



BANK OF ENGLAND

Speech

The Economy and Covid-19: Looking Back and Looking Forward

Speech given by

Michael Saunders

External Member of the Monetary Policy Committee

Bank of England

Online webinar

4 September 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 Andrew Bailey, Harvey Daniell, Jonathan Haskel, Jamie Lenney, Nick McLaren, Michael McLeay, Mette Nielsen, Silvana Tenreyro and Gertjan Vlieghe, for which I am most grateful.

In this speech, I want to look back over some of the economic developments during this year, and to look forward to the prospects for the next year or two.

Looking back, the Covid-19 pandemic, and the measures designed to tackle it, have had dramatic effects on economic activity in recent months. As Covid-19 spread early this year, increased social distancing, higher uncertainty and the lockdown caused activity to weaken very sharply in March and April. Since then, as the lockdown has eased, the rebound in activity appears to have been a bit faster than the scenario in the May MPR. Even so, GDP fell by about 22% over Q1 and Q2 combined, the biggest two quarter decline on record.¹

By contrast, the LFS data suggest that employment and unemployment have been relatively stable over that period. The jobless rate remained close to a record low in Q2, while the share of the adult population in work apparently remains around a record high. In an even bigger contrast, broad money growth (M4) has been exceptionally strong, rising from below 5% YoY in February to 12.4% YoY in July – the highest since 1990.² This mix is very different to prior recessions, which generally saw money, jobs and GDP weaken together.

Figure 1. UK – Monthly Level of Real GDP and Retail Sales, Indexed to 2018 Jan = 100

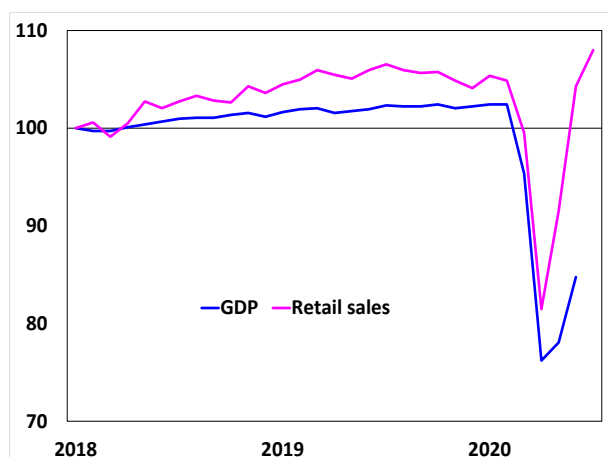
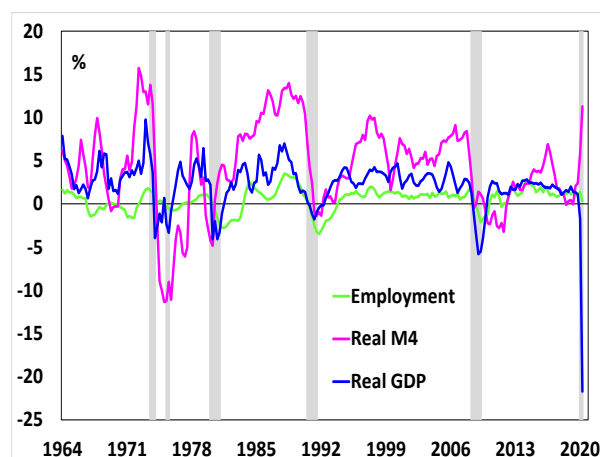


Figure 2. UK – YoY Growth Rates of Real GDP, Real M4, Employment, Qtlly Data



Note: In the right chart, M4 since 1998 is measured excluding deposits held by non-bank financial intermediaries, and is deflated by the CPI. Shaded periods denote recessions. Sources: ONS and Bank of England.

In this speech, I want to make four main points:

¹ There is always some uncertainty about GDP measurement, and recent data may well be revised over time. But, with marked weakness in business surveys and timely indicators of economic activity, there is no reason to doubt the key point that activity has fallen very sharply over the last two quarters.

² M4 is defined as the holdings by the private sector excluding monetary financial institutions (MFIs) of notes and coin, sterling deposits including CDs, as well as commercial paper, bonds, FRNs and other instruments up to five years original maturity issued by UK MFIs. Sterling deposits account for the vast bulk of this. Data refer to M4 excluding deposits held by non-bank financial intermediate companies since 1998, overall M4 before 1998. The recent growth rates are similar for overall M4.

- The economy's faster-than-expected rebound in the last few months has reflected a benign window in which large fiscal support has coincided with the relaxation of lockdown measures and low infection rates. This window may now be closing.
- Unemployment is likely to rise significantly in coming quarters as the furlough scheme winds down and workforce participation recovers.
- The strength in money growth is an indication of the exceptional level of fiscal and monetary policy support in recent months. It is unlikely to translate into excess spending given the economic impact from Covid-19.
- Looking forward, I suspect that risks lie on the side of a slower recovery over the next year or two and a longer period of excess supply than the forecast in the August MPR. If these risks develop, then some further monetary loosening may be needed in order to support the economy and prevent a persistent undershoot of the 2% inflation target.

Let's start with the **economy's recent performance**. The available evidence suggests that GDP fell a bit less than expected in April as the full effects of the lockdown came through, and has recovered faster than the May scenario since then.

I would be cautious about extrapolating much from this apparent outperformance. The uncertainty around the May MPR scenario was particularly high, given the limited information available at that stage on the extent of the decline in activity during the lockdown. In the May MPR, the MPC did not publish the usual fan charts around our GDP profile, because we judged there was no reliable way to estimate the uncertainty around the central path. The preliminary Q2 GDP data were well within my personal estimate of the margins of error around our published scenario. In addition, some areas of consumption were less constrained than expected during the lockdown, with a marked shift to online sales and some substitution among particular areas of spending (eg a shift from eating in restaurants to takeaways). And the lockdown eased earlier than anticipated, advancing some of the expected consumer rebound.

I also suspect that government support measures – for example the JRS, increased benefits, tax payment deferrals, mortgage holidays and so forth – turned out to be more powerful than expected in supporting household incomes and spending. This partly reflects a greater-than-expected impact from measures announced before the May MPR, and partly reflects measures (including extra spending) announced after the May MPR was finalised.³

³ The OBR's estimate of the scale of the fiscal support measures in 20/21 introduced in response to the Covid-19 pandemic has risen from £123.2bn on 14 May (just after the May MPR was published) to £192.3bn on 14 July. This includes measures in the July Summer Economic Update, some of which had already taken effect before that Update.

The OBR estimates that extraordinary fiscal support measures announced so far in response to the Covid crisis total about £192bn in the current fiscal year, equal to roughly 9% of annual GDP. These measures are heavily front-loaded in their impact. More than half (£108bn) was concentrated in the April-June quarter, equal to 19% of last year's average quarterly GDP.⁴ Fiscal support has been smaller in the third quarter, and diminishes during the quarter. Even so, it is still worth about £54bn for Q3 as a whole, (equal to 10% of last year's quarterly GDP), including significant deferrals of tax payments for people subject to self-assessment.

So far, that fiscal support has, to a considerable extent, shielded aggregate household incomes from the decline in activity. For example, official figures suggest that the direct effect of government support measures added roughly 20% to the average incomes of working households in May.⁵ To be sure, there is considerable variation among households, and some have felt a sizeable squeeze in incomes. Nevertheless, the August MPR projects that, in aggregate, household real post-tax labour income in Q2 and Q3 will be significantly up from a year ago and actually will be stronger than in the January MPR forecast, before Covid effects became significant.⁶ Within that, wage and salary income probably will be weaker than in the January MPR forecast (despite the furlough scheme), but there is a modest offset from lower inflation and a large offsetting boost from increases in welfare payments, temporary tax cuts and tax deferrals.

