



BANK OF ENGLAND

Monetary Policy Committee



Monetary Policy Report

May 2020





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Monetary policy at the Bank of England

The objectives of monetary policy

The Bank's Monetary Policy Committee (MPC) sets monetary policy to keep inflation low and stable, which supports growth and jobs. Subject to maintaining price stability, the MPC is also required to support the Government's economic policy.

The Government has set the MPC a target for the 12-month increase in the Consumer Prices Index of 2%.

The 2% inflation target is symmetric and applies at all times.

The MPC's remit recognises, however, that the actual inflation rate will depart from its target as a result of shocks and disturbances, and that attempts to keep inflation at target in these circumstances may cause undesirable volatility in output. In exceptional circumstances, the appropriate horizon for returning inflation to target can vary. The MPC will communicate how and when it intends to return inflation to the target.

The instruments of monetary policy

The MPC currently uses two main monetary policy tools. First, we set the interest rate that banks and building societies earn on deposits, or 'reserves', placed with the Bank of England — this is Bank Rate. Second, we can buy government and corporate bonds, financed by the issuance of central bank reserves — this is asset purchases or quantitative easing.

The *Monetary Policy Report*

The MPC is committed to clear, transparent communication. The *Monetary Policy Report (MPR)* is a key part of that. It allows the MPC to share its thinking and explain the reasons for its decisions.

The *Report* is produced quarterly by Bank staff under the guidance of the members of the MPC.

This *Report* has been prepared and published by the Bank of England in accordance with section 18 of the Bank of England Act 1998.

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Monetary Policy Summary

Authorities around the world are taking action to halt the spread of the Coronavirus (Covid-19) pandemic and to support economic activity.

The Bank of England's Monetary Policy Committee (MPC) sets monetary policy to meet the 2% inflation target, and in a way that helps to sustain growth and employment. In that context, its challenge is to respond to the severe economic and financial disruption caused by the spread of Covid-19. At its meeting ending on 6 May 2020, the MPC voted unanimously to maintain Bank Rate at 0.1%. The Committee voted by a majority of 7–2 for the Bank of England to continue with the programme of £200 billion of UK government bond and sterling non-financial investment-grade corporate bond purchases, financed by the issuance of central bank reserves, to take the total stock of these purchases to £645 billion. Two members preferred to increase the target for the stock of asset purchases by an additional £100 billion at this meeting.

The spread of Covid-19 and the measures to contain it are having a significant impact on the United Kingdom and many countries around the world. Activity has fallen sharply since the beginning of the year and unemployment has risen markedly.

Economic data have continued to be consistent with a sudden and very marked drop in global activity. Oil prices have been volatile. There have, however, been tentative signs of recovery in domestic spending in China, and this is likely to be echoed in other countries that have started to relax Covid-related restrictions on economic activity. Financial markets have recovered somewhat over recent weeks and risky asset prices have picked up from their lows in mid-March. This in part reflects the actions taken by authorities in the United Kingdom and elsewhere. Global financial conditions have, nevertheless, remained tighter than prior to the outbreak of Covid-19.

The timeliest indicators of UK demand have generally stabilised at very low levels in recent weeks, after unprecedented falls during late March and early April. Payments data point to a reduction in the level of household consumption of around 30%. Consumer confidence has declined markedly and housing market activity has practically ceased. According to the Bank's Decision Maker Panel, companies' sales are expected to be around 45% lower than normal in 2020 Q2 and business investment 50% lower. There has been widespread take-up of the Coronavirus Job Retention Scheme. Nevertheless, sharp increases in benefit claims are consistent with a pronounced rise in the unemployment rate.

CPI inflation declined to 1.5% in March and is likely to fall below 1% in the next few months, in large part reflecting developments in energy prices.

The unprecedented situation means that the outlook for the UK and global economies is unusually uncertain. It will depend critically on the evolution of the pandemic, and how governments, households and businesses respond to it. Recognising these uncertainties, the MPC has constructed a plausible illustrative economic scenario in the accompanying May *Monetary Policy Report*. This scenario is based on a set of stylised assumptions about the pandemic and the responses of governments, households and businesses, and, as usual, on the prevailing levels of asset prices and the market path for interest rates. While the scenario is highly conditional, it helps to illustrate the potential impact of Covid-19 on the economy and the channels through which the impact is felt. The *Report* also includes a number of estimates of the sensitivity of the economy to a selection of key variables, which, taken alongside the scenario, serve to illustrate the important drivers of the outlook.

The illustrative scenario incorporates a very sharp fall in UK GDP in 2020 H1 and a substantial increase in unemployment in addition to those workers who are furloughed currently. Given the assumed path for the relaxation of social distancing measures, the fall in GDP should be temporary and activity should pick up relatively rapidly. Nonetheless, because a degree of precautionary behaviour by households and businesses is assumed to persist, the economy takes some time to recover towards its previous path. CPI inflation is expected to fall further below the 2% target during the second half of this year, largely reflecting the weakness of demand.

As set out in the accompanying *interim Financial Stability Report*, the Financial Policy Committee (FPC) has assessed the risks to UK financial stability and the resilience of the UK financial system to the economic and market shocks associated with Covid-19. Drawing on the MPC's illustrative scenario, the FPC judges that the core banking system has capital buffers more than sufficient to absorb losses and, supported by government guarantees for new lending and Bank of England funding, the capacity to provide credit to support the UK economy.

The MPC has statutory objectives to maintain price stability and, subject to that, to support the economic policy of the Government including its objectives for growth and employment. In the current circumstances, and consistent with the MPC's remit, monetary policy is aimed at supporting businesses and households through the crisis, and limiting any lasting damage to the economy.

Since the onset of the Covid-19 shock, the MPC has, complementing the responses of other parts of the Bank of England and the UK Government, taken a number of actions to fulfil its mandate. The Committee has reduced Bank Rate to 0.1%; has introduced a Term Funding scheme with additional incentives for Small and Medium-sized Enterprises (TFSME); and announced a £200 billion increase in the stock of UK government bond and sterling non-financial investment-grade corporate bond purchases, to be carried out as soon as operationally possible and consistent with improved market functioning. The Committee notes that the stock of asset purchases will reach £645 billion by the beginning of July, at the current pace of purchases. The Committee continues to monitor closely a range of indicators of market functioning.

In the illustrative scenario, the recovery in economic activity is relatively rapid and inflation rises to around the 2% target, conditional on the scenario assumptions that include a gradual easing in social distancing, and supported by the very significant monetary and fiscal stimulus. Relative to the scenario, the Committee assesses that the balance of risks to the economic outlook lies to the downside.

At this meeting, the Committee judges that the existing stance of monetary policy is appropriate. The MPC will continue to monitor the situation closely and, consistent with its remit, stands ready to take further action as necessary to support the economy and ensure a sustained return of inflation to the 2% target.

1 The economic outlook

The spread of Covid-19 and the measures to contain it are having a significant impact on the UK and many countries around the world. Activity has fallen sharply since the beginning of the year and unemployment has risen markedly, both domestically and globally.

The unprecedented situation means that the outlook for the economy is unusually uncertain. It will depend critically on the evolution of the pandemic and how governments, households, businesses and financial markets respond. Recognising these uncertainties, the MPC has constructed a plausible illustrative economic scenario based on a set of stylised assumptions. While the scenario is highly conditional, it helps to illustrate the potential impact of Covid-19 on the economy and the channels through which that impact is felt. Alongside a number of estimates of the sensitivity of the economy to a selection of key variables, it also serves to illustrate the important drivers of the outlook.

The illustrative scenario incorporates a very sharp fall in UK GDP in 2020 H1 and a substantial increase in unemployment. The fall in activity should be temporary, and GDP should pick up relatively rapidly as social distancing measures are relaxed. Nonetheless, because a degree of precautionary behaviour by households and businesses is assumed to persist beyond that point, the economy takes some time to recover towards its previous path, with risks skewed to the downside. In the near term, CPI inflation is likely to fall significantly below the MPC's 2% target, given falling energy prices and the weakness of demand. It rises to around the 2% target further out.

The MPC will continue to monitor the situation closely. Consistent with its remit, it stands ready to act to ensure price stability and support households and businesses in a way that helps to minimise longer-term damage to the economy (Box 1).

1.1 Recent developments

Over the past few months, the measures implemented to contain the spread of Covid-19 have evolved significantly.

Since the outbreak of Covid-19 began, it has spread to most countries around the world and was characterised as a pandemic by the World Health Organisation on 11 March. Many countries have implemented public health measures to contain the spread of the disease. Workplaces and schools have been closed, travel has been restricted, and people have been instructed to stay at home.

These developments have led to a tightening in financial conditions.

As the situation has developed, financial markets have been extremely volatile and risky asset prices have fallen significantly. Policymakers around the world have provided exceptional monetary and fiscal support in response to the crisis, and markets have stabilised in recent weeks. Nevertheless, financial conditions have tightened overall in the UK and abroad since January (Section 2.1).

There will be a very sharp fall in activity globally in the first half of the year...

The spread of the virus and the measures taken to protect public health have caused a substantial reduction in activity around the world. Survey indicators such as the output components of PMIs have fallen to record-low levels since the start of the year (**Chart 1.1**), and suggest that many countries have experienced extremely sharp falls in activity. Bank staff estimate that UK-weighted world GDP declined by around 4% in Q1 and could fall by over 20% in Q2. World trade has also declined significantly, and is expected to contract by around twice as much as global GDP in 2020. While many major countries have introduced wage subsidy schemes to reduce job losses, unemployment has increased markedly around the world and many more employees are working less than usual.

...including a dramatic reduction in the UK.

Activity in the UK has also fallen sharply. Official data are sparse at this stage, but high-frequency indicators suggest that consumer spending has fallen steeply since March. In large part, that reflects the impact of both enforced and voluntary social distancing, with some additional drag from lower incomes and confidence about the outlook. In those areas most affected, such as tourism and eating out, indicators including aircraft departures and data on the number of seated diners at restaurants suggest that spending has all but come to a halt (**Section 2.4**). The closure of businesses and widespread moves to working from home have reduced the number of journeys by car and public transport substantially. In addition, spending on many durables is likely to have been delayed. One area that has proved stronger is spending on food, as households substitute spending at supermarkets for eating out. Nevertheless, consumer spending in aggregate has fallen very significantly. In 2020 Q2, it is expected to be almost 30% lower than in 2019 Q4.

Household incomes have declined, although they have been supported substantially by widespread use of government schemes. The Coronavirus Job Retention Scheme (CJRS) covers 80% of the income of employees who have been furloughed temporarily, and the Self-Employment Income Support Scheme provides grants to the self-employed, both up to £2,500 per month. As a result, the fall in consumption appears to have been much more marked than the fall in income, such that the aggregate household saving rate is likely to have spiked sharply upwards in Q2.

Lower activity, alongside tighter financial conditions and higher uncertainty about the outlook both in the UK and abroad, has resulted in lower investment. On average, firms responding to the Decision Maker Panel Survey in April expected their sales in Q2 to be over 40% lower than they otherwise would have been. Almost 85% of firms reported that their level of uncertainty was high or very high, up from 68% in March and 40% in February, with Covid-19 reported as the largest source of uncertainty for the vast majority. Business investment is expected to be around 40% lower in Q2 than at the end of 2019. Reflecting the extremely limited activity in the housing market in recent months and indicators of construction activity, housing investment is likely to have contracted more sharply still. It is expected to be around 60% lower in 2020 Q2 than in 2019 Q4. Gross trade flows also appear to have fallen very dramatically, reflecting global and domestic developments, as well as supply chain disruption, although the impact on net trade volumes is uncertain.

While there are wide bands of uncertainty around any estimates of activity at the present time, UK GDP is expected to be close to 30% lower in 2020 Q2 than it was at the end of 2019 (**Chart 1.2**). UK GDP is expected to have fallen by around 3% in 2020 Q1 and then to fall by a further 25% in Q2.

The reduction in activity has resulted in higher unemployment, although government policies have significantly limited the number of job losses.

As activity has fallen, the number of people in work has dropped sharply. It is likely that the Government's Coronavirus Job Retention Scheme (CJRS) has materially reduced the number of redundancies. Early data suggest that applications for furlough have been received from 800,000 companies covering over six million jobs. The number of people furloughed might be a little lower, though, as some could have more than one furloughed job.

While the CJRS has significantly limited job losses, the flow of new Universal Credit benefit claims and early indicators of redundancies suggest that unemployment has risen sharply over the past couple of months. The unemployment rate is expected to rise to 9% in Q2.

Chart 1.1 PMIs suggest that activity has fallen markedly in many economies

Composite output PMIs in selected economies^(a)

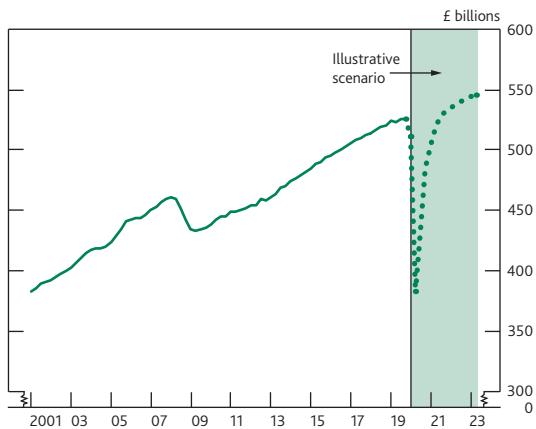


Sources: Eikon from Refinitiv and IHS Markit.

(a) April data points for the euro area, UK and US are flash estimates. Data for China are to March.

Chart 1.2 GDP is expected to have fallen dramatically over the first half of the year

GDP scenario^{(a)(b)}

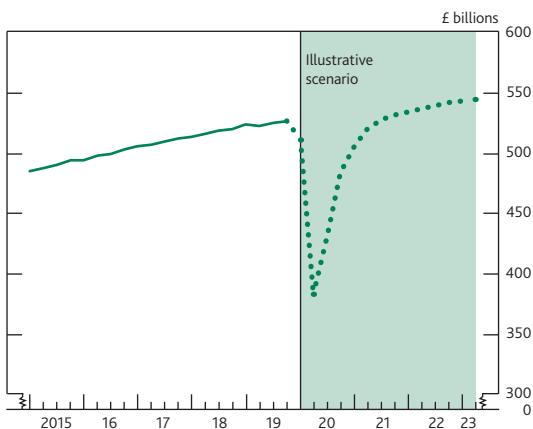


(a) The illustrative scenario is conditioned on the assumptions set out in this section, including: Bank Rate following a path implied by market yields; the TFS and TFSME; the Recommendations of the Financial Policy Committee and the current regulatory plans of the Prudential Regulation Authority; the Government's tax and spending plans as set out in *Budget 2020*, updated to reflect additional announcements made up to 29 April; commodity prices following market paths for two quarters, then held flat; the sterling exchange rate remaining broadly flat; and the prevailing prices of a broad range of assets, which embody market expectations of the future stocks of purchased gilts and corporate bonds. The main assumptions are set out in the 'Download the chart slides and data' link at www.bankofengland.co.uk/report/2020/monetary-policy-report-financial-stability-report-may-2020.

(b) The dotted line begins in 2020 Q1, as ONS data are currently only available to February.

Chart 1.3 GDP picks up relatively rapidly in 2020 H2 in the scenario, although it takes some time to recover towards its previous path

GDP scenario^{(a)(b)}



(a) Conditioned on the assumptions in Chart 1.2 footnote (a).

(b) The dotted line begins in 2020 Q1, as ONS data are currently only available to February.

It is likely that the supply capacity of the economy has been reduced. Many furloughed employees are unlikely to seek other jobs, which reduces the supply of labour temporarily. In addition, in some cases, containment measures may have caused a reduction in hours, for example among employees that have to self-isolate, or care for their families. Potential supply in the economy might also have been affected by lower productivity of those in work. New ways of working in response to the virus — for example, increased working from home by people with little previous experience of it, or new systems and procedures — are likely to have reduced efficiency somewhat. Some people may also be required to cover more tasks than usual — for example, those with caring responsibilities.

Overall, and notwithstanding these effects on supply, the MPC judges that the contraction in demand is likely to have resulted in a material amount of additional spare capacity in the economy in 2020 Q2. That spare capacity will be reflected in an increase in unemployment and a degree of underutilised capital within firms. The precise extent of spare capacity is highly uncertain, however. There will also be significant variation in demand, and different degrees of spare capacity, across different sectors and firms.

Inflationary pressures are expected to remain weak in the near term...

As the impact of the Covid-related shock is very different across sectors, there are likely to be commensurately different effects on prices. Some sectors are experiencing much lower demand than usual. However, there may be limited incentives for them to cut their prices to try and increase demand. For goods and services which have ceased trading completely, such as dining in restaurants, prices are not observable, which will result in some difficulties in measuring CPI inflation.⁽¹⁾ In contrast, other sectors are experiencing higher demand than usual. Overall, the effect on CPI inflation is uncertain, though the MPC judges that there is likely to be some downward pressure on domestic prices from higher spare capacity over the next few quarters.

...and the substantial fall in the oil price is expected to push inflation below 1%.

In addition, CPI inflation in the near term will be significantly affected by recent developments in the price of oil, which fell briefly to its lowest level since 2002 in April. Reflecting the very marked contraction in global demand, and also some news about supply, oil prices are 60% lower than at the time of the January Report. As a result, fuel prices are expected to decline markedly. That, in combination with pre-existing changes to household energy and water bills, is likely to result in inflation falling below 1% over the coming months (Section 2.5).

1.2 An illustrative scenario for the economic outlook

The economic outlook will depend importantly on the actions of governments, households, businesses and financial markets.

The outlook for the economy is unusually uncertain at present, and is highly dependent on the evolution of the pandemic and how governments, households, businesses and financial markets respond. Governments in the UK and elsewhere have taken measures to contain the spread of Covid-19 and reduce its impact on public health. Many governments have also announced a range of public policy measures to reduce the disruptive consequences for households and businesses. The economy will also be affected by how households and businesses respond, including by their confidence and uncertainty about the outlooks for both health and the economy. In addition, developments in asset prices will affect the evolution of the economy.

The scenario presented in this Report is designed to help illustrate the channels through which Covid-19 is likely to affect the economy.

The outlook for the economy is highly dependent on a number of assumptions about which there is great uncertainty, given the nature of the shock posed by Covid-19. Recognising these uncertainties, the MPC has constructed a plausible scenario, conditioned on a set of stylised assumptions about the pandemic and the actions of governments, households and businesses and, as usual, on the prevailing levels of asset prices and the market path for interest rates. While the scenario is highly conditional, it helps to illustrate the nature and potential scale of the impact of the pandemic on the economy. The MPC has also produced some estimates of the sensitivity of the economy to changes in some key variables (discussed in Section 1.3). Taken together, the scenario and sensitivities illustrate the important drivers of the outlook.

The conditioning assumptions underlying the illustrative scenario

The illustrative scenario is conditioned on social distancing measures and government support schemes remaining as they are until early June, before being gradually unwound by the end of Q3.

Underlying the illustrative scenario for both the UK and the rest of the world is an assumption that enforced social distancing measures remain in place until early June and that they are then lifted gradually over the following four months, until the end of Q3. Fiscal support measures, such as the CJRS and the Self-Employment Income Support Scheme, are assumed to remain in place, and to be unwound, over the same period. These assumptions should not be taken to imply that they are or should be government policy.

The Coronavirus Job Retention Scheme lowers the number of jobs that are lost.

In the scenario, the fiscal support schemes announced by the Government are successful in lessening the economic impact of the pandemic. In particular, the CJRS substantially lowers the number of jobs that are lost. Informed by survey data, reports collated by the Bank's Agents and early data on claims under the CJRS, the scenario embodies an assumption that around six million employees are furloughed in Q2 on average. This estimate takes into account the

(1) Box 4 discusses the methodological issues faced by the ONS in gathering information about the economy at present.

likely sectoral pattern of the economic contraction, and in particular the indications that the contraction is most severe in more labour-intensive areas of the economy. The estimate is also affected by the particular incentives within the CJRS. To qualify for the scheme, employees must not be working at all in their usual job. Compared with a more typical economic downturn, companies will therefore have an incentive to cut back more on the number of people working and relatively less on the average hours of those still at work.

In the scenario, as many employers choose to furlough their staff using the CJRS, the scheme is assumed to prevent many job losses. The income of those furloughed falls, however, as employers are assumed not to top up their workers' wages beyond the 80% paid by the Government.⁽²⁾ Information from the Bank's Agency contacts suggests that topping up of wages is limited. Aggregate household incomes will also be directly affected by the projected rise in unemployment.

It is assumed that most furloughed workers do not seek work elsewhere.

While the CJRS requires that furloughed employees do not work in their usual job, it does not stipulate that they cannot seek other work. In general, it is unlikely that any such search would be as intensive as among the unemployed. But the scenario assumes that a minority — 10% — of furloughed workers do look for jobs elsewhere, enlarging the pool of potential employees from which firms could hire. This puts some additional downward pressure on wage growth in the near term, on top of that assumed to stem from higher unemployment.

Some companies are assumed to cease or scale back their operations for a time.

Companies that have shut down temporarily will reduce the supply capacity of the economy during the period they are closed. Some companies have been instructed to cease or limit activities for a time — for example, pubs and restaurants. Others — in manufacturing or construction, for example — are also assumed to have shut down temporarily, either because of a lack of demand, disruption to supply chains, or difficulties working under social distancing guidelines. Companies which have shut temporarily are assumed to restart operations gradually as social distancing measures are relaxed.

Some of the spending foregone while social distancing measures are in place is assumed to be made up...

Social distancing has led to a sharp reduction in consumer spending. Much of this will have been lost permanently. For example, households are unlikely to spend so much on restaurant meals once social distancing measures have been eased that businesses make up all the revenue lost while measures were in place. Some spending, particularly on durable items for example, may have just been delayed. If so, some of the spending foregone while social distancing measures are in place may be made up for later. In the scenario, it is assumed that around a quarter of the fall in consumption that occurs while social distancing measures are in place is recovered gradually thereafter. Similarly, around 10% of investment spending foregone while social distancing measures are in force is assumed to be recovered. And some housing transactions that are not taking place while social distancing measures are in place are also assumed to complete once the measures are lifted.

...but lower confidence and higher uncertainty are assumed to persist for some time and dampen spending.

All else equal, these particular effects will add to spending after social distancing measures are lifted. However, in the scenario, they are outweighed by the impact of continuing caution on the part of households and businesses. Households are likely to maintain some social distancing voluntarily even after official measures are eased. That is consistent with early evidence from countries in which there have been fewer enforced measures and those in which the relaxation of measures is already under way. In the scenario, voluntary social distancing is assumed to unwind only gradually over the next year. That is broadly consistent with the experience of Hong Kong following the SARS outbreak. It is also assumed that concerns about the economic outlook weigh on spending. Indicators of household confidence have fallen very sharply over the recent past (Section 2.4). Survey and financial market measures of business uncertainty suggest that has risen substantially too. While confidence is likely to rise, and uncertainty to fall, as the economy recovers, that happens only gradually in the scenario.

(2) The Government pays 80% of furloughed wages up to £2,500 a month, plus National Insurance and minimum pension contributions. Some furloughed individuals will receive less than 80% of their income, given the £2,500 limit. Consequently, the overall average replacement rate of earnings in the scenario is around 75%. The Government's Self-Employment Income Support Scheme is also assumed to support the income of those who are self-employed by providing taxable grants of 80% of average trading profits up to a maximum of £2,500 a month.

Falls in risky asset prices also weigh on GDP.

The significant falls in risky asset prices since January have resulted in a tightening in UK financial conditions. The scenario is conditioned on risky asset prices remaining broadly stable. In addition, credit conditions have tightened, partly reflecting banks' assessments that credit risk has risen (Section 2.3). As the economy recovers, credit conditions loosen somewhat, but they remain tighter than 2019 throughout the scenario.

But monetary and fiscal policy actions support spending.

The loosening of monetary policy announced by the MPC over the past few months (Box 2) will support spending. The illustrative scenario is conditioned on the market path for interest rates, which rises only a little over the next three years, and market expectations for asset purchases, as embodied by current asset prices. The sterling exchange rate has also depreciated by around 2½% since January.

Moreover, since January the Government has announced measures which will increase public spending substantially (Box 3). A first set of fiscal policy interventions was announced in the March *Budget*, including support for businesses, extra spending on the NHS, and higher government investment spending. Since then, the Government has made a number of further announcements, mainly with the aim of reducing the financial cost of the pandemic on businesses and households.

The illustrative scenario is conditioned on the assumption that the UK moves to a comprehensive free trade agreement with the EU on 1 January 2021.

Consistent with government policy, the scenario assumes that there is an immediate but orderly move to a comprehensive free trade agreement between the UK and the EU on 1 January 2021, as incorporated in the January *Report*. Some restrictions on trade between the UK and EU are assumed to come into place at that point (see Box 1 in the November 2019 Report for more details).

The global outlook in the scenario

Global GDP recovers from the sharp fall in activity in 2020 H1.

Global GDP is estimated to have fallen sharply over the first half of 2020. While the exact paths of the falls in activity vary across regions, reflecting differences in the timing of public health measures being put in place, the impact of those measures is assumed to be broadly similar across the UK's main trading partners. The falls in GDP also partly reflect the tightening in financial conditions which has resulted from falls in risky asset prices around the world. Moreover, global spillovers — through supply chain disruption, for example — amplify the domestic shocks arising from the virus, including in the UK. As a result of some of these spillovers, the fall in world GDP is accompanied by a large reduction in world trade.

In the scenario, conditioned on the assumptions above, global activity recovers over the second half of the year, as social distancing measures are rolled back. The recovery is aided by the macroeconomic policies that have been put in place in many countries, which act to prevent significant longer-term damage to the global economy. There are some variations in the extent of support across countries, however.

In the scenario, PPP-weighted world growth falls sharply from 3% in 2019 to -12% in 2020. It increases strongly in 2021 — to 15% — reflecting the recovery in activity, before growing by 5% in 2022. Weighted by UK export shares, world GDP growth falls from 2% in 2019 to -13% in 2020. It recovers to 14% in 2021 and is around 4% in 2022 (Table 1.A).

The outlook for the UK in the scenario

UK GDP also rebounds in 2020 H2 as social distancing measures are lifted...

UK GDP falls sharply in 2020 H1: it is expected to be close to 30% lower in Q2 than it was in 2019 Q4. Under the assumptions outlined above, it recovers relatively rapidly in Q3, as social distancing measures are gradually lifted, and rises further in Q4 (Chart 1.2).

