to households that have low income or low liquid assets. The households that have actually accumulated the savings last year have both high incomes and are likely to have high liquid assets, so would tend to have a lower propensity to spend.

That begs the question: should we consider this unspent income as "additional income" or "additional wealth", or something else altogether? A comparison between UK and US income dynamics is instructive, shown in Chart 6. UK aggregate household income fell slightly in this pandemic – with income largely protected by the furlough scheme. But it is difficult to argue that the unspent savings represent "additional income" relative to what households may have been expecting before the pandemic. In the US, on the other hand, the pandemic stimulus cheques and the increase in unemployment benefits have led to a significant rise in household income relative to its pre-pandemic trajectory. That can more reasonably be interpreted as "additional income" for many. Moreover, it has, by design, been spread more evenly across the income distribution, so for both of these reasons one might expect US households to spend more of the accumulated savings than UK households.

Chart 6: Nominal income, consumption, and saving



⁵ See also the discussion in the February 2021 Monetary Policy Report, section 3.

In any case, the degree to which health risks dissipate later this year will be a key factor in determining to what extent savings are retained or spent. The more there are lingering health risks and associated economic uncertainty, the more it is likely that a larger share of the accumulated savings stock will be retained, and that the desired on-going flow of savings will remain somewhat elevated relative to pre-pandemic flows.

Given that we have never experienced an economic situation quite like the one we are now in, a wide range of outcomes are possible. I am genuinely uncertain about this, and it is something that reasonable people can disagree on. Given the scale of the amounts involved, even small changes in the assumed propensity to spend out of these accumulated savings lead to large changes in the expected outturns for consumption and the economy as a whole.

4. Inflation

The pandemic shock was fundamentally a disinflationary shock. Without significant support from fiscal and monetary policy to help protect jobs, income, credit and confidence, the economic impact on demand would have been greatly amplified resulting in severe disinflation. It is only thanks to the substantial fiscal and monetary support that the disinflationary impact is expected to be temporary, and inflation is expected to return sustainably to target. These are not just our expectations as MPC members, but also the expectations of external forecasters, as is shown in Chart 7.

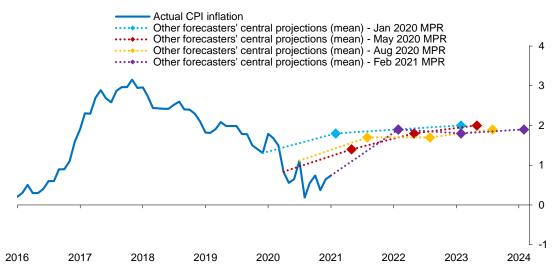
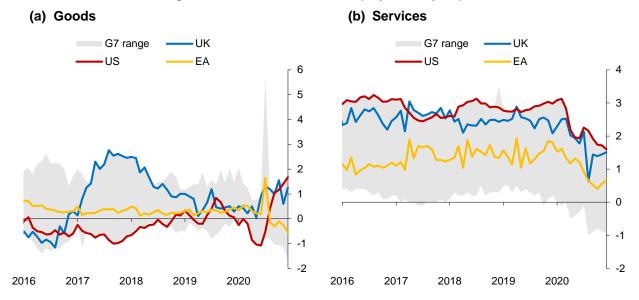


Chart 7: UK CPI inflation and external forecasters' expectations (% year-on-year)

Source: ONS, Bank of England. Latest observation: December 2020 (actual).

Despite the fact that the pandemic shock was clearly disinflationary, the detailed inflation picture that has emerged in recent months is difficult to interpret, given the large differences in the experience across various sectors.

Chart 8: International core goods and services inflation (% year-on-year)



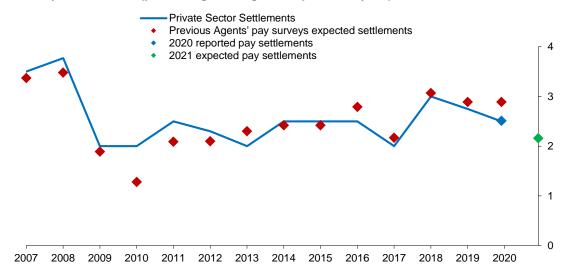
Source: Refinitiv Datastream. Latest observation: December 2020.

A crude summary is that consumption demand has been weak, but within that, services demand has, on average, been far more affected by social distancing than goods demand. Consistent with that sectoral shift, we have seen more disinflation in services than in goods. And, as shown in chart 8, this is a pattern that has been observed in other countries as well. Such large sectoral shifts can lead to temporary price moves that mask underlying inflation trends, as discussed in detail by my colleague Ben Broadbent⁶.