Figure 3. UK – Timing of Covid-Related Fiscal Support Measures in 20/21 Fiscal Year, As Pct GDP

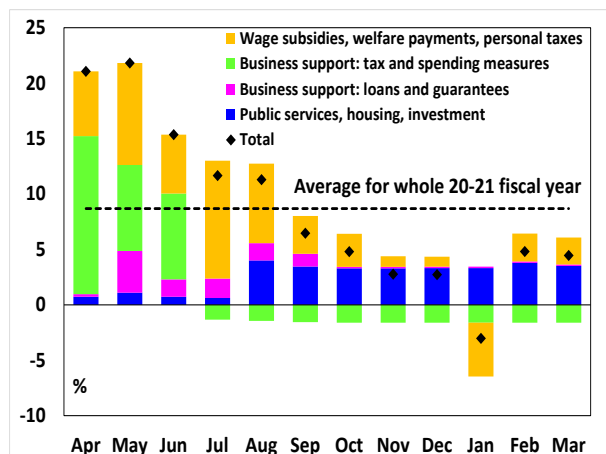
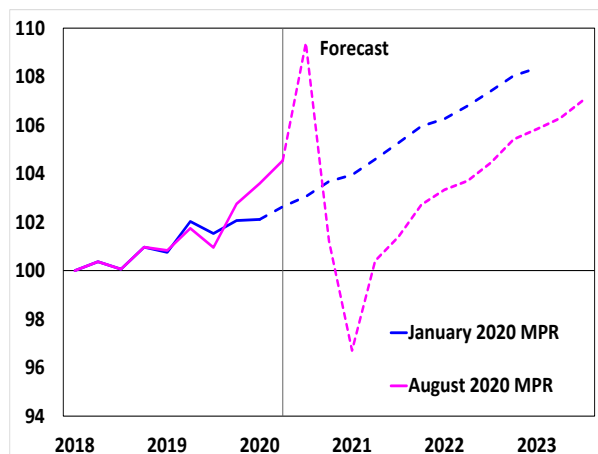


Figure 4. UK – Household Real Labour Income, Indexed to 2018Q1 = 100



Note: In the left chart, the measures are compared to the average level of monthly GDP in 2019. Sources: OBR, ONS and Bank of England.

⁴ The OBR provide estimates for the timing of some fiscal measures. Others are the author's estimates. The timing reflects the effects on the fiscal deficit. The timing of the effects of these measures on economic activity may differ. These figures only include the impacts of government lending schemes in so far as they affect the fiscal deficit. If one allows for the full cashflow effects of these lending schemes, the figure for total support in 2020/21 would be higher, especially in the last few months. The figures are expressed as a percentage of 2019 average quarterly GDP. The figures will be higher compared to the actual lower level of GDP this year.

⁵ See HMT (2020). The total impact of government support schemes on household incomes, including indirect effects of measures supporting company cashflow and increased spending on goods and services, probably has been greater.

⁶ This is defined as wage and salary income, plus government transfers to households, less direct tax payments, and deflated by the consumer spending deflator. Household disposable income – which is slightly broader in coverage – is more volatile, but is also expected to be a little stronger in Q3 than the January MPR forecast.

In all, the economy in June, July and August has benefited from a relatively benign confluence of factors: fiscal support has remained very high, the easing of lockdown has allowed more spending including pent up demand, while the lagged effects of lockdown have kept infection rates low and reassured consumers.

However, even that very limited sweet spot may now be fading. Covid-19 infection rates in the UK and elsewhere in Europe have been rising for several weeks. In turn, timely indicators suggest that consumer confidence has levelled off. Moreover, the government's current plans imply that net fiscal support measures will fall to an average of £15bn per quarter (2-3% of GDP) in Q4 2020 and Q1 2021. There are some new stimulus measures scheduled to come through, such as the job retention bonus. However, the large support from the JRS and SEISS will end, and tax payments deferred from Q2 and Q3 will be due. As a result, the MPC's forecast in the August MPR implies that, from the Q3 level, household real post-tax labour income will fall over the next year and will stay below the Q3 level throughout the next three years.

Given this, I do not interpret the economy's recovery in the last few months as a strong signal that further upside surprises lie ahead. I shall discuss some risks to the outlook more fully later.

Let me turn to the **jobs data**.

The resilience of the LFS employment and unemployment data does not mean the recession has left the labour market unscathed. There are more uncertainties than usual over the accuracy of the LFS data given reduced sample sizes. But I doubt that the stability in unemployment is just due to mismeasurement. Other LFS indicators show that the amount of paid work has weakened markedly since the start of the year.

- The total level of hours worked in the economy fell by 18% QoQ in Q2 (and fell by 19% YoY), roughly in proportion to the drop in Q2 GDP.⁷
- The share of those in employment who report they are temporarily away from paid work soared to 25% in April and May, compared to normal levels of around 7%, and remained high, at around 23%, in late June.
- There has been a sharp rise in the number of people working fewer hours than usual, with the overwhelming share of these citing Covid-19 as the key factor.

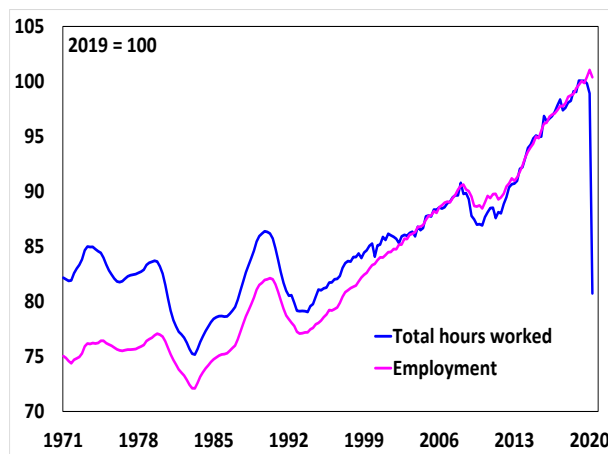
These measures all signal very significant weakness in the labour market. The stability of the official data on jobs and unemployment are outliers in the general picture of severe weakness.

The key factor, again, is official support measures. The JRS has greatly limited the pressure on firms to cut jobs. HMRC data suggest that on average 8 million jobs (27% of all employee jobs) were furloughed under

⁷ In the LFS, people are usually interviewed over five successive periods. First-time non-respondents are assumed to have the same labour market status, including hours worked, as in their prior interview. Excluding this group, total hours worked fell by 28% YoY in Q2. On both measures, the decline in hours is fairly close – given uncertainties – to what one would expect given the drop in GDP.

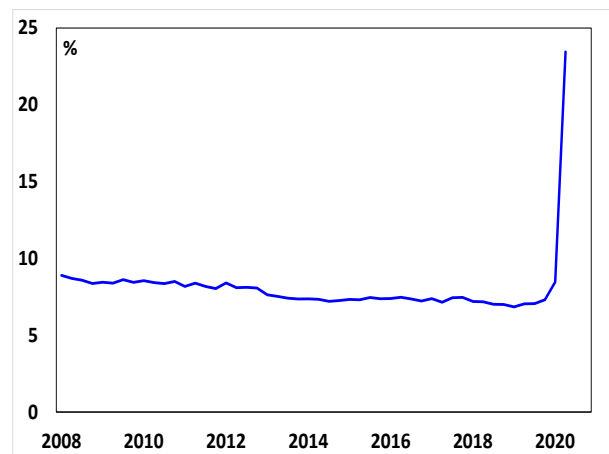
the JRS in Q2. The SEISS has reduced the need for self-employed workers who were unable to work as usual to seek other forms of work, and 2.6 million self-employed workers (55% of self-employed workers, and 8% of total employment) made claims under this scheme by end-July. Moreover, the business support measures (eg loan schemes, tax payment deferrals) probably have also helped firms to limit job cuts. Had these schemes not been available, it is highly likely in my view that the collapse in hours worked in Q2 would have been reflected in a sharp drop in employment.