Table 1.A Indicative paths for selected economic variables consistent with the illustrative scenario^{(a)(b)}

	1998– 2007 ^(c)	2008	2009	2010– 18 ^(c)	2019	2020	2021	2022
	Illustrative scenario							
UK GDP ^(d)	3	0	-4	2	1	-14	15	3
LFS unemployment rate	5	6	8	6	4	8	7	4
CPI inflation ^(e)	1.6	3.6	2.2	2.3	1.8	0.6	0.5	2.0
Bank Rate ^(f)	5.1	4.7	0.6	0.5	0.8	0.2	0.1	0.2
World GDP (PPP-weighted) ^(g)	4	3	0	4	3	-12	15	5
World GDP (UK-weighted) ^(h)	3	1	-3	2	2	-13	14	4
Household consumption ⁽ⁱ⁾	3	0	-3	2	1	-14	15	4
Household saving ratio ^(j)	8	9	12	9	6	17	10	9
Business investment ^(k)	3	-6	-16	4	1	-26	19	12
Contribution of net trade to GDP ^(l)	0	1	0	0	0	0	0	-1
Hourly labour productivity ^(m)	2	-1	-1	1	0	-1	2	0
Average weekly earnings ⁽ⁿ⁾	4	4	0	2	3	-2	4	2
Unit labour costs ^(o)	3	2	4	1	3	11	-9	3
UK import prices ^(p)	0	9	4	1	1	-2	0	0

Sources: Bank of England, IMF *World Economic Outlook* (WEO), ONS and Bank calculations.

(a) The profiles in this table should be viewed as broadly consistent with the illustrative scenario for GDP, CPI inflation and unemployment.

(b) Figures show annual average growth rates unless otherwise stated. Calculations for back data based on ONS data are shown using ONS series identifiers.

(c) Averages over the period.

(d) Excludes the backcast for GDP.

(e) Annual average inflation rate.

(f) Per cent. The path for Bank Rate implied by forward market interest rates. The curves are based on overnight index swap rates.

(g) Chained-volume measure. Constructed using real GDP growth rates of 189 countries weighted according to their shares in world GDP using the IMF's purchasing power parity (PPP) weights.

(h) Chained-volume measure. Constructed using real GDP growth rates of 188 countries weighted according to their shares in UK exports.

(i) Chained-volume measure. Includes non-profit institutions serving households. Based on ABIR+HAYO.

(j) Annual average. Percentage of total available household resources. Based on NRJS.

(k) Chained-volume measure. Based on GAN8.

(l) Chained-volume measure. Exports less imports.

(m) GDP per hour worked.

(n) Growth in whole-economy total pay. Growth rate since 2001 based on KAB9. Prior to 2001, growth rates are based on historical estimates of AWE, with ONS series identifier MDSM.

(o) Growth in unit labour costs. Whole-economy total labour costs divided by GDP at constant prices. Total labour costs comprise compensation of employees and the labour share multiplied by mixed income.

(p) Annual average inflation rate excluding fuel and the impact of MTIC fraud.

...although heightened uncertainty weighs on spending by consumers and businesses for some time.

Demand remains lower than it would have been in the absence of Covid-19, however, partly reflecting the impact of continued caution from households and businesses. The greater uncertainty households face about the outlook, including about job prospects, is assumed to take some time to dissipate, leading to a degree of precautionary saving. That is consistent with the path for unemployment — with which household saving has been well correlated over the past — which falls back only gradually, after rising sharply in 2020. Businesses' uncertainty about the outlook is similarly assumed to remain elevated for some time, which dampens investment over the scenario. Tighter financial and credit conditions also weigh on investment spending.

Lower investment and less innovation weigh on productivity further out.

The near-term shock has a longer-term effect on the supply capacity of the economy. The falls in investment weigh on the productive capacity of the economy over time. Tighter credit conditions also impair productivity by reducing how efficiently capital is allocated across the economy. In addition, productivity is dampened by less on-the-job training and innovation. Consequently, the supply capacity of the economy is a little lower than it otherwise would have been by the end of the scenario period.

GDP falls sharply in 2020 H1 before recovering following the relaxation of social distancing measures.

UK GDP in the scenario falls by 14% in 2020 as a whole. Activity picks up materially in the latter part of 2020 and into 2021 after social distancing measures are relaxed, although it does not reach its pre-Covid level until the second half of 2021 (**Chart 1.3**). In 2022, GDP growth is around 3%. Annual household consumption growth follows a similar pattern (**Table 1.A**). Household income growth is volatile. It falls in 2020, partly reflecting the fact that furloughed workers are paid 80% of their pay (up to £2,500 per month). It then picks up as those employees return to work. On average over the scenario period, consumption growth is weaker than household income growth, such that the saving ratio rises somewhat. Business investment declines very sharply in 2020, by 26% on average relative to 2019. Annual growth rises to 19% in 2021 and is then around 12% in 2022.

Lower demand in 2020 is assumed to lead to some downward pressure on inflation.

In the scenario, the sharp fall in demand leads to spare capacity. In large part, that reflects slack in the labour market. Unemployment is elevated over the first part of the scenario. There is assumed to be some temporary reduction in the efficiency with which people can find jobs, although the long-term equilibrium unemployment rate is assumed not to rise. Labour market slack declines as the unemployment rate falls back over the scenario (Chart 1.4).

Spare capacity in the economy is likely to weigh on inflation. However, the MPC judges that it is likely that, while demand is especially weak, inflation will be affected by a little less than usual for a given degree of spare capacity. That judgement is informed by research on price-setting which finds that firms are less able to increase demand for their goods and services by reducing prices when demand is low (Section 3). Nonetheless, lower demand does reduce domestically generated price pressures. As demand picks up in the scenario, prices become more responsive again.

CPI inflation is very low in 2020, largely reflecting the marked decline in the oil price.

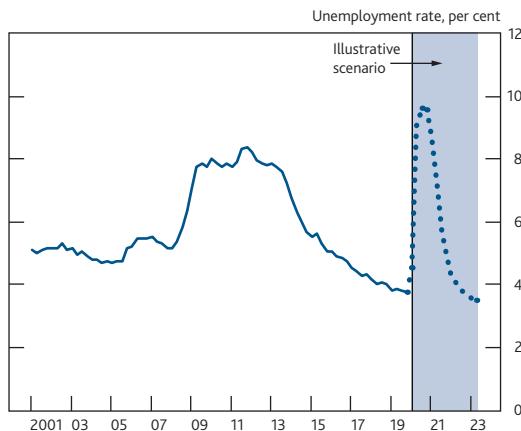
In addition to the downward pressure from low demand, the marked fall in the oil price weighs on CPI inflation over 2020 and early 2021. Lower oil prices also weigh on world export prices, as does the fall in global demand. The resulting downward pressure on UK import prices broadly offsets the upward pressure from sterling's depreciation.

CPI inflation is around 2% in 2022.

In the scenario, CPI inflation averages 0.6% in 2020 as a whole, but drops to around 0% at the end of the year. Inflation rises during 2021 (Chart 1.5), as the direct impact of the fall in the oil price drops out of the annual comparison. Downward pressure from domestic factors also wanes as demand recovers. In 2022, CPI inflation is 2.0%, on average.

Chart 1.4 Unemployment rises sharply, before falling back gradually in the illustrative scenario

Unemployment scenario^{(a)(b)}

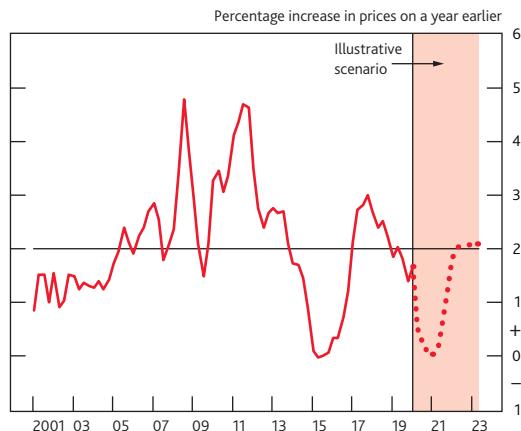


(a) Conditioned on the assumptions in Chart 1.2 footnote (a).

(b) The dotted line begins in 2020 Q1, as ONS data are currently only available to February.

Chart 1.5 CPI inflation falls in the near term partly due to the oil price, but rises further out in the scenario

CPI inflation scenario^{(a)(b)}



(a) Conditioned on the assumptions in Chart 1.2 footnote (a).

(b) The dotted line begins in 2020 Q2.

1.3 Key sensitivities

Many other scenarios for the economy are possible.

As described above, the illustrative scenario is highly conditional, and depends crucially on the underlying assumptions related to Covid-19. This section sets out the sensitivity of the scenario to changing some of the key drivers, using some stylised estimates to help illustrate their potential impact (Table 1.B).

Key sensitivity 1: the global economic outlook.

Policy actions around the world will affect the outlook for the UK...

The timing, speed and extent of the recovery in activity will be affected by the measures that are taken around the world both to contain the spread of Covid-19 and to support the global economy. In the illustrative scenario, the

evolution of the pandemic and the measures taken to contain it are assumed to be similar in other countries to those in the UK. Consequently, the timing and scale of the fall in global GDP is similar to that in the UK. As a result, net trade is broadly neutral for UK GDP in 2020. The need for stricter or longer-lasting measures elsewhere in the world would lead to lower demand for UK exports. Conversely, an earlier unwind of measures in other countries could support demand for UK goods and services.

...including via spillover channels.

How measures are unwound elsewhere in the world is also likely to affect the outlook for the UK economy through spillover channels. For example, if firms in other countries supplying intermediate inputs to UK companies remain closed, the resulting supply chain disruption could lower UK activity, even if UK restrictions are lifted. There are also likely to be some spillovers from developments abroad through financial channels.

Key sensitivity 2: the persistence of the fall in UK activity.

The timing of the recovery will depend in large part on how long social distancing and support measures are in place.

As in other countries, the length of time that UK social distancing and support measures are in place and the speed at which they are lifted will affect the timing of the economic recovery. Some companies are required to cease trading under certain social distancing measures, and other companies are likely to choose to shut temporarily. That prevents some consumer spending.

Table 1.B provides an illustration of the sensitivity of the scenario to changes in social distancing measures. The sensitivity assumes that social distancing measures, and the associated policy support measures, are changed in both the UK and the rest of the world. If an additional two weeks of current social distancing and policy support measures were announced, activity in that quarter would fall by around 1¼% of annual GDP.⁽³⁾ That would lead to a relatively rapid rise in unemployment. Inflation would be a little less than ¼ percentage point lower in the near term, as demand is judged to fall by more than supply. After three years, the impact on activity has faded. If social distancing and policy support measures were relaxed two weeks earlier, that would have the opposite effect.

The speed of the recovery will also be affected by how households and businesses respond once measures are lifted.

The persistence of the fall in demand will also be affected by how rapidly households and businesses are willing to increase their spending as social distancing measures are lifted. In the scenario, spending is dampened somewhat — and saving increased — by continued caution on the part of households and businesses after measures are relaxed. Some are likely to continue social distancing voluntarily for a time. In addition, elevated uncertainty is assumed to weigh on spending. Those effects are offset, though only partially, by an assumption that some of the spending that households and businesses forego during social distancing is made up gradually after measures are lifted.

There are two-sided risks around the profile for savings, although the balance of those risks may lie to the upside. Households, for example, might increase their savings by a greater amount than is embodied in the scenario if they are concerned about the prospect of being placed on furlough, as well as the possibility of being made redundant. In that case, the profile of the saving ratio would be higher than the past correlations with the path of unemployment would imply. Alternatively, the saving rate might be lower if pent-up consumer demand is higher than assumed in the scenario. The response of businesses is similarly difficult to predict. Generally, the heterogeneity of experiences across households and businesses poses difficulties in assessing the likely paths for savings in aggregate.

To illustrate the potential scale of risks posed by saving behaviour, **Table 1.B** shows the impact of temporary 2 percentage points changes in the household and corporate savings rates. If households and companies are less cautious than assumed in the scenario and save less, or choose to make up more foregone spending, GDP would be higher, unemployment lower, and inflation higher as a result of the boost to demand. The effect on demand fades over time, though. Alternatively, if households and businesses save more, activity would be lower in the near term, unemployment higher, and inflation lower.

(3) Given the sharp changes in GDP in the scenario, we have used 2019 GDP to scale the impact of the sensitivities on activity.

Key sensitivity 3: the degree of long-lasting scarring in the economy.

The eventual recovery in GDP will be affected by developments in the economy's supply capacity.

The extent to which GDP recovers will also be affected by developments in the economy's supply capacity. In the illustrative scenario, productivity is lower than it would have been in the absence of Covid-19, reflecting lower investment — including in research and development — and less on-the-job training and innovation. Those effects are relatively small, however, as the support measures in place are assumed to help prevent much longer-lasting damage to the economy.

It is possible that there could be a larger effect on productivity than the illustrative scenario implies. If companies' uncertainty about the economic outlook persists for longer than assumed, they may become less confident about the demand that could arise from successful innovation, making them less willing to invest in such activities. In addition, there is a risk that some existing underutilised capital is scrapped, rather than being redeployed elsewhere. Lower productivity would constrain activity within the economy, lowering GDP. Although as the supply capacity of the economy is also lowered, inflation would change only a little. Alternatively, companies might boost investment spending as demand recovers, including in capital to support new ways of working following Covid-19. That would boost GDP and the potential supply capacity of the economy.

The scenario also embodies an assumption that unemployment eventually falls back to close to its pre-Covid rate and there is no rise in the long-term equilibrium rate of unemployment. It is possible that the rise in unemployment could prove more persistent than embodied in the scenario, for example if companies are reluctant to hire until they are sure about the robustness of the recovery in demand. It is also possible that any rise in unemployment could lead to an increase in the long-term equilibrium rate of unemployment. That might happen if the skills of the unemployed do not increase to the same extent as they would if they were working, for example, or even erode over time. **Table 1.B** shows the effect of an immediate increase in the long-term equilibrium rate of unemployment on the economy. The impact on activity builds gradually over time, such that the hit to GDP in the medium term is larger than in the near term. Unemployment is higher, and the change is similar to the change in the long-term equilibrium rate in the medium term. But as the long-term equilibrium rate of unemployment is assumed immediately to be higher, there is less slack in the labour market in the near term. That pushes up on inflation somewhat.

Key sensitivity 4: the impact of changes in economic activity on prices.

CPI inflation will be affected by how companies respond to changes in demand.

In the medium term, CPI inflation will depend importantly on how domestically generated price pressures evolve. But the responsiveness of domestic prices to the Covid-19 shock is very uncertain, given the sharp fall and recovery in demand in the scenario, the partial closure of some markets and significant heterogeneity in experiences across sectors. There is little evidence from past pandemics to draw upon.

In the scenario, inflation is assumed to be somewhat less responsive than usual to a given degree of spare capacity while demand is especially weak. If companies expect the shock to demand to be temporary, they might be less likely to lower their prices, to avoid having to reverse those changes when conditions improve. As a result, slack in the near term might dampen inflation by even less. That would pose an upside risk to CPI inflation. Alternatively, firms might avoid raising prices as demand picks up, in order to rebuild their customer base. That could pose a downside risk to inflation as the economy recovers.

Table 1.B Stylised estimates of the impact of changing selected underlying assumptions on the indicative paths for some economic variables

	Immediate impact on activity (as percentage of 2019 GDP) ^(a)	Impact on activity three years later (as percentage of 2019 GDP)	Peak impact on unemployment, percentage points (quarters)	Peak impact on inflation, percentage points (quarters)
Sensitivities^(b)				
Two weeks longer/shorter duration of current enforced social distancing and policy support measures in both the UK and the rest of the world ^(c)	-/+ 1¼	~0	+/- ¾ (within 1 quarter)	-/+ < ¼ (after 1 quarter)
Temporary 2 percentage points higher/lower household and corporate savings rates ^(d)	-/+ 1	-/+ ¼	+/- 1¾ (after 2 quarters)	-/+ 1 (after 3 quarters)
Persistent 2 percentage points higher/lower long-term equilibrium rate of unemployment ^(e)	-/+ ¼	-/+ 1¾	+/- 2 (after 12 quarters)	+/- ¼ (after 4 quarters)

(a) Impact on GDP over the three months following the change. Shown as a proportion of annual GDP in 2019, to abstract from sharp changes in GDP in subsequent years in the scenario.

(b) Sensitivities are estimated over a 13-quarter period, including the impact quarter. The resulting impacts on GDP, unemployment and inflation are not necessarily scalable or additive.

(c) Based on current mix of social distancing policies and government and Bank policy support measures.

(d) Consumption and business investment impact calibrated to deliver initial 2 percentage points higher/lower household and corporate savings rates for one quarter before unwinding over subsequent 12 quarters.

(e) Change in long-term equilibrium rate of unemployment persists for the duration of the scenario.

Box 1**The monetary policy response to Covid-19*****The MPC sets monetary policy to meet the 2% inflation target.***

The MPC sets monetary policy to maintain price stability, as defined by the 2% CPI inflation target. Subject to that, the Committee supports the economic policy of the Government, including its objectives for growth and employment. These objectives are embodied in law.

The pandemic creates unique challenges for monetary policy, which cannot prevent a near-term fall in activity...

The current challenge is to respond to the severe economic and financial disruption caused by the spread of Covid-19. The nature of this economic shock is very different to those to which the MPC has previously had to respond. The social distancing measures implemented to slow the spread of the disease require a sharp but temporary suppression of economic activity. Monetary policy cannot prevent the losses of revenue and income that companies and households suffer during this period.

...but monetary policy can help support companies and households through economic disruption...

Monetary policy loosening can help support households and companies through the economic disruption caused by the pandemic. It bolsters households' and businesses' cash flows, helps maintain the flow of credit, and supports asset prices. It can therefore mitigate the tightening in financial conditions that can amplify the initial contraction in activity, and help ensure that financial conditions are appropriate to support the recovery as the social distancing measures are eased.

Since the onset of the Covid-19 shock, the MPC has taken a number of actions to fulfil its mandate, including reducing Bank Rate to 0.1%, introducing a Term Funding scheme with additional incentives for Small and Medium-sized Enterprises (TFSME) and announcing a £200 billion increase in the stock of UK government bond and sterling non-financial investment-grade corporate bond purchases.

...and in doing so help limit the extent to which the pandemic causes longer-term damage to the economy.

Activity should recover as the pandemic is brought under control and measures to contain its spread can be reduced. However, given the severity of the economic disruption, there is a risk of substantial longer-term damage to the economy from business failures and an increase in unemployment. As well as being costly in their own right, business failures and high unemployment can give rise to 'hysteresis' effects. Evidence from past periods of hysteresis indicate that these losses can be significant.

Monetary policy is only one part of the broader public policy response. It takes into account other public policies...

Monetary policy is only one part of the necessary policy response. The MPC's actions complement those of the FPC and PRC, whose macroprudential and microprudential policies are also helping to support the ability of banks to supply the credit needed by households and businesses. The FPC has reduced the UK countercyclical capital buffer rate to 0% of banks' exposures to UK borrowers from 1%. The PRC has taken various supervisory actions, including agreement with major UK banks and insurers that dividends should not be paid in 2020. The Bank has also taken steps to support the functioning of financial markets on which the real economy relies, including through the activation of the Contingent Term Repo Facility, which allows participants to borrow central bank reserves in exchange for less liquid assets, and through co-ordinated action with central banks abroad on swap lines.

The Bank's response also complements the actions taken by the UK Government. Fiscal support measures are the main tool for dealing with the sharp fall in economic activity and the loss of income for households and companies. The UK Government has announced a series of substantial measures to alleviate some of the severe cash-flow problems facing businesses and households and support people's incomes (see Box 3).

...while maintaining focus on its primary objective of price stability.

The primary objective of monetary policy is price stability, a pre-condition for long-term economic prosperity. The MPC has clear operational independence for how the inflation target is achieved and is accountable to Parliament for its actions in meeting that target. Alongside that institutional framework, the UK Government has provided explicit indemnities for monetary policy operations such as quantitative easing that could otherwise create risks to the Bank's balance sheet.⁽¹⁾ These arrangements ensure that the MPC can take the actions it needs to meet its objective of price stability.

The MPC will continue to monitor the economic situation closely. The scenario shown in this section illustrates just one of many different ways in which the UK economy could evolve. It is less informative for the setting of monetary policy than the MPC's usual projections, but along with the key sensitivities it illustrates some of the important drivers of the economic outlook.

However events unfold, the MPC stands ready to respond as necessary to support the economy and ensure a sustained return of inflation to the 2% target.

(1) See '[Monetary policy and the Bank of England's balance sheet](#)', Vlieghe, G (2020).

Box 2**Monetary policy since the January Report**

The spread of Covid-19 and the measures likely to be needed to contain it had evolved significantly between the *January Report* and the scheduled MPC meeting ending on 25 March. The MPC held two special meetings in March, in addition to its scheduled meeting, to consider the monetary policy response to the economic shock associated with the disease. The Committee judged that, in these extraordinary circumstances, there was a role for monetary policy to help UK businesses and households bridge a sharp reduction in activity, and so help to prevent a temporary disruption from causing longer-lasting economic harm. Alongside the policy changes made at these meetings, the Bank has been involved in other measures which aim to improve liquidity in financial markets and enhance the provision of credit to the UK real economy (**Table 1**).

This box provides more information on the policy decisions made in the March MPC meetings⁽¹⁾ and provides an overview of developments in lending rates and gilt yields following those decisions.

Table 1 Summary of MPC policy changes since the January Report

MPC policy changes (<i>other relevant actions shown in italics</i>) ^(a)	
11 March (Special MPC meeting ending 10 March)	Bank Rate reduced by 50 basis points to 0.25%. Term Funding scheme with additional incentives for Small and Medium-sized Enterprises (TFSME) introduced, financed by the issue of central bank reserves. <i>FPC reduced the UK countercyclical capital buffer rate from 1% to 0% of banks' exposures to UK borrowers with immediate effect.</i>
15 March	<i>Internationally co-ordinated central bank action to enhance the provision of liquidity via the standing US dollar liquidity swap line arrangements.</i>
17 March	<i>HM Treasury and the Bank launched the Covid Corporate Financing Facility (CCFF) to provide additional help to firms to bridge through Covid-19-related disruption to their cash flows.</i>
19 March Special MPC meeting	Bank Rate reduced by 15 basis points to 0.1%. TFSME enlarged by increasing initial borrowing allowance from 5% to 10% of participants' stock of real-economy lending. Stock of asset purchases, financed by the issuance of central bank reserves, increased by £200 billion to a total of £645 billion. To be delivered as soon as is operationally possible and consistent with improved market functioning. The majority of the increase to comprise UK government bonds. Some additional sterling non-financial investment-grade corporate bonds should also be purchased.
20 March	<i>Internationally co-ordinated central bank action to further enhance the provision of liquidity via the standing US dollar liquidity swap line arrangements.</i>
24 March	<i>Activation of the Contingent Term Repo Facility (CTRF).</i>
6 April	Announcement that the TFSME would open to drawings on 15 April, sooner than previously anticipated.

(a) More information can be found on other relevant actions in the following links: [11 March Bank of England measures](#); [15 March co-ordinated central bank action](#); [17 March launch of CCFF](#); [20 March co-ordinated central bank action](#); [24 March activation of CTRF](#).

(1) For the Minutes of these meetings see: [Minutes of the special Monetary Policy Committee meeting ending on 10 March 2020](#) and [Minutes of the Monetary Policy Committee meetings ending on 19 March 2020 and 25 March 2020](#).

Special MPC meeting ending 10 March

By early March, the spread of Covid-19 and the measures needed to contain it were expected to have significant impacts on economic activity.

In the period following the MPC's meeting in January, the spread of Covid-19 and the measures that were likely to be needed to contain the virus had evolved rapidly, with significant associated impacts expected on economic activity. Although the magnitude of the shock from Covid-19 was highly uncertain, the MPC judged it likely that activity would weaken materially over the coming months.

The MPC judged there was a role for monetary policy to help UK businesses and households.

The MPC agreed that in these extraordinary circumstances, and alongside other policy responses, there was a role for monetary policy to help UK businesses and households bridge a sharp but temporary reduction in activity. Monetary policy stimulus would help to keep firms in business and people in jobs, and help to prevent a temporary disruption from causing longer-lasting economic harm.

The Committee voted unanimously to:

- i. Reduce Bank Rate by 50 basis points to 0.25%; and
- ii. Introduce a Term Funding scheme with additional incentives for Small and Medium-sized Enterprises (TFSME), financed by the issuance of central bank reserves, that would: help reinforce the transmission of the reduction in Bank Rate; provide participants with a cost-effective funding backstop; and incentivise banks to provide credit to bridge economic disruption, particularly to SMEs by providing an additional five pounds of funding for every pound of positive net lending to them.

Special MPC meeting on 19 March

In the days leading up to 19 March, UK and global finance market conditions had tightened significantly further...

In the days leading up to the special MPC meeting on 19 March, UK and global financial conditions had tightened significantly further. In common with a number of other advanced-economy government bond markets, conditions in the UK gilt market had deteriorated as investors had sought shorter-dated instruments that are closer substitutes for highly liquid central bank reserves. Corporate bond spreads had also widened materially. Volatility in stock markets had risen to historically elevated levels and equity prices had fallen significantly further. Sterling had depreciated sharply. As a consequence, all major central banks had set out wide-ranging policy responses.

...and the MPC judged that a further, comprehensive package of measures was warranted.

At its special meeting on 19 March, the MPC judged that a further, comprehensive package of measures was warranted to meet its statutory objectives.

The Committee voted unanimously to:

- i. Reduce Bank Rate by 15 basis points to 0.1%;
- ii. Enlarge the TFSME, by increasing the initial borrowing allowance from 5% to 10% of participants' stock of real-economy lending;
- iii. Increase the stock of asset purchases, financed by the issuance of central bank reserves, by £200 billion to a total of £645 billion as soon as was operationally possible and consistent with improved market functioning; and
- iv. The majority of additional asset purchases should comprise UK government bonds. Some additional sterling non-financial investment-grade corporate bonds should also be purchased.

MPC meeting ending 25 March

The Committee took no further action at its scheduled meeting on 25 March.

