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On firm ground?

The impact of Covid-19 on firms and what policy makers should do in response

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Executive Summary

Firms' hiring and investment decisions will play a key role in determining the pace and extent of the recovery. But although the impact of Covid-19 on households has rightly received much attention, less has been done to uncover the impact across the business sector. This report helps to fill that gap by using a range of data to assess the current state of corporates and by setting out the priorities for policy makers that will allow firms to drive a rapid recovery.

The shock to firms from the Covid-19 crisis has been unprecedented; as has the policy response

The pandemic has had a devastating economic impact. The collapse in GDP between April and June last year was more than six times greater than the largest fall previously recorded for such a period. Despite a mini-recovery since then, the economy in September 2020 was still around 9 per cent smaller than at the end of 2019. That hit to GDP has led to a huge fall in firms' turnover, with more than a quarter of the business sector in January 2021 reporting that turnover was down by at least 20 per cent on normal levels.

The impact of an economic hit during a recession always varies across firms, but this time the hit has been particularly concentrated on the service sector. During the financial crisis, for example, the hit to the production sector was more than double that of the service sector, but lost output in the service sector in 2020 was 9 per cent of its previous peak output, larger than the 7.5 per cent fall in the production sector. All this means that, although some businesses have come through the crisis relatively unaffected, many – particularly in the service sector – have seen their revenues collapse.

This unprecedented hit to firms has been met by a massive policy response. The aim of that response has been to take many businesses' costs onto the government's books, shielding them from a huge hit to revenues, so reducing the risk of large numbers of insolvencies and mass unemployment. The centre piece to the policy package – the coronavirus job retention scheme (CJRS) – paid the wages of nearly 9 million people at its peak, hugely reducing firms' wage bills at a cost to date of around £59 billion. On top of that, the Government has deferred tax payments, underwritten around £87 billion of cheap finance, and provided grants totalling around £16 billion aimed at supporting smaller businesses. All this has provided a lifeline to many firms.

A key question, then, is where has the combination of the economic hit from the pandemic and the policy response left the business sector? Given the size and highly-variable nature of these forces, answering that question means paying attention to the whole distribution, not just the aggregate picture.

At this critical juncture – as both the vaccine rollout provides hope for an imminent start to the recovery, while the scale of the second wave means many businesses will face restrictions for months to come – policy makers must address two key policy challenges:

First, preventing viable businesses from failing in the coming months: the vaccine rollout means social distancing restrictions will begin to be lifted from the spring. But the continuation of some restrictions and the time that it will take for some firms' activity levels to bounce back means that it remains an immediate priority to avoid the liquidation of firms that have a long-term future. Mass failures of such businesses would slow the recovery significantly and increase the permanent economic scarring from the pandemic.

And second, ensuring that firms are in a position to facilitate a rapid recovery. It is the lifting of the virus-related restrictions that will guarantee that there is a recovery, but the ability of firms to grow will determine the strength of the recovery in employment and productivity, and so determine living standards for years to come.

Policy makers must understand the impact of the pandemic on cash and debt across different types of firms

Setting policy to meet these challenges successfully means focussing on the variables that are key to firm survival and subsequent growth.

In the short term, even businesses that have a viable future will fail if they run out of cash. This is why policy support to date has rightly focused on reducing firms' costs to protect their cashflow.

Looking further ahead, debt levels are important too. Our analysis of recent downturns in advanced economies finds that sharper increases in corporate debt are associated with slower recoveries. This effect is weaker than for sharp rises in household debt, reflecting the fact that debt-burdened firms can fail with new companies emerging to take their place. However, because a successful vaccine rollout should largely see a return to pre-pandemic economic activities, there is a stronger than normal case for supporting *existing* firms relative to focussing on encouraging *new* firm creation. But in doing this, policy makers must avoid the creation of so-called 'zombie' firms – firms that exist primarily to service a large debt burden and that are not able to make a material contribution to a growing economy.

In short: we need to make sure that viable businesses do not run out of cash so as to prevent them from failing in the coming months while restrictions persist, and we need to ensure that firms are not saddled with crippling levels of debt so that they are in a position to facilitate a rapid recovery as restrictions are eased.

So far, overall measures of cash holdings in the corporate sector are reassuring, and debt has risen only marginally

The headline figures from the corporate sector so far are relatively benign. The level of company liquidations actually fell by around a quarter in 2020 compared with 2019, in stark contrast to past recessions that saw large increases in insolvencies. The key reason for this is that firms' aggregate cash holdings have increased since the start of the pandemic, despite falls in revenue. On average, firms have reduced their cash buffers by the equivalent of around £40 billion in today's prices over the past four recessions, but these holdings have jumped by £118 billion since the start of last year.

These positive developments reflect the scale of the policy response. Alongside direct payments to firms via grants or furlough payments, the provision of around £87 billion in government-guaranteed loans means firms have had access to cheap external finance. This is very different from the recession following the financial crisis, when firms raised only around £20 billion. The fact that firms have been able to access finance on such a scale during the pandemic is testament to the increased resilience of the banking sector and, more importantly, the role of government guarantees in reducing the cost and increasing the availability of finance.

The use of government-backed lending schemes has, of course, led to a rise in corporate debt, but debt levels remain below their pre-financial-crisis peak. The ratio of corporate debt-to-GDP has risen since the end of 2019 but by nowhere near enough to reverse the falls seen since the financial crisis. And, although the rise in debt will clearly reduce the net worth of the corporate sector, the accompanying rise in cash holdings and the low cost of finance suggest that there is scope for much of the rise to reverse quickly once a recovery takes hold.

But these aggregate measures do not mean that all is well in the corporate sector. First, there are pockets of the corporate sector where cash flow has been under sustained pressure and is becoming more worrying as the crisis continues. This is particularly the case for the hardest-hit sectors: the proportion of hospitality firms reporting three months or fewer of cash reserves remaining has risen from 36 to 53 per cent between September 2020 and January 2021. More concerning is that lower cash reserves appear to be strongly associated with plans to lay workers off and close business sites, over and above any impact of being in one of the worst-affected sectors: 9 per cent of firms in the recreation sector with fewer than three months of cash reserves left are planning to close business sites in the next two weeks, and only 2 per cent of recreation firms with higher cash reserves plan to do the same. This suggests that, with policy support currently set to expire over the course of the next two months, the weak cash position of some firms could lead to business failures just as the economy begins to emerge from the current lockdown.

Second, it is important to keep in mind that the fall in business failures in 2020 means that there are likely to be 'pent up' insolvencies in the system. If, rather than falling, business insolvencies had remained at their 2019 level, we might have expected to see around another 4,700 insolvencies in 2020 in England and Wales. This is important for policy makers: they should try to avoid providing further support to such firms so as not to throw 'good money after bad', but we also need to ensure that the system for resolving such failures is able to process cases quickly as emergency support is withdrawn.

And third, there is concern that weak investment and hiring could slow the recovery. Business investment growth has been anaemic in recent years as firms have faced significant policy uncertainty. It is therefore striking that, over the summer of 2020, when social distancing restrictions were less severe, consumption recovered by far more than investment. Here, it is likely that the impact of higher debt for individual firms will be a further barrier to a pickup in investment, even if the overall rise in debt does not appear overly alarming in aggregate. Likewise, there is evidence of weak hiring intentions, with the vacancy rate remaining significantly below levels seen at the depths of the financial crisis. This suggests policy makers should prioritise measures directed at boosting the strength of the recovery, particularly those that can support investment and employment.

Additional measures will be needed to help some firms survive the coming months

A number of proposals have already made by several organisations. For some, the scale of the economic hit means huge amounts of public money should be pumped into firms in order to avoid mass bankruptcies. For others, it is high time for support to be withdrawn altogether given the huge amounts already committed. The most extreme version of such arguments is that business failure is a necessary element of the recovery, allowing new, more productive firms to enter.

Although policy so far means the hit to firms' balance sheets – particularly their cash buffers and debt levels – has been much smaller than the overall hit to the economy, the pockets of deterioration in firms' finances since the summer highlight areas of danger. These dangers are most acute where they overlap with sectors – like hospitality – that will be affected for the longest by restrictions even as most of the economy fully reopens. Additional government support should be targeted specifically at these sectors to help firms survive the coming months. That support should take the form of targeted grants and business rates relief, partially insuring firms against losses that are strongly tied to the decisions we collectively need to take to control the virus. Further expanding loans schemes would be poorly targeted: cash constraints are not economy-wide and loan schemes suffer from an 'adverse selection' problem that would lead spending to be directed disproportionately towards firms that are less likely to prove viable.

Despite these problems, the hardest-hit firms may struggle to access necessary financing from the financial sector due to the impacts of the crisis (for example the higher level of debt). In these cases, there is a role for continued government support – the existing Enterprise Finance Guarantee scheme, which provides government backing of loans up to 75 per cent, provides a suitable template for continued government support, and should be extended and provided more funding.

But the priority should be policies that address the underlying source of uncertainty and lead to more rapid overall growth

Debt levels and 'pent up' firm insolvencies will require Government attention. This is important because high debt levels can reduce a firm's capacity to invest. And allowing firms which are not viable in the long term to continue operating can impede the reallocation of capital and labour from less-productive firms to more productive firms. The UK's existing insolvency process is well designed to cope with this issue. But banks have limited incentive to recognise that small businesses using the Bounce Back Loan Scheme are insolvent given the new debts they have taken on. This could slow down the efficient resolution of these firms, and could be of a sufficient scale to have macroeconomic implications. The Government should therefore pay to transfer part of the liability for the Bounce Back Loans to the banks so as to better align their incentives and to help facilitate an efficient resolution of non-viable firms in exchange for a fee.

But given the close relationship between the pandemic and economic activity, the most important policy that would give firms the confidence to hire and invest is a swift and predictable rollout of the vaccine. Combined with measures to suppress the prevalence of the virus in the rest of the population, sustainably reducing the case load, this is the only route to a lasting reduction in social distancing restrictions and a strong recovery.

Reducing uncertainty and strengthening demand are the pre-requisites for strong investment, both far more important than small changes to individual taxes or regulations. So measures to address the underlying health crisis should be combined with broad macroeconomic stimulus measures – such as increased public investment – in order to ensure a rapid and full recovery that can generate steady increases in living standards over the coming years. Our full set of policy recommendations are listed below.

Key policy conclusions

Preventing short-term business failure

- *Targeted grants to sectors directly affected by ongoing restrictions*
- *Extend business rates relief for a further three months*
- *Extend CJRS beyond April cliff-edge and announce a phase-out path*
- *Delay start date for VAT deferral payments, and defer payments for January to March 2021 for 1 year*
- *Expand and extend the existing Enterprise Finance Guarantee scheme*

Supporting a strong recovery

- *Drive an improving health outlook, and provide certainty that the virus will remain supressed in future with strong health safeguards*
- *Large-scale fiscal stimulus to drive a rapid recovery in private demand*
- *Transfer part of the liability for Bounce Back Loans to the financial sector in exchange for a fee*

Section 1

Introduction and context

The pandemic has had a devastating impact on the economy, necessitating a huge policy response. The fall in GDP between April and June last year was more than six times larger than the largest fall for any such previous quarter. Although the economy has subsequently recovered, the hit to output from Covid-19 remains larger than at any point during the financial crisis, and is much more concentrated in the service sector than in past recessions. In response, the Government has put in place measures aimed at shielding families and businesses from losses in income. For firms, the aim has been to reduce costs. That has included around £59 billion to pay the wages of furloughed workers, as well deferring tax payments. But, as noted by the Bank of England, this has not been enough to stop a sharp rise in borrowing by the corporate sector as a whole.

This raises an important question about how much damage the pandemic has done to balance sheets across a range of firms. Although much research has been carried out on the impact of schemes put in place to protect household finances, relatively less attention has been paid to the position of firms. This is a significant gap because firms' hiring and investment decisions will play a key role in determining the pace and extent of the recovery. As with households, a comprehensive understanding of the position firms are in needs to engage with the distribution, and not just the aggregates. This report fills that gap by using a range of data to assess the impact of Covid-19 across a range of businesses.