Wage data have been similarly difficult to interpret. Here, too, large sectoral shifts have masked underlying trends. When the jobs lost are disproportionally those at the lower end of the pay scale, the average pay of the remaining jobs is arithmetically higher. The strength of these compositional effects is difficult to estimate with precision. But the resulting strength in average pay is clearly not "underlying strength", because when the jobs return, the compositional boost will unwind. It is therefore important to form a view based on a range of pay-related indicators. One such indicator, which, although not particularly timely, has given us reliable signals in the past about underlying wage growth, is the Agents' pay settlements survey, shown in Chart 9. This shows that pay settlements, which had risen to around 3% in the past few years, are expected to fall back to around 2%, close to where they were in the long period of weak wage growth after the financial crisis. Other surveys of pay deals give a similar message.

⁶ Broadbent (2021), "Covid and the Composition of Spending", speech available at: https://www.bankofengland.co.uk/speech/2021/january/ben-broadbent-covid-and-the-composition-of-spending

Chart 9: Pay settlements (percentage change over previous year)



Source: Bank of England wage settlements database. For more information, see Box C in the February 2021 Monetary Policy Report.

It is important to distinguish these shorter term temporary fluctuations in price and wage data from underlying inflationary pressures. With the economy and the labour market running so far below its medium-term potential, we will ultimately need to close that gap to get inflation sustainably back to target.

5. Monetary policy toolkit

Over the past year, the MPC has cut the policy rate to 0.1%, judged to be the effective lower bound (ELB) at the time, and has announced QE, or asset purchases, of £450bn to ensure that financial conditions were stimulative enough to return inflation to its 2% target sustainably. For much of last year, both short-term and long-term interest rates have been close to zero.

To reiterate, the monetary policy response was not there to boost activity beyond safe levels while health risks remained acute. Rather, the monetary policy response was intended to prevent an unavoidable economic contraction from becoming unnecessarily amplified due to a high cost or unavailability of credit, a loss of confidence, and a lack of cash flow, which would in turn have caused unwarranted persistent damage to the economy.⁷

I have on many occasions explained my view that QE works primarily through expectations and liquidity channels, with only small and temporary term premium effects. As a consequence, when long term yields are already very low (close to the ELB) and there is ample liquidity in markets, there is little QE can do to add further stimulus to the economy.

⁷ I made this point on a few occasions, e.g., see Vlieghe (2020), "Monetary Policy and the Bank of England's Balance Sheet", speech available at: https://www.bankofengland.co.uk/speech/2020/gertjan-vlieghe-speech-monetary-policy-and-the-boes-balance-sheet

In the early stages of the pandemic, when market functioning was severely disrupted, the MPC acted quickly to buy UK government bonds on a large scale, as well as a smaller amount of corporate bonds. At the time, the QE bond buying pace happened to match, approximately, the pace of government issuance. That in itself was not a new development. As shown in chart 10, both in 2009 and 2012 the QE buying pace even exceeded government issuance of gilts. What was unusual last spring was that government issuance itself was unprecedented, which reflected the unprecedented scale of the economic shock leading to a very large fiscal response. That same unprecedented economic shock also required a very large monetary policy response, which the MPC delivered.

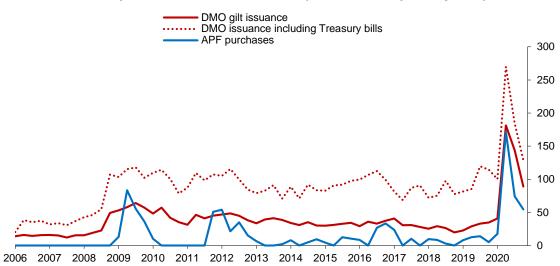


Chart 10: Issuance and purchases of debt securities (GBP billions, quarterly sum)

Source: DMO, Bank of England, and Bank calculations. Latest observation: 2020 Q4.

Chart 10 also shows that, when market functioning started improving, the QE buying pace slowed significantly, and is now well below the pace of government issuance. We are not simply buying what the government is issuing. We are buying much less. This shows clearly that the driving force behind the decision of how much to buy is what we think we need to buy to return inflation to its target, not how much the government happens to be issuing.

In the US, we also saw a rapid pace of central bank purchases during the period of market turbulence, followed by a much lower pace of purchases thereafter, also well below the pace of government issuance, (shown in Chart 11).

Bank of England: Weekly gilt purchases (% of 2019 nominal GDP) Federal Reserve: Weekly change in Treasury securities held (% of 2019 nominal GDP) 1.8 1.6 1.4 1.2 1 8.0 0.6 0.4 0.2 Mar 20 Apr 20 May 20 Jun 20 Jul 20 Aug 20 Sep 20 Oct 20 Nov 20 Dec 20 Jan 21

Chart 11: Bank of England and Federal Reserve QE purchase pace

Source: DMO, Bank of England, and Bank calculations. Latest observation: 29 January 2021.