The measures taken by monetary and fiscal authorities in the United Kingdom and across the world had helped to stabilise markets and improve liquidity in government bond markets. As a result of the policy action over the previous weeks, there was not a strong case for further policy changes at this meeting. The MPC would monitor closely the pass-through to banks and building societies' lending rates of the recent reductions in Bank Rate. Regarding the impact of asset purchases, gilt yields had fallen significantly following the previous week's special MPC meeting and the commencement of additional gilt purchase operations from 20 March. If needed, the MPC could expand asset purchases further. The MPC would continue to monitor the situation closely and, consistent with its remit, stood ready to respond further as necessary to guard against an unwarranted tightening in financial conditions, and support the economy.

Recent developments in lending rates and gilt yields

Bank Rate is a key influence on the interest rates facing businesses and households.

Bank Rate is a key influence on the interest rates for borrowing and saving products. Changes in Bank Rate influence the cost at which banks can obtain funding, so reductions in Bank Rate will tend to reduce interest rates on products for households and businesses. Other factors are also important in influencing the rates charged by banks and building societies, however. These include banks' funding spreads over risk-free rates, the credit risk on a loan and other factors such as profitability (see Box 2 of the [May 2018 Inflation Report](#)).

While recent reductions in Bank Rate will push down lending rates over time, heightened credit risk associated with the deterioration in the economic outlook will push in the opposite direction. Higher wholesale bank funding spreads (Section 2.2) may also push up lending spreads, but UK banks have placed less weight on wholesale unsecured funding costs for loan pricing after balance sheet reforms (see Box 1 in the [February 2019 Inflation Report](#)). In addition, the TFSME should act as a backstop by allowing banks to access funding at interest rates close to Bank Rate.

Changes in Bank Rate pass through to some borrowers more quickly than others.

Changes in Bank Rate pass through to borrowers with variable-rate and tracker products relatively quickly. Banks tend to reprice variable-rate products in the month or two following a change in Bank Rate and tracker products will adjust automatically. Around a quarter of the value of the stock of mortgage lending is on a floating-rate product. In contrast, any change in rates will only affect borrowers with a fixed-rate product — who hold the remaining three quarters of outstanding mortgages — when they remortgage at the end of their fixed term. Changes in Bank Rate tend to have a relatively small effect on the interest rates on consumer credit products as credit risk plays a much more important role in their pricing.

Around 85% of corporate lending is on floating rate and so changes in Bank Rate would be expected to feed through relatively quickly. The spread of Libor over Bank Rate is also important for rates on business loans linked to Libor, a common benchmark for floating-rate corporate lending. The spread between three-month Libor and Bank Rate widened substantially in the second half of March, offsetting much of the reduction in Bank Rate. In contrast, SONIA (the Sterling Overnight Index Average) has remained closely in line with Bank Rate. Borrowers who have already made the transition to paying interest based on SONIA, or those with loans linked to Bank Rate, will have benefited from the reduction in Bank Rate more directly (see Box 1 of the May 2020 [interim Financial Stability Report](#)).

Low deposit rates can hinder pass-through...

When deposit rates are close to zero, banks may not be able to pass on Bank Rate cuts fully to these products. This might limit their ability to pass on Bank Rate cuts to lending rates if they want to preserve the 'net interest margin' earned between lending and borrowing rates. Since the MPC cut Bank Rate, interest rates on savings accounts have fallen, but the cuts have not been passed through fully. This is particularly the case for sight deposits, which make up more than two thirds of household deposits and tend to have the lowest interest rates ([Table 2](#)).

...but the TFSME will help reinforce the transmission of lower Bank Rate.

The TFSME was designed to maximise the effectiveness of the Bank Rate cut by mitigating the pressures faced by some banks and building societies unable to reduce deposit rates much further. The scheme provides funding to banks and building societies at rates at, or very close to, Bank Rate. By helping to protect lenders' net interest margins, this

measure should help reinforce the transmission of the reduction in Bank Rate to the lending rates facing business and households. This should allow the cuts in Bank Rate from 0.75% to 0.1% to have broadly the same impact as those made when rates were further above zero. Over 30 banks and building societies have applied to participate in the scheme to date, and these lenders plan to draw more than £100 billion of funding from the scheme. The TFSME also helps to support the supply of credit to businesses and households.

The reduction in Bank Rate has reduced interest rates for some households and businesses...

Existing customers with variable-rate mortgages have seen the largest changes. The average effective rate on these mortgages in March fell by 11 basis points relative to February (**Table 2**). This rate is likely to fall further in the coming months. Supervisory intelligence suggests most banks have passed on the 65 basis points reduction fully to existing tracker and variable-rate mortgage products, but many of these changes took place after March so are not yet captured in the effective rates data. A 65 basis points interest rate reduction would save a household with a typical mortgage around £30 a month on their repayments.

Quoted rates on most new fixed-rate mortgage products have been little changed in the data to April. Past experience suggests that the falls in risk-free rates will already be having some influence on pricing decisions. The price of new mortgage lending, however, is also likely to have been affected by the impact of Covid-19 on the housing market and mortgage lending capacity. The stalling in the housing market, in part due to government restrictions, means there is limited new business for banks to compete for. In addition, banks are currently experiencing capacity constraints due to the large volumes of payment holiday queries and staff shortages (Section 2.3).

New consumer credit rates are broadly unchanged relative to February, in line with previous insensitivity to changes in Bank Rate. Rates on credit cards, some of which are linked to Bank Rate, adjusted a little more than other consumer credit products.

The effective rate on the stock of bank loans to corporates fell by 9 basis points in March.

Table 2 The reduction in Bank Rate has already reduced interest rates on some products

Selected household and corporate interest rates^(a)

Quoted rates on new lending and deposits						Effective rates on the stock of loans and deposits					
	Apr. 2020 (per cent)	Changes since (basis points)						Mar. 2020 (per cent)	Changes since (basis points)		
		Mar. 2020	Feb. 2020	Jan. 2020	Jan. 2017				Feb. 2020	Jan. 2020	Jan. 2017
Mortgages											
Two-year fixed rate, 75% LTV	1.40	-2	-1	-2	-5		Fixed-rate mortgage	2.15	-1	-1	-55
Five-year fixed rate, 75% LTV	1.67	1	0	-1	-55		Floating-rate mortgage	2.85	-11	-9	28
Two-year fixed rate, 90% LTV	1.88	-6	-10	-18	-62		Credit card ^(c)	18.41	-14	-11	22
Consumer credit											
£10,000 personal loan	3.56	0	-3	-2	-13		Personal loan ^(d)	6.8	-7	-6	-51
Credit card	20.72	-8	-5	-5	276		Deposits from individuals^(b)				
Household deposits							Interest-bearing sight	0.45	-1	-1	7
Instant access	0.28	-11	-13	-13	13		Time	0.94	0	-1	-8
One-year fixed-rate bond	0.73	-24	-24	-24	13		PNFCs				
							Loans	3.21	-9	-8	28
							Interest-bearing sight deposit	0.32	-9	-11	15

(a) The Bank's quoted rate series are weighted monthly average rates advertised by all UK banks and building societies with products meeting the specific criteria. In February 2019 the method used to calculate these data was changed. See 'Introduction of new Quoted Rates data' for more information. The Bank's effective rate series are weighted monthly averages of rates from a sample of banks and building societies with products meeting the specific criteria. Data are not seasonally adjusted.

(b) Individuals and individual trusts.

(c) Weighted average interest rate on interest-bearing balances.

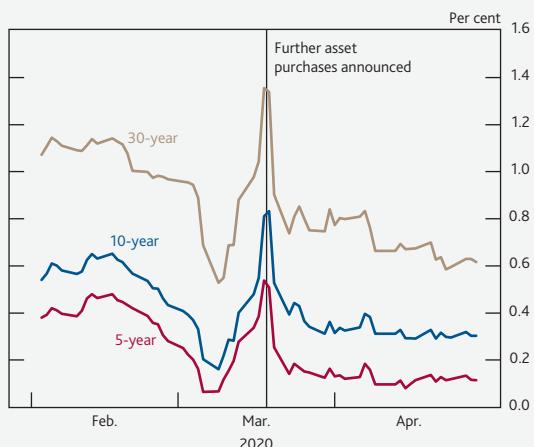
(d) Also includes other consumer credit products which are not credit cards or overdrafts.

...and the increase in the asset purchase scheme has helped gilt and corporate bond markets.

The additional asset purchases announced on 19 March have helped to reduce interest rates and improve liquidity in the gilt market as intended. By the end of March, gilt yields across maturities were lower than their levels at the start of February (**Chart A**). Additionally, spreads between bid and offer prices, which are an indicator of market liquidity, had fallen back a little from their elevated levels seen in mid-March (**Chart B**). The commitment to purchase some corporate bonds as part of the MPC's asset purchases has helped conditions in corporate bond markets also (Section 2.3).

Chart A Gilt yields fell back after the MPC announced further asset purchases

Spot yields on UK gilts at selected maturities^(a)

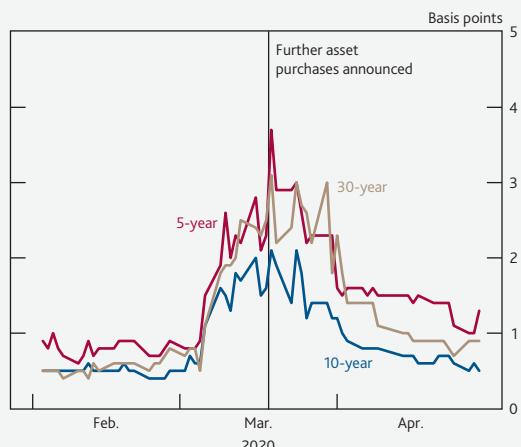


Sources: Bloomberg Finance L.P., TradeWeb and Bank calculations.

(a) Zero-coupon spot rates derived from government bond prices.

Chart B Measures of liquidity in the gilt market had deteriorated before asset purchases were announced

Bid-offer spreads on UK gilts at selected maturities



Sources: Eikon from Refinitiv and Bank calculations.

Box 3

Fiscal policy since the January Report

The Government has announced a substantial set of fiscal measures in response to Covid-19.

Since January, there have been a number of substantial fiscal policy interventions in response to the challenges caused by Covid-19. Some increase spending on the health service, while others are aimed at supporting the economy during the outbreak, in particular minimising the potential for longer-term damage. The first set of measures was announced in the March *Budget*, which committed to provide support for businesses and extra spending on the NHS, as well as making changes to Statutory Sick Pay. The Government has also made a number of further announcements since the *Budget*, mainly with the aim of reducing the financial cost of the pandemic on businesses and households.

Part of the response is designed to support employment and household incomes.

The Government has taken action to support employment, largely via the Coronavirus Job Retention Scheme. That Scheme will reimburse businesses 80% of the usual salaries of employees that are furloughed during the outbreak, up to a value of £2,500 per month. This is designed to encourage companies to retain their staff where possible and safeguard the incomes of those employees. For the self-employed, the Government will provide a direct cash grant of 80% of average profits, also up to £2,500 per month. Income tax payments due in July 2020 under the self-assessment system will also be deferred to January 2021.

The Government has also increased the value of some welfare payments. The standard allowance under Universal Credit and the basic element of Working Tax Credit have both been increased by £20 per week. Local Housing Allowance rates have also been increased.

Other announcements are aimed at supporting businesses.

Measures have been introduced to support businesses of all sizes that come under stress as a result of Covid-19. The Government has deferred the collection of any VAT that would normally have been due before the end of June, with businesses given until the end of the 2020–21 tax year to pay these liabilities. Some sectors adversely affected by the Covid-19 outbreak will receive particular support. Eligible retail, hospitality, leisure and nursery businesses in England will not pay business rates for the 2020–21 tax year.

There are schemes to support SMEs...

A number of measures have been introduced that are specifically targeted to support small and medium-sized enterprises (SMEs). The Government will offer a rebate to all SMEs to cover the cost of Statutory Sick Pay paid to employees affected by the virus. Grant funding will be made available, including cash grants for SMEs in the retail, hospitality and leisure sectors.

In addition, the Government has launched schemes to support the ability of banks to supply the credit needed by companies during a period with severe cash-flow pressures. The Bounce Back Loans Scheme provides SMEs with access, via their lender, to loans of up to £50,000. The Government will cover interest and lender-levied fees for the first year and facilities will be fully backed by a government guarantee. For SMEs with larger financing needs, the Coronavirus Business Interruption Loan Scheme offers facilities of up to £5 million with an 80% government guarantee. For fast-growing businesses that rely on equity investment, the Coronavirus Future Fund provides convertible loans of up to £5 million, if they are at least matched by private investors.

...and larger businesses.

Further policy measures have been announced that aim to ease financing conditions for larger businesses. Under the Covid Corporate Financing Facility, the Bank of England is buying short-term debt from larger companies, to support businesses facing a temporary funding squeeze. The facility will also support the functioning of corporate finance markets and ease the supply of credit. Furthermore, the introduction of the Coronavirus Large Business Interruption Loan Scheme means that banks are able to offer loans of up to £50 million to larger firms with an 80% government guarantee.

Table 1 A package of government policy measures has been designed to support different parts of the economy

	Businesses		Households		
	Large businesses	SMEs	Employees	Self-employed	Unemployed
11 March 2020 — Budget 2020					
Statutory Sick Pay relief		✓			
Time To Pay tax support service	✓	✓		✓	
17 March 2020 — support to protect businesses					
Covid Corporate Financing Facility	✓				
Coronavirus Business Interruption Loan Scheme		✓			
Business rates holiday		✓			
Grant funding		✓			
20 March 2020 — workers' support package					
Coronavirus Job Retention Scheme	✓	✓	✓		
VAT payments deferral	✓	✓			
Income tax payments deferral				✓	
Welfare changes, including Universal Credit standard allowance			✓	✓	✓
26 March 2020 — support for self-employed					
Coronavirus Self-Employed Income Support Scheme				✓	
3 April 2020 — strengthening support for businesses					
Coronavirus Large Business Interruption Loan Scheme	✓				
20 April 2020 — helping high-growth businesses					
Coronavirus Future Fund		✓			
27 April 2020 — fast-track finance for small businesses					
Bounce Back Loan Scheme		✓			

Recent announcements represent a significant loosening of fiscal policy.

Even without accounting for the measures that have been announced since, the *Budget 2020* fiscal package represented the largest easing of fiscal policy since 1992. That loosening would, all else equal, boost GDP. The impact of the measures taken since the *Budget* will depend on how much they are used, but they are also judged likely to support GDP (Section 1). These fiscal announcements, along with the weaker economic outlook, will contribute to a marked increase in public sector borrowing.⁽¹⁾

(1) For an early assessment of the possible impact of Covid-19 on the public finances, see the Office for Budget Responsibility's [Coronavirus reference scenario](#), published on 14 April 2020.

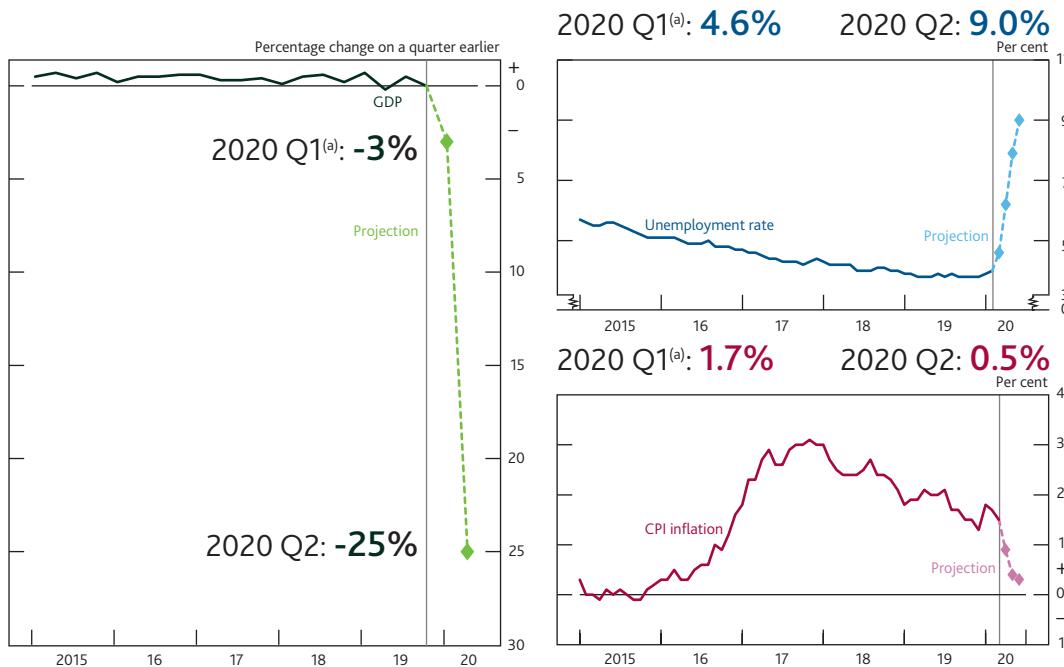
2 Current economic conditions

Economic activity has fallen significantly around the world as a result of Covid-19 and the measures implemented to contain it. Policymakers have provided exceptionally large monetary and fiscal stimulus in response to the crisis. Nonetheless, financial conditions have tightened both in the UK and abroad. Markets have been extremely volatile and risky asset prices have fallen significantly.

Activity in the UK has fallen sharply, with GDP expected to contract by around a quarter in Q2, although the uncertainty around that estimate is large. Covid-19 and the social distancing measures to fight its spread have reduced consumer spending; some forms of spending have stopped completely. Lower demand for goods and services has caused firms to cut investment, reduce working hours and, in some cases, lay off workers. Although the Government's Coronavirus Job Retention Scheme has prevented many redundancies, unemployment is still expected to rise sharply.

Inflation is expected to fall below 1% over the coming months as much lower oil prices feed through to lower fuel and energy prices. Further ahead, the lower price of goods from overseas may also push inflation down. But the outlook for overall inflation will also depend on how domestic cost pressures evolve.

Chart 2.1 Economic activity has fallen sharply. Unemployment is expected to rise and inflation to fall below 1%.
Near-term projections



Sources: ONS and Bank calculations.

(a) GDP and unemployment projections are based on official data to February. CPI inflation figure is an outturn.

2.1 The global economy

Economic activity has fallen sharply around the world...

There has been a sharp reduction in economic activity around the world as a result of Covid-19 and the public health measures implemented to contain it. Workplaces and schools have been closed, travel has been restricted, and people have been instructed to stay at home.

Output first started to fall in China around the start of the year. Other countries experienced sharp declines in March as the virus and containment measures spread (Chart 2.2). Bank staff estimate that UK-weighted world GDP fell by around 4% in Q1, the first decline since 2009 (Table 2.A). But the fall in output is expected to be much larger in Q2, as social distancing measures will have been more widespread for a larger part of the quarter. Bank staff estimate the decline in world GDP could be over 20%.

Chart 2.2 Surveys suggest many economies have experienced record monthly declines in output
Composite output PMIs in selected economies^(a)



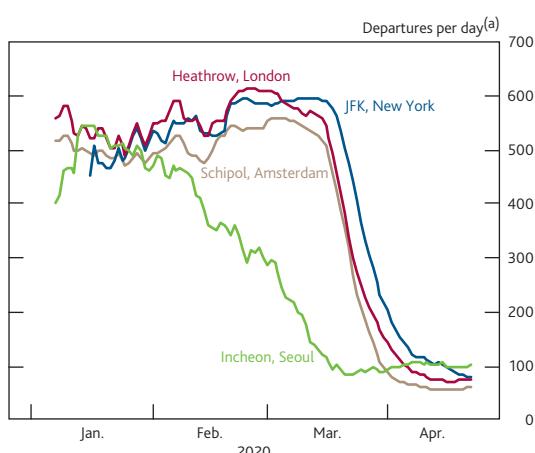
Sources: Eikon from Refinitiv and IHS Markit.

(a) April data points for the euro area, UK and US are flash estimates. Data for China are to March.

...with travel, trade and consumer services severely affected.

Travel has been severely restricted because of the pandemic. The number of commercial flights leaving US and European airports has fallen by around 90% since the start of March (Chart 2.3). Air traffic across Asia fell earlier, and although some parts saw a small recovery in April, departures remain well below normal levels. It has also become harder to cross land borders: the average time it took cargo trucks to cross some European borders increased sharply in March as extra checks were imposed, although some of these have now been lifted.

Chart 2.3 Air traffic has fallen sharply all over the world
Aircraft departures from selected major airports



Sources: OpenSky Network and Bank calculations.

(a) Seven-day moving averages of flights tracked by the OpenSky Network.

Table 2.A Many countries experienced falls in GDP in Q1 and world GDP fell for the first time since 2009
GDP in selected countries and regions^(a)

Percentage changes on a quarter earlier

	Quarterly averages					
	1998–		2010–		2020	
	2007	2008	2009	2018	2019	Q1
United Kingdom	0.7	-0.9	-0.4	0.5	0.3	-2.9(b)
Euro area (40%)	0.6	-0.5	-0.6	0.3	0.3	-3.8
United States (19%)	0.7	-0.7	0.0	0.6	0.6	-1.2
China (4%) ^(c)	2.5	1.8	2.7	1.9	1.5	-9.8
UK-weighted world GDP ^(d)	0.8	-0.3	-0.1	0.6	0.4	-3.9(b)

Sources: Eikon from Refinitiv, IMF *World Economic Outlook* (WEO), National Bureau of Statistics of China, OECD, ONS and Bank calculations.

(a) Figures in parentheses are shares in UK exports in 2018.

(b) Figures for 2020 Q1 are Bank staff's projections.

(c) Estimates from 2010 Q4 onwards are from the National Bureau of Statistics of China.

(d) See footnote (c) of Table 1.A.

Chart 2.4 World trade volumes were already falling in February
World trade in goods



Sources: CPB Netherlands Bureau for Economic Policy Analysis and Bank calculations.

The combination of travel restrictions, the enforced closure of some factories, and weaker demand from consumers has caused a significant decline in world trade. The volume of world goods trade was already 2.6% lower than a year earlier in February, the lowest rate of growth since 2009 (Chart 2.4). That largely reflected the earlier imposition of restrictions in China. Bank staff expect the total decline in world trade over 2020 to be around twice the size of the decline in world GDP.

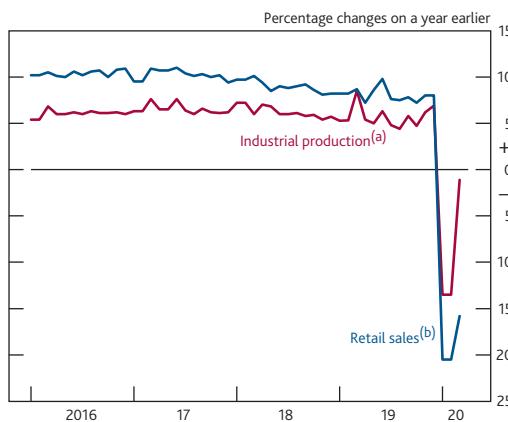
In addition to those sectors affected by trade and supply chain disruption, domestic consumer services have been severely disrupted by social distancing measures. Restaurants, cinemas and theatres are completely closed in many major economies. Retail footfall is less than a fifth of normal levels in some European countries and the US, with some shops selling non-essential products remaining closed.

The Chinese economy was hit by the virus first...

The outbreak of Covid-19 began in China, with Wuhan and other cities in the province of Hubei entering a period of lockdown on 23 January. A range of restrictions were imposed on other parts of the country as well. The stark economic consequences were apparent in data from the start of the year: retail sales in January–February were a record 21% lower than a year earlier and industrial production was 14% lower (Chart 2.5). Fixed-asset investment was even weaker, at almost 25% lower than a year earlier.

Chart 2.5 Chinese industrial production and retail sales were very weak at the start of the year

China industrial production and retail sales

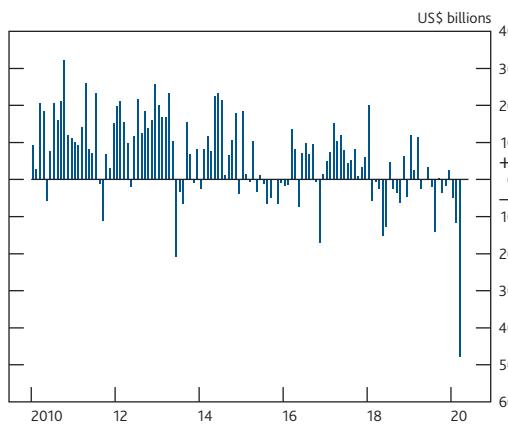


Sources: Eikon from Refinitiv and National Bureau of Statistics of China.

(a) Constant-price measure.
(b) Current-price measure.

Chart 2.7 There was a record outflow of capital from non-China emerging market economies in March

Non-China EME net portfolio capital inflows^(a)

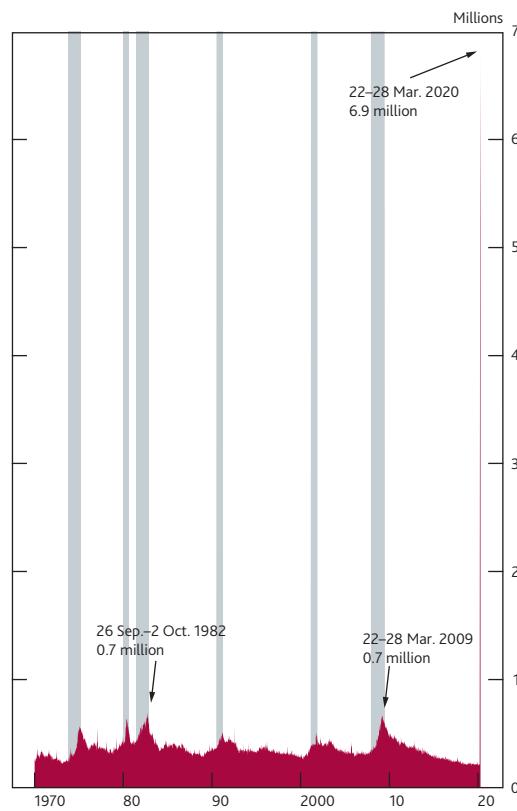


Sources: Institute of International Finance and Bank calculations.

(a) Net non-resident portfolio inflows to the following EMEs: Brazil, Colombia, Hungary, India, Indonesia, Malaysia, Mexico, Thailand, Turkey, South Africa and Vietnam. Constituent series are excluded if data are missing for March.

Chart 2.6 There has been an unprecedented surge in unemployment claims in the US

US weekly initial unemployment claims^(a)



Sources: Federal Reserve Bank of St. Louis, National Bureau of Economic Research and US Employment and Training Administration.