This analysis is crucial for two key challenges facing policy makers. First, with the vaccine rollout providing some light at the end of the tunnel, there is a near-term challenge of preventing viable businesses from failing in the coming months as the current support measures end. But, although it is the lifting of the virus-related restrictions that will guarantee that there is a recovery, it is the ability of firms to grow that will determine the strength of that recovery and drive living standards for years to come. So the second challenge for policy makers is how to ensure businesses are in a position to facilitate a rapid recovery.

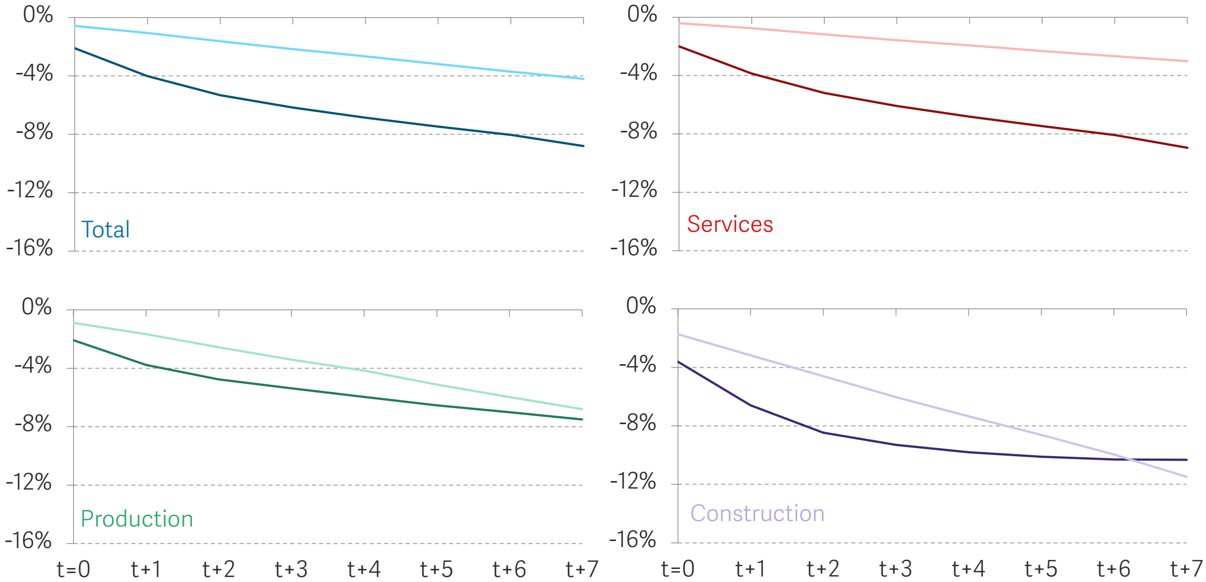
Businesses face an unprecedented economic shock

The pandemic has had a devastating economic impact.[1] The economy is estimated to have contracted by nearly 19 per cent during Q2 2020, more than six times the fall recorded in the previous weakest quarter on record. Despite a sharp bounce back in Q3, lost output amounts to around 9 per cent of annual output at its peak at the end of 2019 – a bigger deficit relative to its previous peak than at any time during the financial crisis (see Figure 1, top-left panel).

That hit to the economy is also unusually concentrated in the service sector. Lost output in that sector is also around 9 per cent of annual output at its pre-crisis peak (see Figure 1, top-right panel), more than the fall in the production sector (7.5 per cent, Figure 1, bottom-left panel). This stands in stark contrast to other recessions: during the financial crisis, for example, the fall in the production sector was more than double that in the service sector.[2] Whereas a number of previous UK recessions originated in shocks to the world economy, amplified across borders through tradable goods markets, the shock from Covid-19 has led to the shutdown of the social-contact-reliant service sector.

FIGURE 1: **Unlike previous recessions, the economic shock has been skewed towards the service sector**

Annualised cumulative output loss relative to pre-crisis peak from the trough in output during the financial crisis and coronavirus crisis, by sector: UK



NOTES: Output loss is calculated using seasonally-adjusted data each month, therefore the total actual output loss relative to a full year of output may differ from these results. Results for the agricultural sector are excluded but are included within the "Total" category.
SOURCE: RF analysis of ONS, GDP monthly estimate.

1 For a discussion of the nature of the impact of Covid-19 on the economy, see: J Smith & T Yates, The Macroeconomic Policy Outlook Q2 2020, Resolution Foundation, May 2020.
2 For a discussion of the drivers and impact of past UK recessions, see: See: J Smith, J Leslie, C Pacitti & F Rahman, Recession ready? Assessing the UK's macroeconomic framework, Resolution Foundation, September 2019.

The policy response has also been huge

The huge size and sectorally-concentrated nature of the hit to the economy has been met by a massive policy response designed to provide income replacement for families and businesses. The major measures are summarised in Table 1, and discussed in more detail in our previous work.[3] The key point to take away is that the size of the support has been huge, with the public sector net deficit likely to top £400 billion in 2020-21, a level of borrowing that is unprecedented in peace time. The package of policies has been successful in protecting families from falling incomes and firms from incurring huge losses or – even worse – being forced into mass layoffs. The centre piece to the policy package – the coronavirus job retention scheme (CJRS) has paid the wages of nearly 9 million people at its peak, with the OBR estimating that the scheme will cost around £59 billion in total.

TABLE 1: **The Government has provided significant support to business**

Major government support schemes for the corporate sector including OBR costing

Type	Scheme	Details	Ends	Size
Grants/tax cuts:	*Business rates relief*	Retail, hospitality & leisure industries (various schemes and value).	Mar-21 (in most cases)	£9.7bn
	Restriction grant	Grants for businesses directly required to close.	One-off	£16.3bn
Deferrals:	*VAT*	Opt-in scheme for businesses up to date with VAT in March 2020.	Mar-21	£2.2bn
Loans:	*CBILS*	Up to £5m loan to SMEs, government guaranteed, up to 3-6 year term.	Applications up to end-March 21	£26bn
	CLBILS	Up to £200m for businesses with turnover of >£45m, government guarantee, up to 3 year term.	Applications up to end-March 21	£6bn
	Bounce back	Up to £50k loan, full government guarantee, up to 6 year term, no repayment in first year and early repayment is free.	Applications up to end-March 21	£55bn
Other support:	*CJRS*	Furlough scheme where staff costs are covered by the government allowing labour market matches to be maintained.	End-April 21	£59bn

NOTES: Size is the OBR's overall costing for each of the schemes except for the loan schemes which records the overall lending. For the loan schemes, the OBR's estimate for total lending (£87bn) is split between the different schemes based on the ratios of take up so far. For the CJRS, total size includes the OBR's estimate for the extension of the scheme to April.

3 See: L Gardiner, J Leslie, C Pacitti & J Smith, Easing does it: Economic policy beyond the lockdown, Resolution Foundation, July 2020.

SOURCE: OBR.

Despite measures to reduce costs, the corporate sector has borrowed significantly more during the pandemic

Despite this support, firms' financial positions have deteriorated, leading many to take on significant amounts of debt. Estimates published by the Bank of England have pointed to a funding deficit of around £180 billion in 2020-21 for private non-financial firms in aggregate.[4] As discussed below, firms appear to have borrowed around half of that amount from banks (the majority through government-guaranteed loans) and financial markets since the start of the pandemic. But the Bank estimates that firms may not need to raise further external finance and can instead fund the rest of the shortfall via pre-existing cash holdings. This raises the question of whether these increases in debt and drawdowns in businesses' cash buffers will affect the strength of corporate balance sheets. What matter in this context is not just the overall position, but also the distribution of that impact.

The vaccine rollout means a recovery is in sight, but challenges for policy makers remain

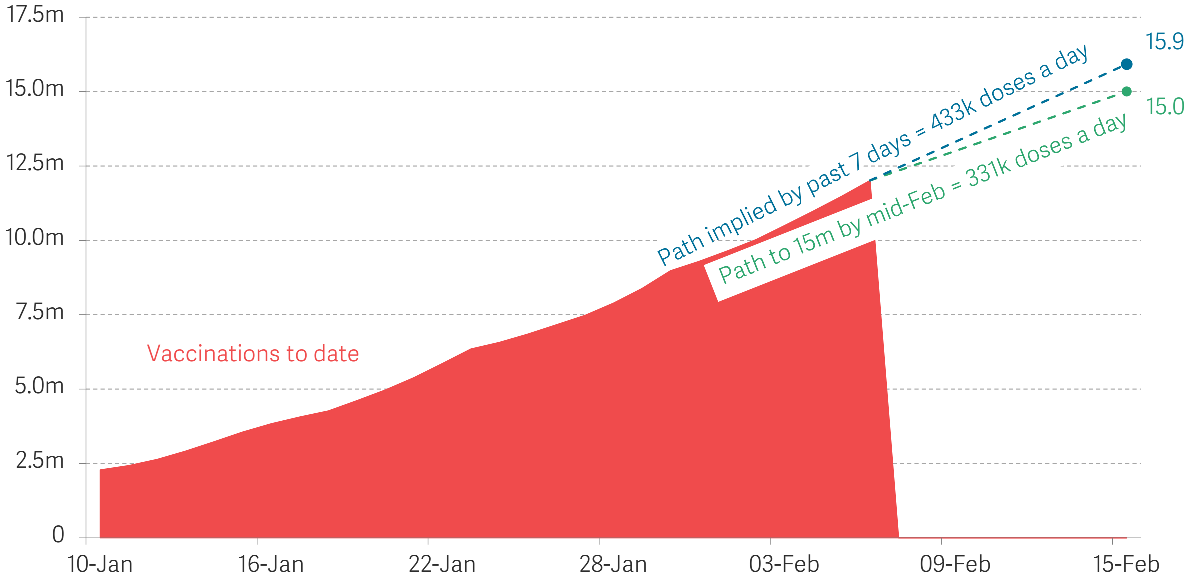
With the Government on track to vaccinate around 15 million of those most vulnerable by the middle of February (Figure 2), the virus should recede in the coming months. In the meantime, however, social distancing restrictions will continue to be needed, and importantly will be required beyond March when most of the support schemes are set to expire (see Table 1). Furthermore, the longer that social-distancing restrictions remain in place and demand remains constrained, the larger the funding deficit faced by the corporate sector will be.

Given all this, there are two key challenges facing policy makers. First, with the vaccine-driven recovery coming in the next few months, there is a need to make sure long-term viable businesses do not fail in the coming months as the Government seeks to stop the various support schemes. And second, looking beyond the next few difficult months, there is the challenge of making sure businesses are in a position to facilitate a rapid recovery, and this means preventing the creation of so-called 'zombie' firms that are crippled by their debts.

4 See: Financial Stability Report, Bank of England, December 2020.

FIGURE 2: **The Government is on track to vaccinate around 15 million people by the middle of February**

Vaccine first doses received across the UK, to 6 February: UK



SOURCE: RF analysis of Government Dashboard, 6 February 2021.

Understanding the impact of the pandemic across the corporate sector is vital for policy makers to meet these challenges. To answer these questions, the rest of this report is structured as follows:

- Section 2 sets out the criteria for assessment of the impact of Covid-19 on firms. Here there are two key aspects to focus on: first, the impact on cash buffers, particularly for the short term; and second, the rise in debt, as this will be particularly important for the strength of the recovery.
- Section 3 provides our assessment of the pandemic across firms focusing on cash and debt.
- Finally, Section 4 sets out the next steps for policy.

Section 2

The importance of firms' cash buffers and debt levels

Firms matter. Their hiring and investment decisions play a key role in determining the depth of any recession as well as the strength of the subsequent recovery. A healthy corporate sector is crucial for living standards both in the short- and longer-term. During the depths of a recession, this means maintaining cash buffers: even businesses with a viable future will fail if they run out of cash. In this context, although policy support has reduced firms' costs, the risk remains that this will not be sufficient to stop firms depleting their cash buffers, particularly if that support is withdrawn too early.