Figure 5. UK – Level of Total Hours Worked And Number of People in Employment, 2019 = 100



Sources: ONS and Bank of England.

Figure 6. UK – Pct of Those in Work Classified as “Temporarily Away From Paid Work”



In addition, the lockdown probably meant that more people were classed as inactive in labour market terms, either because they were not actively looking for work or were not available to start work.⁸ Many jobs cannot be done from home and some people may have been reluctant to leave home, perhaps because of health concerns, child care responsibilities, or reluctance to use public transport. There are signs of such effects in the LFS data. For example, there has been a sharp rise in the number of people who are classed as inactive but say they would like to work, as well as a marked drop in workforce participation among the over 65s (who might be most reluctant to seek work during the pandemic). There also was a very large flow of people from unemployment to inactivity in the second quarter.

Similar factors capped unemployment in Q2 across other European economies. Many other countries had job support schemes, of varying sizes. And countries had varying degrees of lockdown (which affected participation). Looking across countries, the relation between the QoQ changes in GDP and unemployment rates in Q2 looks counter-intuitively positive. Some countries with large declines in GDP (eg Ireland, France, Spain and the UK) saw little or no rise in unemployment. Conversely, some countries (eg Estonia, Latvia, Lithuania and Sweden) experienced large rises in unemployment despite relatively small declines in activity. The overall euro area jobless rate was roughly stable in Q2 (like the UK), despite a 12% drop in GDP.

⁸ In the LFS, people are counted as unemployed if they are out of work, have looked for work in the last four weeks, and are available to start work in the next two weeks, in line with the international definition of unemployment specified by the ILO.

Figure 7. Advanced Economies – Pct of Employees on Job Retention Schemes During Lockdown

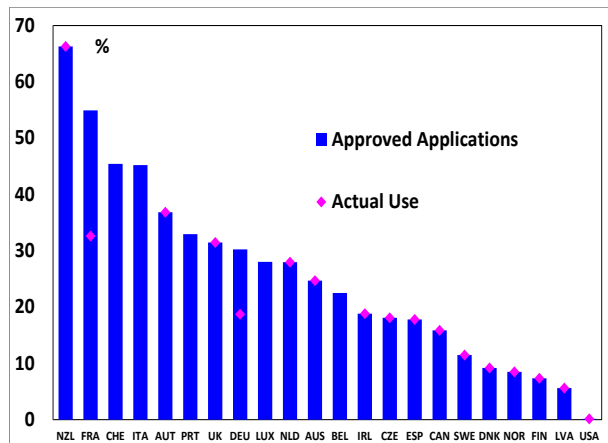
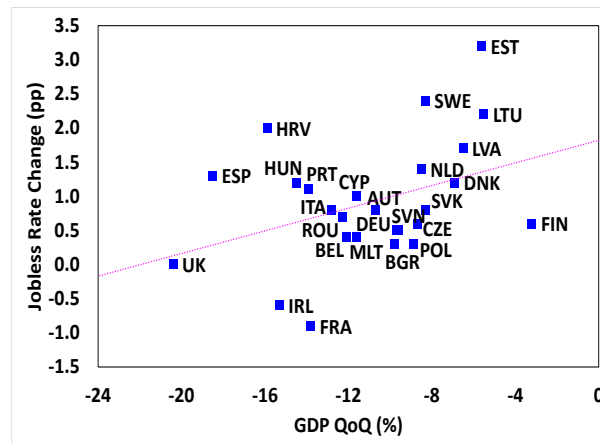


Figure 8. EU and UK – QoQ Change in Real GDP and Jobless Rate in Q2 2020



Note: In the right chart, 2020 Q2 GDP outturns where available, otherwise showing European Commission's Summer 2020 Economic Forecast. The change in the unemployment rate is between June 2020 and March 2020. Sources: Eurostat, European Commission, OECD, ONS and Bank of England.

A panel regression across European countries (see Appendix) suggests that, for a given pace of GDP growth, unemployment tended to rise by less (or fall) in Q2 in countries with more extensive official job support schemes (ie the furlough effect), or more stringent lockdowns (which affects participation). Allowing for effects of job support schemes and lockdowns, the usual negative relationship between GDP growth and unemployment re-emerges. In this context, the lack of any significant rise in UK unemployment in Q2 is not so surprising, with the upward pressure on unemployment from the marked drop in Q2 GDP offset by the relatively large scale of the UK official job support schemes and relatively long period of stringent lockdown.

Looking ahead, the dampening effects on unemployment in the UK from furlough and participation are likely to diminish in coming months. With the lockdown having eased, participation is likely to recover, because more people should be able to look for work and be available to start work, especially if schools are open as planned. The furlough scheme will be wound down by end-October, although firms will be eligible to receive a £1000 bonus for every furloughed employee who remains in employment until end-January.⁹

The share of private sector employees who are furloughed has already fallen from 30% in May to about 11% in mid-August (according to the ONS BICS data). So far, it appears that most of those moving off furlough have returned to work with the same firm. But it is likely that firms experiencing stronger demand will be relatively quick to bring staff back from furlough, and that a higher share of those still furloughed are in firms

⁹ The JRS was closed to new entrants from mid-July, while employers have had to bear an increasing share of the costs of furloughed staff since early August.

that are not currently trading or face weaker activity. This implies that, of those still on furlough, a relatively high share may become unemployed.

As a result, unless activity and hours worked quickly recover the lost ground, unemployment is likely to rise markedly. The news in this respect is worrying. Job vacancies are down by 55% YoY and business surveys show marked weakness in firms' hiring intentions. There has been a wave of redundancy announcements over the last few months. In turn, unemployment fears are becoming more widespread, with a marked rise in the share of people that expect unemployment to rise sharply in the year ahead.

Figure 9. UK – Pct of Employees on Furlough

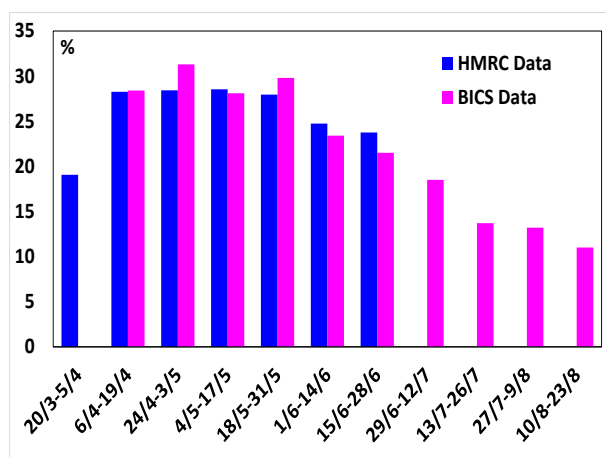
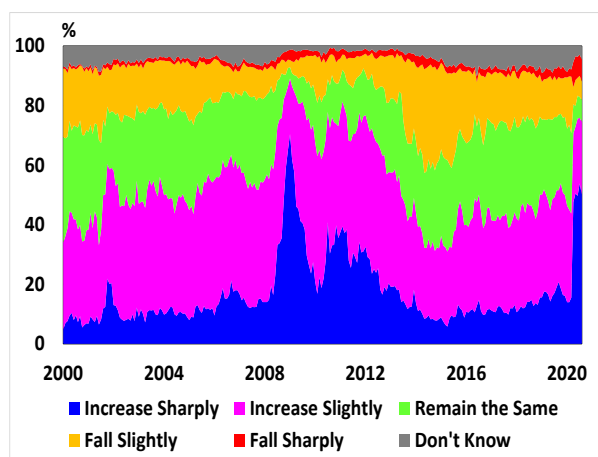


Figure 10. UK – Pct of People Expecting Unemployment to Rise Sharply/Rise Slightly/Stable/Fall In Year Ahead



Note: In the left chart, HMRC publish data for the number of furloughed jobs. These are shown as a percentage of total employee jobs. The BICS series is measured as a share of private sector employees. Sources: HMRC, ONS Business Implications of Covid Survey, European Commission and Bank of England.