(a) Grey bars indicate NBER-dated US recessions.

Restrictions have started to ease and economic activity is now slowly resuming in China. High-frequency indicators such as energy consumption and road traffic suggest that activity is at almost 90% of normal levels. Industrial production had already recovered in March and was only 1% lower than a year earlier. Retail sales remained very weak however — 16% down on the previous year — suggesting that consumer spending could be slower to recover. Households may be reluctant to resume spending out of fear of infection or to increase their precautionary saving. There is evidence for this in South Korea, another country that experienced a relatively early outbreak of the virus; internet searches for restaurants are still well below their level a year ago despite the fact most businesses are open.

GDP in China in Q1 — which included the period of peak disruption in February and the partial recovery in March — was 9.8% lower than the previous quarter (**Table 2.A**) and 6.8% lower than a year earlier, the lowest rates of growth in China for decades.

...then its effects spread to the euro area...

After China and some neighbouring countries, parts of Europe have been dealing with the virus for the longest. Specific villages in northern Italy were put into quarantine in February and a national lockdown began in early March. Other countries adopted similar measures in the following weeks. Although some countries have started easing specific restrictions, there are still widespread limits on people's movements and economic activity.

PMIs suggest many countries saw steep declines in output in March, and euro-area GDP fell by 3.8% over Q1 as a whole (**Table 2.A**). April's flash PMIs confirm the weakness persisted into April, and the contraction in GDP in Q2 is expected to be even larger. Most major countries in the euro area have introduced wage subsidy schemes to reduce redundancies (**Table 2.B**). Nevertheless, benefit claimant figures suggest unemployment has increased sharply in several countries.

...and to the United States, where there is already evidence of unemployment increasing sharply.

At the end of March, the US became the country with the highest number of confirmed Covid-19 cases, with a particularly severe outbreak in New York. Containment measures have been introduced by states, with many implementing similar measures to Europe. The US publishes timely data on unemployment claims which suggest the current crisis will see the sharpest increase in joblessness on record. In the final week of March, almost 7 million people applied for first-time unemployment benefits, ten times higher than previous highest weekly totals in 1982 and 2009 (**Chart 2.6**). Over 30 million people have applied since 15 March, when claims first began to surge.

Most emerging economies have been hit less hard by the virus so far, but have suffered capital outflows.

There are now significant outbreaks in many emerging market economies (EMEs) including Turkey, Russia, Brazil and other parts of South America. Containment measures are widespread. The later implementation of measures in these countries means the economic impact in Q1 is expected to be a little smaller than in advanced economies, but larger later on in the year.

Growth in emerging markets may also be reduced because of capital outflows. There was a record outflow of portfolio capital from non-China EMEs in March (**Chart 2.7**) as investors sought to put their money into safe-haven assets, in particular US dollars (Section 2.2). The substantial fall in oil prices also reduced the demand for assets in oil-producing EMEs. Weekly data suggest that outflows continued in April, though at a much lower rate. The outflows of capital and accompanying currency depreciations could cause financial stability risks in these economies to crystallise, hindering the recovery from the current crisis. The [December 2019 Financial Stability Report](#) discussed these risks in more detail.

The pandemic has triggered an exceptionally large economic policy response.

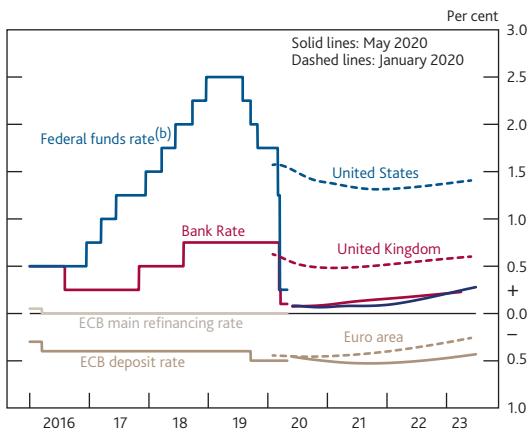
As the economic consequences of the virus and the actions taken to contain its spread have become apparent, governments and central banks around the world have stepped in with exceptional levels of support for their economies (**Table 2.B**). Although policy cannot prevent the large falls in activity, it can help to alleviate cash-flow problems facing businesses and households and minimise longer-term damage to economies.

Monetary policy has been loosened markedly...

Most central banks have cut their policy rates over the past quarter, with most policy rates across advanced economies now around zero. In the US, the Federal Open Market Committee cut the target range for the federal funds rate from 1.5%–1.75% to 0%–0.25% over two meetings in March. The Bank of England's Monetary Policy Committee cut Bank Rate from 0.75% to 0.1% (Box 2). Market participants expect policy rates to remain around these levels over the next three years (**Chart 2.8**).

Chart 2.8 Monetary policy rates have been reduced and are expected to stay low

International forward interest rates^(a)



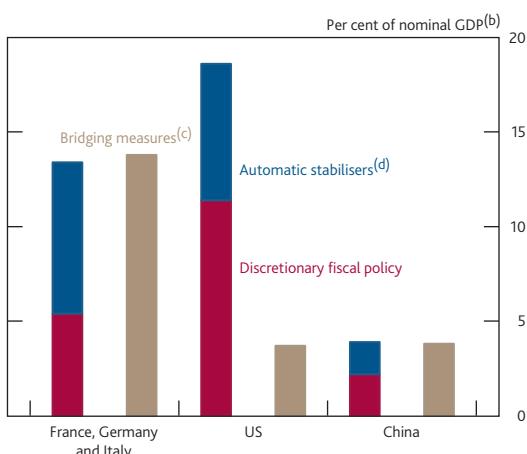
Sources: Bloomberg Finance L.P. and Bank calculations.

(a) All data as of 29 April 2020. The May and January curves are estimated using instantaneous forward overnight index swap rates in the 15 working days to 29 April and 22 January 2020 respectively.

(b) Upper bound of the target range.

Chart 2.9 Governments are providing exceptional support for their economies in response to the crisis

Bank staff estimates of announced fiscal policy responses^(a)



(a) See Table 2.B and its footnote for more information.

(b) Policy announcements as a percentage of nominal GDP in 2019.

(c) Bridging measures are temporary fiscal actions that will eventually be repaid (eg tax deferrals, state loans). The actual uptake of programmes may be lower than the announced packages.

(d) Projected response of automatic stabilisers.

Central banks have also expanded or restarted asset purchase schemes. These purchases increase the demand for debt, pushing longer-term interest rates down and helping markets function effectively. In the US, the Federal Reserve has announced open-ended purchases of a range of assets. The ECB has announced plans to make €890 billion of purchases this year. These ‘quantitative easing’ schemes are even larger than those implemented in the financial crisis, and the range of countries making purchases is also much wider: some advanced economies, such as Australia and Canada, and some emerging economies, such as South Africa and Turkey, are using them for the first time in their history.

...lending facilities have been created to help firms ‘bridge’ the temporary shortfall in their revenues...

A key aim for policymakers around the world has been to make credit cheap and widely available so firms affected by the crisis can, if they wish, borrow money to pay their expenses until their usual income streams return. Countries have gone about this in a variety of ways (Table 2.B). Many governments are offering to wholly or partially guarantee bank loans to small and medium-sized enterprises. In the US, a similar effect is achieved by the Federal Reserve purchasing 95% of eligible loans under the Main Street Lending Program. Some central banks are encouraging private banks to lend to companies by providing cheaper funding.

Several countries are also offering more direct routes to finance. The US has set up various corporate credit facilities offering to buy commercial paper, corporate bonds and loans from larger businesses. Germany is providing finance for troubled companies via its Economic Stabilisation Fund (WSF), in some cases in return for equity stakes. Governments around the world are deferring tax bills, which is also a form of credit. European countries have announced particularly large packages of ‘bridging measures’ relative to the size of their economies (Chart 2.9), although ultimate uptake might be less than the total amount available.

...and governments are providing direct help to support employment and incomes.

Governments have also set out spending plans to provide direct help for households and firms, for example by paying wages (Table 2.B). Many European countries, including the UK (Box 3), have agreed to help pay workers affected by the pandemic, allowing firms to furlough workers or reduce their hours rather than make them redundant. The US Paycheck Protection Program provides incentives for small businesses to retain workers and the government is also making some direct payments to households. This assistance comes on top of the usual ‘automatic stabilisers’ — higher benefit payments and lower taxes — that operate automatically when the economy slows (Chart 2.9).

Table 2.B There has been an exceptional economic policy response to the crisis
Selected economic policy announcements^(a)

Discretionary fiscal policy		Bridging finance for firms	Monetary, macroprudential and financial sector policy
US	Measures worth at least 11% of GDP including: - Paycheck Protection Program for small businesses designed to provide an incentive for small businesses to keep their workers on the payroll - payments to individuals - business tax cuts - expanded unemployment benefits - extra health system funding	Multiple schemes including: - Commercial Paper Funding Facility and Corporate Credit Facilities for large firms - Main Street Lending Program of loans for small and medium-sized firms - Municipal Liquidity Facility for states and municipalities - US\$300 billion deferred tax payments	- Federal funds rate cut by 150 basis points to 0%–0.25% in March - Asset purchases including over US\$1 trillion of US Treasuries and US\$500 billion of corporate bonds and asset-backed securities - Improved and expanded swap lines to enhance the provision of global US dollar liquidity
China	Measures worth at least 2% of GDP including: - infrastructure investment - subsidies for those on low income - subsidies for new vehicles - targeted tax cuts	The People's Bank of China (PBoC) has simplified bond issuance for large firms, allowed banks to expand business lending, and permitted loan forbearance for affected SMEs and households	- Various interest rate cuts, including a 30 basis points cut to the one year medium-term lending facility rate - Targeted cuts in the reserve requirement ratio for small and medium-sized banks - Over RMB 3 billion injected into the banking system
European Union	- €66 billion made available to date - The European Council has also agreed a package of up to €540 billion including loans to support employment, credit lines from the European Stability Mechanism to support healthcare spending, and a guarantee for loans to companies, with a focus on SMEs		- The ECB has announced at least €870 billion of asset purchases this year, with an expanded range of assets eligible for purchase - TLTRO III finance expanded and made cheaper
Germany	Measures worth at least 9% of GDP including the short-time work scheme which provides subsidies for workers who have had their hours cut	- Economic Stabilisation Fund for large firms - Loans from the state-owned development bank	Banks' countercyclical capital buffers reduced
France	Measures worth at least 3% of GDP including the partial unemployment scheme which provides subsidies for workers who have had their hours cut	- State guarantees for bank loans - Tax and social charge deferrals - Public reinsurance mechanism	Banks' countercyclical capital buffers reduced
Italy	Measures worth at least 1% of GDP with Parliament due to debate an additional stimulus package shortly	- State guarantees for bank loans - Tax and utility bill deferrals	

(a) The IMF is maintaining a comprehensive [policy tracker](#) of economic responses to Covid-19 covering 193 economies. Many measures feature elements of both discretionary fiscal policy and bridging finance and their classification is a matter of judgement. China fiscal measures represent a lower bound as the size of some policies have not been provided and therefore not included. China bridging measures take into account target credit measures that may be implemented by the PBoC and other financial institutions.

2.2 Financial markets

Financial markets have been exceptionally volatile since the January Report.

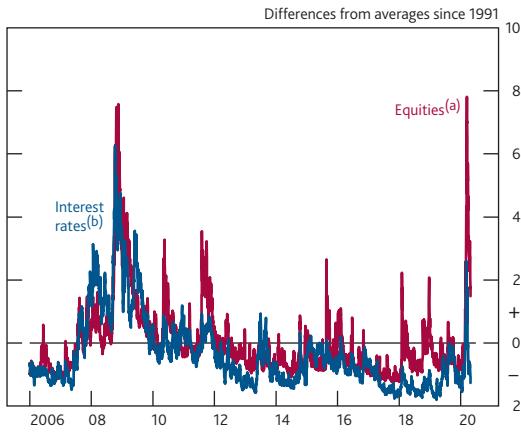
Financial markets have been exceptionally volatile over the past few months as a result of the Covid-19 shock (**Chart 2.10**). There was a rapid decline in risk appetite in March as the worldwide spread of Covid-19 became apparent and the economic outlook deteriorated. At times there was extremely high demand for liquid, short-term assets — in particular the US dollar — and market functioning was disrupted by low levels of liquidity. Government and central bank actions around the world helped markets to stabilise, and there was a modest recovery in sentiment over April.

Equity prices fell sharply in March...

Equity prices fell around the world in March as the worldwide spread of Covid-19 became apparent (**Chart 2.11**). The UK FTSE All-Share index fell over 10% on 12 March, the largest one-day fall since 1987. At one point, the major US, European and UK equity indices were all over 30% below their recent peaks. The decline was widespread across sectors, although healthcare and consumer staples sectors saw somewhat smaller falls. While the outlook for most firms' profits had worsened, the falls in equity prices were much larger than would be implied by announced earnings downgrades. That suggests investors were demanding a higher risk premium to hold equities, and that they were potentially anticipating further earnings downgrades.

Chart 2.10 Equity price and interest rate implied volatility has been exceptionally high

Option-implied volatilities



Sources: Bloomberg Finance L.P. and Bank calculations.

- (a) VIX measure of 30-day implied volatility of the S&P 500 equity index.
- (b) Merrill Option Implied Volatility Estimate (MOVE) Index measure of implied volatility of one-month US Treasury options.

Chart 2.11 Equity prices fell sharply in March, although there has been a modest recovery since then

International equity prices^(a)



Sources: Eikon from Refinitiv, MSCI and Bank calculations.

- (a) In local currency terms, except for MSCI Emerging Markets which is in US dollar terms.
- (b) The MSCI Inc. disclaimer of liability, which applies to the data provided, is available from the ['Monetary Policy Report May 2020'](#).

...corporate bond spreads increased...

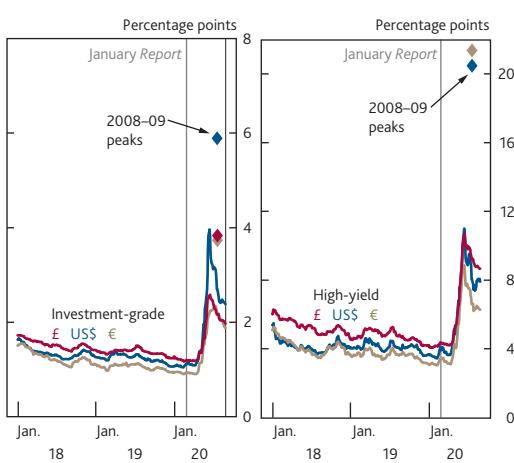
Corporate bond spreads increased as risk sentiment weakened. Investment-grade corporate bond spreads increased by over 100 basis points (Chart 2.12). The spread between riskier high-yield and safer investment-grade debt widened, and issuance of new high-yield debt was paused (Section 2.3).

...and commodity prices fell, particularly oil prices.

The weakening economic outlook caused expected demand for commodities to fall, with prices falling sharply as a result. The decline in oil prices was particularly large (Chart 2.13), with transport restrictions leading to a sharp fall in demand for fuel. Supply factors added to the downward pressure on oil prices, with Russia rejecting a plan by Saudi Arabia and other OPEC countries to limit production in March. Although a wider range of producers agreed to make co-ordinated cuts after that, prices continued to fall as supply remained higher than demand and concerns emerged that some storage facilities would soon reach capacity. The price of a barrel of Brent crude oil — the international benchmark — fell below US\$20 in April for the first time since 2002. The price for May delivery of West Texas Intermediate crude oil — a similar type of oil produced only in the US — was briefly negative, implying sellers were willing to pay buyers to take delivery of the oil.

Chart 2.12 Corporate bond spreads spiked in March and remain higher than they were in January

International non-financial corporate bond spreads^(a)

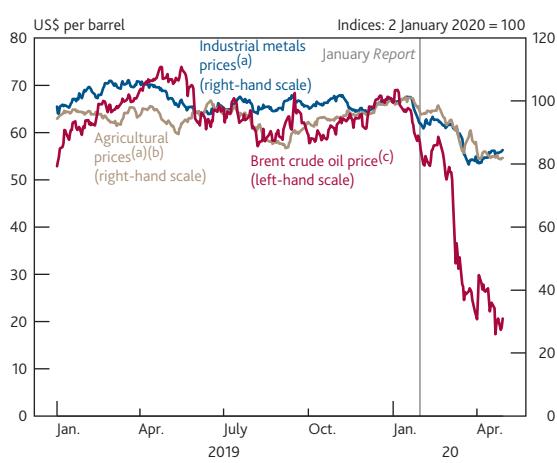


Sources: Eikon from Refinitiv, ICE/BoAML Global Research and Bank calculations.

- (a) Option-adjusted spreads on government bond yields. Investment-grade corporate bond yields are calculated using an index of bonds with a rating of BBB3 or above. High-yield corporate bond yields are calculated using aggregate indices of bonds rated lower than BBB3. Due to monthly index rebalancing, movements in yields at the end of each month might reflect changes in the population of securities within the indices.

Chart 2.13 Oil prices have dropped sharply as global demand has fallen

US dollar oil and other commodity prices



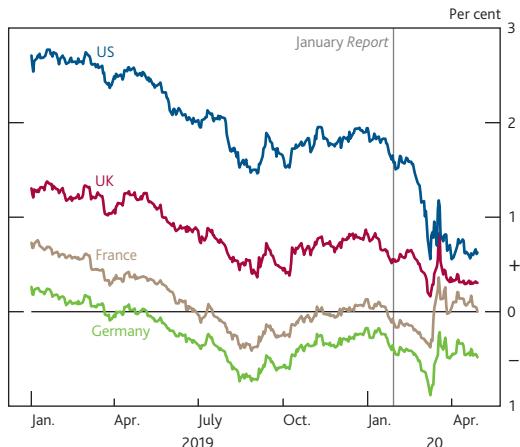
Sources: Bloomberg Finance L.P., Eikon from Refinitiv, S&P Indices and Bank calculations.

- (a) Calculated using S&P GSCI US dollar commodity price indices.
- (b) Total agricultural and livestock S&P commodity index.
- (c) US dollar Brent forward prices for delivery in 10–25 days' time.

As risk aversion increased, a 'flight to safety' turned into a more extreme 'dash for cash'...

The increase in risk aversion reached extreme levels in mid-March, with demand for US dollar cash and cash-like assets so strong that even assets traditionally thought of as safe havens were being sold. The prices of longer-term government bonds fell, causing their yields to increase (**Chart 2.14**). These bond yields normally fall when risk appetite weakens, so the correlation between yields and equity prices is typically positive; the negative correlation observed in mid-March was extremely unusual (**Chart 2.15**).

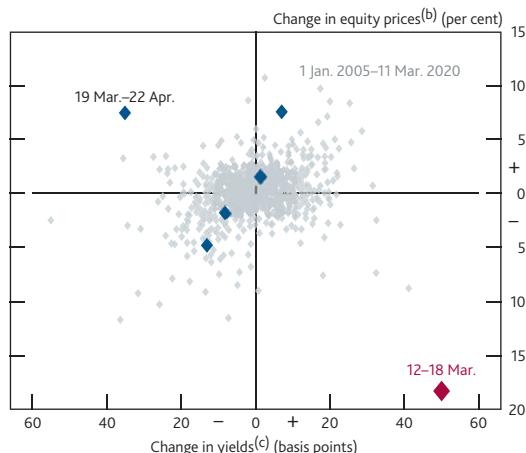
Chart 2.14 Long-term government bond yields spiked in March but have mostly fallen following central bank action
Ten-year nominal interest rates^(a)



Sources: Bloomberg Finance L.P. and Bank calculations.

(a) Zero-coupon spot rates derived from government bond prices.

Chart 2.15 There was a unusual negative correlation between bond yields and equity prices in mid-March
Changes in UK bond yields and equity prices^(a)



Sources: Bloomberg Finance L.P. and Bank calculations.

(a) Changes over non-overlapping five-day periods.

(b) UK domestically focused companies' equity price index. UK domestically focused companies are defined as those generating at least 70% of their revenues in the UK, based on annual financial accounts data on companies' geographic revenue breakdown.

(c) Ten-year UK government bond yield.

Market functioning appeared to be impaired because of a lack of liquidity, with indicators like bid-offer spreads on advanced-economy government bonds unusually high (Box 2). Even short-term funding markets, such as the commercial paper markets, became strained.

The 'dash for cash' resulted from a number of underlying vulnerabilities in the financial system, although many parts appeared to function well through the period of extreme volatility. This period is discussed in more detail in the May 2020 interim Financial Stability Report.

...and the US dollar appreciated against a range of currencies.

The strong demand for the US dollar caused it to appreciate sharply. The dollar effective exchange rate climbed over 7% between 6 and 23 March, with appreciations against a broad basket of currencies including some traditional safe-haven currencies such as the Swiss franc and Japanese yen. Emerging market currencies were hit particularly hard as capital flowed out of those economies (Section 2.1). The currencies of oil-exporting countries, such as Norway, were also hit by the weaker global demand for oil.

Central bank and government policies helped markets to stabilise...

A wide range of central bank and government measures (**Table 2.B**) helped markets to stabilise towards the end of March. Central bank asset purchases eased liquidity pressures in bond markets. For example, gilt yields and bid-offer spreads have fallen back in the UK (Box 2). Extended US dollar swap lines increased the supply of dollars, and various lending facilities for corporates helped ease the pressure in corporate debt markets (Section 2.1).

...and there has been a modest recovery in risk sentiment since March.

There has been a modest recovery in financial markets since March. Equity prices have increased, although they are still well below their levels in the run-up to the *January Report* (**Chart 2.11**). The FTSE All-Share is 25% lower while the US S&P 500 is 14% down. Corporate bond spreads have fallen (**Chart 2.12**) and issuance of new US dollar investment-grade bonds has been strong, with demand boosted by central bank purchasing schemes.

Advanced-economy government bond yields are mostly a little lower than in January (**Chart 2.14**), consistent with their usual behaviour as risk appetite has fallen. UK gilt yields remained low and stable over April as the effects of increased supply to the primary market from the UK's Debt Management Office appear to have been offset by increased demand from the Bank of England asset purchasing programme. A number of surveys suggest market participants expect further asset purchases to be announced later this year.

The sterling exchange rate is 2½% lower than in January.

The sterling exchange rate has been volatile since January. At one point the sterling ERI was almost 9% lower than at the time of the January *Report*, having fallen over 12% against the US dollar. As risk sentiment has improved and the demand for dollars has abated, sterling has mostly recovered, although it remains 2½% lower (**Chart 2.16**). Market contacts note that there are some UK-specific factors affecting sterling. For example, Brexit-related uncertainty is continuing to weigh on UK assets relative to foreign assets; trade negotiations with the EU are currently continuing remotely, and the transitional arrangements currently in place are due to expire at the end of this year.

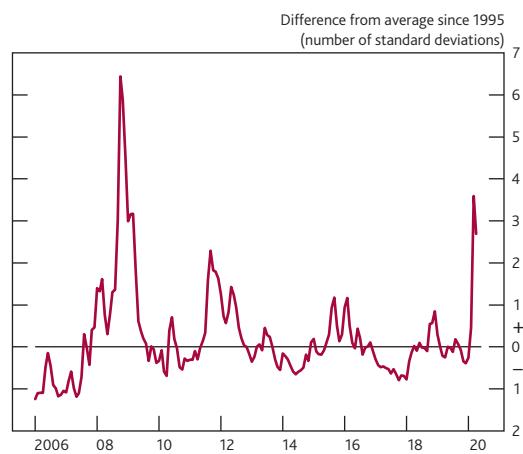
Global financial conditions tightened significantly in March, although they eased slightly in April.

The combination of falling equity prices and increasing borrowing costs meant that global financial conditions in March were at their tightest since 2008, according to a summary measure of conditions across 43 economies (**Chart 2.17**). The stabilisation in markets since then has caused this monthly indicator to fall slightly in April, but conditions remain tighter than at any time since the financial crisis.

Chart 2.16 Sterling fell sharply in March but has since rebounded
Sterling ERI



Chart 2.17 Global financial conditions tightened markedly in March but eased slightly in April
Global financial conditions index^(a)



Sources: Bloomberg Finance L.P., Eikon from Refinitiv, IMF *World Economic Outlook* (WEO) and Bank calculations.

(a) Financial conditions indices (FCIs) estimated for 43 economies using principal component analysis and weighted according to their shares in PPP-weighted world GDP. The FCIs summarise information from: term spreads, interbank spreads, corporate spreads, sovereign spreads, long-term interest rates, equity price returns, equity return volatility and relative financial market capitalisation. An increase in the index indicates a tightening in conditions. Data are to end-April 2020.

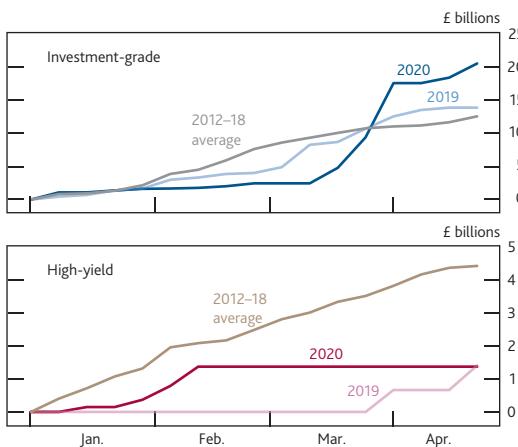
2.3 Credit conditions

Increases in corporate bond spreads have made capital market funding more costly...

The cost of market-based funding for corporates increased sharply in March. Spreads on corporate bonds widened (**Section 2.2**) and leveraged loan spreads spiked to double previous levels. Market intelligence suggested that primary high-yield and leveraged loan funding markets were effectively closed for most of March. These two markets accounted for around 20% of UK corporate debt as of end-2019.

Market conditions stabilised a little towards the end of March, as policy measures calmed markets (**Section 2.2**). Capital market issuance, which had stalled throughout much of March, increased sharply as large firms were able to issue in investment-grade bond markets (**Chart 2.18**). Conditions have not improved to the same extent in high-yield markets, where global issuance remains weak.