Looking further ahead, our analysis of downturns in advanced economies over the past 40 years finds that larger rises in corporate debt are associated with slower recoveries, although it is less of a headwind than household debt, as indebted firms can fail and be replaced with new entrants. However, because a successful vaccine rollout should see a return to pre-pandemic economic activities, it is more important than usual in the current crisis to support existing firms rather than encouraging new firm creation. So a priority for policy makers is making sure that the recovery is not hobbled by large corporate debts by avoiding the creation of so-called 'zombie' firms – which exist to service their debts and do not make a material contribution to a growing economy.

Firms' decisions matter for living standards and their financial positions affect their behaviour

Firms play a crucial role in driving growth and living standards. In particular, there are three key ways in which businesses affect overall prosperity:

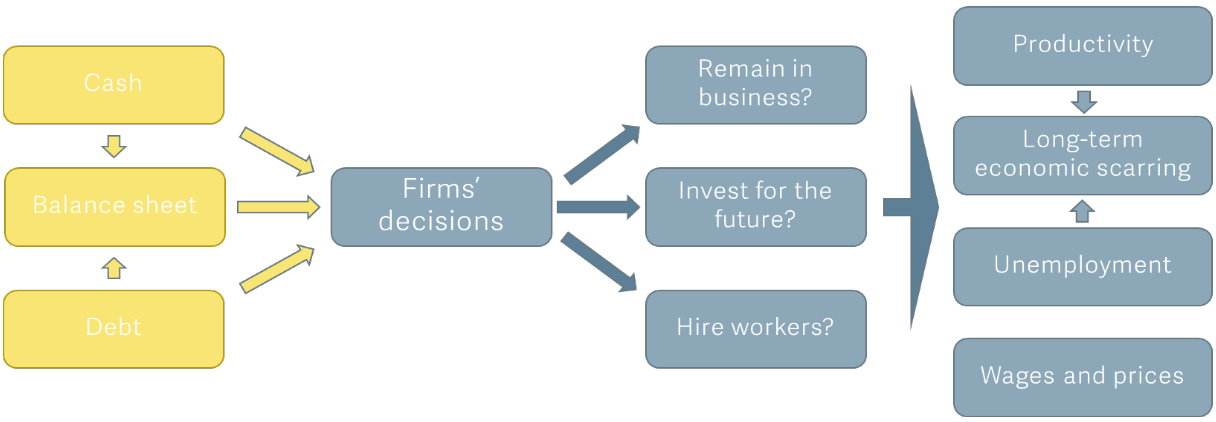
- First, and most obviously, businesses provide employment for the vast majority of workers. In the UK, a little over four in five workers (83 per cent) work for private sector firms. This means that a post-pandemic recovery in living standards hinges on the ability of firms to create jobs.

- Second, firms are a key source of aggregate demand in their own right. By investing in capital goods to increase their ability to produce goods and services, business contribute to overall demand.
- And third, firms' ability to adopt new technologies and improve their efficiency are a key determinant of overall productivity which determines longer-term growth prospects.

Our framework for thinking about how the impact of the crisis will affect firms' decisions and feed through to the strength of the recovery is summarised in Figure 3.

FIGURE 3: **Business balance sheets will play a key role in shaping the strength of the recovery**

Conceptual framework for thinking about firm behaviour in the crisis



SOURCE: RF analysis.

So a healthy and dynamic corporate sector is key to longer-term prosperity and living standards. In the current context, 'healthy' means not overly reliant on external finance. In principle, it shouldn't matter how firms are funded: firms should be able to undertake an investment project if it is likely to yield a profit in future, bearing in mind the cost of any external finance.[5] But, in practice, a range of financial frictions have been found to exert important influences on behaviour, and there are two areas that are particularly relevant to the current crisis: the role of cash holdings; and the role of debt. We discuss these in turn below.

5 The classic reference for such an approach to thinking about firms is: F Modigliani & M H Miller, 'The Cost of Capital, Corporation Finance and the Theory of Investment', American Economic Review, vol. 48(3), pages 261–297, 1958.

There is compelling evidence that cash flow plays a particularly important role, particularly during the depths of a recession

In a downturn, revenues typically fall, leading affected firms to draw down their cash reserves. If a firm runs out of cash and cannot borrow to meet costs, it faces closure or will need to fire workers.[6] Even if the recession is a temporary phenomenon, this process can lead to permanent economic damage. This is because moving a firm into insolvency destroys job-specific expertise and leads to the scrapping of at least some of the physical capital employed by the firm.[7] In this setting, cash buffers play an important role, particularly during the depths of a recession. They allow firms to 'weather the storm', maintaining their productive capacity – that is, maintain their pre-recession levels of physical capital and employment. This explains why many of the Government's policies set out in Table 1 are focused on making sure firms don't run out of cash.[8]

Looking ahead to the recovery, debt also plays a key role

There is also evidence that cash holdings affect the recovery. For example, a recent study for the UK found that, following the financial crisis, firms with relatively large cash holdings were better able to maintain their productive capacity through the recession and then invested more heavily during the recovery.[9] The story here is that having significant cash holdings at the time of recession reduces reliance on external sources of funding which can dry up during downturns. This allows firms to grow more quickly during the recovery, as they are less likely to need to hire and train new staff or increase their levels of physical capital. But it is worth noting that this evidence focuses on the aftermath of the financial crisis. This matters because the importance of cash holdings rises in financial crises because external sources of funding (for example, bank lending) tend to dry up at those times. Such constraints should be less binding in the current crisis, as the financial sector is in a much stronger position.

There is also evidence that high debt can have persistent effects on the ability of firms to invest. For example, recent work using microdata from a number of European countries finds that firms with higher debt levels reduced their investment more after the euro-area

6 For a discussion of these issues in the context of the current crisis, see: T Philippon, 'Efficient Programs to Support Businesses During and After Lockdowns', NBER Working Paper No. 28211, December 2020.
7 The impact of recessions on loss of job-specific expertise is discussed in: R E Hall & M Kudlyak, 'The Inexorable Recoveries of US Unemployment', NBER Working Papers No. 28111, 2020.
8 For a discussion of the reasons why such policy can have powerful effects, and recent evidence, see: J Gonzalez-Uribe & S Wang, The Effects of Small-Firm Credit Guarantees During Recessions, Working Paper, September 2020.
9 See: A Joseph, C Kneer, J Saleheen & N van Horen, 'All you need is cash: Corporate cash holdings and investment after the financial crisis', Bank of England Working Paper No. 843, January 2020.

crisis.[10] For the US, studies of developments at the firm level highlight the importance of high debt levels in reducing investment during 'normal' times, and particularly in the aftermath of recessions.[11]

This evidence on the impact of debt at the firm level does not always seem to translate to overall macroeconomic weakness, however. In particular, research looking back over a long sweep of history (with data back to the 19th century) for 17 advanced economies finds that larger credit booms in the run-up to recessions do not lead to slower recoveries.[12] This result for corporate debt stands in stark contrast to those for increases in household debt, large increases in which tend to be associated with much weaker GDP growth. The authors suggest the key difference is that, unlike household debt, corporate debt can be restructured in the aftermath of recessions, with new entrants in faster growing sectors taking the place of firms which fail.

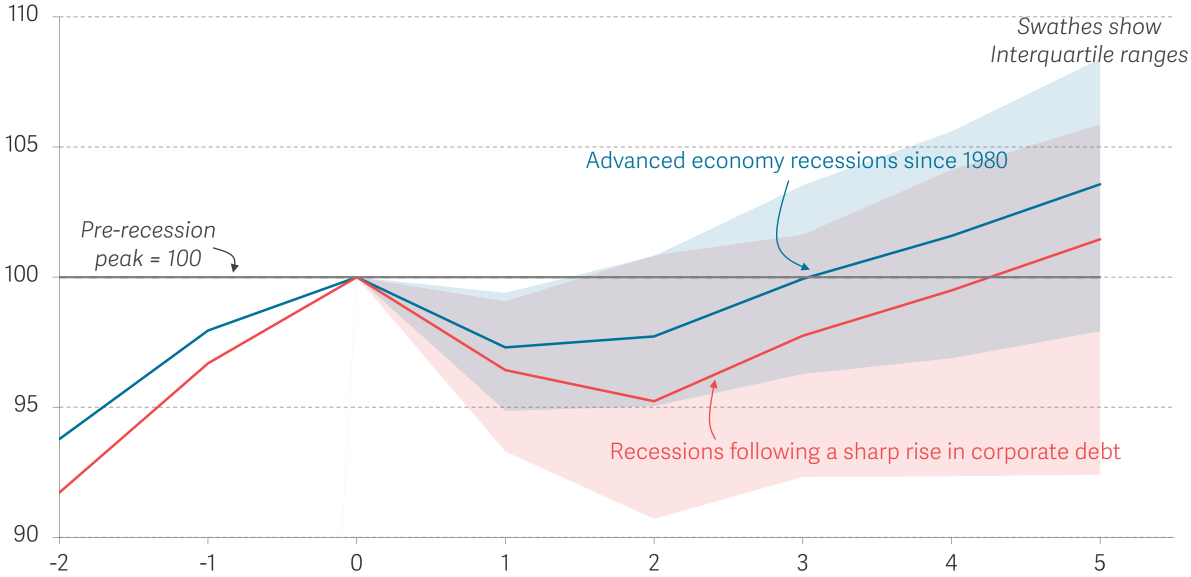
But our view is that there are reasons for policy makers to worry about debt. First, our own analysis of more recent recessions suggests that larger increases in debt are associated with somewhat deeper recessions and more protracted recoveries. Figure 4 shows average GDP growth in the aftermath of recessions for advanced OECD countries since 1980 for which comparable data on debt is available, a period in which the size of the financial sector has increased substantially, increasing firms' access to finance. Also shown are levels of growth in the aftermath of those recessions that follow 8-year periods in which the corporate debt-to-GDP ratio increases by more than 33 percentage points (roughly corresponding to the top third of such rises): these recoveries do tend to be weaker than the others.

Second, allowing firms with high debt to fail and other firms to enter would be the right strategy if the structure of the economy was likely to change significantly. But a successful vaccine rollout should see a return to many pre-pandemic economic activities, and this makes it more important than usual to support existing firms relative to encouraging new firm creation. And third, even if the problem of high corporate debt can be taken care of through debt restructuring, policy makers must ensure that it happens quickly and without business owners extracting the value of firms, not least if much of that value comes from government-backed loans.

10 See: S Kalemli-Ozcan, L Laeven & D Moreno, 'Debt overhang, rollover risk and corporate investment: Evidence from the European crisis', ECB Working Paper 2241, 2020.
11 K Blickle & J A C Santos, 'The Costs of Corporate Debt Overhang', available https://ssrn.com/abstract=3708502, October 2020.
12 See: Ò Jordà, M Kornejew, M Schularick & A M Taylor, Zombies at Large? Corporate Debt Overhang and the Macroeconomy, Federal Reserve Bank of New York Staff Reports, no. 951, December 2020.

FIGURE 4: **Large increases in corporate debt are associated with somewhat deeper recessions and slower recoveries**

Change in real GDP around recessions (first year of recession at t=1): advanced OECD economies



NOTES: covers recessions since 1980 in OECD countries for which debt data are available. Recessions are defined as a fall in calendar year GDP. The sample includes around 40 recessions. Sharp rises in corporate debt are defined as being in the top quartile of increases in corporate debt-to-GDP ratios.
SOURCE: RF analysis of OECD data.

So, in assessing the impact of the pandemic on firms, we need to pay close attention to both cash holdings and debt. We need to make sure viable businesses do not run out of cash, to prevent them from failing in the coming months, and we need to ensure that firms are not saddled with crippling levels of debt, to allow them to facilitate a rapid recovery.

Having set out how we think about the impact of the pandemic on firms, we turn next to an initial assessment of how cash buffers and debt have evolved, and how they are affecting firms' decisions.