Should market functioning deteriorate again, of course the MPC will not hesitate to accelerate the buying pace again, if that is appropriate to ensure that financial conditions are consistent with meeting the inflation target. But absent such a deterioration, and with long term interest rates already very low, we need to look for tools other than QE to deliver further stimulus if required.

It is therefore an important and welcome development that the MPC will be adding negative interest rates to its toolkit from August, once banks have made the necessary operational adjustments. The six-month period for operation readiness was the time frame recommended by the Prudential Regulation Committee.⁸

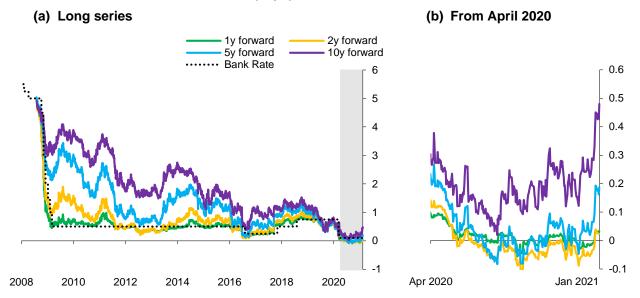
The possibility of negative rates, which the MPC started discussing last spring,⁹ has already been affecting the yield curve since then. Chart 12 (b) shows that forward interest rates out to five years have regularly been in negative territory over the past year, representing an amount of stimulus that would not have been present if we had ruled out negative interest rates. As shown in Chart 12 (a), in previous years, when there was not a live discussion about the possibility of negative interest rates, the actual level of Bank Rate tended to act as a lower bound for forward interest rates.

I have previously observed that the question of negative rates can be broken down into whether they are feasible, effective, and appropriate. From August 2021, negative rates will be feasible.

⁸ As explained in more detail in the MPC Minutes, February 2021, para 68. Available at: https://www.bankofengland.co.uk/media/boe/files/monetary-policy-summary-and-minutes/2021/february-2021.pdf

⁹ See for example the Governor's comments at the Treasury Committee, 20 May 2020, Q502. Available at: https://committees.parliament.uk/oralevidence/415/html/

Chart 12: Instantaneous forward rates (% pa)



Source: Bloomberg and Bank calculations. Notes: Forward rates derived from Sterling Overnight Indexed Swaps. Latest observation: 12 February 2021.

I also conclude from the large amount of evidence gathered from countries that already have negative rates, ¹⁰ that negative rates are effective. That is to say, negative rates stimulate the economy and lending relative to a counterfactual where rates are not cut any further. Some research papers find cuts into negative territory as effective as cuts in a positive range, while others find that the effectiveness is slightly reduced. But there has been no evidence that negative rates have been counterproductive to the aggregate aims of monetary policy.

There is a theoretical possibility that, below a certain level, further cuts in interest rates do become counterproductive to the aims of monetary policy. 11 That is still possible, but we have seen no evidence that any country has reached these levels yet. Where these theoretical models have been too pessimistic, in my view, is in the assumption that deposit demand would shrink rapidly near zero interest rates, because everyone would want to convert their deposits into paper money to avoid negative interest rates. In practice, the inconvenience of holding paper money has meant that people *are* in fact willing to hold a range of assets with negative nominal rates, including corporate bank deposits, large retail deposits, and wholesale bank funding instruments. Banks have therefore seen a fall across a wide range of interest rates on their liabilities, which has allowed them to preserve their interest margin much better than simple models had assumed.

Banks might not pass on the rate cuts in full, but even a partial pass-through would be stimulative. Importantly, the transmission of monetary policy is much broader than just via the interest rate on bank

As summarised in Tenreyro (2021), "Let's Talk about Negative Interest Rates", speech available at: https://www.bankofengland.co.uk/speech/2021/january/silvana-tenreyro-lets-talk-about-negative-interest-rates
 Brunnermeier & Koby (2018), "The Reversal Interest Rate", NBER Working Paper No. 25406, available at: https://www.nber.org/papers/w25406

loans. The cost of market financing (bonds, shares) would fall as normal, the exchange rate would fall as normal.

The final question then remains in what circumstances negative interest rates are appropriate, meaning when are they needed in order to return inflation sustainably to target? I will turn to that in the next section.

6. The outlook for monetary policy

I will now discuss some possible outcomes for the economy, and what they might imply for the future stance of monetary policy.

The MPC published its best collective view of the economic outlook in the February Monetary Policy Report. This outlook comprises not just a central path for the economy, but a fan chart around that central path incorporating both upside and downside risks. Moreover, the MPC gave specific guidance on the future setting of monetary policy in its February Minutes. It is useful to highlight two key sentences: "If the outlook for inflation weakens, the Committee stands ready to take whatever additional action is necessary to achieve its remit. The Committee does not intend to tighten monetary policy at least until there is clear evidence that significant progress is being made in eliminating spare capacity and achieving the 2% inflation target sustainably".