Chart 2.18 Corporate capital market issuance halted during March before investment-grade issuance surged
Cumulative bond issuance by UK corporates^(a)

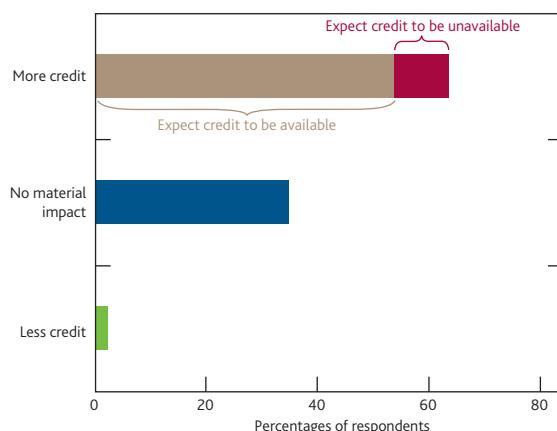


Sources: Refinitiv — Deals Business Intelligence and Bank calculations.

(a) Euro, sterling and US dollar issuance.

Chart 2.19 Two thirds of businesses reported that their demand for credit had increased but most expected extra credit to be available

Impact of Covid-19 on firms' demand for credit in Q2^(a)



Sources: Decision Maker Panel (DMP) Survey and Bank calculations.

(a) Question: 'Relative to what would have otherwise happened, how do you expect the spread of Coronavirus (Covid-19) to affect your demand for credit in 2020 Q2?'

...and at the same time many businesses have needed more credit.

There have been widespread reports of cash-flow shortages for businesses, as revenues have declined due to Covid-19. This has heightened many firms' demand for credit as they seek to build liquidity (for analysis of UK corporate sector financing needs see the [May 2020 interim Financial Stability Report](#)). Around two thirds of businesses reported that their demand for credit in Q2 is higher as a result of Covid-19 in the Bank's April Decision Market Panel (DMP) Survey (**Chart 2.19**). Some firms have reportedly been more reluctant to add to their debt levels (Box 5). For these firms, grants and payment holidays are important for helping cash flow.

More firms have turned to the banking sector for credit...

The higher demand for credit — alongside some businesses facing impaired access to capital markets — has resulted in increased demand for lending from banks and building societies. While the 2020 Q1 *Credit Conditions Survey* was carried out in March before the most stringent social distancing measures came into force, increased demand for bank credit was already expected. Lenders were expecting demand to pick up materially for firms of all sizes in Q2, with net balances the highest on record.

... and bank lending volumes increased markedly in March.

Net bank lending to PNFCs spiked to over £30 billion in March, up from an average of around £1 billion per month over the past three years. The pickup was mainly driven by drawdowns of existing facilities and net PNFC deposit flows picked up by around the same amount. This might suggest a precautionary motive. Banks have also supported businesses by offering relaxed covenants and payment holidays.

Some firms in the most disrupted sectors have found it difficult to access additional finance...

In the Bank's April DMP Survey, while most businesses expected the extra credit they needed due to Covid-19 would be available, around 10% of firms thought that they would not be able to get additional credit (**Chart 2.19**). Some mid-tier and smaller businesses have reported to the Bank's Agents that credit availability beyond pre-existing agreements appears tighter, particularly for trade credit and the sectors worst affected by Covid-19 (Box 5).

...so corporate credit availability is being supported by Bank and government schemes.

The availability of credit to businesses is being supported by new Bank and government schemes (Box 3, **Table A**). The TFSME provides lenders with funding at, or close to, Bank Rate to help support lending to the real economy, especially to SMEs (Box 2). The release of the UK countercyclical capital buffer by the Financial Policy Committee will support up to £190 billion of bank lending. Purchases of corporate bonds via the Asset Purchase Facility will also help businesses to access funding in capital markets.

The Covid Corporate Financing Facility (CCFF) allows larger firms to access working capital directly from the Bank of England. In addition, the Bounce Back Loan Scheme (BBLS), the Coronavirus Business Interruption Loan Scheme (CBILS) for SMEs and its equivalent for larger businesses provide loans backed by government guarantees.

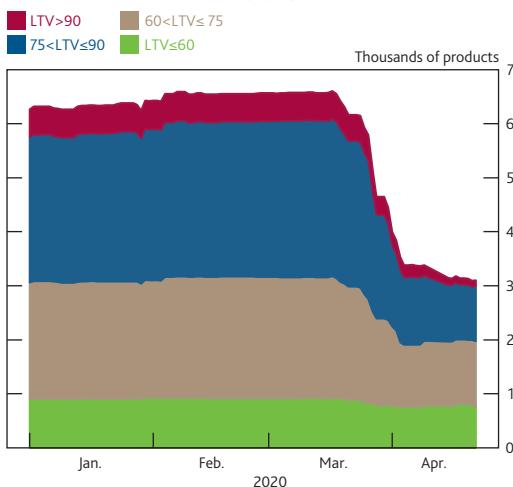
Early evidence shows that firms are already making use of these schemes. There was around £18 billion of commercial paper outstanding as of 6 May that had been purchased under the CCFF. Data from UK Finance suggest that more than £5 billion has been lent to SMEs as part of CBILS. Despite this, some firms are continuing to report in business surveys that credit availability and cash-flow positions have deteriorated.

Covid-19 has affected lending capacity in the mortgage market...

For households, new mortgage availability has been affected by staff shortages and social distancing measures. Some large lenders have cut the number of new mortgage products they offer in order to focus lower staff numbers on responding to the large volume of payment holiday queries. The availability of products with higher LTVs has fallen particularly sharply (**Chart 2.20**). These are likely to have been most affected by difficulties in estimating the loan to value (LTV) for new mortgages and the risk of house price falls. The housing market has stalled as social distancing measures have been implemented (Section 2.4), making it difficult to predict how house prices might evolve. Lenders have also had to use automated property valuations, which have a larger margin for error, while in-person valuations are not possible.

Chart 2.20 The availability of new mortgage products has fallen, particularly at higher LTVs

Number of advertised mortgage products, by maximum LTV^(a)

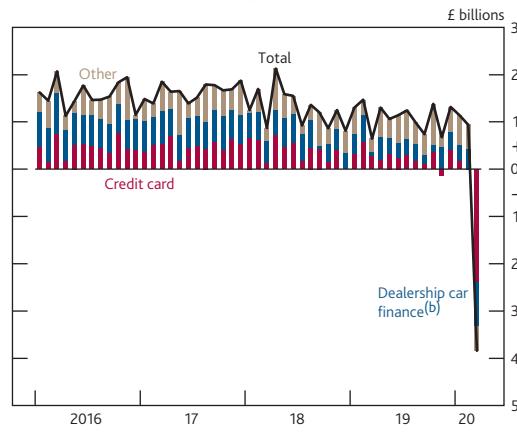


Sources: Moneyfacts.co.uk and Bank calculations.

(a) For products which have different maximum eligible LTVs for different subsets of borrowers, the highest has been taken. Buy-to-let mortgage products are excluded. Data are not seasonally adjusted.

Chart 2.21 Consumer credit repayments exceeded new lending in March

Net consumer credit lending^(a)



Sources: Bank of England, ONS and Bank calculations.

(a) Sterling net lending by UK monetary financial institutions (MFIs) and other lenders to UK individuals (excludes student loans).

(b) Identified dealership car finance lending by UK MFIs and other lenders.

...but demand for new mortgages is likely to be low...

The fall in new mortgage availability may not prove to be a constraint on new lending for house purchases. Lending was likely to fall regardless, as activity in the housing market has fallen markedly. Those wanting to remortgage at the end of a fixed term should be able to do so with their existing lender. Some might be more affected if they wish to change mortgage provider however, especially if they have a higher LTV, which may mean they cannot secure the most competitive rate.

...and existing customers will benefit from lower rates and payment holidays.

As discussed in Box 2, existing mortgage customers, particularly those on tracker or variable rate products, will benefit from lower interest rates on their mortgages following the reduction in Bank Rate. Additionally, banks are supporting customers by allowing payment holidays for those who are experiencing financial difficulties, for example if their income has fallen due to Covid-19. One in seven mortgages in the UK is currently subject to a payment holiday according to UK Finance.

Demand for consumer credit has fallen alongside the drop in consumer spending.

Some households have needed to take on extra consumer credit as a result of Covid-19, but overall demand has fallen as social distancing measures have restricted spending. In aggregate, net consumer credit lending volumes fell sharply in March as repayments exceeded new gross lending, particularly for credit cards (**Chart 2.21**). A small proportion of respondents to the Bank/Ipsos MORI survey⁽¹⁾ reported that they had either applied for a loan, increased the balance on their credit card or increased their overdraft since February as a result of Covid-19 (**Chart 2.22**). In addition, some people have reported that they are experiencing financial difficulties, such as falling behind with bills or debt repayments (see Box 4 of the *May 2020 interim Financial Stability Report*). Consumer credit borrowers in financial difficulty are being supported by payment freezes.

Higher wholesale funding costs are unlikely to push up the cost of credit materially.

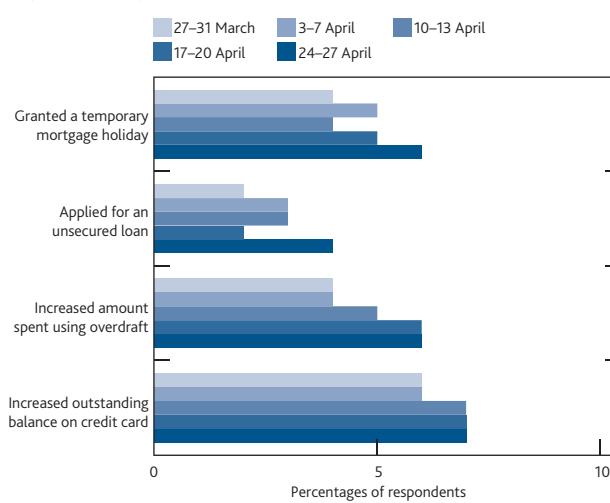
UK banks' wholesale funding costs rose sharply in March as concerns about the impact of Covid-19 on bank earnings and market-wide risk aversion spread. Spreads remain elevated, despite narrowing somewhat from their peak. This could push in the opposite direction to the cuts in Bank Rate on loan pricing (Box 2), but this effect is likely to be limited. Wholesale funding only makes up a small proportion of the funding large UK banks use to support lending to businesses and households.

Overall, UK monetary and financial conditions have tightened.

Taken together, the changes in financial market and credit conditions since the January Report have led to a marked tightening in UK monetary and financial conditions (**Chart 2.23**). While falling risk-free rates and the depreciation in sterling have loosened conditions, that has not been enough to offset the significant fall in equity prices and widening in credit spreads.

Chart 2.22 Some people have taken on extra credit as a result of Covid-19

Reported changes since the start of the Covid-19 outbreak^(a)

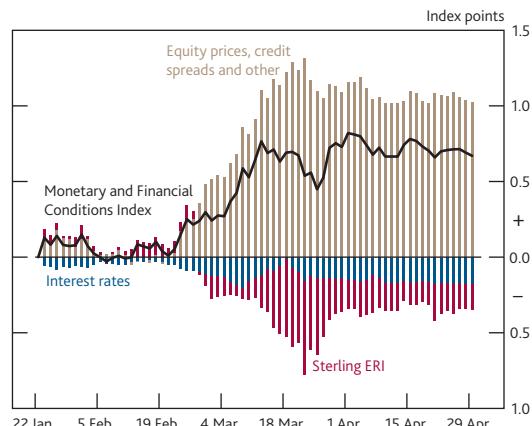


Sources: Bank of England, Ipsos MORI and Bank calculations.

(a) Question: 'Since the start of the outbreak of coronavirus in the UK in February, which, if any, of the following, have you experienced?'. Respondents were able to select other responses in addition to those shown in the chart. These were related to falling behind on loan payments, bills or rent and also allowed respondents to select 'none of these', 'don't know' and 'prefer not to answer'. Data are not seasonally adjusted.

Chart 2.23 Overall UK financial and credit conditions have tightened

Contributions to changes in the UK Monetary and Financial Conditions Index since the January 2020 Report^(a)



Sources: Bloomberg Finance L.P., Eikon from Refinitiv, ICE/BoAML Global Research and Bank calculations.

(a) 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. For more information, see the Bank Overground post ["How can we measure UK financial conditions?"](#).

(1) Research for this survey was carried out by Ipsos MORI on behalf of the Bank of England. It surveyed a nationally representative quota sample of over 2,200 adults in the United Kingdom aged 16–75 using its online omnibus for each wave. Data have been weighted to the known offline population proportions for age, gender, government office region, working status and social grade.

2.4 Demand and output

Prior to the spread of Covid-19, UK GDP growth had been slowing, although the MPC had expected some recovery over 2020...

Over 2019, weak global growth and Brexit-related uncertainty had been weighing on UK growth. GDP grew at 0.3% a quarter on average in 2019, slower than the average of around 0.4% across the previous three years. In January, the MPC expected UK growth to recover over 2020 as global growth recovered and uncertainty fell back. Surveys of firms' output growth had picked up after December's general election.

...but Covid-19 has materially altered the path for near-term growth.

The spread of Covid-19 and the measures implemented to contain it have significantly changed the course of near-term growth. Social distancing measures have materially damped consumer spending (**Chart 2.24**), changed the way people work and have required some businesses to close for a period. Supply chains have also been disrupted and tourism has fallen as a result of measures implemented across the world. As a result, UK GDP has fallen sharply.

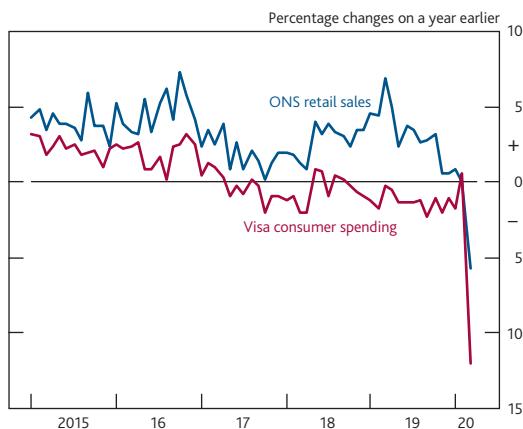
Timely indicators of activity point to a very sharp reduction in output since March.

The latest official data show that GDP growth was 0.1% in the three months to February 2020. That was a little below Bank staff's expectation, but poor weather affecting construction and retail might explain part of that weakness. Although concerns around Covid-19 were rising during February, widespread social distancing did not begin until the second half of March.

Timelier data such as business surveys show sharp contractions in activity over the past couple of months. The composite IHS Markit/CIPS indices for both output and expectations for future output fell sharply in March, even before the most stringent social distancing measures were imposed (**Chart 2.25**). The output index fell even further in April to a record low. These surveys record net balances of respondents, so they provide an indication of how widespread falls in output and expectations are, but are less informative about the magnitude of the falls. So, at a time when the contractions are likely to be very large, it is difficult to use these data to predict the size of the change in output.

As business output surveys are providing a less useful steer than usual, Bank staff are using a wider range of indicators to gauge how GDP is likely to evolve. These include new weekly surveys of businesses and households and high-frequency spending data (**Chart 2.26**). Using all of these sources, Bank staff estimate that monthly GDP will fall by enough in March to pull GDP down by around 3% in Q1 as a whole (**Chart 2.1**).

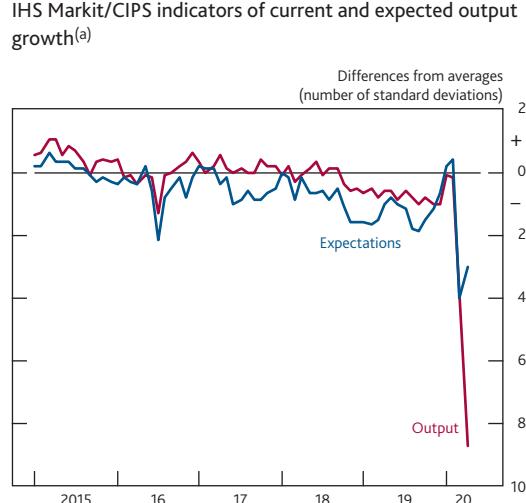
Chart 2.24 Consumer spending fell sharply in March
Indicators of consumer spending^(a)



Sources: ONS and Visa.

(a) Volume measures.

Chart 2.25 Survey indicators of current and expected output growth have hit record lows
IHS Markit/CIPS indicators of current and expected output growth^(a)



Sources: IHS Markit/CIPS and Bank calculations.

(a) Differences from averages since January 2000. UK composite output and expectations indices. Data for April are flash estimates.

GDP is expected to fall by around a quarter in Q2, although the uncertainty around that estimate is large.

Bank staff expect GDP to fall by around a quarter in Q2 (**Chart 2.1**), although the uncertainty around that estimate is large (Section 1). It is particularly sensitive to the evolution of the pandemic and any changes to social distancing practices. Over two thirds of this fall comes from reduced consumption as social distancing restricts household spending. Sharp contractions in housing and business investment account for a large proportion of the rest of the fall.

Social distancing has materially affected consumption...

Official data on aggregate consumption are not available yet for 2020 but the evolution of different types of spending can be monitored using a range of higher-frequency indicators, supported by monthly spending data up to March. Even though strict social distancing measures were only implemented part way through the month, indicators of consumer spending reached record lows in March (**Chart 2.24**).

...through a sharp reduction in spending involving social interaction...

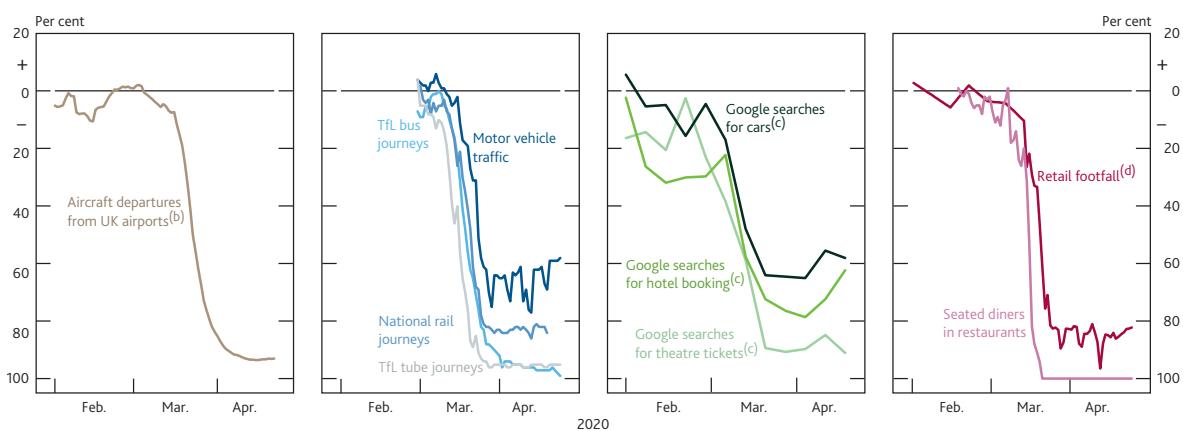
Some types of consumption are likely to stop almost entirely while social distancing measures are in place. Typically, around a fifth of consumer spending involves social interaction (**Chart 3.2**). This includes, for example, eating out at restaurants and attending sports events, as well as spending relating to holidays such as hotels and air travel. Card payments data suggest that spending in hotels, restaurants and bars fell by over 30% in March (**Chart 2.27**). Indicators such as retail footfall and restaurant diners started to show signs of weakness in February and this accelerated after some social distancing measures were announced on 16 March (**Chart 2.26**). After further measures were announced on 20 and 23 March, spending in some of these areas appears to have fallen to almost zero.

...and a weakening in consumption of other non-staple products...

Social distancing is also likely to weigh heavily on spending related to work, such as personal transport, and on some non-essential goods. As more people work from home, or are unable to work at all for a period, the number of journeys by car and public transport in the UK has fallen substantially (**Chart 2.26**), indicating significantly lower spending on transport fares and fuel. The closure of many non-essential businesses will also mean households have fewer opportunities to buy goods, such as clothing and cars, in physical shops. Retail footfall was 80% lower than the same day in 2019 by the end of March. Some purchases may still be carried out online but other products may not be needed when people are staying at home. For example, spending on clothing and footwear fell by over 30% in March as a whole according to Visa. Spending on these products is likely to be delayed until restrictions are lifted, or foregone altogether.

Chart 2.26 High-frequency indicators show the rapid decline in economic activity over March

High-frequency indicators of economic activity^(a)



Sources: Department for Transport, Google Trends, OpenSky Network, OpenTable, ShopperTrak and Bank calculations.

(a) Data are not seasonally adjusted. Road and rail travel data are shown relative to normal levels. All other data are shown relative to a year earlier.

(b) Seven-day moving averages of flight departures tracked by the OpenSky Network from Birmingham, Gatwick, Heathrow, Luton, Manchester and Stansted airports.

(c) Google searches data are weekly averages of the Google Trends index of UK search volumes. Searches for cars shows the average of changes in search volumes for the six highest-selling car brands in the UK.

(d) Weekly changes to 14 March and daily thereafter. Data have been adjusted to remove distortions caused by bank holidays.

...although spending on essential items has held up.

Some types of consumption have held up, and even increased, as households adapt to staying at home. Households still need to pay for essentials such as rent, bills and other staples. Supermarkets saw a large increase in spending on staple food and drink products in March as consumers stocked up on essentials (Chart 2.27). This increase in sales was larger than that usually seen in the lead-up to Christmas. Some higher spending will persist while households consume more food and drink at home, although Agency intelligence suggests that sales growth relative to a year ago has fallen back since March (Box 5).

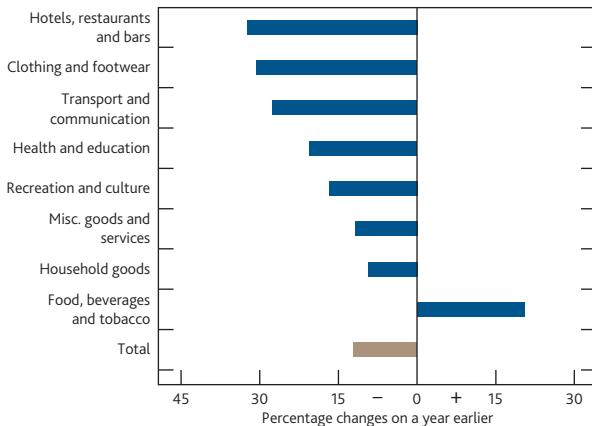
Broader effects on consumer confidence and incomes will also dampen spending.

In addition to the direct effects of social distancing, spending is likely to be further reduced through precautionary savings and income channels (see Section 3). People's expectations about their personal and general economic situations fell sharply, and unemployment expectations rose materially, between mid-March and mid-April (Chart 2.28). These were the largest monthly deteriorations since the series began in 1985. Almost 40% of adults reported that their household income had fallen because of Covid-19 in a Bank/Ipsos MORI survey. Evidence from the Bank's Citizens' Panels indicated a marked deterioration in participants' views on the outlook for growth and unemployment from mid-March into April. Some participants expected that some of the changes in consumer behaviour would continue after social distancing measures are lifted.

The impact of Covid-19 will vary across households, but, in aggregate, the saving ratio is likely to rise sharply while social distancing measures are in place. Even with a large proportion of households experiencing falls in income, the scale of the fall in consumption in Q2 is likely to outweigh it. March data on household money flows support this: net flows into bank deposits from households more than doubled in March, while borrowing fell materially. Much of this increased saving will be involuntary, as some forms of consumption are not possible, but increased fears of unemployment or uncertainty over future income could also lead to an increase in precautionary saving. Higher precautionary saving could persist, even if social distancing measures are relaxed, if income uncertainty remains elevated.

Chart 2.27 Spending declined markedly across almost all categories in March

Consumer spending in March 2020, by sector^(a)

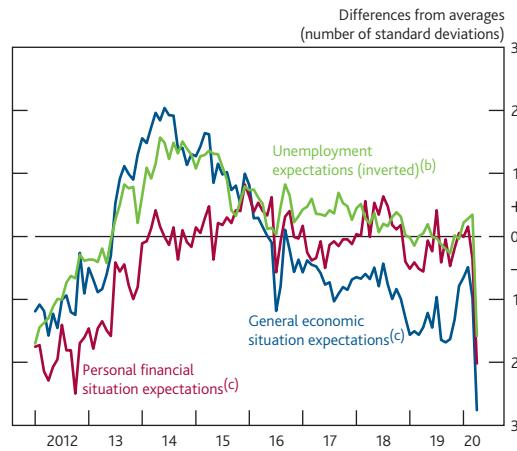


Source: Visa.

(a) Volume measures. Data are not adjusted for seasonality or trading days.

Chart 2.28 Indicators of consumer confidence fell by record amounts between March and April

Indicators of consumer confidence^(a)



Sources: GfK (research carried out on behalf of the European Commission) and Bank calculations.

(a) Differences from averages since 1997.

(b) Net balance of respondents expecting that the number of people unemployed will rise over the next 12 months.

(c) Net balances of respondents expecting an improvement over the next 12 months.

Overall, Bank staff expect consumer spending to fall by around a quarter in Q2.

Based on the available evidence, Bank staff expect consumption to fall by around a quarter in Q2. Visa spending data, which cover a broader range of spending categories than ONS retail sales, support a reduction of this magnitude. Total spending fell by over 12% in March, despite the social distancing measures being in place for only half of the month (Chart 2.27). As with GDP, the total fall in quarterly consumption in Q2 will depend on how social distancing measures evolve. Consumption is likely to remain subdued while social distancing measures are in place (Section 1.3).

Activity has stalled in the housing market, reducing housing investment sharply in the near term.

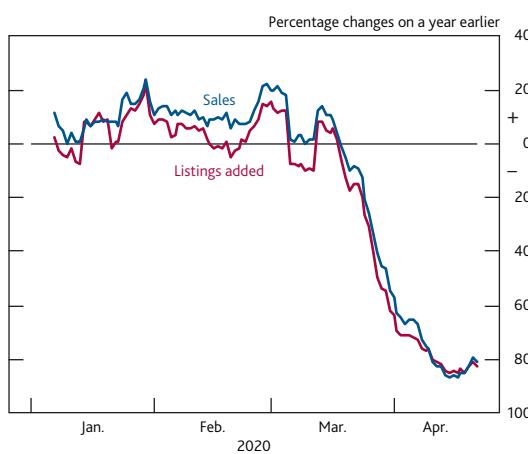
Activity in the housing market has also been severely affected by social distancing measures. Prior to the spread of Covid-19, the number of mortgage approvals for house purchase had increased to their highest level since 2014, and house price growth had started to increase from its 2019 trough. These trends have reversed sharply in subsequent months. Government advice to delay moving house, along with increased uncertainty about the outlook, has discouraged both new buyers and sellers. Both new property listings and sales have fallen to small fractions of levels seen last year as the market has stalled (**Chart 2.29**). As discussed in Box 4 of the *May 2019 Report*, the housing market affects GDP directly through housing investment. Since a lot of construction activity has paused, and spending associated with moving house will decline in line with transactions, residential investment is likely to fall very sharply in Q2.