Section 3

Assessing the impact of the pandemic on firms' cash buffers and debt levels

Although the unprecedented hit to the economy from Covid-19 has translated into a sharp deterioration in turnover, the good news is that – in aggregate – changes in cash buffers and debt levels have been much less alarming. Aggregate cash holdings have actually risen over the past year and, although corporate debt has increased, it remains below pre-financial crisis peaks. This relatively sanguine aggregate picture reflects the impact of the huge scale of this Government's policy response.

But this aggregate picture does not mean that all is well in the corporate sector. There are three reasons for concern. First, there are pockets of the corporate sector where cash flow is starting to become more worrying, particularly in the hardest-hit sectors. This deterioration is associated with plans to lay workers off and close business sites, suggesting that, without additional support, there could be a rise in business failures, slowing the recovery. Second, the fall in business failures in 2020 means there are 'pent up' insolvencies in the system. This is important for policy makers who need to avoid funnelling support to such firms.

And third, there is concern that weak investment and hiring could slow the recovery. Business investment growth has failed to recover since the low point of the current crisis to the same extent as has consumption. It is likely that the impact of higher debt for many firms will be an unwanted further barrier to a pickup in investment. Likewise, hiring intentions also remain weak, with the new vacancy rate significantly below levels seen at the depths of the financial crisis. All this suggests policy makers should prioritise measures directed at boosting the strength of the recovery, particularly those that can support investment and employment.

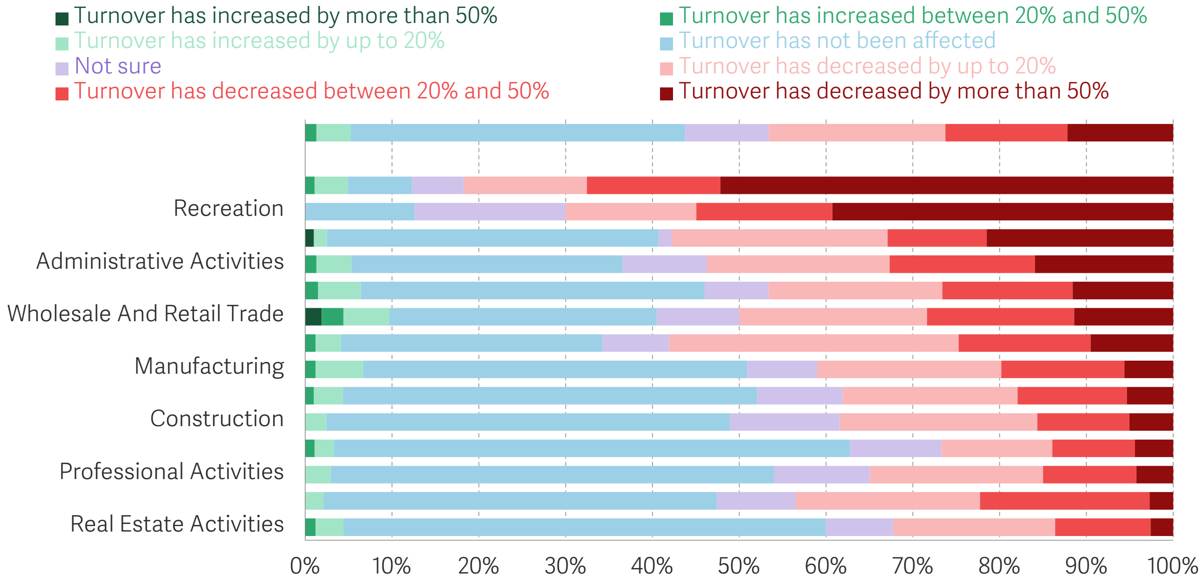
We start this section by looking at how cash buffers and debt levels have evolved in the face of the huge economic shock from the pandemic. By comparing to previous recessions, we can put those developments in context and assess prospects for the recovery – particularly decisions affecting future insolvencies, investment and hiring.

The economic shock has led to a sharp fall in firms' turnover and profits

Like the overall shock to the economy, the hit to firms' turnover has been large and concentrated in service sectors. To understand this, it is helpful to look at turnover, which gives a sense of the size of the impact of the pandemic on business activity, and is relatively unaffected by the Government's measures to support firms balance sheets. As shown in Figure 5, data from the start of 2021 (a time when all parts of the UK were in a form of lockdown) from the ONS's Business Impact of Covid-19 Survey (BICS) points to a huge fall in turnover, with nearly half of firms (46 per cent) noting that turnover had fallen relative to normal levels, and more than a quarter of the business sector reporting turnover was down more than 20 per cent. That loss in activity is particularly concentrated in sectors reliant on social consumption, most obviously hospitality, where more than four in five (81 per cent) had seen some fall and around half of firms had experienced a fall in turnover of over 50 per cent.

FIGURE 5: **The fall in turnover has been heavily skewed towards social sectors**

Proportion of businesses reporting how Covid-19 has affected turnover, by industry: UK, 28 December 2020 to 10 January 2021

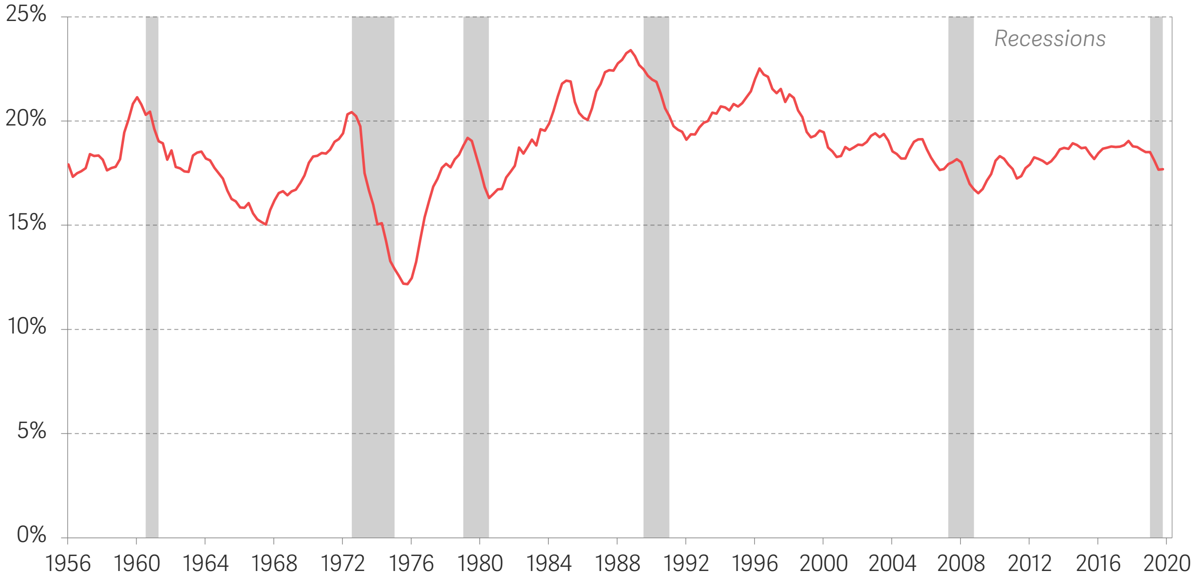


SOURCE: RF analysis of ONS, Business Impact of Covid-19 Survey.

As in other recessions, this fall in turnover has fed through to a fall in profitability. Figure 6 puts the shock to firms in a historical context, looking at how profits have changed during UK recessions in recent decades. This data is not as timely as those from the BICS – they only run to Q3 2020 – but profitability has fallen in this crisis, as it has around every major recession on record. That said, the fall in profits, so far at least, does not stand out as historically unprecedented in the same way as has the hit to GDP, suggesting that the Government schemes have, as intended, partially shielded firms from losses.

FIGURE 6: **Firms' profits have fallen since the onset of the pandemic**

Private non-financial corporations gross operating surplus-to-GDP ratio: UK, 1956-2020



NOTES: Ratio of a four-quarter moving average of private non-financial corporations gross operating surplus to a four-quarter moving average of nominal GDP, lagged by one year.
SOURCE: RF analysis of ONS, Profitability of UK companies – rates of return and revisions.

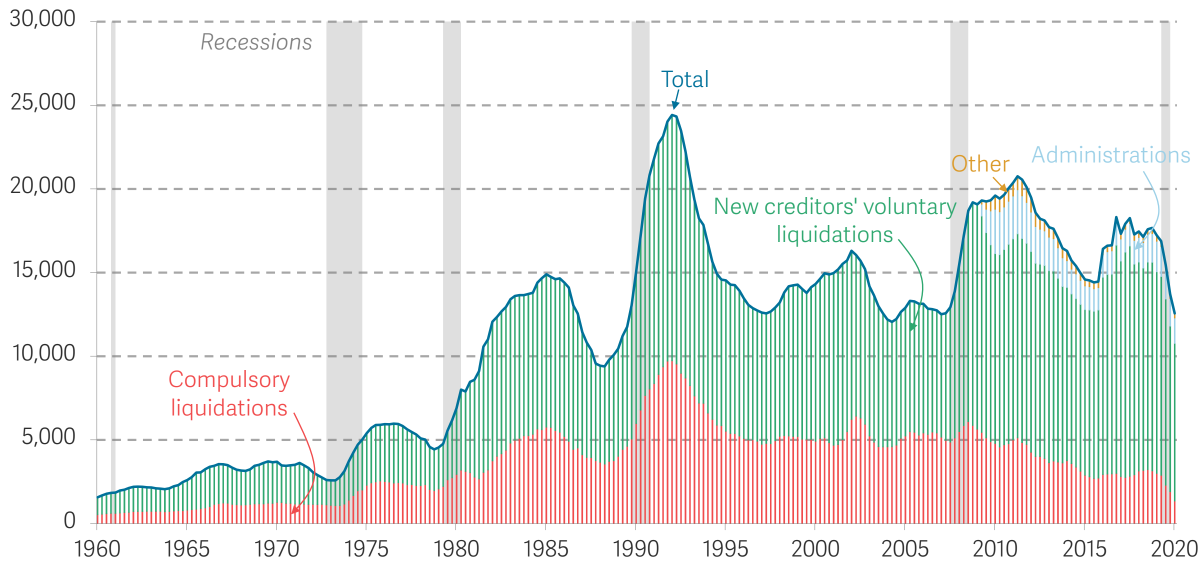
But government policies have prevented business failures

Firm closures typically rise in recessions, but the opposite has happened so far during the pandemic. The number of insolvencies – a timely measure of business failures – spiked up sharply following the financial crisis, when there were around 20,000 annual insolvencies in England and Wales in the years after the crisis, but insolvencies have actually fallen during the pandemic, with only 12,600 insolvencies recorded in 2020. If, rather than falling, business insolvencies had been in line with 2019, we might have expected to see another 4,700 insolvencies in 2020. Cross-country work shows that the UK has seen one of the largest falls in measures of bankruptcy during the pandemic.[13]

13 See: S Djankov & E Zhang, As COVID rages, bankruptcy cases fall, VoXEU, February 2021.

FIGURE 7: **Company liquidations have fallen**

Company liquidations per 10,000 active companies, by type of liquidation: England and Wales



NOTES: Prior to Q4 2012 excluded CVLs following administration. The entire series was revised from Q1 2013 to include these liquidations. Compulsory liquidations includes partnership winding-up orders. Since Q2 2011 winding-up orders have been counted based on the date they were granted by the court.
SOURCE: Insolvency Service (compulsory liquidations only); Companies House (all other insolvency types).