In the August MPR, the MPC's central forecast was that the LFS jobless rate will nearly double by yearend, rising from 3.9% of the workforce in Q2 to 7.5% in Q4. The scale of the projected rise in unemployment (about 3½ pp) is similar to that seen in 2008-11, but it occurs much faster. Indeed, it would be, by some distance, the sharpest rise in unemployment for at least 50 years.¹⁰ While there are uncertainties around that forecast, my view is that the picture of a sharp rise in unemployment is – sadly – highly plausible.

What do the **money data** tell us?

The surge in broad money growth is widespread, with strong gains across all the main sectors. The growth of M4 held by private non-financial companies has picked up especially sharply, reaching 25% YoY in July (highest since 1986) and with an annualised gain of 45% in the last three months. Broad money held by

¹⁰ LFS data began in 1971. Since then, the unemployment rate has never risen by more than 2 percentage points over a six month period.

non-bank financial companies rose strongly in March but its growth has cooled a little since then. Household M4 growth has picked up less dramatically but, at 7.7% YoY, it is the highest since 2008.

For an individual household, you could explain a rise in their M4 holdings as a side effect of higher savings. The household saving ratio has indeed risen sharply, partly reflecting the restrictions on spending during the lockdown and partly reflecting higher uncertainty and increased caution. But while this story of higher savings lifting M4 growth might hold at an individual level, it is not the whole story at an aggregate level. The spending of one household affects other people's incomes. A marked rise in household savings tends to result in weaker economic growth (the paradox of thrift), and this is usually reflected in lower broad money growth (as in 1990/92 and 2008/09).

Figure 11. UK – YoY Growth of Broad Money (M4) held by Households, Private Non-Financial Companies and Non-Bank Financial Institutions

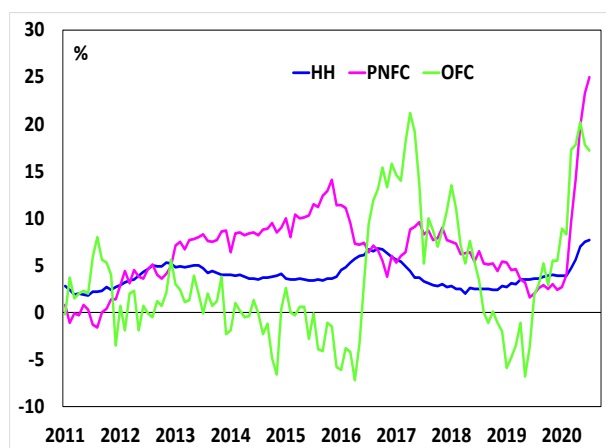
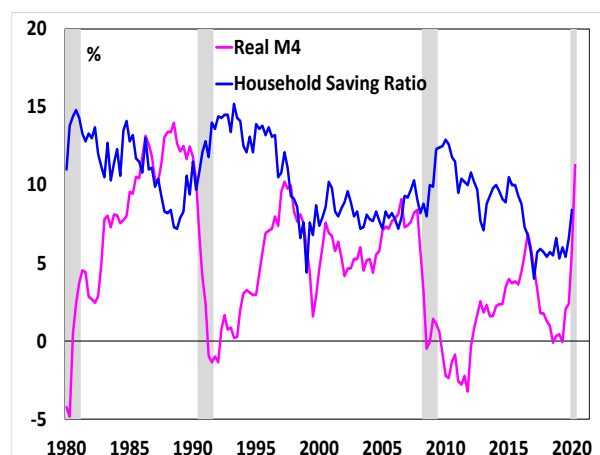


Figure 12. UK – Household Saving Ratio and YoY Growth Rate of Real M4



Note: In the left chart, OFCs are non-intermediate other financial institutions. In the right chart, the household sector includes non-profit institutions. Shaded periods denote recessions. Sources: ONS and Bank of England.

Using the standard counterparts, broad money growth is usually mainly driven by the growth of private sector credit. At times, swings in non-deposit liabilities, or external counterparts, play a role. Public sector transactions also can be important, especially during periods of QE.

One key difference with those previous downturns is that private credit growth has held up this year, hence supporting broad money growth. In those previous downturns, the drop in activity was demand-driven, as households and businesses retrenched in response to monetary tightening and over-extended balance sheets. This was reflected in marked weakness in credit and hence also in broad money. By contrast, the recent downturn was in part triggered by mandatory restrictions on activity. Households borrowed less, but firms sought to borrow more to fill the gap as profits weakened, so that overall demand for credit held up. And, thanks to the marked rise in their capital ratios during the last decade, banks have been much better placed than previously to meet that demand for credit.

But the key factor that has allowed money growth to *accelerate* while the economy has shrunk has been the extraordinary scale of monetary and fiscal stimulus during this year. As noted earlier, household incomes have been supported by a sharp rise in government transfers, wage subsidies, and deferred tax payments. There has been an extra cashflow benefit from deferrals of mortgage payments.¹¹ Official lending schemes have helped to maintain credit supply, especially for companies.¹² Company cashflows have also been supported by tax deferrals. As a result, despite lower profits, the share of companies that report they have enough cash reserves to cover at least six months of operations is a little higher now than a few months ago. All this has been backed up by the BoE's asset purchase programme, which (to the extent that bonds have been bought from the non-bank private sector) acts directly to boost broad money growth.¹³ With the combination of the rising fiscal deficit and sizeable asset purchases, public sector transactions mechanically explain most of the strength in broad money in the last couple of quarters.¹⁴

Figure 13. UK – Contributions to YoY M4 Growth (MFIs Balance Sheet Counterparts)

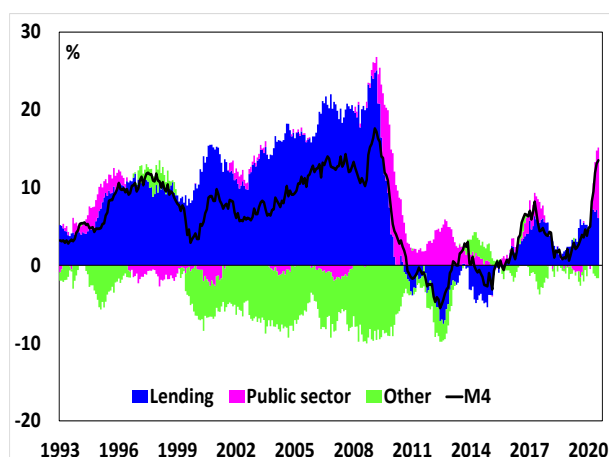
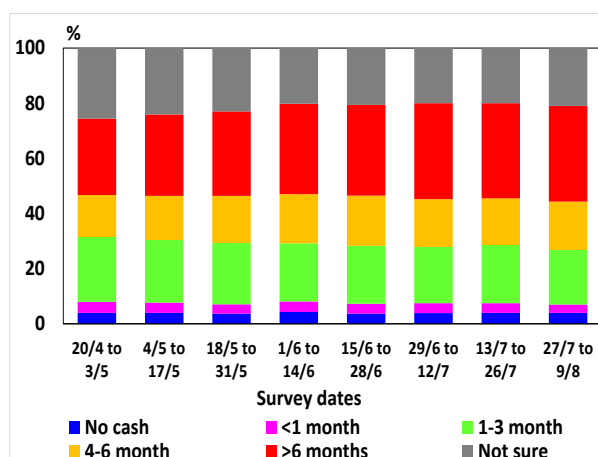


Figure 14. UK – How Long Will Firms' Cash Reserves Last?