Covid-19 will have a significant impact on firms' sales...

Most businesses expect Covid-19 to have a large, negative impact on their sales. Many cannot operate at their previous level of capacity, or at all, while social distancing measures are in place. These businesses will face large falls in revenues in the near term. Firms responding to the Bank's DMP Survey in April expected sales to be 44% lower in Q2 due to Covid-19 (**Chart 2.30**). Industries catering to social consumption, such as the hospitality industry, and those where it is difficult for employees to work from home, such as construction, expected a larger impact on sales on average.

Chart 2.29 Housing market activity has stalled

Listings added and sales of properties on Zoopla^(a)

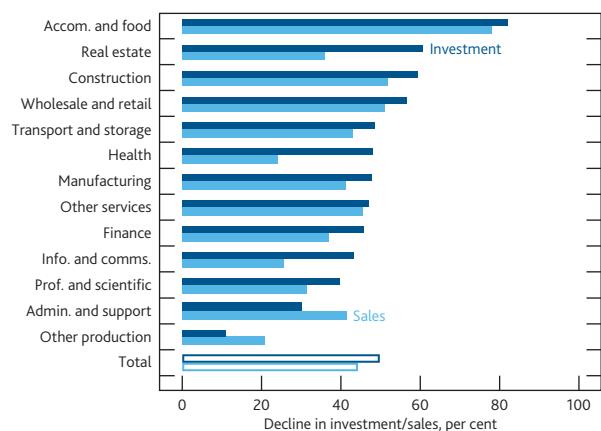


Sources: WhenFresh, Zoopla and Bank calculations.

(a) Seven-day moving averages. Data are not seasonally adjusted.

Chart 2.30 Many firms expect Covid-19 will materially reduce their business investment and sales in Q2

Average expected impact of Covid-19 on business investment and sales in 2020 Q2^(a)



Sources: DMP Survey and Bank calculations.

(a) Question: 'Relative to what would have otherwise happened, what is your best estimate for the impact of the spread of Coronavirus (Covid-19) on the sales/capital expenditure of your business in 2020 Q2?'

...and is the main source of uncertainty facing businesses...

Covid-19 is now a larger source of uncertainty for businesses than Brexit has been at any time over the past three years. Almost 90% of firms cited Covid-19 as their top current source of uncertainty in the April DMP Survey, up from 50% in March. Around 85% of firms reported that their level of uncertainty is high or very high, up from 68% in March and 40% in February.

...which is likely to weigh very heavily on business investment.

Responses to the Bank's April DMP Survey suggest firms expected investment to halve in Q2 as a result of Covid-19 (**Chart 2.30**). Bank staff's projection for business investment in Q2 is similar, with a fall of around 40%. Lower sales and company shutdowns are likely to lead to immediate sharp reductions in investment. Firms facing reductions in revenues may not have the cash flow to proceed with investment plans. The expected impact of Covid-19 on investment in the DMP Survey was generally higher for industries that also expected a large impact on sales. The Bank's Agents have received reports of investment plans being halted to preserve liquidity, particularly in hard-hit sectors. Investment will also be automatically lower while firms which produce investment goods, such as construction, are not operating at previous capacity levels. Higher uncertainty about the outlook means business investment is likely to remain subdued for some time.

Exports have fallen as global demand has weakened and supply chains have been disrupted.

Global growth has fallen markedly as countries around the world deal with Covid-19 (Section 2.1). This rapid reduction in global demand will depress UK exports. Measures taken both in the UK and around the world have also significantly reduced the flow of tourists to and from the UK. For example, the number of flights from UK airports is 90% below normal levels (Chart 2.26). Markedly reduced spending domestically will also reduce imports.

At the same time, responses to the virus have also disrupted international supply chains. Some factories have been closed and international transportation has become more difficult. Around 50% of UK businesses which trade abroad reported that Covid-19 had affected their exports or imports in March. As both exports and imports are likely to fall sharply in Q2, the effect on net trade is uncertain.

A significant loosening in fiscal policy will support demand.

As discussed in Box 3, the Government has increased spending materially to support the economy. The *Budget 2020* fiscal package represented the largest easing of fiscal policy since 1992. Further policies announced in response to Covid-19 will increase government spending much further.

The direct effect of government spending on GDP in the near term may be obscured by measurement issues. Nominal spending on education is expected to be largely unchanged, but the measured real output of the education sector may fall in Q2 because schools and universities have closed. The ONS is currently reviewing the measurement of education output (Box 4).

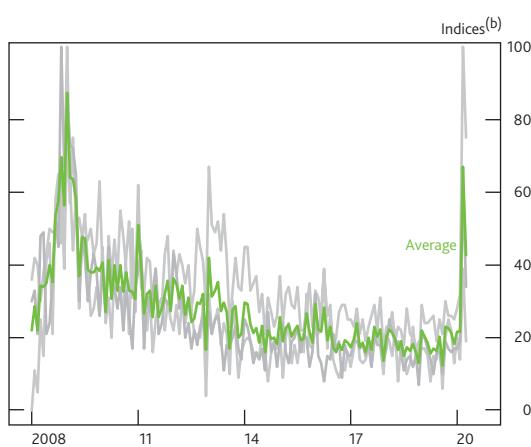
2.5 The labour market, costs and prices

There has been an increase in the number of job losses in the UK...

The sudden drop-off in economic activity from March has led to a substantial number of job losses in the UK, as it has done elsewhere in the world (Section 2.1). Early indicators of redundancies, such as counts of relevant internet search terms, suggest that they increased sharply at the end of March (Chart 2.31). They fell back but remained elevated in April.

Most people who lose their jobs will not be able to find a new one immediately because few firms are currently hiring. Surveys of employers and the number of vacancies posted online suggest hiring intentions have fallen sharply, although some activities, such as food distribution, are still hiring more than others.

Chart 2.31 Internet searches for terms related to redundancy picked up sharply in March
Internet searches related to redundancy^(a)

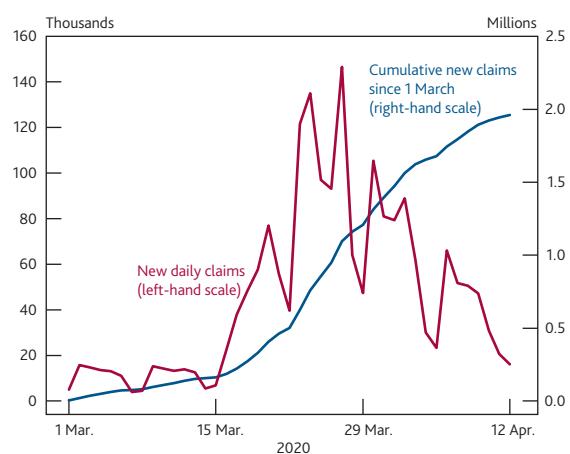


Sources: Google Trends and Bank calculations.

(a) The terms included are 'unemployment benefits', 'unemployment insurance' and 'redundancy insurance'. Data are monthly averages and are not seasonally adjusted. April data points are the average to 24 April.

(b) Search volumes are calculated as an index where 100 represents the maximum search volume for the term.

Chart 2.32 The number of people claiming Universal Credit has picked up since March
Universal Credit claims^(a)



Sources: Department for Work and Pensions and Bank calculations.

(a) Management information on individuals making a Universal Credit declaration. Not all declarations will go on to receive payment. Data are not seasonally adjusted and are for Great Britain only.

Box 4**Measuring the economy during Covid-19**

The spread of Covid-19 and the social distancing measures needed to contain it have presented a range of issues around the measurement of the economy. This box provides a short summary of some of the challenges facing the producers and users of these statistics. More details can be found in the series of ONS articles published on 6 May, covering prices, GDP and the labour market.

A number of measurement issues will be present in the April consumer price data. In line with government guidelines, price collectors are no longer physically visiting stores to record prices. Normally, prices covering around half of the CPI basket by weight are collected in this way. In some cases, greater use of phone calls and websites can replace physical store visits. However, for some specific products there may not be enough available prices to produce a sample large enough to be robust, even though the product remains on sale to consumers. In these cases, the ONS may infer the rate of price growth from a similar product or a wider product class, or re-use the last observed price.

In some other cases entire categories of product are currently unavailable, such as cinema tickets and restaurant meals. In these cases the ONS has said it will not attempt to collect a price, and will instead set the rate of price growth equal to the rate of price growth in the rest of the CPI basket. This could have an effect on the path of measured CPI inflation if the characteristics of the missing prices are different to the overall basket.

House price statistics are particularly affected by the current situation. The number of transactions in April is expected to have been much lower than normal (Section 2.4), making it very difficult to estimate meaningful average price statistics. As a result, the ONS plans to temporarily suspend publication of the UK House Price Index after March's figures have been released.

There are also challenges for the measurement of GDP and the labour market. There may be a fall in survey response rates as a result of the current situation: firms that have temporarily ceased trading may stop responding; household response rates may fall as the ONS stops using face-to-face interviews and uses more telephone calls and online surveys. Missing data would normally be imputed based on answers to previous surveys, and early estimates of GDP in particular routinely include some forecast data. But the sharp changes in the economy make past information less useful, and forecasting more difficult.

There are extra challenges in measuring the output of some specific sectors. In healthcare, some data collections have been suspended. In education, schools and universities are now making much greater use of remote teaching methods. The ONS are exploring how to best measure output in these cases.

Methodological experts at the ONS are working to address these issues, and the MPC will continue to take data uncertainty into account when assessing the economy.

...leading to a sharp pickup in unemployment...

Bank staff expect the rate of unemployment to rise to 9% by June, the highest rate since 1994, and sharply higher than the latest figure of 4.0% in the three months to February (Chart 2.1). There is considerably more uncertainty around the forecast for unemployment than usual. The short-term forecast is informed by figures from the Department for Work and Pensions, which show that new claims for Universal Credit spiked at over 100,000 per day at the end of March (Chart 2.32). Although the flow of new claims fell in April, it remained much higher than in normal times. In total, around 2 million new claims had been made between the start of March and mid-April. However, claims are not a perfect guide to the rate of unemployment. On the one hand, they may overstate the rise because Universal Credit can be claimed for a wider range of reasons than just unemployment, including low income. In normal times, less than 40% of claims are for unemployment, but that proportion is expected to be much higher now. On the other hand, claim numbers may also underestimate the rise because not all newly unemployed people apply for benefits.

...although government policies have significantly reduced the number of redundancies.

The number of people made unemployed so far is likely to be much lower than it could have been because of government action. Companies that cannot maintain their workforce because their operations have been severely affected by Covid-19 are able to furlough employees under the Coronavirus Job Retention Scheme (Box 3). Early data indicate that applications have been received from 800,000 companies covering over 6 million jobs. The number of employees furloughed might be somewhat lower, though, as some people could have multiple furloughed jobs. The highest rates of furloughing appear to have been in the accommodation and food service sectors. Agency contacts indicate that a large proportion of those furloughed would have been made redundant in the absence of the scheme.

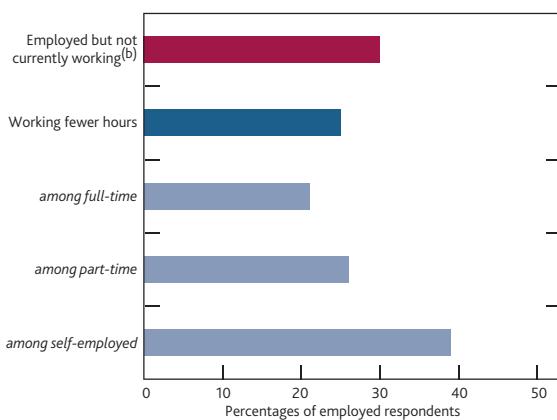
The Government has also launched a similar scheme to support the incomes of self-employed workers. However, some self-employed workers will not have the necessary track record or may pay themselves dividends through a corporation, in which case they will not qualify for the scheme. Those that do make use of the support may report themselves as unemployed in the LFS unemployment statistics. As a result, the increase in unemployment may be skewed towards those leaving self-employment.

Those in work may have been working fewer hours than they would normally...

Those that remain in work may be working fewer hours than normal. This could be because of reduced demand for their services, in which case they will have spare capacity. But they may also work fewer hours because they fall ill, are required to self-isolate, or have extra non-work responsibilities, such as caring for relatives or home-schooling children. In these cases, the economy's supply capacity is reduced temporarily. Over half of employed respondents to a Bank/Ipsos MORI survey reported that they were employed but not currently working, or were working fewer hours, as a result of the pandemic. Most of those said that it was a result of firm closure or lower demand. The self-employed were most likely to report working fewer hours (Chart 2.33).

Chart 2.33 Many people are working fewer hours as a result of Covid-19

Reported reductions in working hours^(a)



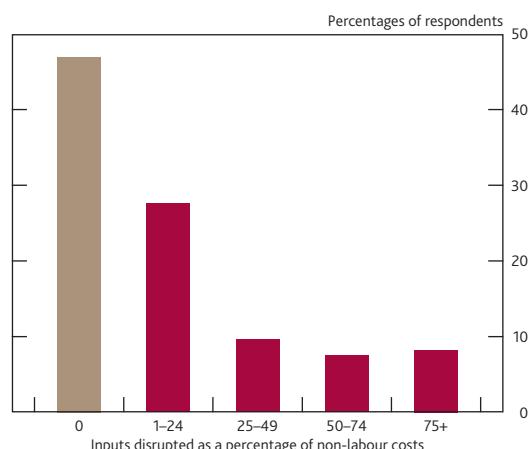
Sources: Bank of England, Ipsos MORI and Bank calculations.

(a) Respondents were asked if on balance they were working more hours, fewer hours, or about the same hours as a result of the measures taken around the coronavirus pandemic. Respondents were surveyed between 24 and 27 April.

(b) Includes people that are not working at all because they have been furloughed/have taken unpaid leave/taken a sabbatical, etc.

Chart 2.34 Over half of firms have experienced disruption to their supply chains

Disruption to non-labour inputs from Covid-19^(a)



Sources: DMP Survey and Bank calculations.

(a) Question: 'How has the spread of Coronavirus (Covid-19) affected the availability of the non-labour inputs your business uses as of April 2020?'

...and those working may not be able to produce as much as usual.

The hourly productivity of those in work may also be lower than normal. Bank staff estimate that over 40% of employees are currently working from home. Only around 14% of workers typically work from home, and fewer than 30% had any experience of working from home before March. New ways of working might reduce efficiency compared to being in the workplace.

Productivity per hour may fall in Q2, with a very large fall on a per-head basis.

Some firms may also experience lower productivity because of disruption to domestic or international supply chains. Over half of businesses in the DMP Survey said that the availability of non-labour inputs had been affected by Covid-19 (**Chart 2.34**), and supplier delivery times have lengthened sharply according to business surveys. The volume of goods transported as air freight in passenger planes has fallen as a result of the decline in demand for air travel (Section 2.1). Traffic around ports has also fallen, suggesting deliveries by sea may also have been affected.

The impact of lower firm-level productivity on aggregate productivity should be partially offset by the changed composition of output in Q2: many of the sectors worst hit by the containment measures are labour-intensive, so tend to have labour productivity below average.

Overall, the combination of lower individual productivity and disrupted supply chains is expected to cause labour productivity on a per-hour basis to fall slightly in Q2, possibly by around 2%, although this estimate is highly uncertain. The fall on a per-head basis will be much larger — possibly as large as 20% — because furloughed workers working zero hours still count among the employed.

The temporary disruption from Covid-19 has caused total spare capacity to increase...

The sharp changes in the economy over Q2 do not divide neatly into demand and supply factors, making an assessment of the level of spare capacity in the economy more difficult than normal. It is particularly tricky to assess the role of furloughed workers. Only a small minority are expected to be looking for new jobs and therefore exerting downward pressure on wages in the way spare capacity in the labour market normally does. Overall, the MPC judges that the level of spare capacity in the economy will have increased in Q2.

...but companies in some specific sectors are operating at, or close to, full capacity.

Although many firms have spare capacity because of weak demand, some are likely to be operating at, or close to, full capacity as a result of demand holding up. The containment measures have caused many households to switch spending away from social activities to essential products. Spending on food and drink to consume at home increased sharply in March, for example (Section 2.4).

Average wage growth is expected to weaken markedly, although there will be significant variation.

There will be significant variation in individuals' income changes over the coming months. Those that have lost their jobs will suffer the largest negative shock. Most workers who have been furloughed as part of the CJRS will receive less than their normal pay. Some workers who have not been furloughed but get paid commission, or performance-related pay, will also receive lower pay because of the weaker demand environment. Some other workers will be largely unaffected.

Overall, average weekly earnings in Q2 are expected to be around 5% lower than a year earlier, driven by pay reductions for those on the CJRS. Due to the even larger fall in per-head labour productivity, unit labour costs will increase sharply. But that will be temporary, and firms will be able to recoup much of that rise in costs through the CJRS. As a result, it should have little impact on domestic inflation pressures.

Consumer price-based measures of domestic inflation pressures appeared weak even before Covid-19...

The fall in demand and opening up of spare capacity would normally be expected to cause domestic price pressures to ease. Some measures already appeared weak before Covid-19 struck. Core services price inflation — a CPI-based measure of domestic price pressures — was 2.3% in March and has been below rates consistent with overall inflation at target for some time. This was despite rising wage growth and weak productivity growth causing growth of unit labour costs to pick up. One possible reason is that sectors of the economy that are relatively important for consumer prices, such as retail, were experiencing above-average productivity growth. That meant unit labour costs were growing more slowly in that sector than in the wider economy (**Chart 2.35**). Another explanation could be that,

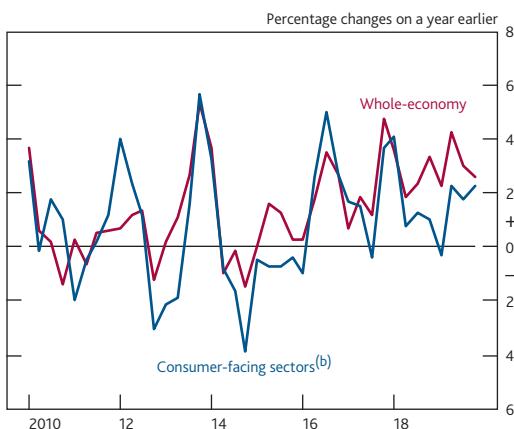
although labour costs were growing strongly, other production costs, including commercial rents, were growing much more slowly ([Tenreyro \(2020\)](#)).

...but it is hard to gauge how they will develop, with many relative price changes expected.

Covid-19 has introduced a range of shocks to supply and demand that vary across sectors. As a result, there may be many relative price changes over the coming months, and it is difficult to know what the impact on CPI inflation — the average rate of price growth of consumer goods and services — will be.

Chart 2.35 Unit labour cost growth has been lower in sectors that are important for consumer prices

Sectional unit labour costs^(a)

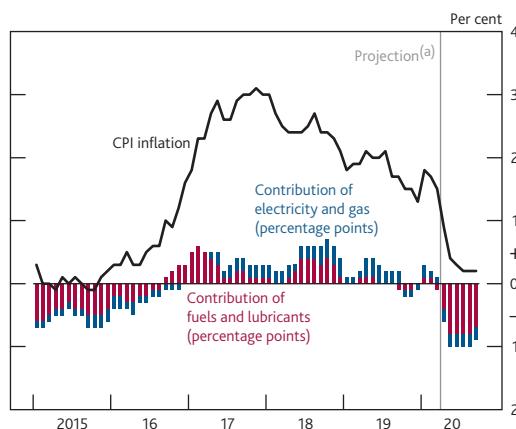


(a) Data are not seasonally adjusted.

(b) Wholesale and retail trade, transportation and storage, accommodation and food services.

Chart 2.36 Inflation is expected to fall well below 1% over the next six months, driven by fuel and energy prices

CPI inflation and the contribution of energy



Sources: Bloomberg Finance L.P., Department for Business, Energy and Industrial Strategy, ONS and Bank calculations.

(a) Bank staff's projection. Fuels and lubricants estimates use Department for Business, Energy and Industrial Strategy petrol price data for April 2020 and are then based on the sterling oil futures curve.

Some parts of the economy are experiencing much lower demand than usual. Clothing retailers are likely to have significant excess stock as a result of stores being shut. Some Agency contacts expect discounting and aggressive promotional activity once they reopen. Many consumer services are also suffering much lower demand than normal. However, there may be limited incentives for them to cut their prices to try to increase demand. Some businesses, such as hotels and restaurants, are closed completely, so cannot change their prices. This also raises challenges for the measurement of CPI inflation: Box 4 discusses these in more detail.

Demand has held up for other sectors, and for some it may have been temporarily much higher than normal. For example, the demand for some food products has been very high recently. The Bank's Agents reported that supermarkets had reduced promotional activity in March, although there has been some normalisation since then. Looking further ahead, the price of some foods may increase because of disruption to production and supply chains. Many European farms use migrant workers to harvest crops and travel restrictions may prevent these workers getting to the fields.

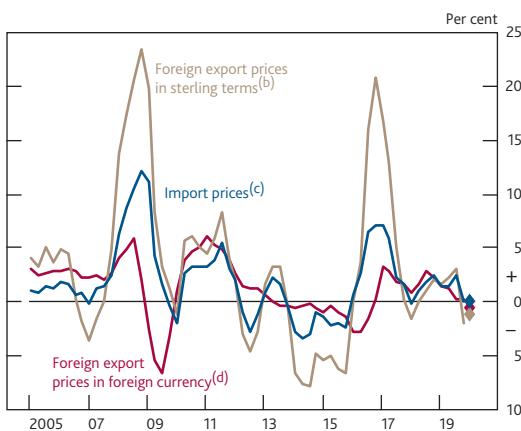
Other products such as cleaning and sanitary items have also been in high demand. Some prices have increased as a result: the ONS noted that the online prices of a small basket of 'high demand products' increased by 1.3% between mid-March and end-April. But supermarkets and pharmacies have mostly held off increasing their prices significantly. Instead, they have rationed products, or simply sold out.

In the short term, lower oil prices and some regulated price changes will push inflation below 1%.

The biggest influence on inflation in the near term is likely to be the fall in oil prices. Oil prices have fallen by over 60% since the January Report (Chart 2.13), reflecting the fall in global demand and some supply factors (Section 2.2). This has already led to a big fall in the price of fuel at the pump. Petrol prices fell 9% and diesel prices fell 6% between March and April, the largest monthly declines since 2008.

Chart 2.37 Import prices have been relatively stable recently but lower foreign export prices may cause them to fall

Import price and foreign export price inflation^(a)



Sources: Bank of England, CEIC, Eikon from Refinitiv, Eurostat, ONS and Bank calculations.

(a) The diamonds show Bank staff's projections for 2020 Q1.

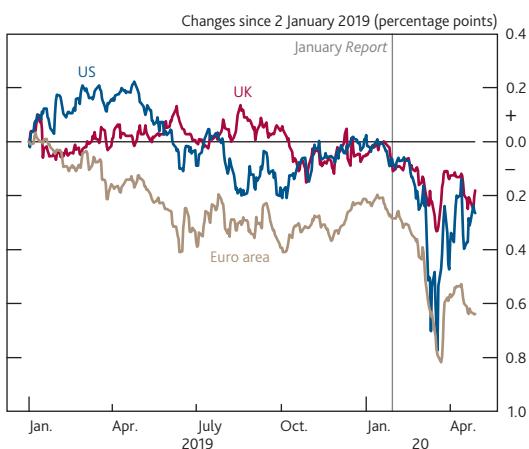
(b) Domestic currency export prices as defined in footnote (d), divided by the sterling effective exchange rate index.

(c) UK goods and services import deflator excluding fuels and the impact of MTIC fraud.

(d) Domestic currency non-oil export prices of goods and services of 51 countries weighted according to their shares in UK imports. The sample excludes major oil exporters.

Chart 2.38 UK implied inflation expectations are a little lower than in January

Changes in five-year, five-year forward inflation compensation^(a)



Sources: Bloomberg Finance L.P. and Bank calculations.

(a) Derived from swaps. The instruments are linked to the UK RPI, US CPI and euro-area HICP measures of inflation respectively.

Several changes to regulated prices will also push inflation down in Q2. Lower water bills came into effect in April as a result of action by the regulator Ofwat. There will also have been a fall in the contribution of household energy prices to inflation in April as last year's increase in the energy price cap fell out of the annual comparison. Finally, the March Budget included freezes on fuel and alcohol duties, some of which had been previously expected to increase. These changes push the short-term inflation forecast down as well.

Together, these factors are expected to push inflation down to 0.9% in April, and further towards 0% in the following months (Chart 2.36). A reading below 1% triggers an exchange of letters between the Governor and the Chancellor.

The lower price of goods produced overseas may also weigh on inflation.

Further out, a fall in foreign export prices as a result of the weak global economy may weigh on UK inflation via import prices, although that effect would be somewhat offset by the recent depreciation of sterling (Section 2.2) if it is sustained. Annual import price inflation was around zero in 2019 Q4, having been subdued since mid-2017 (Chart 2.37).

Table 2.C Inflation expectations remain well anchored

Measures of inflation expectations^(a)

Per cent

	2000–07 ^(b)	2010–18	2019		2020	
		Q1	Q2	Q3	Q4	Q1
One year ahead inflation expectations						
Households^(c)						
Bank/TNS	2.4	3.0	3.2	3.1	3.3	3.1
Barclays Basix	2.8	2.6	2.6	2.5	2.8	2.4
YouGov/Citigroup	2.5	2.4	2.7	2.6	3.0	2.5
Companies^(d)	n.a.	1.7	1.0	1.2	0.5	0.9
Financial markets^(e)	2.6	2.9	3.4	3.4	3.7	3.3
Two to three year ahead expectations						
Households^(c)						
Bank/TNS	n.a.	2.8	2.9	3.0	3.0	2.9
Barclays Basix	3.2	2.9	3.0	3.0	3.3	3.0
Companies^(d)	n.a.	n.a.	1.4	1.2	-0.1	0.9
External forecasters^(f)	2.0	2.1	2.0	1.8	2.0	2.0
Financial markets^(e)	2.8	3.1	3.5	3.6	3.8	3.6
Five to ten year ahead expectations						
Households^(c)						
Bank/TNS	n.a.	3.3	3.4	3.8	3.1	3.6
Barclays Basix	n.a.	3.7	4.0	4.1	4.1	3.8
YouGov/Citigroup	3.5	3.2	3.1	3.2	3.0	3.1
Financial markets^(e)	3.0	3.3	3.5	3.6	3.6	3.4
Memo: CPI inflation	1.6	2.3	1.9	2.0	1.8	1.4

Sources: Bank of England, Barclays Capital, Bloomberg Finance L.P., CBI, Citigroup, ONS, TNS, YouGov and Bank calculations.