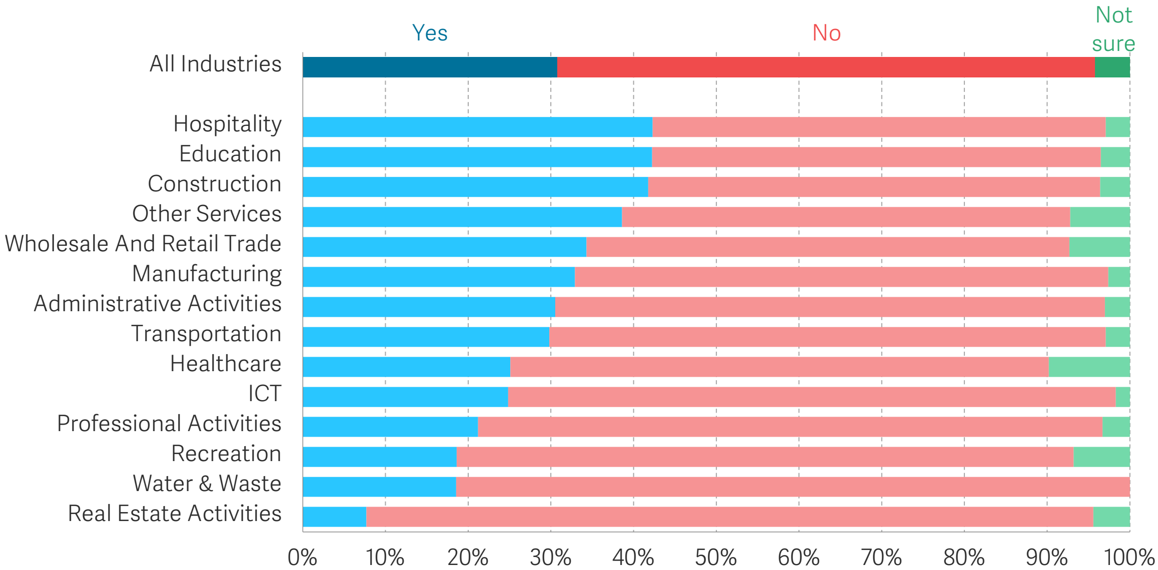
The low level of bankruptcies almost certainly reflects the impact of various government-guaranteed lending schemes (see Table 1) with many businesses using these to cover on-going costs and boost their cash reserves. As shown in Figure 8, around 30 per cent of all businesses have accessed one of the Government's loan schemes during the pandemic, rising to around 40 per cent in the worst-affected sectors, such as hospitality. These support schemes are also increasing incentives for firms to remain in operation in the hope of benefitting from future schemes.

But the fact that insolvencies have declined suggests that there are 'pent up' insolvencies, as the International Monetary Fund have recently warned about.[14] This is important for policy makers who need to avoid funnelling support to such firms.

14 For a discussion of the problem across a number of countries, see: January 2021 World Economic Outlook Update, IMF, January 2021.

FIGURE 8: **Access to government schemes has been important in stopping business failures**

Proportion of businesses reporting having received government-backed loans or finance: UK, 29 December 2020 to 10 January 2021



SOURCE: RF analysis of ONS, Business Impact of Covid-19 Survey.

Aggregate debt levels have increased, as have cash holdings

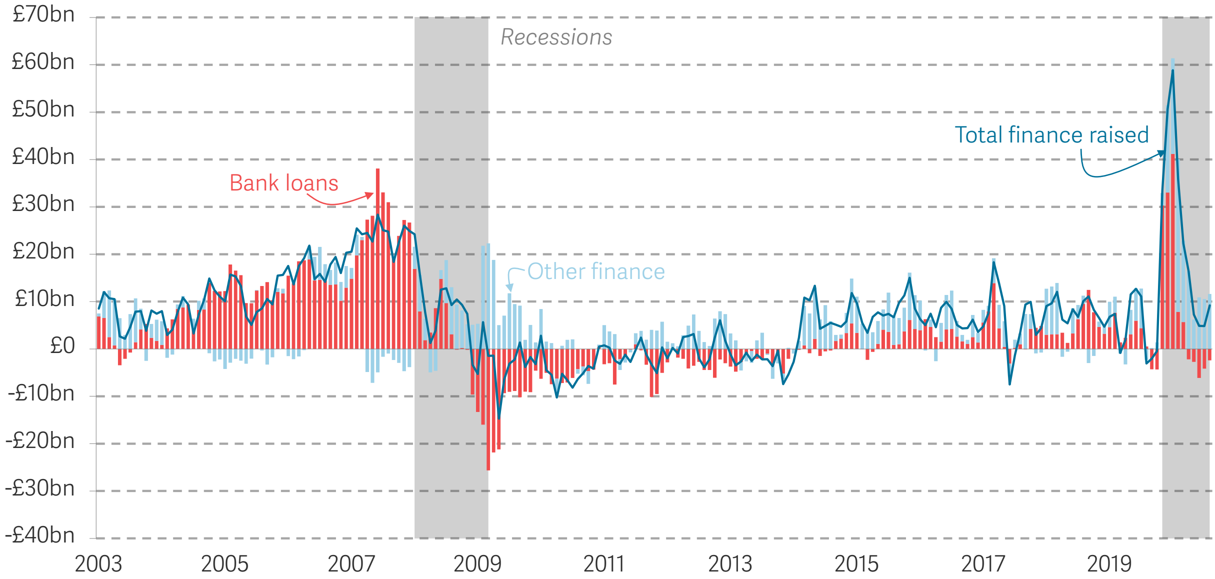
The crisis has led to a large rise in levels of debt held by the corporate sector. As shown in Figure 9, firms have raised nearly £84 billion of additional finance. The largest single component of finance raised has been additional lending from banks, with a net flow of around £36 billion between March and December last year, more than accounted for by the government-guaranteed loan schemes (see Table 1). But firms have also issued bonds and equity worth around £48 billion, with larger firms taking advantage of the relatively benign conditions in financial markets.

Despite the rise, aggregate debt remains well below the pre-financial crisis peak and, with lower interest rates, presents less of a problem than in past crises.[15] Figure 10 puts this increase in borrowing in a historical context. It suggests that the corporate debt-to-GDP ratio is little changed since the start of the pandemic, with the level remaining below the peaks seen before the financial crisis (note that we have lagged GDP by a year, so that the sharp fall does not drive movements in the overall ratio).[16] In contrast to the typical borrowing behaviour outside of recessions, the rise in debt seen over the past year will not have been allocated towards increasing firms' productive capacity. Some, particularly for many small firms, will have been spent on meeting day-to-day operating costs, while some has ended up as larger aggregate cash holdings.

15 More generous terms on Government loan schemes will also have reduced debt costs for many firms.
16 The total debt data suggest debt has risen by around £56 billion in the three quarters to Q3 2020. Over the same period, net finance raised increased by £60 billion.

FIGURE 9: **Unlike the experience of the financial crisis, firms raised significant amounts of finance in 2020**

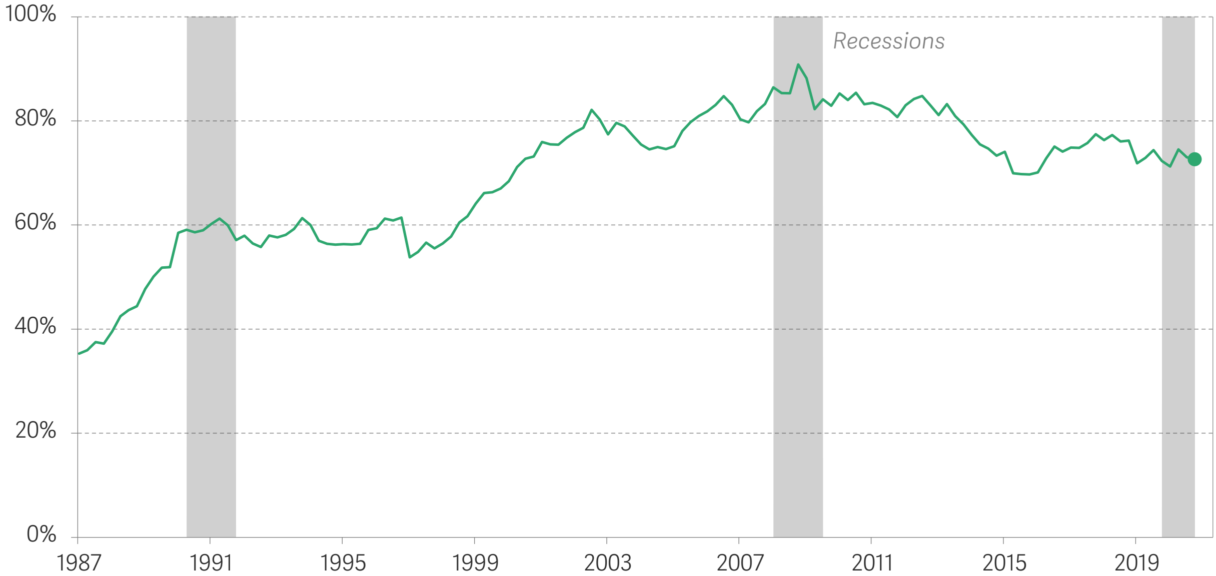
Net finance raised by private non-financial corporations, by source of finance (three-month rolling sum, £ billions): UK



NOTES: Other finance comprises equity, bonds and commercial paper issuance.
SOURCE: RF analysis of Bank of England.

FIGURE 10: **Corporate debt has risen but remains well below its pre-financial crisis peak**

Private non-financial corporate gross debt-to-GDP: UK, 1987-2020

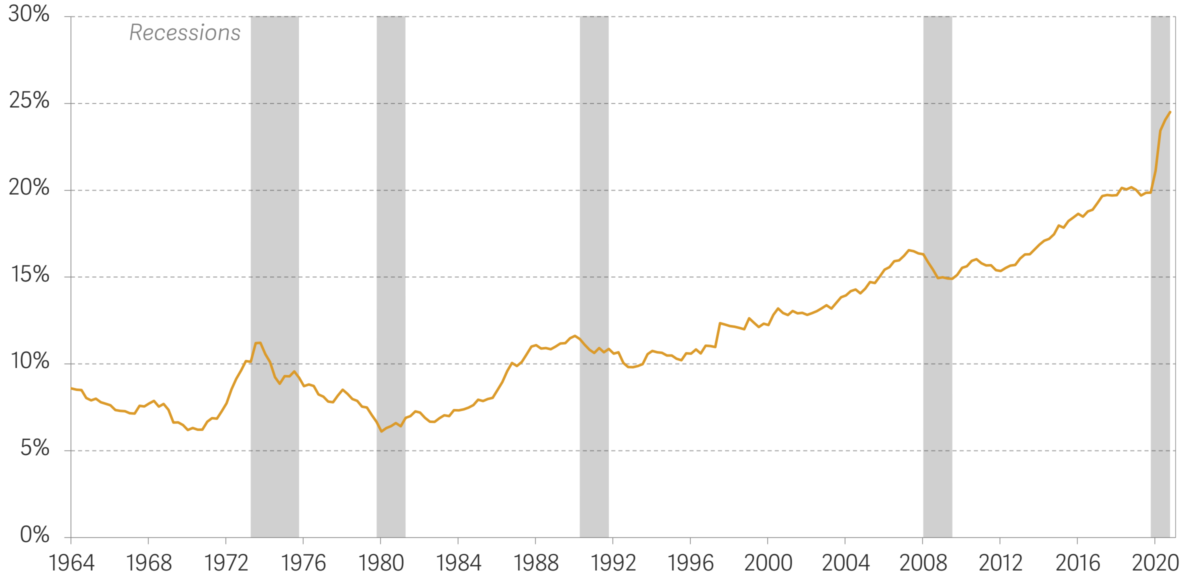


NOTES: Debt is defined as private non-financial corporations' loans and debt securities, excluding direct investment loans and loans secured on dwellings. The dot shows an estimate for the fourth quarter of 2020 based on Bank of England data for net (non-equity) financed raised by PNFCs.
SOURCE: RF analysis of ONS, UK Economic Accounts: institutional sector - non-financial corporations.

Turning to cash, what is striking about this crisis is that aggregate cash holdings have actually increased. Figure 11 shows the ratio of aggregate money holding to GDP measured at current prices (where we have once again lagged GDP by a year).[17] In all the past four recessions, firms have drawn down their cash buffers by an average of around £40 billion in current prices. In stark contrast, money holdings have increased in the four quarters since the onset of Covid-19 by around £118 billion.