What I want to do is to discuss some illustrative scenarios for the economy that fall within the fan chart of the Monetary Policy Report, and to discuss what my preferred Bank Rate path might look like in each of these scenarios. The Bank Rate paths I am showing are consistent with the MPC's guidance, but the guidance encompasses a wide range of other paths as well. I want to be very clear that these are my own personal views, and do not represent the view of the MPC. And I emphasise that any future rate path that I discuss is not a promise, it is my own forecast based on a particular economic scenario. ¹² If the data turn out differently, so will the associated rate path.

If the economy evolves broadly in line with our February central projection, then in my view it is likely that no further monetary stimulus is required. The current stance remains appropriate, and we will just complete the already announced QE programme. For me the question will then turn to when it becomes appropriate to remove stimulus. Given how low I think the neutral rate of interest is, there is no hurry at all to remove stimulus. This view of a low neutral rate is further supported by the fact that, immediately before the pandemic, our policy rate was just 0.75% and we were discussing whether it should be cut because inflation pressures were a little too weak. Given these considerations, my preferred path for policy would be to keep the current monetary stimulus in place until well into 2023 or 2024, long enough to judge whether economic

¹² I have discussed the benefits of providing more clarity in our preferred path before, see Vlieghe (2019), "Continuous improvements in communicating monetary policy", speech available at https://www.bankofengland.co.uk/speech/2019/gertjan-vlieghe-thomson-reuters

slack has indeed been eliminated fully, and inflation has returned to target sustainably, rather than being pushed up by temporary factors.

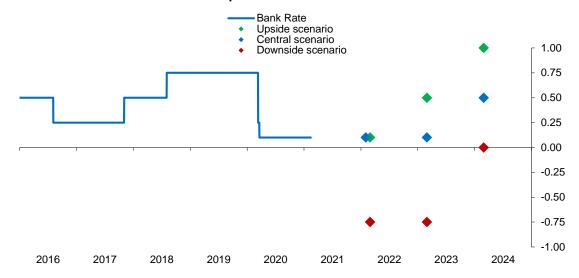
Stronger economic scenarios are of course possible. More of the accumulated savings could be spent in the coming years, so that spare capacity is not just eliminated, but the economy moves into excess demand. I would want to judge whether that excess demand is persistent or not, so I would favour not responding to the first signs of it, as long as inflation expectations remain anchored. It is perfectly possible that we have a short period of pent up demand, after which demand eases back again. In my judgement it would be a policy error to respond to such circumstances with early monetary tightening. Tightening too soon would be a worse mistake than tightening too late, given that monetary policy space for easing is limited. So even if the economy recovers more strongly than in our central projection, I think removal of monetary stimulus is unlikely to become appropriate until well into 2022. Such a strong economic scenario would be a nice problem for the MPC to have. We have all the policy space we need in order to tighten monetary policy. And given low neutral interest rates, is likely we would not have to tighten all that much.

There is also the possibility of a weaker scenario, and my own view is that risks remain skewed in this direction. First, there is the risk that concerns about the virus will linger, in part driven by uncertainty about future variants, but also by a slower pace of vaccination outside the UK, so that the economic impact of health risks will be greatly reduced but not eliminated this year. In the words of renowned global health expert Peter Piot: "The pandemic is not over anywhere until it's over everywhere". Second, I worry that, as we transition out of the furlough scheme, some of the furloughed workers will not be seamlessly reintegrated into the labour market. This transition is to some extent already present in the MPC's central projection, and has been for some time. But I worry that the resulting labour market slack will be more persistent and more disinflationary than in our central projection. Even a small amount of persistent labour market slack would be enough to keep wage pressure too low, and therefore inconsistent with inflation returning sustainably to target. In such a scenario, I judge more monetary stimulus would be appropriate, and I would favour a negative Bank Rate as the tool to implement the stimulus. The time to implement it would be whenever the data, or the balance of risks around it, suggest that the recovery is falling short of fully eliminating economic slack, which might be later this year or into next year. After the further boost delivered by negative rates to eliminate slack, interest rates can begin to return to positive.

These are just some of the possible scenarios, and I am showing them graphically in Chart 13. But I think they illustrate usefully what sort of timing and magnitude of policy adjustments I would find appropriate in different circumstances, without committing to them and without any implication that others on the MPC share these views. As always, the actual policy settings will be determined by how the data evolves, and will be such that we ensure that inflation returns to its 2% target sustainably.

¹³ See: "Professor Peter Piot comments on halting funding to the WHO", available at: https://www.lshtm.ac.uk/newsevents/news/2020/professor-peter-piot-comments-halting-funding-who

Chart 13: Three scenarios for the future path of Bank Rate



Source: Bank of England. Notes: Diamonds show hypothetical levels of Bank Rate in one, two, and three years' time.