(a) Data are not seasonally adjusted.

(b) Averages from 2000, or start of series, to 2007. Financial market data start in October 2004, YouGov/Citigroup data start in November 2005 and external forecasters' data start in 2006 Q2.

(c) The household surveys ask about expected changes in prices but do not reference a specific price index.

(d) CBI data for the distributive trades sector. Companies are asked about the expected percentage price change over the coming 12 months and the following 12 months in the markets in which they compete.

(e) Instantaneous RPI inflation one and three years ahead and five-year RPI inflation five years ahead, derived from swaps.

(f) Bank's survey of external forecasters, CPI inflation rate three years ahead.

The Committee judges that inflation expectations remain well anchored.

Developments in households' and businesses' inflation expectations will also be important for the medium-term outlook for inflation. They will affect the wages that households seek and the prices that companies charge.

Since January, movements in inflation expectations have been mixed. Financial market measures suggest UK inflation expectations have fallen slightly since January, although to a lesser degree than in the euro area. Five-year, five-year forward inflation compensation fell sharply in March (**Chart 2.38**), although this in part reflected market disruption (Section 2.2). Inflation compensation has since recovered, and remains around its average since 2010.

Companies' inflation expectations for the year ahead fell sharply to 0% in Q1, but expectations for inflation two years ahead increased slightly (**Table 2.C**). The near-term fall may reflect the expected impact of lower energy prices on companies' costs. In contrast, households' expectations for inflation one year ahead increased in the YouGov/Citigroup survey in March and remained elevated in April, above their long-run average. Longer-term expectations have been relatively stable, however.

Overall, the MPC judges that indicators of inflation expectations remain well anchored and consistent with inflation close to the 2% target.

Box 5

Agents' update on business conditions

The key information from Agents' contacts considered by the Monetary Policy Committee at its May meeting is highlighted in this box.⁽¹⁾

Contacts reported a very sharp decline in output, though some sectors are planning to resume activity soon. Agency intelligence gathered over the past few weeks indicates that economic activity has fallen rapidly following social distancing measures introduced in March, particularly in consumer-facing sectors.⁽²⁾

Sales of consumer goods and services contracted sharply in April compared with a year ago, as non-food stores and sectors, such as restaurants, leisure and recreational facilities, have been obliged by law to close or limit activities (Chart A).

In contrast, supermarket sales in April were slightly higher than a year ago, though a boost from consumer stockpiling in March had waned.

Retailers of non-food goods selling online reported strong demand for electrical goods and home office equipment. However, there were significant falls in sales of clothing and footwear, with weak demand compounded by some constraints on retailers' capacity to sell online due to social distancing measures in warehouses and distribution centres.

Contacts in other sectors that were legally obliged to close, for example in tourism, hospitality and the arts, were concerned that they would not be able to survive a prolonged period of lockdown. And even when restrictions start to be lifted, some contacts expected demand to remain subdued for several months due to voluntary social distancing and economic uncertainty.

By contrast, some businesses that had closed voluntarily, such as DIY stores and takeaway food outlets, have started to reopen.

In manufacturing, demand was generally weak, in particular for contacts supplying the automotive, aerospace and house building sectors. Export demand was also weak (Chart B). However, many contacts in sectors such as food, chemicals, pharmaceuticals, and electronic components reported operating at or around normal levels. Some companies had closed temporarily because of concerns from employees and unions around the ability to work under

Chart A Sales of consumer goods and services are markedly weaker than a year ago

Consumer goods and services values

Three months on the same period a year earlier



Chart B Manufacturing output and exports fell sharply, but demand varied between sectors

Total manufacturing output and manufacturing exports

Three months on the same period a year earlier



(1) A comprehensive quarterly report on business conditions from the Agents is published alongside the MPC decision in non-Monetary Policy Report months. The next report will be published on 18 June 2020.

(2) The Agents' scores released alongside this publication are based on intelligence gathered over March and early April.

social distancing rules. However, after making adjustments, a growing number of companies, for example in automotive, heavy industry and construction materials plan to resume production over the coming weeks, albeit at lower volumes initially.

Contacts reported an improvement in the delivery of supplies from China and the Far East, following Covid-19-related disruption earlier in the year. However, some were now having difficulty obtaining supplies from India. Imports from Spain and Italy were also subject to delays. In addition, lower freight capacity and international travel restrictions were putting pressure on the supply of inputs, as well as on exports.

Business services turnover and exports of services also fell significantly (**Chart C**), but developments across sectors were mixed. In the legal sector, while all but a few corporate and property transactions have stopped, demand for insolvency, restructuring and employment advice has increased — particularly for retail, hospitality and construction firms. Demand for banking and financial services also increased, as companies sought finance to bridge the lockdown. Larger accountancy firms said demand was holding up.

By contrast, contacts in marketing and advertising reported sharp declines in business as companies cut discretionary spending. Some recruiters and agencies for temporary workers also reported steep falls in demand for their services and an associated decline in fee income.

In the transportation sector, contacts in food distribution reported strong demand, but other freight activity fell sharply, reflecting a combination of weaker demand and reduced capacity due to international travel restrictions, which was reported to have halved air freight capacity.

Construction output also fell sharply (**Chart D**), as house building activity largely stopped. Other commercial and civil engineering projects were reported to be operating at around half normal levels. The decline in construction activity was also driven by concerns about adhering to social distancing measures and a lack of building supplies resulting from temporary closures. However, more recently, a number of contacts, including in house building and commercial construction, have said they plan to resume activity in the coming weeks.

Chart C Business services activity has weakened markedly
Business services and services exports



Chart D Construction activity has fallen sharply
Construction output



Housing market activity ground to a halt, with only transactions that were already near completion going through. Contacts said the main obstacles to the market were difficulties conducting viewings and property surveys. Some contacts were concerned that housing market activity could take a while to recover once social distancing measures are lifted due to concerns about the economic outlook. In that case there could be some downward pressure on house prices, though there was little evidence of this currently.

Activity in the commercial real estate market also declined sharply. Prices were reported to be falling across all sectors, but particularly in retail, though valuations were uncertain. Rental income was below normal, especially for retail properties, where rental income was reported to be around a third to a half lower than usual.

Many contacts reported higher demand for credit, with less credit available for some sectors.

Cash flow concerns led to a general increase in demand for credit from many businesses of all sizes, and in most sectors. However, some smaller contacts were reluctant to increase debt given the economic uncertainty. Banks were reported to have largely maintained supply for existing customers, and were generally willing to renew loans and overdrafts, relax covenants and grant repayment holidays. A number of contacts said they had drawn on existing facilities as a precaution.

Credit availability was reported to be tight for companies in sectors that have been most disrupted by the pandemic and where uncertainty has increased. For instance, banks were said to be reluctant to grant new loans, and/or were applying tighter terms and conditions to new lending, for businesses in retail, tourism, hospitality and leisure. However, there were early signs that the Bank and government loan schemes were helping to improve the supply of credit overall.

Companies in challenged sectors were also more likely to have trade credit insurance withdrawn or credit limits reduced. Some contacts in these as well as other sectors said their trade credit insurance costs had increased sharply.

The availability of some forms of non-bank finance, for example peer-to-peer lending and invoice discounting, also tightened significantly, as funding constraints limited the ability of providers to lend or forbear on loans.

Most investment-grade corporates said that financial market conditions had improved somewhat in recent weeks enabling them to issue bonds.

In the labour market, a large proportion of contacts had furloughed staff, and there had been some redundancies.

A number of contacts across sectors said that the Government's Coronavirus Job Retention Scheme (CJRS) had reduced the need to lay off staff. Nonetheless, there were widespread reports of temporary workers being stood down from positions.

A large proportion of businesses spoken with in recent weeks said they had furloughed staff under the scheme — predominantly in non-food retail, hospitality, leisure and construction, but also some in manufacturing and business services. There were a few reports across sectors of employers topping up furloughed workers' wages to 100%.

Contacts also reported taking a variety of measures to reduce labour costs in response to dramatically weaker demand. Some companies cut pay or working hours rather than furlough workers, and there were also reports of pay awards being deferred, and voluntary pay cuts among higher earners.

Contacts said they have generally scaled back hiring and were not replacing leavers, though supermarkets have been taking on staff to meet increased demand.

There have also been some redundancies in the sectors most severely affected by lockdown, such as tourism, casual dining and non-food retail. And many contacts across sectors said they might need to make staff redundant in the coming months if social distancing — whether enforced or voluntary — remained after the CJRS is discontinued.

Contacts in most sectors reported little change in non-labour costs; some retail and leisure businesses expect to cut prices sharply.

Contacts in most sectors that have not been obliged to close said there had been little movement in non-labour costs and in prices, despite the recent fall in oil and commodity prices and the depreciation of sterling. This was likely to be because some companies, in particular manufacturers, were running down existing stocks or had hedged for currency effects.

Uncertainty about demand and the economic outlook more generally were deterrents to increasing prices, for example in business services. However, in freight a significant reduction in capacity, in particular in air freight and road haulage, had led to price increases.

Supermarkets had stopped most promotional activity in order to maintain the availability of stock, but contacts said that this had led to only a small increase in food prices overall. However, there was some evidence of food price inflation starting to build, in particular for imported food from Europe. There were concerns that prices of fresh fruit and vegetables would increase in the coming months, and that there could be some volatility in dairy, meat and poultry prices due to varying demand for some products.

Companies in sectors that remain under lockdown have not been reporting prices at all. But contacts in hospitality and leisure anticipated cutting prices when social distancing measures are lifted in order to stimulate demand. Used car prices were also expected to fall sharply.

Some online clothing retailers have already been offering large discounts. And some clothing retailers anticipated that heavy discounting would be needed to shift seasonal stock when stores reopen.

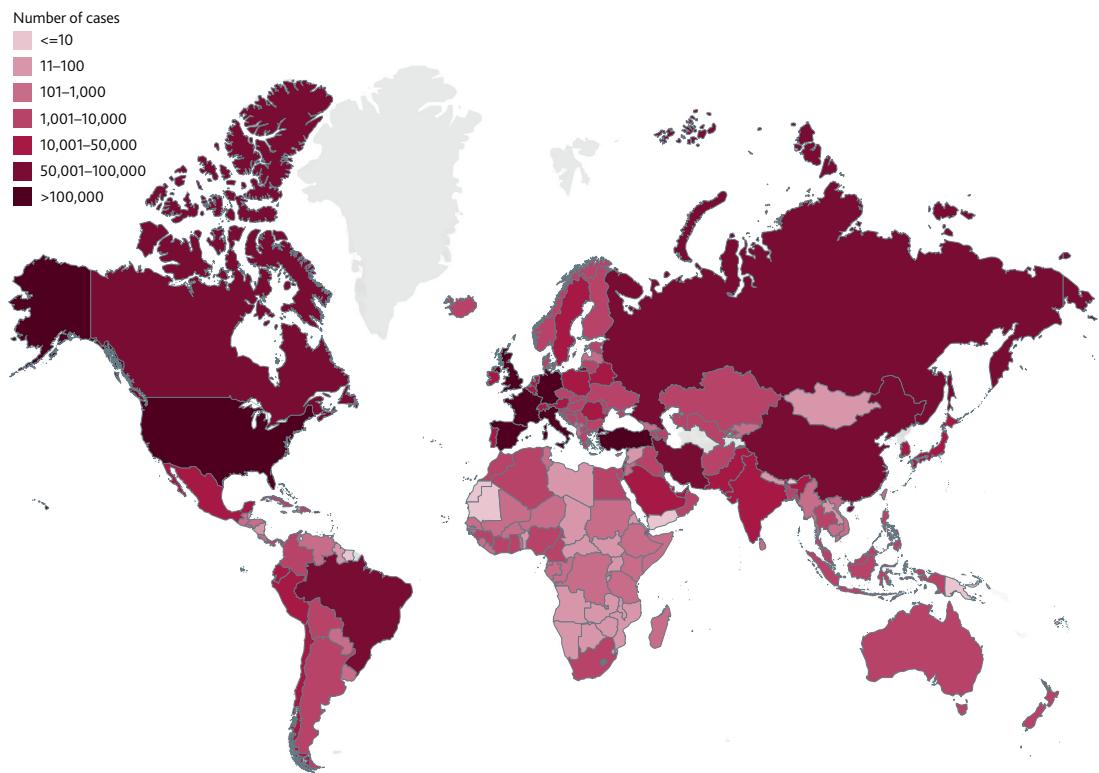
3 In focus The economic effects of Covid-19

Since the January Report, Covid-19 has been declared a global pandemic by the WHO...

The outbreak of Covid-19 began in late 2019. Since then, it has spread to almost every country around the world (**Chart 3.1**), and was characterised as a pandemic by the World Health Organisation (WHO) on 11 March. The first confirmed case of Covid-19 was recorded in the UK on 29 January, and the number of UK cases has increased sharply since then.

Chart 3.1 Covid-19 has spread around the world

Number of Covid-19 cases^(a)



Sources: COVID-19 Dashboard by the Centre for Systems Science and Engineering (CSSE) at Johns Hopkins University and Bank calculations.

(a) Data are not available for countries in shaded in grey. Cumulative cases to 29 April.

...and it has already had a significant impact on economic activity.

Covid-19 has significantly slowed economic activity both globally and domestically (Section 2). Financial markets have been exceptionally volatile and there have been periods of disruption to market functioning. Policymakers have provided exceptional monetary and fiscal support in response to the crisis.

The economic outlook depends upon the evolution of the pandemic and how long social distancing measures remain in place.

As discussed in Section 1, the impact of Covid-19 on the economic outlook is unusually uncertain. It will be sensitive to the progression of the disease, how long the social distancing measures taken to control its spread remain in place, the speed with which confidence returns and, further out, the extent to which short-term disruption damages the economy.

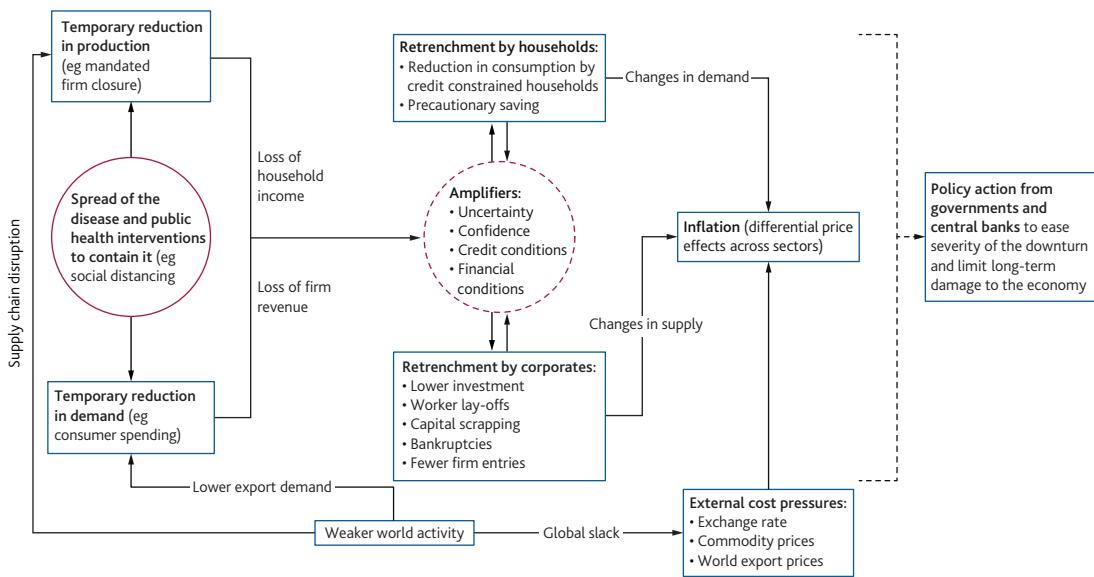
This *In focus* sets out the channels through which the disease will affect the economy, drawing on some of the academic evidence regarding their likely importance (Section 3.1). It also looks at the empirical literature on the impact of pandemics (Section 3.2).

3.1 What are the channels through which Covid-19 will affect the economy?

Covid-19 and associated public health interventions affect economic activity through a number of channels.

Figure 1 sets out the channels through which Covid-19 and the measures put in place to contain its spread affect the economy. Many countries have made a series of public health interventions in order to slow the spread of the disease. Workplaces and schools have been closed, travel has been restricted, and people have been instructed to stay at home.

Figure 1 Covid-19 affects economic activity through a series of channels



In the near term, they cause a sharp reduction in production and demand...

Production falls while social distancing measures are in place, as some firms are required to cease or significantly curb operations, and others shutdown voluntarily to protect employee health. Firms that are part of complex supply chains also experience disruption to production as suppliers cut their output. Some firms find it difficult to maintain production due to diminished availability of workers, who may be off work due to sickness or to perform caring duties. Other firms are able to rely on their employees working from home, but output may be lower than normal if employees are not used to working remotely.

Demand also declines sharply. Households are unable to spend money on social activities, such as eating out, leisure travel and cultural activities. This spending accounts for around a fifth of UK consumption (Chart 3.2). Work-related consumption, such as spending on transport fares and fuel, also falls. Households may also postpone spending on durable goods, such as cars, and some other purchases that are viewed as delayable, such as clothing. Spending on some essentials, such as food and drink, may rise as households substitute spending at supermarkets for eating out, but this will not offset the falls in spending elsewhere.

...reducing firm revenue and household income.

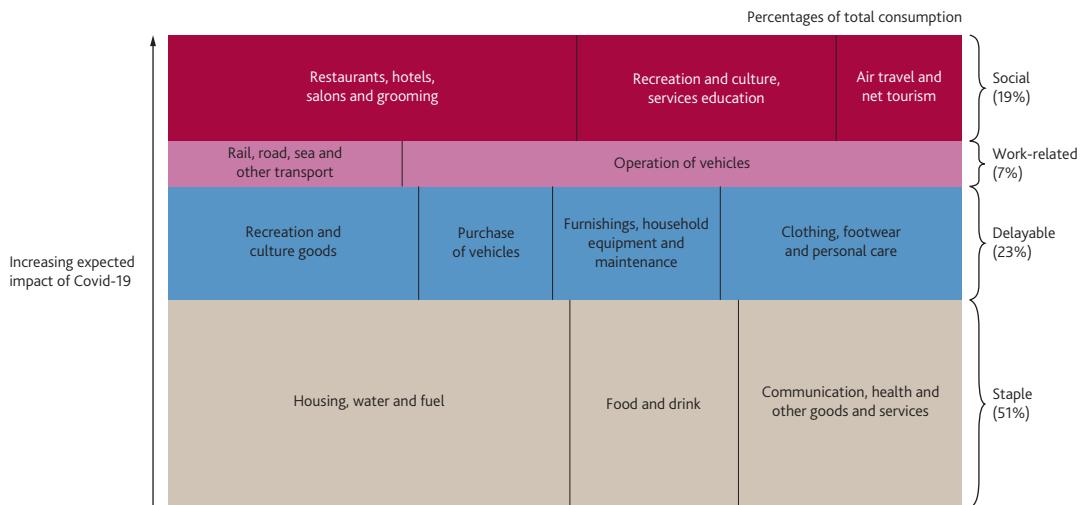
Many companies' revenues fall as a result, in some cases severely. In addition to those businesses mandated to cease operations, many firms face lower demand both from customers at home and abroad.

Some workers may lose their jobs and be unable to find another. For those households, their saving rate is likely to decline as their spending falls by less than their incomes. But for others who retain their jobs, the enforced reduction in spending during the period of social distancing is likely to be larger than the reduction in their income.

Spillovers from other countries will add to those effects...

The global nature of this crisis, and pandemics in general, means that similar slowdowns in other countries will add to these effects. Open economies such as the UK, where exports and imports comprise a significant share of national output, are likely to be particularly affected. Companies that are still exporting goods and services will suffer from reduced demand as people abroad suffer income losses. Firms that rely on intermediate inputs from abroad may see

Chart 3.2 Spending on goods and services that involve social contact will be the most affected by the pandemic
 Share of annual UK household consumption in 2019



Sources: ONS and Bank calculations.

production disrupted if suppliers cut their output or there are delays in shipping goods at borders. These spillovers do not affect domestic firms that have ceased production anyway. However, the shutdown of production in one sector can affect the demand for goods produced in other sectors if these goods are often consumed together ([Guerrieri et al \(2020\)](#)). For example, individuals may delay purchases of a home-produced good until certain foreign-produced goods are available again.

...and they can be amplified by a deterioration in confidence and an increase in uncertainty...

While the main driver of initial falls in spending is the social distancing measures, its effects can be amplified by other factors. For example, business confidence about the outlook is likely to fall, and uncertainty to rise. That has occurred already in the current pandemic (Section 2). As discussed in Section 4 of the [November 2019 Report](#), businesses are likely to respond to lower confidence and higher uncertainty by reducing investment. Likewise, households may engage in precautionary saving and delay purchases of durable goods, particularly if they are concerned about their job prospects. That effect could be lessened during the current pandemic if households have built up savings involuntarily while social distancing measures have restricted spending.

...as well as a tightening in credit and financial conditions.

Covid-19 has caused a tightening in financial conditions as risky asset prices — such as equity and corporate bond prices — have fallen significantly, raising the cost of capital for firms. This has occurred as growth expectations have been downgraded and risk appetite has fallen, resulting in investors moving their money to safe and highly liquid assets. Credit supply to some companies has also tightened (Section 2).

Such a tightening in financial and credit conditions can amplify falls in spending. While revenues fall, some firms will be unable to delay payment of a proportion of their costs. Some companies might be able to draw on cash reserves, but many will need to access finance, and those that are unable to do so may have to restrict spending further ([May interim Financial Stability Report, UK corporate sector financing and Covid-19](#)). Similarly, some households facing a fall in income may be able to draw on their savings, but some may need to borrow. Credit constraints can restrict the ability of some households to do so, and lead to further falls in consumption.

Activity should recover as social distancing measures are lifted...

As social distancing measures are relaxed, most firms will restart operations, returning production towards more normal levels. Demand should also recover as households are able to resume social activities. There may be a catch-up in some spending on durable goods as households make purchases postponed during the period when social distancing measures were in place.

...but there is a risk that the weakness in growth persists...

The recovery in demand may be more sluggish if firms are slow to restart hiring or undertake investment. Following a fall in demand, credit constraints, increased uncertainty or a loss of confidence may lead firms to be more cautious

when it comes to making long-term decisions such as whether to invest in capital or hire workers ([Angeletos and Lian \(2019\)](#) and [Di Tella and Hall \(2020\)](#)). This can suppress capital investment and hiring long after the initial driver of the downturn fades.

If firms are slow to hire in the recovery, this would also affect consumer demand as households are likely to be reluctant to spend before they feel secure in their jobs. It is also possible that behavioural changes will mean that individuals continue to social distance voluntarily after government restrictions are lifted. Individuals may be more reluctant to dine out or attend events with large crowds, for example, stalling the recovery in social consumption. There has been evidence of this from countries that have started to ease restrictions (Section 2).

In combination these two channels could raise the risk of an ‘unemployment trap’, where employment is persistently depressed as individual firms are reluctant to hire due to depressed demand and households are unwilling to spend due to high unemployment ([Ravn and Sterk \(2020\)](#) and [Den Haan et al \(2017\)](#)).

...and that the temporary disruption causes longer-term harm to the productive capacity of the economy through scarring effects.

Covid-19 is expected to cause a sharp near-term fall in investment (Section 2). That will permanently reduce the capital stock and productive capacity of the economy if it is not recovered after the pandemic ends. Productive capacity could be particularly affected if investment in research and development (R&D) falls. This type of investment may be hit hard during a pandemic since firms are likely to be particularly uncertain about future demand, and that may discourage them from innovating. Studies show that lower spending on R&D can have long-lasting effects on the economy through reduced productivity growth ([Anzoategui et al \(2019\)](#)). The sharp fall in activity caused by Covid-19 could also reduce the number of new firms formed; that has occurred following previous declines in demand, according to VAT registrations data. That may also weigh on productivity growth, as some papers find that younger firms tend to be more productive ([Alon et al \(2018\)](#)) and others suggest they are more likely to engage in innovation ([Acemoglu et al \(2018\)](#)).

Moreover, scarring effects can arise if severely affected firms have to lay off workers and sell capital equipment. If those workers or capital equipment are specialised, or difficult to replace, firms might be less productive when normal activity resumes. Firm failures would lead to a permanent loss of output if it is not possible to reallocate capital to another firm, and if intangible capital, such as established supply chains, are lost.

There is also the possibility of scarring effects in the labour market, otherwise known as hysteresis. Workers that are laid off could lose skills and become detached from the labour market, lowering labour supply ([Blanchard and Summers \(1986\)](#)). Even if unemployed workers do not become detached, they will stop accumulating on-the-job skills for a period, potentially lowering their productivity when they return to work. Evidence from the literature suggests that people who experience periods of unemployment are likely to have lower future earnings ([Arulampalam et al \(2001\)](#) and [Davis and von Wachter et al \(2013\)](#)).

Monetary and fiscal policy may help mitigate some of these effects.

Policies aimed at protecting economic capacity can help minimise the risk of some of these effects ([Gourinchas \(2020\)](#)). In response to this pandemic, governments and central banks around the world have stepped in with exceptional economic support (Section 2). Central banks have eased policy and supported market functioning to ensure credit remains affordable and widely available so firms can borrow money to pay expenses until revenues recover. Many governments, including in the UK, have introduced policies to directly protect otherwise viable firms from bankruptcy and encourage them to retain workers. These schemes also provide income to households during the disruption, which should support consumption in the near term and allow it to recover more quickly once social distancing measures are eased.

The experience of companies and households is likely to differ markedly...

The impact of Covid-19 will differ markedly across the economy. Some sectors, such as airlines and hospitality, are facing a sharp reduction in demand, while others, such as food retailers, have seen an increase.