FIGURE 11: **In stark contrast to previous recessions, firms' aggregate cash holdings have increased during the pandemic**

Private non-financial corporations' money holdings to-GDP ratio: UK, 1964-2020



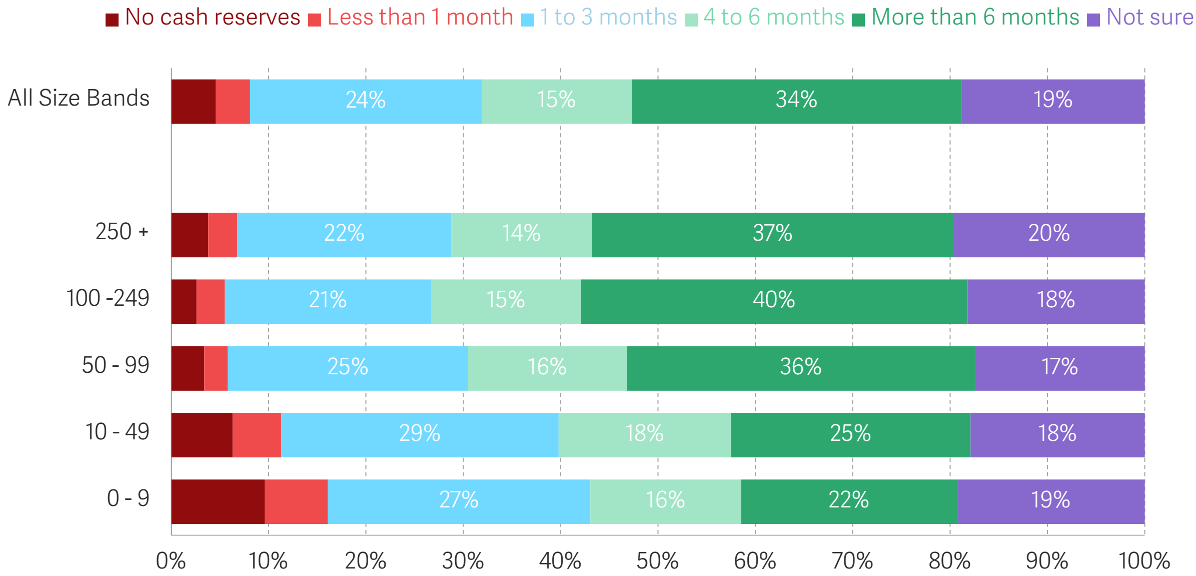
NOTES: Ratio of a four-quarter moving average of monetary financial institutions' sterling M4 liabilities to private non-financial corporations to a four-quarter moving average of nominal GDP, lagged by one year.
SOURCE: RF analysis of Bank of England; ONS.

But this benign aggregate picture doesn't tell the full story. The relatively contained impact of the crisis on firms' balance sheets is testament to the size of the Government's policy response. But, as shown in Figure 12, a significant minority of firms – nearly a third (31.9 per cent) – say they expect their cash reserves to last less than three months. Indeed, 8.1 per cent, and 16.1 per cent for the smallest firms, say they have less than a month's worth of reserves. This is particularly worrying given it is likely that social-distancing restrictions will be needed for some months to come.

17 It is worth noting that measures of firms' holdings of money have been trending up relative to GDP in recent decades. For a discussion, see: K Farrant & M Rutkowska, Are firms ever going to empty their war chests?, Bank Underground, July 2015.

FIGURE 12: **But many firms – particularly small ones – say they are cash-poor**

Proportion of still-trading businesses reporting how long they expect cash reserves to last, by number of employees: UK, 28 December 2020 to 10 January 2021



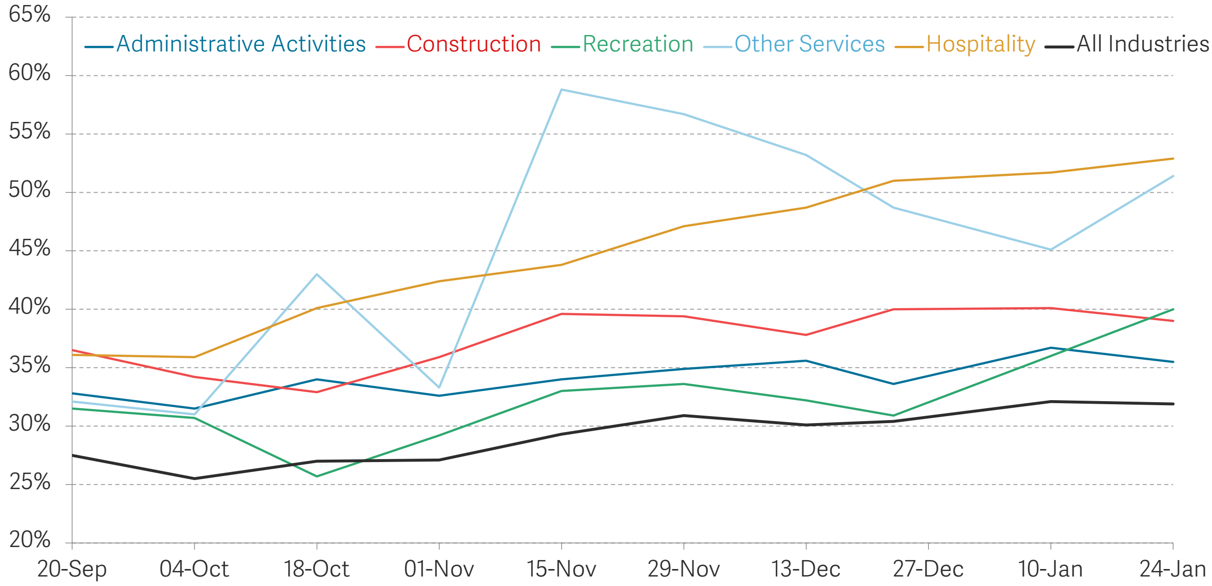
SOURCE: ONS, Business Impact of Covid-19 Survey.

Although it is not clear how such low levels of cash holdings compare to more normal times, this does suggest that there is a group of firms that warrant more attention. We can shed more light on this by looking at how cash reserves have changed over time, as shown in Figure 13. At the end of September 2020, restrictions across the UK had been relaxed with economic activity close to pre-crisis levels, and just over a quarter of all businesses at that time were reporting having three months or fewer of cash reserves in place (with some sectors, like hospitality, with a higher prevalence of low-cash firms (36 per cent)). As virus cases have picked up since September, thus requiring tighter restrictions on activity, the share of low-cash firms has risen across the economy, but only very slightly: it is up by just 4 percentage points to 32 per cent. This suggests that government support appears to have been largely sufficient to prevent a deterioration in the financial position of most firms. But there are pockets of increasing strain: the share of low-cash firms in the hospitality and other services sectors has picked up much more dramatically, hitting 53 and 51 per cent respectively.

This evidence does not directly suggest that these low-cash firms are at immediate risk of failure – not least because we have not seen widespread firm failures since the summer. But the clear sectoral concentration in deteriorating finances is set to continue, as it seems inevitable that restrictions on hospitality and other face-to-face services remain in place for the immediate future. The key challenges for policy, then, are how to prevent a wave of firm failures in these sectors, and what might the deterioration in business' cash positions mean for the longer-term recovery.

FIGURE 13: **The proportion of hospitality firms with fewer than 3 months of cash reserves left has risen from a third to over a half in 6 months**

Proportion of businesses reporting less than 3 months of cash reserves remaining, for all businesses and selected industries: UK, September 2020 to January 2021



NOTES: 'Other services' includes membership organisations, repair of household/personal goods and personal care services. Results are shown for the industries with the five highest share of low-cash reserves firms.
SOURCE: RF analysis of ONS, Business Impacts of Coronavirus (COVID-19) Survey.

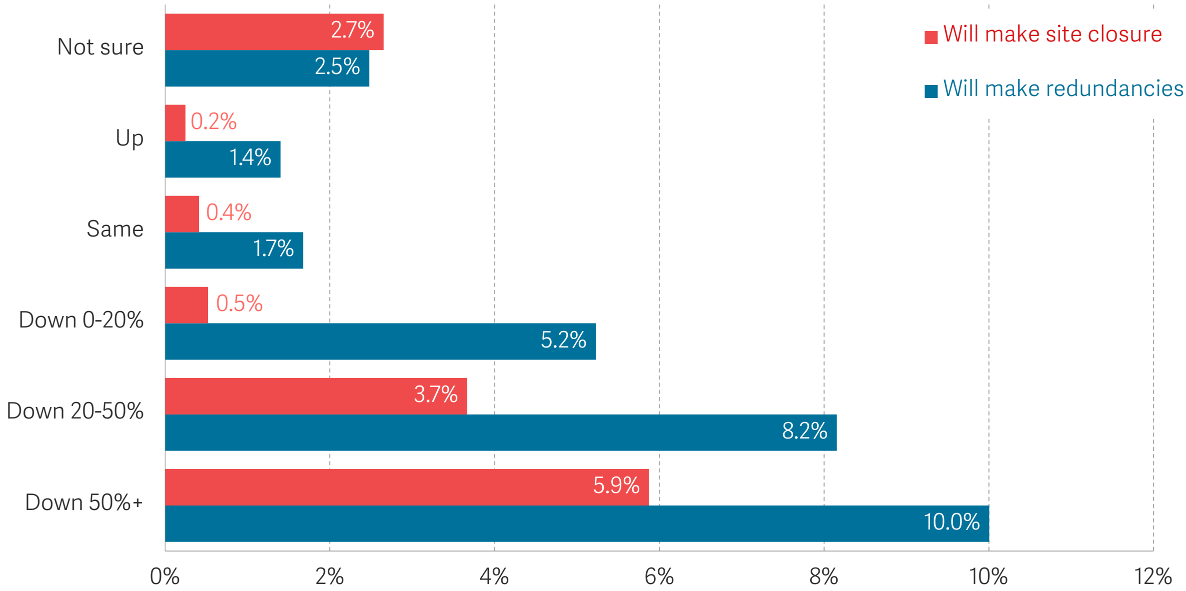
Lower cash reserves are likely to weigh on the pace of the recovery

A very worrying development is the clear evidence that the businesses which have been most affected by the crisis are also more likely to be planning to reduce future business activity. Figure 14 shows the relationship between the impact of the crisis on profits and firms' plans to close business sites and make redundancies. For those businesses which report that their profit was unaffected by Covid-19 around the turn of the year, just 1.7 per cent are planning to make redundancies in the next three months, but 10 per cent of businesses whose profits have fallen by at least half plan the same. We see similar results when we look at the plans to close business sites: businesses currently experiencing falls in profits of over 20 per cent are substantially more likely to be planning to reduce their operating capacity.

Cash reserves are also closely related to how likely firms are to close sites. Although the overall proportion of businesses closing sites in the next two weeks is low, those with cash reserves of less than three months remaining are three times as likely to be closing sites than other businesses in all sectors except transportation (Figure 15).