Note: Data in the right chart are from the Business Impact of COVID-19 Survey. Sources: ONS and Bank of England.

A monetarist perspective might imply that this surge in broad money growth signals the prospect of a strong recovery in activity and possible overheating over the next couple of years. In such a view, households and businesses aim to hold an equilibrium level of money and a substantial excess of money, if sustained, would prompt extra spending (this could occur directly or via asset price inflation and wealth effects).

¹¹ Finance UK report that from the number of mortgage payment holidays granted by lenders reached 1.9 million in June, 17% of the number of outstanding mortgages. Another indication is that the average monthly level of regular repayments of mortgage debt in April-July was 13% below the Q1 average.

¹² In all, the BBLS, CBIL, CLBIL and CCFE schemes have provided companies with roughly £70bn of funding since mid-March.

¹³ These transactions are reflected most directly in a rise in deposits held by non-bank financial companies.

¹⁴ The public sector contribution to M4 is defined as the public sector net cash requirement less net sales of government debt to the non-bank private sector.

There is some evidence that changes in broad money affect spending.¹⁵ And the economy's prospects are certainly much better than if such large policy support had not been forthcoming. But I wouldn't get too carried away by this prospect of money-fuelled inflation pressures. In particular, I suspect that under current conditions, households and companies will want to hold relatively high levels of liquid assets (especially deposits), both in the nearterm and further ahead. In other words, the crisis has lifted the demand for money – the amount of deposits that households and businesses would like to hold – as well as the rise in the supply of money described above.¹⁶

This 'dash for cash' escalated rapidly during March, as evidence of rising Covid infection rates accumulated and activity began to weaken markedly. Bank lending to non-financial companies, and M4 held by these companies, both showed record monthly growth in March. In financial markets, strains rapidly became acute, as the increased volatility of asset prices forced some leveraged investors to sell and prompted a widespread dash into bank deposits.¹⁷

Financial market strains have eased considerably since then. But demand for money probably remains relatively high. With the very low level of gilt yields and term premia, financial investors may be willing to hold relatively high levels of deposits as a low-risk alternative to gilts.¹⁸ More widely, households and non-financial businesses are likely to want to hold higher levels of liquidity as a buffer against the very high levels of uncertainty over incomes, profits and the future availability of credit. Previous experience suggests that firms with higher liquidity levels are better able to weather economic storms – with greater resilience in investment, and stronger trends in market share and profitability – than firms with lower liquidity levels.¹⁹ Of course, some firms may be able to borrow instead, using their capital stock as collateral. However, credit availability in general tends to worsen in downturns. And firms with a higher level of intangible capital (eg branding, R&D, well-trained teams, specialised IT) may find that it is harder to use that capital as collateral, increasing their incentives to hold larger buffer stocks of deposits.²⁰

Before this pandemic, many households and businesses had quite limited financial buffers. The median level held in bank deposits among UK households early this year was just £5,000.²¹ Roughly one third of households have less than £1,000 in the bank (equal to less than two weeks of median disposable income).²² For the UK non-financial business sector, aggregate top-down data suggest that the level of sterling deposits before the pandemic was equal to roughly six weeks of turnover. The data show some

¹⁵ See Cloyne *et al.* (2015).

¹⁶ See Bullard (2020) for a similar discussion in the context of the US.

¹⁷ See speeches by Brazier (2020), Cunliffe (2020) and Hauser (2020).

¹⁸ This preference for deposits may be reinforced by the experience of having seen a range of assets that were previously classed as relatively safe and liquid briefly become relatively illiquid and volatile in March.

¹⁹ See Joseph *et al.* (2020).

²⁰ See Haskel and Westlake (2018). There is evidence that firms with high levels of intangible capital hold higher liquidity in order to compensate for reduced scope to use their capital as collateral for borrowing. See Falato, Kadyrzhanova and Sim (2013) and Hosono, Miyakawa, and Takizawa (2017). In addition, housing collateral is an important source of collateral for many firms, see Bahaj, Foulis and Pinter (2020). Uncertainty over future house prices may therefore add to uncertainty over the future availability of credit, increasing incentives to hold more liquidity.

²¹ The average was higher, about £35,000 per household, with a small number of people holding substantial amounts.

²² Median household disposable income in 2019/20 was £30,800 per year, according to ONS data released on 22 July 2020.

sectoral variation, with relatively high figures for professional services, education and human health, and relatively low figures in retailing and wholesaling (1-2 weeks), manufacturing (3-4 weeks), as well as transport and storage (also 3-4 weeks). These averages are inflated by a few very cash-rich companies. Across a sample of 70,000 non-financial companies for the latest available financial year (which in most cases is 2018-19), roughly one third of companies have liquid assets equal to less than one week of turnover.²³ Slightly more than half of firms have liquidity equal to less than four weeks' turnover (the median is 3½ weeks of turnover). The median is even lower in some sectors, at just below 2 weeks' turnover in retail and wholesaling, as well as transport and storage. The median is around 3 weeks in manufacturing, as well as accommodation and food services.

It is notable that the sectors which suffered the biggest declines in activity this year generally held relatively low levels of liquidity before the pandemic. For example, in sectors where GDP in April-May fell by more than 25% YoY (eg accommodation and food services, manufacturing, retailing), the level of sterling deposits before the pandemic was equal to only about four weeks of turnover (and the median among companies was just 3 weeks).

Figure 15. UK – How Much Cash do Households Have? Pct of Households With Bank Deposits up to Specified Levels

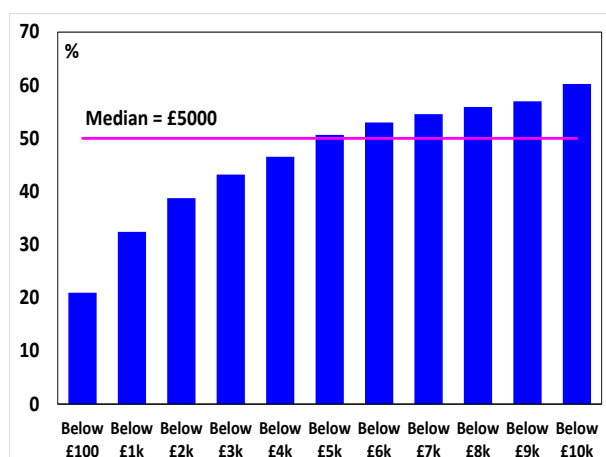
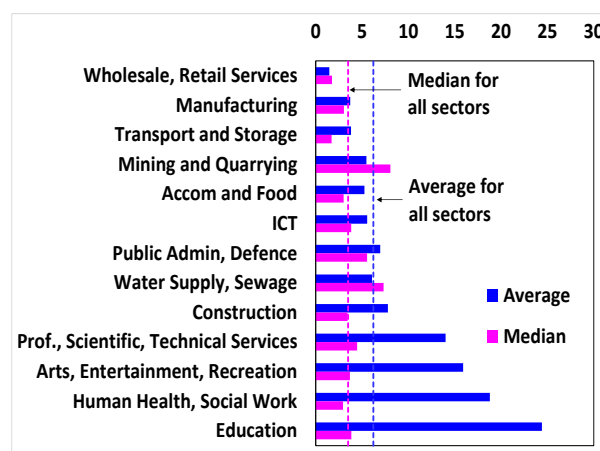


Figure 16. UK – How Much Cash do Firms Hold? Corporate Deposits/Weekly Turnover by Sector



Note: The right chart covers only non-financial businesses. In order to make the chart more readable, the right chart does not show the real estate sector, which has an average level of deposits equal to 41 weeks of turnover, and a median of 4 weeks of turnover. The averages are based on 2018 data, the medians use latest available company data.