The experiences of households will also differ. While workers in some industries are being laid off or furloughed, others are able to work from home. Workers in some sectors may even see an increase in income if they are required to work overtime to meet increased demand.

...and the effects on prices will differ too.

The differences between sectors are likely to lead to many relative price changes across the economy. Firms in sectors facing lower demand, such as consumer durables, may be incentivised to cut prices. However, where shutdowns are occurring (eg restaurants and cinemas), prices will be unobservable. Box 4 discusses the difficulties that will pose for the measurement of CPI inflation in more detail.

Firms in sectors facing increased demand, such as consumer essentials, may be incentivised to increase prices to bring demand closer into line with supply. This effect could be amplified if there is also disruption to production and supply chains. Evidence from the literature suggests that prices do not tend to respond substantially in response to sudden large supply-demand mismatches, however. That could reflect firms seeking to avoid 'customer anger' ([Rotemberg \(2002\)](#)). Consistent with this, there has been only limited evidence of higher prices for high-demand products so far in the current crisis (Section 2).

The impact of spare capacity on inflation may be less than normal...

The fall in demand associated with Covid-19 is likely to have been more marked than the fall in supply, such that spare capacity has increased, although there is uncertainty about the extent of that.

The impact of spare capacity on inflation may be less than might be expected in usual times, given the material weakness of demand. One reason is that increased slack might not be reflected fully in lower costs for firms. Employees may resist cuts to their nominal wages, which can make it difficult for companies to lower labour costs in response to a downturn in demand. Many firms' fixed costs, such as rent, will also remain unchanged.

In addition, even if firms' costs do fall, they might not choose to lower prices in response. In periods of weak growth, firms are less able to generate increased demand by lowering prices as consumers are less able and willing to spend. Large price cuts can actually lower profits if demand rises only a little. [Lindé and Trabandt \(2019\)](#) suggest this mechanism has been significant in weakening the relationship between slack and inflation in the US following deep recessions. If firms have liquidity constraints — which might be caused by sharp falls in cash flow — that might also discourage them from cutting prices, as they prioritise short-term revenue generation in order to avoid the need to access external finance. [Gilchrist et al \(2017\)](#) found evidence for this during the 2008 financial crisis. Finally, increased uncertainty can reduce the sensitivity of inflation to changes in slack. [Woodford \(2011\)](#) finds that firms are less likely to change prices in response to changes in slack if they are more uncertain about the state of the economy.

...and there is the potential for large effects on inflation from movements in the exchange rate and commodity prices.

Covid-19 has caused large fluctuations in bilateral exchange rates as capital has moved to perceived safe havens. This can influence inflation through its effect on import prices. The pass-through from any exchange rate move to inflation tends to depend on the shock causing the exchange rate to move, however ([Forbes et al \(2018\)](#)). The literature finds that it tends to be somewhat lower when output growth is weak ([Cheikh et al \(2018\)](#) and [Chou \(2019\)](#)).

The sharp falls in activity around the world mean that global disinflationary pressures are likely to represent an additional drag on inflation in many countries such as the UK. Lower activity has contributed to falls in some commodity prices and oil prices in particular. Oil prices are expected to be the largest influence on UK inflation in the near term, pushing it below 1% (Section 2).

3.2 What can we learn about the potential impact of Covid-19 from the literature on pandemics?

Studies of pandemics suggest the effects on economic activity can be large.

There have been a number of influenza pandemics and other viral outbreaks since the turn of the 20th century, and academic papers suggest that they have had significant economic effects ([Table 3.A](#)). For example, [Barro et al \(2020\)](#) estimate that the Spanish flu — the most severe of these pandemics in terms of health outcomes — reduced real GDP per capita by around 6% in the typical country over the period 1918–21.⁽¹⁾ The economic effects of more contained outbreaks with less severe health outcomes, such as the 2003 SARS epidemic, are estimated to be smaller.

(1) This is the average economic effect over a cross-section of 42 countries. Given the cross-country range of experience, the most affected countries could have seen declines in real GDP per capita of 10% or more.

Table 3.A Past pandemics are estimated to have had significant economic effects

Impact on economic activity from a selection of previous pandemics and epidemics

Pandemic/ epidemic	Number of deaths (global)	Containment measures	Impact on economic activity during outbreak	
Spanish flu (1918–19)	17–50 million	Some social distancing measures varying across jurisdictions	<u>Barro et al (2020)</u> :	Average GDP loss in affected countries of 6%; average consumption loss of 8% over the period 1918–21.
			<u>Correira et al (2020)</u> :	18% decline in US manufacturing output.
SARS (2002–03)	774	Largely voluntary social distancing in China and Hong Kong	<u>Lee and McKibbin: [2004]</u> <u>Hai et al (2004)</u> :	1.1% GDP loss in mainland China; 2.6% GDP loss in Hong Kong. 1–2 percentage points lower 2003 GDP growth in China.
Ebola (2014–16)	11,323	Case isolation and quarantining of contacts	<u>World Bank (2014)</u> :	GDP growth 2.1 percentage points, 3.4 percentage points and 3.3 percentage points lower in Guinea, Liberia and Sierra Leone respectively in 2014.

There are also studies that estimate the impact of a hypothetical pandemic on the UK (**Table 3.B**). For example, McKibbin and Sidorenko (2006) consider the impact of a pandemic under four scenarios, varying in severity to match pandemics of the past century. They estimate that the impact on annual GDP in the UK would range from -0.7% in a 'mild Hong Kong flu' style pandemic to -5.8% in a 'severe Spanish flu' style scenario. An 'ultra' pandemic modelled to be worse than the Spanish flu lowers GDP by 11.1%.

Table 3.B The estimated impacts of hypothetical pandemics on the UK economy vary substantially

Selection of papers that estimate the impact of hypothetical pandemics on the UK

Paper	Scenario	Number of deaths (UK)	Containment measures	Impact on annual UK GDP
<u>McKibbin and Sidorenko (2006)</u>	'Mild' — Hong Kong flu (1968–69)	7,600	None	-0.7%
	'Moderate' — Asian flu (1957)	76,000	None	-2.4%
	'Severe' — Spanish flu (1918–19)	380,000	None	-5.8%
	'Ultra'	760,000	None	-11.1%
<u>Keogh-Brown et al (2009)</u>	'Mild baseline'	41,900	None	-0.2%
	'Mild with school closure and voluntary absenteeism'	41,900	Schools closed for one quarter and 34% of workers avoid work for a month	-2.2%
	'Severe'	305,100	None	-1.6%
	'Severe with school closure and voluntary absenteeism'	305,100	Schools closed for one quarter and 34% of workers avoid work for a month	-4.5%
<u>Verikios et al (2016)</u>	'High-mortality, low infectiousness'	52,243	Some school closures and voluntary absenteeism	-0.4%
	'Low-mortality, high infectiousness'	50,747	Some school closures and voluntary absenteeism	-2.0%

Social distancing measures increase the size of the immediate economic impact.

Extensive social distancing measures, such as mandated business closures and widespread travel restrictions, have not been implemented during past pandemics (**Table 3.A**). Studies that model pandemics where they are introduced find larger economic effects (**Table 3.C**). Eichenbaum et al (2020) find that a pandemic accompanied by containment measures that restricts individuals from working and spending can lower annual consumption by over 20%. This is more than triple the estimated fall when social distancing measures are not in place. Barrot et al (2020) and Inoue and Todo (2020) estimate the impact of widespread social distancing measures over a shorter time period of around one month, and still find that the effect on annual output is significant at around 5%.

Table 3.C Studies which include extensive social distancing measures find the largest economic effects

Selections of papers that estimate the impact of pandemics with extensive social distancing measures

Paper	Country studied	Duration of social distancing	Impact on annual GDP
<u>Eichenbaum et al (2020)</u>	US	Entire duration of pandemic	-22% ^(a)
<u>del Rio-Chanona et al (2020)</u>	US	One year	-22%
<u>Barrot et al (2020)</u>	France	Six weeks	-5.6%
<u>Inoue and Todo (2020)</u>	Japan	One month (Tokyo only)	-5.3%

(a) Estimated impact on consumption rather than GDP.

Some studies suggest that social distancing measures can improve economic outcomes in the medium term. Correia et al (2020) find that cities that implemented early and extensive interventions in response to the Spanish flu experienced stronger economic growth after the pandemic subsided relative to those that did not.

The literature suggests that severe pandemics can have persistent effects on economic activity.

Many of the papers which estimate the impact of hypothetical pandemics predict that they are largely temporary, with GDP growth recovering sharply in the quarters following the outbreak and returning close to its pre-pandemic level by the end of two years [Jonung and Roeger \(2016\)](#) and [Mckibbin and Sidorenko \(2006\)](#).

Some papers note the potential for more persistent effects, however. [Kozlowski et al \(2020\)](#) find that pandemics can lead to permanent losses in output if there are bankruptcies or changes in consumer habits. [Di Mauro and Syverson \(2020\)](#) consider a number of channels through which the pandemic can lower long-run productivity growth, such as the loss of intangible capital and firms repatriating economic activity.

There is relatively little evidence on the impact of pandemics on inflation.

In terms of the impact of pandemics on inflation, there is little evidence to draw upon. Papers that model pandemics largely as negative supply shocks find them to be inflationary. For example, [McKibbin and Sidorenko \(2006\)](#), who assume that the supply effect from a pandemic would account for around 85%–95% of the weakness in GDP, estimate that inflation is likely to rise in most countries as a result. The effect only becomes deflationary if it is accompanied by a large exogenous shock to demand.

But more recent papers suggest the estimated effects on demand might be substantially larger than those on supply, which could create a disinflationary effect. [Guerrieri et al \(2020\)](#) model an economy where a supply shock in one sector can create demand spillovers in another. As a result, aggregate demand falls by more than aggregate supply. The resulting spare capacity and the disinflationary pressure that would ensue is consistent with evidence from the 2003 SARS epidemic, where inflation fell.

Annex 1

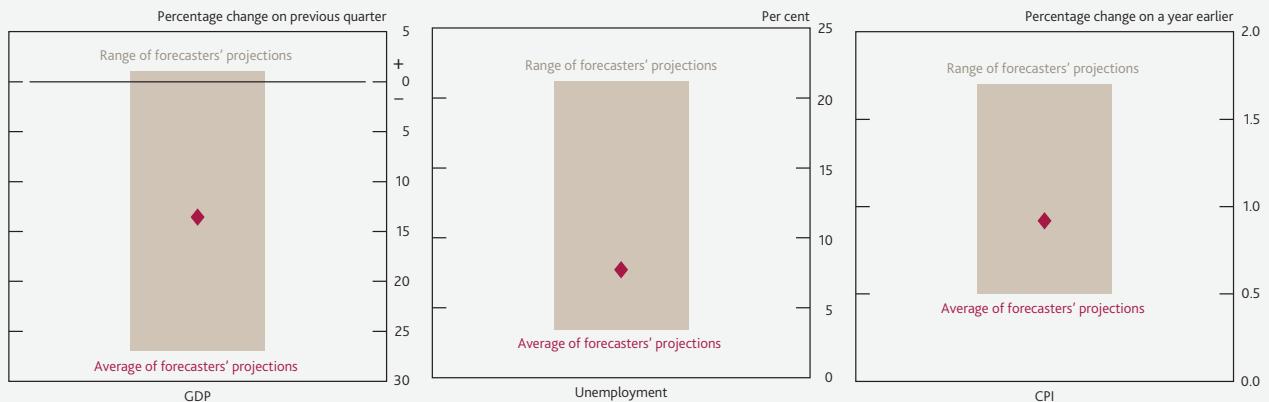
Other forecasters' expectations

This annex reports the results of the Bank's most recent survey of external forecasters.⁽¹⁾

External forecasters have made sizable revisions to their forecasts since the January Report. Most expected a large fall in quarterly GDP growth in 2020 Q2, and the unemployment rate to rise markedly (left and middle panel, **Chart A**). On average, CPI inflation was expected to fall below 1% in Q2 (right panel, **Chart A**). The range of projections was wide, reflecting uncertainty in particular about the likely scale and duration of measures to contain Covid-19.

Chart A In 2020 Q2, external forecasters expected GDP growth to fall markedly, unemployment to rise and CPI inflation to fall below 1%

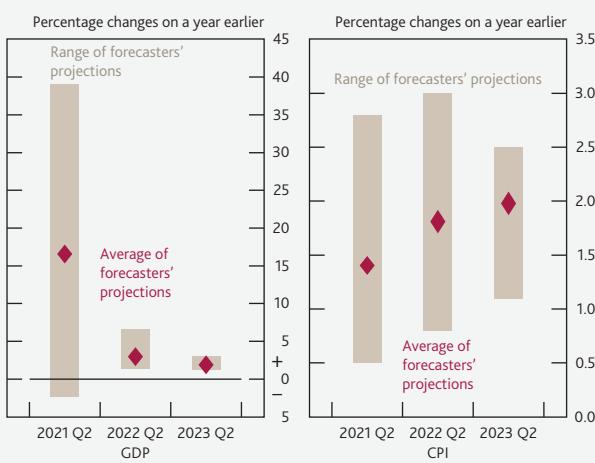
Averages of other forecasters' central projections for GDP growth, the unemployment rate and CPI inflation in 2020 Q2



Source: Projections of outside forecasters as of 24 April 2020.

Looking further ahead, respondents expected that social distancing measures would be relaxed and that GDP growth would rebound in the four quarters to 2021 Q2, (left panel, **Chart B**). On average, external forecasters expected inflation to remain below the MPC's 2% target for the next two years, but to be close to the target at the three-year horizon (right panel, **Chart B**). On average, respondents expected Bank Rate to remain close to 0.1% until 2021 Q2, and then rise a little (**Table 1**). On average, the stock of purchased gilts and corporate bonds was expected to increase to more than the £645 billion already announced by the MPC.

Chart B Over the next year, external forecasters expect GDP growth to rebound, and inflation to remain below the target
Projections for GDP and CPI inflation



Source: Projections of outside forecasters as of 24 April 2020.

Table 1 Averages of other forecasters' central projections^(a)

	2021 Q2	2022 Q2	2023 Q2
GDP growth ^(a)	16.6	3.0	1.9
CPI inflation ^(b)	1.4	1.8	2.0
LFS unemployment rate (per cent)	5.8	5.0	4.6
Bank Rate (per cent)	0.2	0.7	1.0
Stock of purchased gilts (£ billions) ^(c)	676	651	655
Stock of purchased corporate bonds (£ billions) ^(c)	22	22	23
Sterling ERI ^(d)	79.8	80.8	80.7

Source: Projections of outside forecasters as of 24 April 2020.

(a) Four-quarter percentage change.

(b) Twelve-month rate.

(c) Original purchase value. Purchased via the creation of central bank reserves. The fall in the stock of purchased gilts over the three-year horizon reflects changes in the composition of the respondents for two and three years ahead.

(d) Index: January 2005 = 100.

(1) This survey included an additional question about forecasters' expectations for 2020 Q2. For detailed distributions, see '[Other forecasters' expectations](#)'.

Annex 2

How has the economy evolved relative to the MPC's projections?

On an annual basis, the MPC sets out how the economy has evolved relative to its forecasts.⁽¹⁾ This box looks at how the economy evolved in 2019, before Covid-19 began to affect the UK economy, relative to projections in the November 2018 Report. It also looks at outturns relative to the MPC's fan charts over a longer period.

How did the economy evolve in 2019 relative to the November 2018 projections?

GDP growth was weaker than expected.

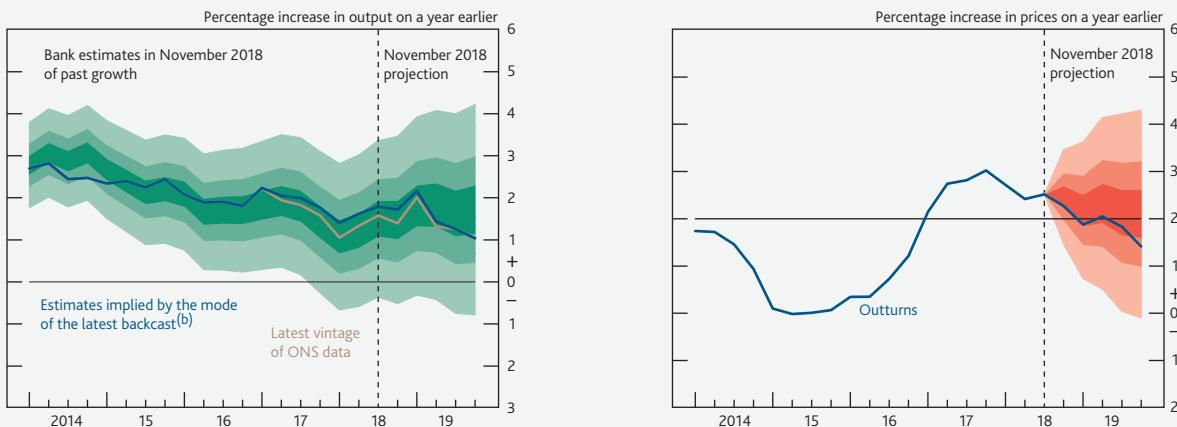
GDP growth slowed over 2019 and four-quarter growth in 2019 Q4 was around half a percentage point weaker than expected in the November 2018 Report (**Chart A**). Business investment accounted for most of that weakness although consumption and housing investment were also a little lower than expected. By contrast, government spending boosted GDP by around 0.3 percentage points more than expected.

That reflected slower global growth...

UK-weighted global growth was 1¾% in 2019, compared to the 2¼% expected in November 2018. Part of that unexpected weakness is likely to reflect an increase in trade protectionism. The sharp increase in tariffs on bilateral trade between the US and China over that period increased uncertainty and weighed on business sentiment globally.⁽²⁾ Growth was weaker than projected in 2019 in a range of countries including non-China EMEs, the euro area and the US. Slower global growth will have weighed on net trade as well as investment spending, which tends to be affected by global developments in uncertainty and sentiment.

Chart A Over 2019, GDP growth was weak and CPI inflation was a little lower relative to the MPC's November 2018 projection

GDP and CPI inflation outturns and projections in the November 2018 Report^(a)



Sources: ONS and Bank calculations.

(a) The projections were conditioned on: market interest rate expectations; the assumption that the stocks of purchased gilts and corporate bonds financed by the issuance of central bank reserves remained at £435 billion and £10 billion respectively and remained there throughout the forecast period; and the announced Term Funding Scheme financed by the issuance of central bank reserves. See footnotes to Charts 5.1 and 5.3 of the November 2018 Report for information on how to interpret the fan charts.

(b) The latest backcast is a judgement about the path for GDP in the mature estimate of the data.

...and elevated Brexit-related uncertainty.

In the November 2018 projections, Brexit-related uncertainty was expected to fall back, consistent with the assumption of a smooth withdrawal from the EU, with the UK leaving the EU at the end of 2019 Q1. In the event, the date of the UK's exit from the EU was changed on a number of occasions; and ultimately to 31 January 2020. As a result Brexit-related uncertainty remained elevated. The proportion of firms in the DMP Survey citing Brexit as one of their top three sources of uncertainty rose from around 49% at the time of the November 2018 Report to around 55% in 2019, for example. That has weighed on business investment (see Section 4 of the [November Report](#)), particularly given Brexit-related uncertainty was not resolved at a number of points at which firms might have expected it to be, creating a strong incentive to wait ([Broadbent \(2019\)](#)).

(1) For example see the May 2019 and May 2018 Reports and the Independent Evaluation Office report.

(2) For more information see the [November Report](#).

Weak GDP growth is judged to have resulted in a greater margin of spare capacity in 2019...

Alongside GDP growth, potential supply growth is judged to have slowed reflecting weaker-than-expected productivity growth. However, the MPC judges that the slowing in GDP growth has been larger than that of potential supply growth, such that a greater margin of spare capacity had opened up in 2019.

...which may help explain why inflation was weaker than expected...

More spare capacity, which would encourage firms to limit price rises to encourage demand, may help explain weaker-than-expected inflation. CPI inflation fell over 2019, reaching 1.4% in Q4, outside the central band of the MPC's fan chart in November 2018 (**Chart A**). Subdued CPI inflation may also have reflected weakness in the inflation rate of non-labour costs, as well as faster productivity growth in the retail sector ([Tenreyro \(2020\)](#)).

...although it is partly explained by external factors, related to a rise in sterling and a fall in energy prices.

At the end of 2019, the sterling ERI was around 2% higher than the conditioning assumption in the November 2018 projection. Sterling rose in the latter half of 2019 as greater clarity around Brexit emerged. That appreciation lowered growth in import prices and pushed down CPI inflation. In addition, oil prices were around 20% lower at the end of 2019 than the conditioning assumption in November 2018, reducing petrol prices and utility bills.

Assessing the MPC's forecasts over time

While GDP growth and CPI inflation have been weaker than the November 2018 projection, there has not been a consistent pattern in forecast errors over recent years (**Table 1**). Looking at the last five projections made in November, GDP growth has been stronger than expected in the subsequent year on one occasion, and weaker on three. CPI inflation was lower than projected in two of the five November *Reports* published since 2014, in one case it was slightly higher, and in two cases the data were broadly in line with the forecast.

Looking back over a longer period, outturns for GDP growth and CPI inflation have been relatively evenly distributed within the MPC's fan charts since 2004 (**Chart B**) and the one year ahead forecasts have not shown significant evidence of bias.⁽³⁾ If the fan charts accurately describe the uncertainty faced by the MPC, then absent any news in the conditioning paths, outturns would be expected to lie evenly across the fan chart distribution over time, with 10% of outcomes in each decile. GDP growth has tended to lie more often in the lower half of the fan chart distributions. Outturns have been more evenly distributed for CPI inflation, although the proportion of outturns in the top decile has been larger than would be expected.

Table 1 Pattern of MPC forecast errors over recent years
Outturn data a year ahead compared to past projections

Percentage point differences in calendar year growth, unless otherwise stated

	Projection date				
	Nov. 2014	Nov. 2015	Nov. 2016	Nov. 2017	Nov. 2018
Headline indicators					
GDP	-0.5	-0.6	0.6	0.0	-0.3
Unemployment rate ^(a)	-0.4	-0.2	-0.9	-0.3	-0.2
CPI inflation ^(b)	-1.4	0.0	0.3	-0.1	-0.7
Potential supply and the labour market					
Potential supply	0.1	-0.6	0.2	0.0	-0.4
Productivity	0.1	-0.6	-0.6	-0.6	-0.9
Whole-economy AWE	-0.2	-1.0	-0.3	0.3	0.2
Global output					
UK-weighted world GDP ^(c)	-0.1	-0.1	0.6	-0.2	-0.5

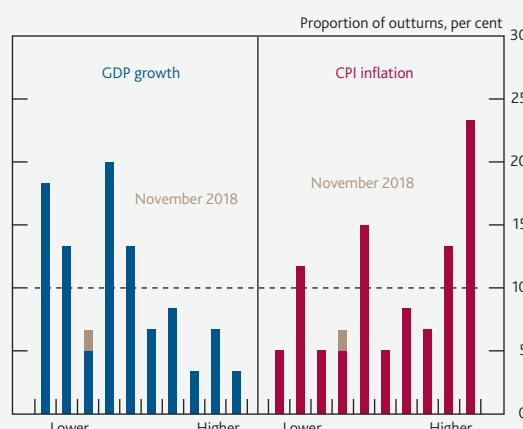
Sources: Eikon by Refinitiv, IMF *World Economic Outlook*, OECD, ONS and Bank calculations.

(a) Differences between outturns and forecasts for the percentage point change in the unemployment rate. Negative values indicate a lower than expected unemployment rate.

(b) Differences between outturns and forecasts for the annual CPI inflation rate at the end of the year after the forecast.

(c) Constructed using data for real GDP growth rates for 188 countries weighted according to their shares in UK exports.

Chart B GDP growth and CPI inflation outturns across deciles of the MPC's fan chart probability distribution^(a)



(a) Calculated for the market rate fan charts published since February 2004. Five quarters ahead.

(3) For further information see the [Independent Evaluation Office](#) report on evaluating forecast performance.

Glossary and other information

Glossary of selected data and instruments

AWE – average weekly earnings.
 CPI – consumer prices index.
CPI inflation – inflation measured by the consumer prices index.
 DMP – Decision Maker Panel.
 ERI – exchange rate index.
 GDP – gross domestic product.
 HICP – harmonised index of consumer prices.
 LFS – Labour Force Survey.
 MFCI – Monetary and Financial Conditions Index.
 PMI – purchasing managers' index.
 RPI – retail prices index.
RPI inflation – inflation measured by the retail prices index.
 SONIA – Sterling Overnight Index Average.

Abbreviations

CBI – Confederation of British Industry.
 CCFF – Covid Corporate Financing Facility.
 CIPS – Chartered Institute of Purchasing and Supply.
 CJRS – Coronavirus Job Retention Scheme.
 ECB – European Central Bank.
 EME – emerging market economy.
 EU – European Union.
 FTSE – Financial Times Stock Exchange.
 GfK – Gesellschaft für Konsumforschung, Great Britain Ltd.
 ICE/BoAML – Intercontinental Exchange/Bank of America Merrill Lynch.
 IMF – International Monetary Fund.
 LTV – loan to value.
 MPC – Monetary Policy Committee.
 MSCI – Morgan Stanley Capital International Inc.
 MTIC – missing trader intra-community.

NHS – National Health Service.

OECD – Organisation for Economic Co-operation and Development.

Ofwat – Water Services Regulation Authority.

ONS – Office for National Statistics.

OPEC – Organization of the Petroleum Exporting Countries.

PNFC – private non-financial corporation.

PPP – purchasing power parity.

R&D – research and development.

S&P – Standard and Poor's.

SARS – severe acute respiratory syndrome.

SME – small and medium-sized enterprise.

TFSME – Term Funding scheme with additional incentives for Small and Medium-sized Enterprises.

TLTRO – targeted longer-term refinancing operation.

VAT – Value Added Tax.

WEO – IMF *World Economic Outlook*.

Symbols and conventions

Except where otherwise stated, the source of the data used in charts and tables is the Bank of England or the Office for National Statistics (ONS) and all data, apart from financial markets data and results from the Decision Maker Panel (DMP) Survey, are seasonally adjusted.

n.a. = not available.

Because of rounding, the sum of the separate items may sometimes differ from the total shown.

On the horizontal axes of graphs, larger ticks denote the first observation within the relevant period, eg data for the first quarter of the year.