FIGURE 14: **Firms which have been hit harder by the crisis are planning to cut business capacity more than others**

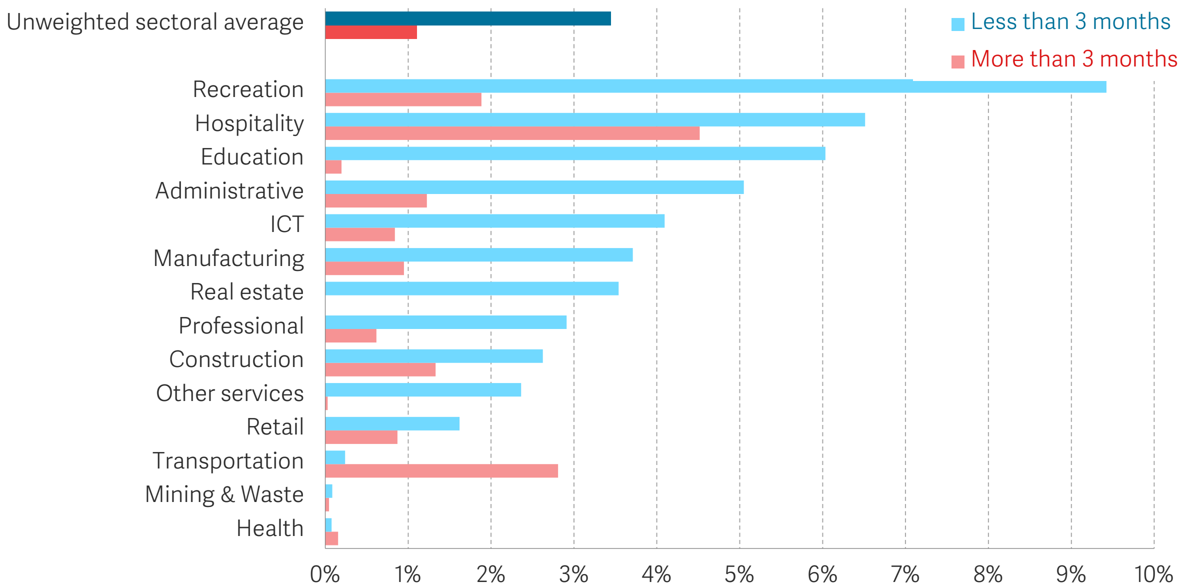
Proportion of firms reporting plans to make redundancies in the next three months or close sites in the next two weeks, by reported impact of Covid-19 on profit levels: UK, 19 November 2020 to 6 January 2021



SOURCE: RF analysis of ONS, Business Impacts of Coronavirus (COVID-19) Survey.

FIGURE 15: **Within sectors, low cash reserves are associated with plans to reduce business activity**

Proportion of firms reporting plans to close sites in the next two weeks, by length of time cash reserves are expected to last and sector: UK, 5 November 2020 to 6 January 2021

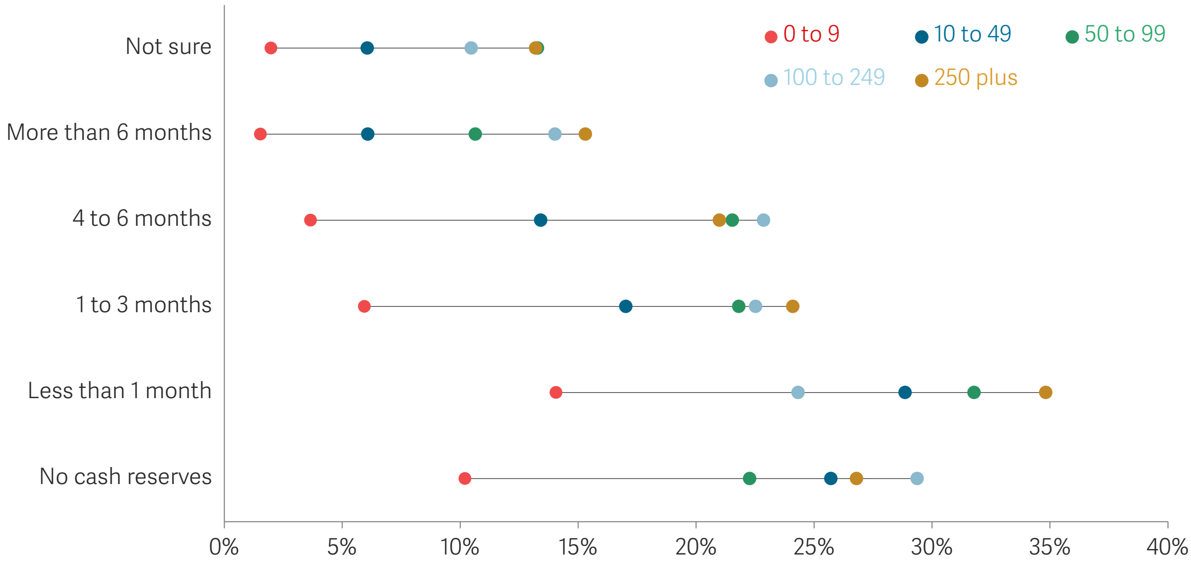


SOURCE: RF analysis of ONS, Business Impacts of Coronavirus (COVID-19) Survey.

Lower cash holdings are also related to a higher chance of cutting workers in the next three months (see Figure 16).[18] And the pattern of planned redundancies also varies widely across different firm types – with larger firms much more likely to be planning to lay off workers in the next three months.

FIGURE 16: **Businesses with higher cash reserves are less likely to be planning redundancies**

Proportion of firms reporting plans to make redundancies in the next three months, by length of time cash reserves are expected to last and employment size: UK, 5 November 2020 to 6 January 2021



SOURCE: RF analysis of ONS, Business Impacts of Coronavirus (COVID-19) Survey.

We acknowledge that data availability is a real challenge in understanding the contemporaneous position of firms' balance sheets. For example, we cannot compare the distribution of cash reserves recorded in the BICS to pre-crisis levels because the survey was only introduced once the crisis began, and we would expect that some firms would have low cash reserves even if there hadn't been a crisis: roughly half of firms had cash holdings of less than 5 per cent of their total assets in 2017-18.[19] Furthermore, the recorded deterioration in cash reserves will reflect both changes in cash levels as well as firms' reduced expectations for net outflows. But whatever the cause or comparison to 'normal' cash reserves, the evidence is clear that the deterioration is related to firms' future decisions that could have a profound impact on the nature and pace of the recovery.

18 The survey sample size is too small to accurately identify the impact of cash holdings on firm behaviours within both size bands and industry simultaneously. However, evidence suggests that the patterns shown in Figure 22 and Figure 23 appear to hold within these smaller samples.

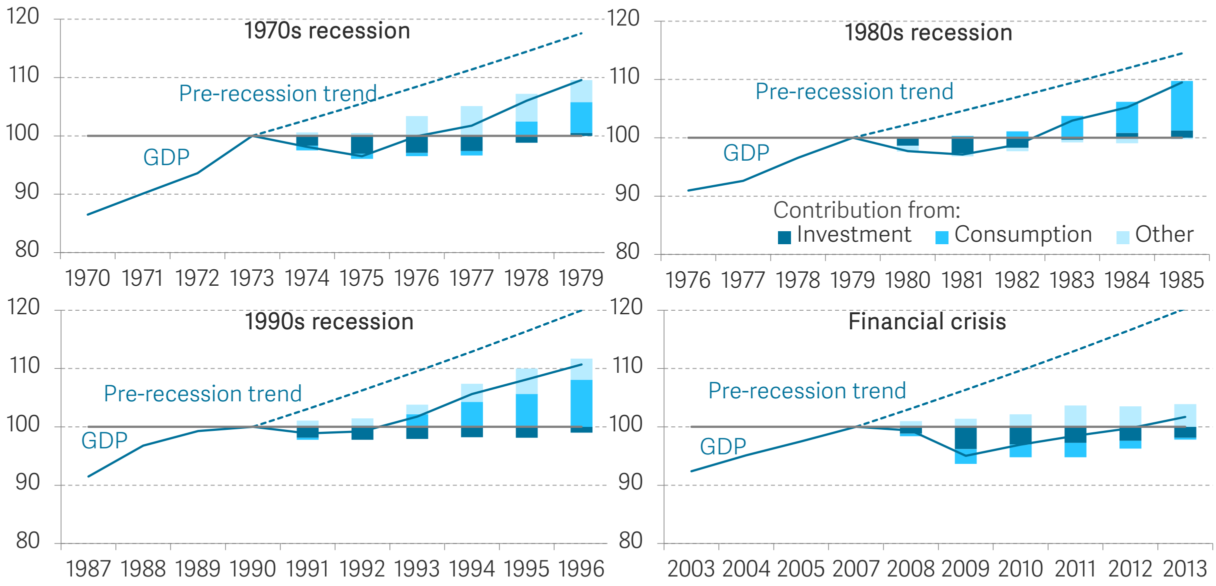
19 See Bank of England, Financial Stability Report – August 2020.

Business investment could be slow to recover

Recoveries in business investment typically play a key role in driving how fast total GDP recovers. As shown in Figure 17, investment tends to fall sharply during UK recessions and then recovers more quickly than other components of demand.[20] For example, although investment accounts for less than 20 per cent of final expenditure, it accounted for nearly 30 per cent of the rise in GDP in the five years following the financial crisis. Moreover, a sharper recovery in the level of investment (shown by a more rapid recovery in the darkest blue bar in Figure 17) is associated with a stronger recovery overall (that is, the shortfall in GDP relative to its pre-crisis trend is smaller).

FIGURE 17: **Investment plays a small but disproportionate role in recessions and recoveries**

Contributions to the level of real GDP following recessions, by expenditure component: UK



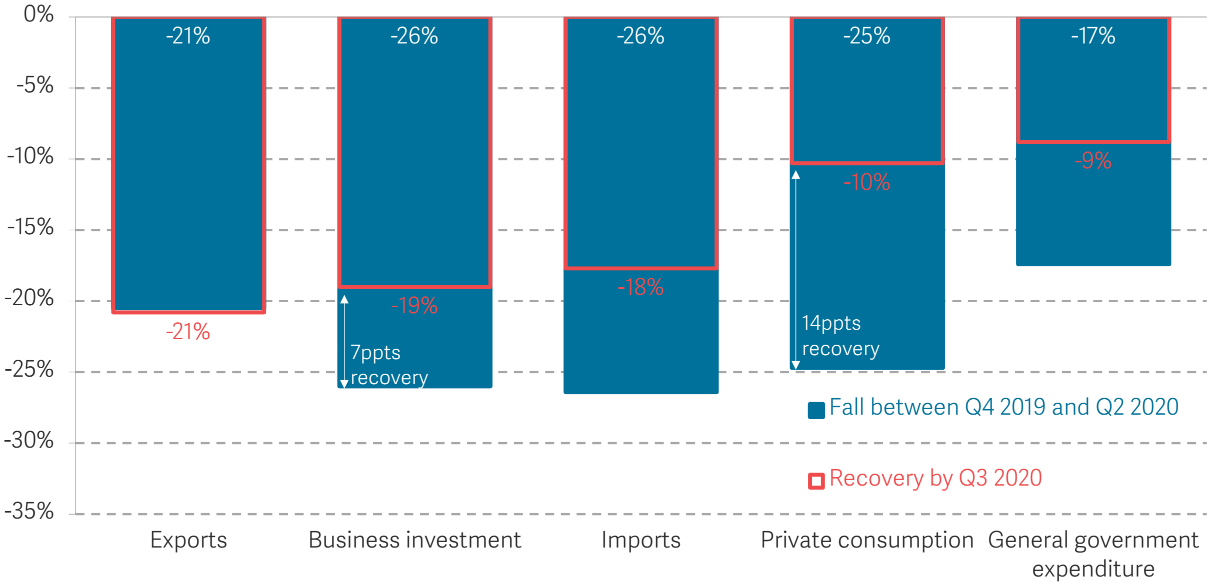
NOTES: Bars show contributions to annual percentage changes in GDP. The pre-recession trend is defined as the five-year average growth rate four years before the onset of the recession.
SOURCE: RF analysis of Bank of England, A millennium of macroeconomic data.

It is therefore worrying that business investment has remained weak during the second half of 2020, even as the overall economy has recovered. Figure 18 shows that while consumption bounced back rapidly over the summer as social distancing restrictions eased – recovering 14 percentage points of its 25 per cent fall in Q2 –investment recovered by much less.

20 The measure of investment in Figure 17 is whole-economy investment reflecting the lack of availability of contributions to GDP from business investment for recessions prior to the financial crisis. Results for just business investment for the financial crisis are, however, very similar. This is not surprising, as business investment makes up the majority of whole-economy investment.

FIGURE 18: **Investment did not recover by as much as other expenditure components when social-distancing restrictions were eased over the summer**

Change in output, by expenditure category: UK, Q4 2019 to Q2 2020 and Q3 2020



SOURCE: RF analysis of ONS, Quarterly National Accounts.