Sources: NMG survey, ONS, Fame (Bureau van Dijk), S&P Capital IQ and Bank of England.

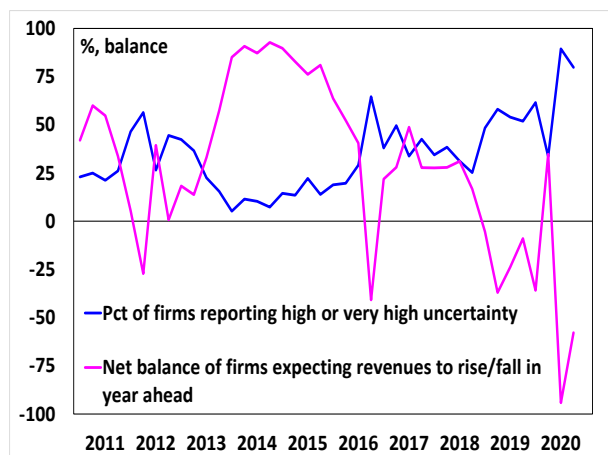
Those levels of liquidity might have seemed adequate for the pre-Covid world; it is questionable whether they are enough for the conditions that we now face. Consumer and business surveys highlight the mood of caution. The net balance of consumers who intend to save more in the year ahead has reached a record

²³ Liquidity is defined here as cash on hand and in the bank, along with any holdings of short-term investments (eg gilts and tradable securities). National accounts data suggest that bank deposits account for more than 90% of this liquidity measure in aggregate. So while this measure of liquidity is not quite the same as M4, there is a very substantial overlap.

high in recent months, according to the GfK/EC survey. The Deloitte CFO survey suggests that CFOs judge uncertainty to be very high and expect further substantial declines in corporate revenues, cashflow and cash holdings in the year ahead.

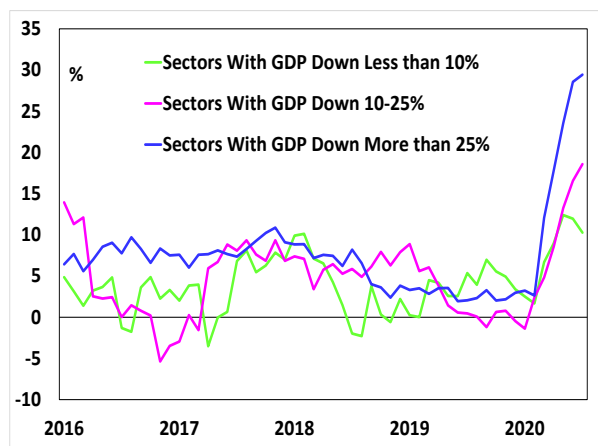
It appears to me that companies – particularly in the worst-affected sectors – have taken the chance to stockpile cash as a buffer against future uncertainties. For example, sectors which saw relatively large declines in GDP (and previously held relatively low cash levels) have seen relatively high deposit growth in the last few months, reflecting high take up of official support schemes (including lending facilities) in these sectors. For example, the growth of sterling deposits is now running at about 30% YoY on average in sectors which saw GDP fall by at least 25% YoY in April-May. Within that, the YoY growth of deposits exceeds 35% for the manufacturing sector, accommodation and food services, and also transport and storage. It is over 50% for retailers. Conversely, the upturn in deposit growth has been less marked in sectors which experienced relatively small declines in activity (and which had lower take up of official support schemes).

Figure 17. UK – Deloitte CFO Survey Readings on Uncertainty and Revenues



Sources: ONS, Deloitte CFO survey and Bank of England.

Figure 18. UK – YoY Corporate Deposit Growth Split by Scale of YoY Decline in GDP in April-May



With the rapid growth in deposits over recent months, aggregate corporate liquidity is probably up from about six weeks' turnover previously to between seven and eight weeks' now. Assuming the growth in deposits is evenly spread, the median level of liquidity among firms is probably up from about 3½ weeks of the normal level of turnover to about 4½ weeks now. Given the advantages of holding high liquidity at present, that rise does not look excessive in my view.

I suspect that many firms and households will want to hold higher liquidity for some time. Of course, if all of the current uncertainties fade, then households and companies might feel willing to spend the funds accumulated in the last couple of quarters. But that is really just another way of stating the obvious point that, absent Covid-19, the current policy stance would probably produce strong growth. It is less likely to apply to the situation we face at present.

So across these three issues (the recent rebound in activity, resilience of employment and strength of money growth), the common factor is that the very large scale of monetary and – especially – fiscal policy support has so far helped to cushion the effects of the severe drop in activity caused by the pandemic and lockdown. Without that fiscal and monetary support, the recent rebound would probably have been weaker, unemployment considerably higher and money growth markedly lower. Prospects for the economy would be worse. In setting monetary policy, the MPC takes fiscal policy as given. But, as a monetary policymaker, it is reasonable to note that, taken as a whole, fiscal policy has helped to reduce the burden on monetary policy to support the economy and return inflation to target.

Looking Forward: Risks to the Outlook

Looking ahead, the outlook for the economy will depend in large part on dynamics of the pandemic, the extent of progress in vaccines and other treatments, and the reaction of households, businesses and governments to those developments. In the August MPR, the MPC assumed that improvements in vaccines and treatments would allow the direct impact of Covid-19 on economic activity to gradually decline during next year and fade by the end of next year. Conditioned on that, and assuming that the UK moves smoothly to a CETA-like trade deal with the EU at the end of this year, the central forecast in the MPR was that the economy will gradually recover such that excess capacity emerges in about two years, lifting inflation a little above target three years ahead. The MPC judged that risks were skewed to the downside.

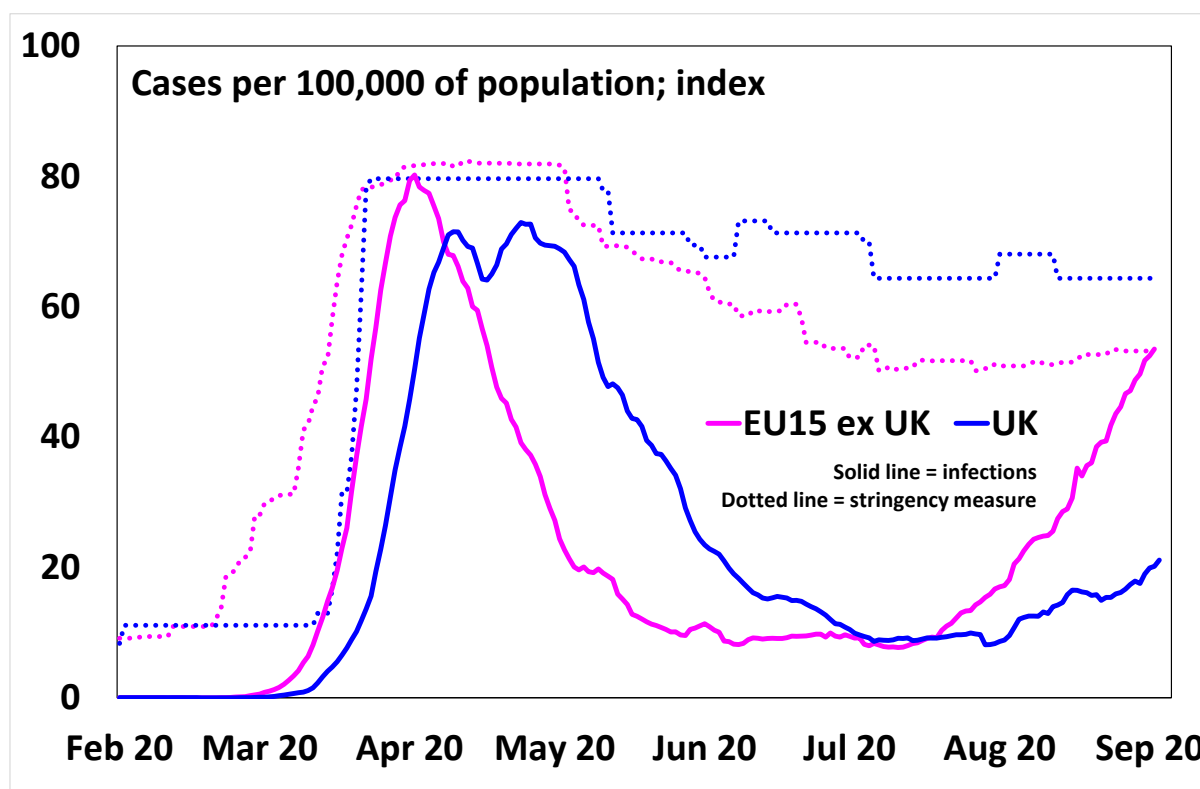
The uncertainties in the outlook are unusually high at present. The fan charts published in the August MPR represent the MPC's collective view and it is not unusual for there to be a range of views among individual MPC members. My own view is that, relative to the August MPR forecasts, risks are on the side of a slower recovery over the next year or two.

First, without being overly precise, a range of scenarios for Covid-19 are conceivable. In particular, it is possible that, both in the UK and globally, we will be living with Covid for much if not all of the three year forecast period. The evidence so far is that as lockdowns ease and economic activity recovers, infection rates tend to rise again. The US has experienced this, it is now occurring in much of Europe, and there are signs of rising infection rates in the UK. It is possible that there will not be effective vaccines in the next year or two, or that vaccines will only provide short-lived immunity.

A lingering or persistent Covid scenario might not produce a renewed national lockdown. But it could well result in a long period of rolling local lockdowns of varying sizes, some geographic, some sectoral, or on certain demographics. Local lockdowns are unlikely to produce anything like the dramatic decline in GDP seen in Q2. However, the resultant health uncertainties probably would also imply continued economic

uncertainty. In particular, unlike the national lockdown, local lockdowns have not so far been cushioned by large additional fiscal support. There is no local version of the furlough scheme, Bounce Back Loans, or tax deferrals. Households and companies will bear the economic costs of local lockdowns to a much greater extent than for the national lockdown. The desire to self-insure against lockdown risk would probably create widespread caution and a desire for higher savings among households and businesses.

Figure 19. UK & EU – Covid-19 Infection Rates and Measures of Stringency of Response



Note: EU15 ex UK stringency measure is weighted by 2018 real GDP. Covid infection rates are shown as 7-day averages. Sources: European Centre for Disease Prevention, IMF and Hale *et al.* (2020).

A persistent Covid scenario also would probably imply greater structural changes in the economy that could keep uncertainty high.²⁴ For example, the airline and restaurant sectors might shrink markedly. Working from home might remain the norm in some jobs, either for the whole week or part of it. This would cut demand for office space and limit spending in city centres. It might imply downward pressure on pay and job security in some sectors, by widening the available pool of labour for a job to include those who (perhaps for geographic or personal reasons) cannot work at a specific location every day. Such structural changes might create some winners, but would create a considerable number of losers.

²⁴ See Barrero and Bloom (2020).

Uncertainty over which scenario – an effective vaccine or persistent Covid – is more likely also will probably weigh on spending. For some firms, investment projects that are profitable in the event of a successful vaccine might be unprofitable if Covid persists.²⁵ Firms won't know which outlook to plan for.

The second issue is Brexit. Considerable uncertainties remain about the nature of the UK's future trade relations with the EU, the timing with which they will take effect, and whether the adjustment will be smooth or disruptive. The DMP survey suggests that roughly half of firms expect that the UK will have a no-deal exit from the current trading arrangements at yearend or next year. Relative to the MPR forecast, risks probably lie on the side of a thinner trade deal, a less-smooth transition, or more persistent Brexit-related uncertainty. More generally, global trade policy uncertainty remains high.

As seen in the last few years, conditions of persistent uncertainty create strong incentives for companies and households to defer major spending decisions and to focus instead on greater balance sheet resilience.²⁶

Figure 20. UK – Firms' Expectations for Date UK Leaves the EU

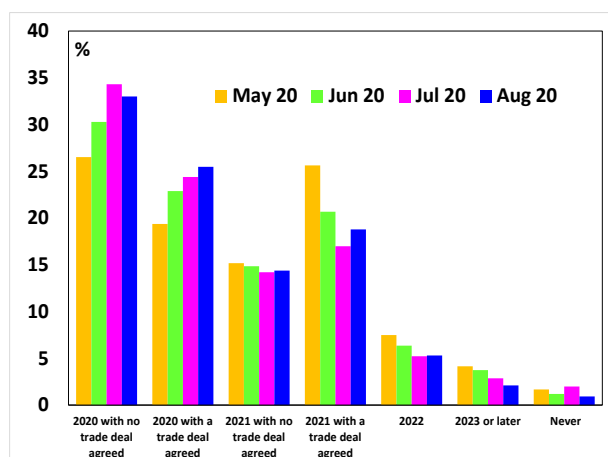
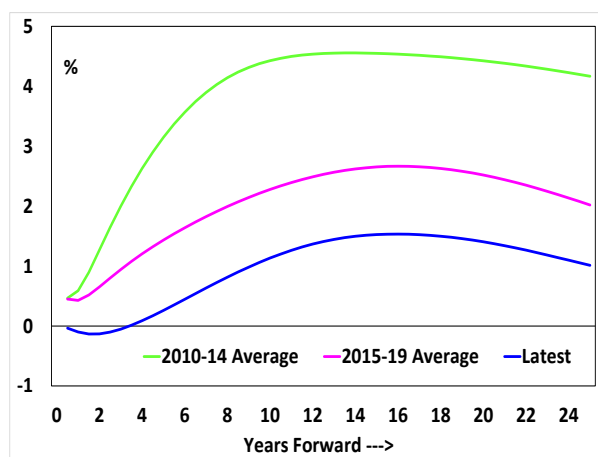


Figure 21. UK – Forward Path of Short-Term Rates



Sources: DMP survey, Eikon from Refinitiv and Bloomberg Finance L.P.

The third issue is that the neutral interest rate may have fallen further, such that the current level of monetary conditions is providing less stimulus than intended. Back in 2018, the MPC estimated that the neutral rate in coming years would be around 2¼% in nominal terms.²⁷ Since then, rate expectations appear to have fallen further from already low levels, as illustrated by the fact that the forward curve peaks at only about 1½%. This decline in forward rates partly predates the Covid outbreak. It may reflect a further decline in the neutral rate, caused by the same factors – such as demographics and low productivity growth – that helped reduce the neutral rate in earlier years. And even if and when the direct effects of Covid eventually fade, the

²⁵ For example, in a persistent Covid scenario, it might be worthwhile for firms to invest in more labour-saving technology and simpler supply chains to reduce risks stemming from lockdowns. But such investment might not be worthwhile in a scenario where Covid ceases to affect activity. Conversely, an airline might expand its fleet in the event that Covid ceases to affect activity, but not in a persistent Covid scenario.

²⁶ See Broadbent (2019).

²⁷ See box on pages 39-43 of the August 2018 *Inflation Report*.

experience of having had such large economic swings may well lead to a preference for more robust balance sheets and higher savings than in the pre-Covid period. Such psychological scarring could lead to some persistent rise in risk aversion, and would thereby also weigh on the neutral rate.²⁸

Some considerations in monetary policy

Let me finish with some comments on the appropriate setting of monetary policy at present.

In setting monetary policy, the MPC cannot prevent the significant structural adjustments to the economy and individual sectors that may result from Covid-19. Monetary policy can help underpin the economy through that period of adjustment by supporting demand and reducing risks of a persistent rise in spare capacity that would leave inflation below target.

As discussed, my hunch is that risks lie on the side of weaker growth and a longer period of excess supply than forecast in the August MPR, and hence of a more persistent inflation undershoot. Moreover, a downside scenario would be very costly. It would imply greater longterm scarring on potential growth through hysteresis effects. And, with relatively limited monetary policy space, it would be harder to return inflation to target from below than from above. Risk management considerations imply we should lean strongly against downside risks at present.²⁹ The Committee noted at the August meeting that it would continue to monitor the situation closely and stands ready to adjust monetary policy accordingly to meet its remit. I consider it quite likely that additional monetary easing will be appropriate in order to achieve a sustained return of inflation to the 2% target.

Of course, if the economy recovers strongly, then it is possible that less monetary policy support will be needed over time. In this case, the MPC has ample scope and time to tighten before significant inflation pressures emerge. But there is no automatic time limit on our willingness to maintain a loose monetary policy stance. In particular, as the Committee noted in August, we do not intend to tighten monetary policy until there is clear evidence that significant progress is being made in eliminating spare capacity and achieving the 2% inflation target sustainably.

²⁸ See Guttentag and Herring (1986), Haldane (2015), Kozlowski, Veldkamp and Venkateswaran (2015) and (2020), Jorda, Singh and Taylor (2020).

²⁹ See Saunders (2020).

References

Bahaj, S, Foulis, A and Pinter, G (2020), 'Home values and firm behavior', *American Economic Review*, American Economic Association, vol. 110(7), pages 2225-2270, July.

Barrero, J and Bloom, N (2020), 'Economic uncertainty and the recovery', Jackson Hole Economic Symposium, Federal Reserve Bank of Kansas City.

Brazier, A (2020), 'Protecting economic muscle: finance and the Covid crisis', speech given as part of the CFO Virtual Agenda, available at <https://www.bankofengland.co.uk/speech/2020/alex-brazier-keynote-dialogue-at-the-cfo-agenda>

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>

Bullard, J (2020), 'James Bullard on the Fed's policy review, FSOC and forecasting jobs data', interview with Centralbanking.com.

Cloyne, J, Thomas, R, Tuckett, A and Wills, S (2015), 'A sectoral framework for analysing money, credit and unconventional monetary policy', *Bank of England Staff Working Paper*, No. 556, available at <https://www.bankofengland.co.uk/working-paper/2015/a-sectoral-framework-for-analysing-money-credit-and-unconventional-monetary-policy>

Cunliffe, J (2020), 'Financial system resilience: lessons from a real stress', speech given during the Investment Association webinar, available at <https://www.bankofengland.co.uk/speech/2020/jon-cunliffe-speech-at-investment-association>

Falato, A, Kadyrzhanova, D and Sim, J (2013), 'Rising intangible capital, shrinking debt capacity, and the US corporate savings glut', *Finance and Economics Discussion Series*, 2013-67, Board of Governors of the Federal Reserve System (U.S.), revised 2013.

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>

Hale, T, Webster, S, Petherick, A, Phillips, T and Kira, B (2020), 'Oxford Covid-19 government response tracker', Blavatnik School of Government.

Haskel, J and Westlake, S (2018), 'Capitalism without capital: the rise of the intangible economy', *Princeton University Press*.

Hauser, A (2020), 'Seven moments in spring: Covid-19, financial markets and the Bank of England's operations', speech given at Bloomberg, available at <https://www.bankofengland.co.uk/speech/2020/andrew-hauser-speech-hosted-by-bloomberg-via-webinar>

HM Treasury (2020), 'Impact of Covid-19 on working household incomes: distributional analysis as of May 2020', available at <https://www.gov.uk/government/publications/impact-of-covid-19-on-working-household-incomes-distributional-analysis-as-of-may-2020>

Hosono, K, Miyakawa, D and Takizawa, M (2017), 'Intangible assets and firms' liquidity holdings: evidence from Japan', *Discussion papers*, No 17053, Research Institute of Economy, Trade and Industry (RIETI).

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

Joseph, A, Kneer, C, van Horen, N and Saleheen, J (2020), 'All you need is cash: corporate cash holdings and investment after the financial crisis', *Bank of England Staff Working Paper*, No. 843, available at <https://www.bankofengland.co.uk/working-paper/2019/all-you-need-is-cash>

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.

Saunders, M (2020), 'Covid-19 and monetary policy', speech given at an online webinar, available at <https://www.bankofengland.co.uk/speech/2020/speech-by-michael-saunders-28-may-2020>

Appendix – A Panel Model of European Unemployment

We estimate a panel regression of 15 European countries in order to decompose the changes in the unemployment rate into three channels:³⁰

- Demand – captured by quarterly GDP growth, which controls for the usual negative relationship between unemployment and output (the so-called Okun’s law);
- Furlough – captured by the participation in job retention schemes (JRS).³¹ Temporary state support for firms’ labour costs allows them to retain staff for a time, acting as a buffer against the sharp drop in output and labour demand; and
- Labour market participation – proxied by the Oxford University’s Stringency Index, which records the strictness of lockdown policies that primarily restrict people’s behaviour. To meet the ILO definition of unemployed, an individual must have been actively seeking work in the past four weeks and be available to start work in the next two weeks. Hence, policies which limit (eg because of restrictions on movement) and/or disincentivise (eg because of school closures) work search will temporarily cap unemployment.

The results are shown in Table 1. Equation (1) shows the expected, negative relationship between unemployment and GDP. Equations (2) and (3) suggest that stringency and furlough have each, individually, been negatively correlated with unemployment, once controlled for demand. Equation (4) brings all the channels together. As we might expect, it shows that the rise in the unemployment rate (given the fall in output) has been capped by the use of furlough schemes, but also, mechanically, by the restrictions on people’s behaviour. Given the expected evolution of GDP and the fading effects of government policy, the model suggests that the UK unemployment rate will start to pick up from 2020Q3.

Table 1. Panel regression results

Dependent variable	Δ Unemployment rate			
	Sample	2000Q1	2020Q2	
Cross-sections	15			
	(1)	(2)	(3)	(4)
Constant	0.04***	0.07***	0.06***	0.08***
Δ GDP	-0.04***	-0.05***	-0.05***	-0.07***
Δ GDP(-1)	-0.09***	-0.09***	-0.09***	-0.09***
Δ Stringency Index		-0.03***		-0.03***
Δ JRS Use			-0.05***	-0.04***
Period fixed effects	Yes	Yes	Yes	Yes
Observations	1214	1214	1214	1214
R2	0.33	0.34	0.35	0.36

Note: asterisks denote significance at 10% (*), 5% (**) and 1% (***) level.

³⁰ The countries included are: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Italy, Latvia, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom.

³¹ See Figure 1.8 of OECD’s Employment Outlook 2020. We took actual use where available, and approved applications otherwise.