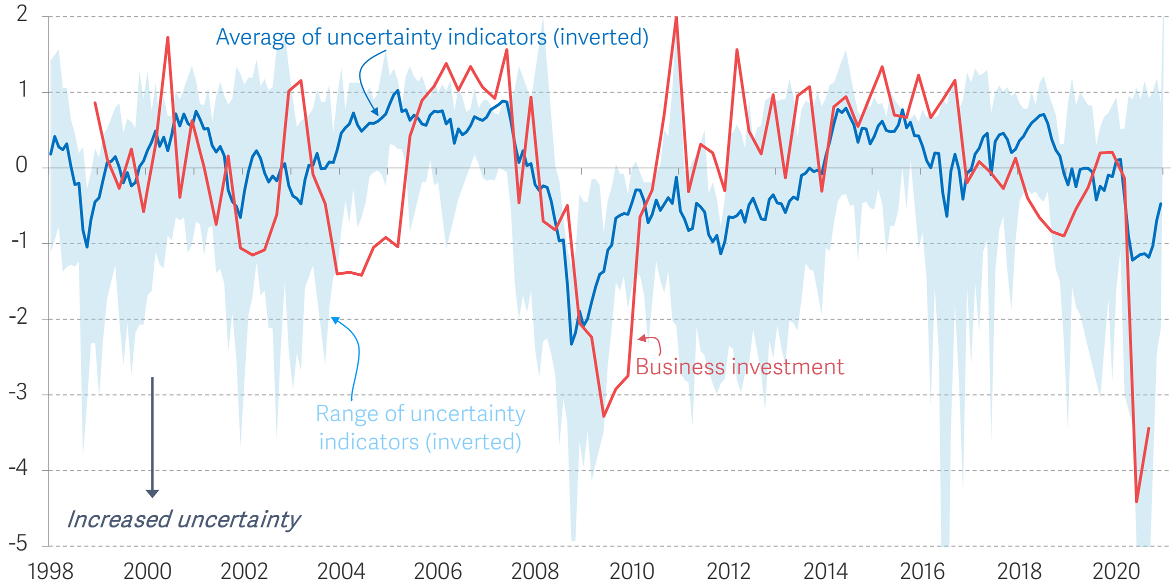
An obvious reason for such low levels of investment is that businesses face pervasive uncertainty at the moment. Higher uncertainty – whether over economic fundamentals or the direction of policy – can lead to the postponement of otherwise profitable investment projects.[21] But Figure 19 shows that, although changes in uncertainty have mapped quite closely to changes in business investment in recent decades – including during the financial crisis – that relationship has broken down during the pandemic, with investment remaining weak even as measures of uncertainty have recovered. Naturally, the temporary closure of some businesses will have prevented investment that would otherwise have taken place, thus amplifying the fall in investment.

Although data on business investment is particularly uncertain at the moment, this suggests there is a risk that business investment could recover only slowly, and this should be a key concern for policy makers wishing to generate a rapid recovery.

21 See: R K Dixit & R S Pindyck, Investment Under Uncertainty, Princeton University Press, 1994, and S R Baker, N Bloom & S J Davis, 'Measuring Economic Policy Uncertainty', The Quarterly Journal of Economics, vol. 131(4), pages 1593-1636, 2016 on policy uncertainty.

FIGURE 19: **Business investment during the pandemic has been weaker than implied by the usual relationship with measures of uncertainty**

Measures of economic and policy uncertainty and four-quarter growth in business investment (standard deviations from the sample mean): UK, 1998 to 2020



NOTES: The swathe shows a range of uncertainty indicators: CBI survey measure of demand uncertainty as a factor likely to limit capital expenditure for manufacturing and services; an index of UK policy uncertainty based on newspaper articles; household survey responses on their personal financial situation and unemployment expectations; the six-month option-implied volatility for the FTSE 100; the 12-month option-implied volatility of short sterling. All indicators are shown as number of standard deviations from the mean. The line shows the mean of these indicators. Business investment data are adjusted for the transfer of nuclear reactors from the public corporation sector to central government in Q2 2005.
SOURCE: RF analysis of ONS, Bank of England, GfK, 'Measuring Economic Policy Uncertainty' by Scott Baker, Nicholas Bloom and Steven J. Davis at www.PolicyUncertainty.com.

Firms' demand for workers is currently very depressed

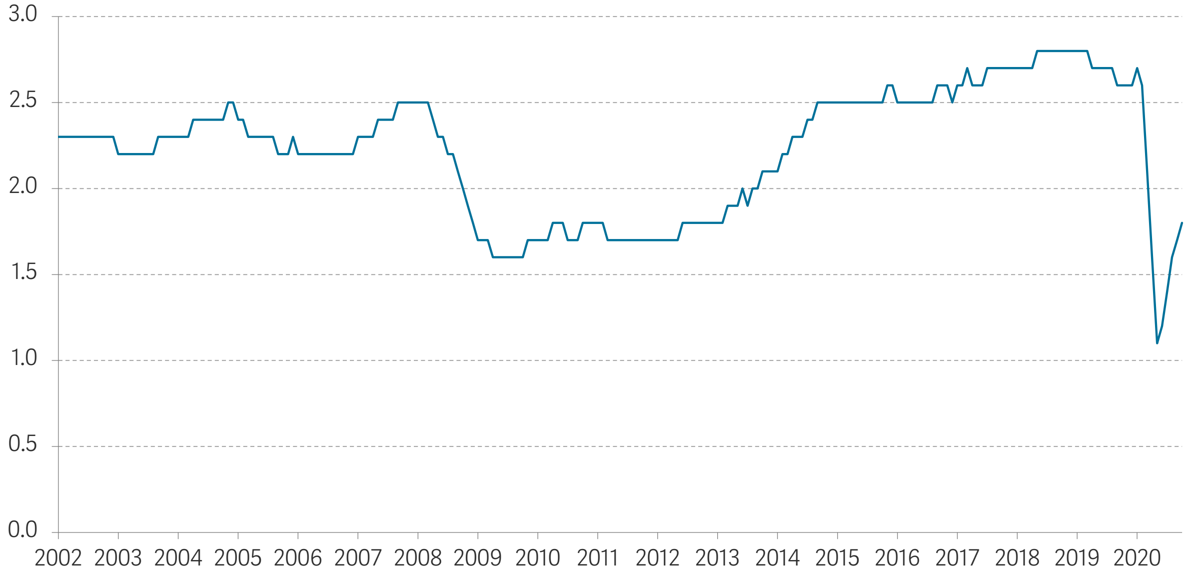
The final key area of firm decision-making is on employment. Here, as we have discussed extensively in other work, the CJRS – which during parts of 2020 was paying the wages of over 9 million workers – has prevented the pandemic from leading to an unemployment crisis.[22] However, vacancy rates suggest that the outlook for the labour market is bleak (Figure 20).

This is important because we need strong growth in employment to drive a rapid, broad-based recovery that leads to an improvement in incomes. This could involve targeting broader stimulus towards creating jobs directly – as we have seen with the Government's Kickstart scheme. In this context it is worth noting that while SMEs account for less than half of employment overall, they can play a dominant role in driving changes in employment. Indeed, as shown in Figure 21, SMEs more than accounted for the rise in employment seen during the recovery from the financial crisis. This suggests that policy makers should make sure that they pay attention to the plight of firms of all sizes.

22 See M Brewer, N Cominetti, K Henehan, C McCurdy, R Sehmi & H Slaughter, Jobs, jobs, jobs: Evaluating the effects of the current economic crisis on the UK labour market, Resolution Foundation, October 2020.

FIGURE 20: **The pandemic has led to a pronounced weakening in firms' demand for labour**

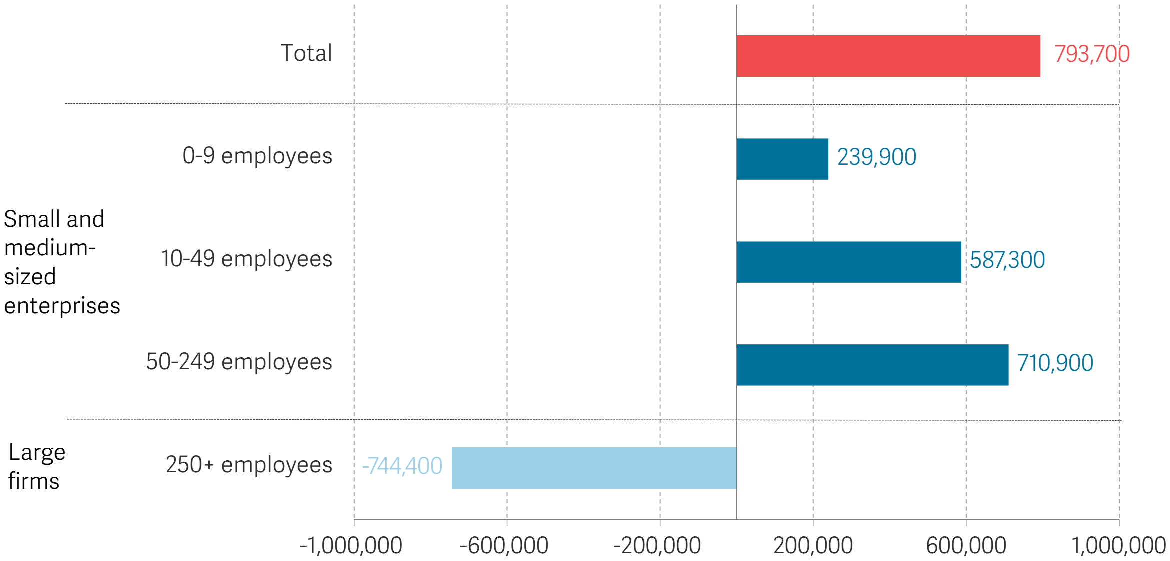
Vacancies per 100 employees: GB



SOURCE: ONS. Vacancy Survey.

FIGURE 21: **SMEs played a key role in driving rises in employment following the financial crisis**

Change in employment during the recovery from the financial crisis, by firm size: UK



NOTES: Change in employment from the post-financial crisis trough in employment (Q3 2010) to the point at which GDP recovered its previous peak (Q2 2013), numbers rounded to the nearest hundred.
SOURCE: RF analysis of ONS, Business dynamism in the UK economy: Quarter 1 (Jan to Mar) 1999 to Quarter 4 (Oct to Dec) 2019.

The analysis in this Section suggests that policy makers should prioritise measures directed at boosting the strength of the recovery, particularly those that can support investment and employment. How they should do that is the subject of the next section.

Section 4

What should happen next to policy?

Previous sections have shown that policy support has hugely protected firms' cash positions during this crisis. Further such support will be required in the months ahead as restrictions continue to limit activity in parts of the economy. Generalised support, including the CJRS, should be gradually phased out, rather than ended abruptly, as is currently planned. Additional immediate crisis support should be targeted at those sectors directly affected by restrictions, which are also the parts of the economy where we see pockets of growing corporate stress: hospitality and other face-to-face services. This support should be delivered via a continuation of grants to businesses forced to remain largely closed, rather than additional loans. Extensions of business rates relief and VAT deferrals are also warranted.

Looking ahead to the recovery phase of the pandemic, there is more uncertainty over how much damage the crisis has done to firms' ability to invest and hire. Higher levels of debt and 'pent up' firm insolvencies will require Government attention. The UK's existing insolvency process is well designed, but banks have limited incentive to recognise situations in which small businesses using the Bounce Back Loan Scheme are insolvent given the new debts they have taken on. This could slow down the efficient resolution of these firms, and could be of a sufficient scale to have macroeconomic implications. The Government should therefore pay to transfer part of the liability for the Bounce Back Loans to the banks, in return for a fee, so as to better align their incentives and to help facilitate an efficient resolution of non-viable firms. But traditional fiscal support – alongside a credible commitment to operate a health policy that keeps the virus in check – will be the most important part of the Government's policy package to deliver a strong recovery in business investment, both to reduce economic uncertainty and ensure a recovery in consumer demand.

As we have noted throughout this report and elsewhere, this Government's policy measures since the pandemic began have been very active in addressing firms' financial difficulties and, to a large extent, have been successful. The upcoming Spring 2021

Budget represents an opportunity to set out what the next stage in the policy support for firms should look like and, as the health crisis wanes, to refocus support to ensure a rapid recovery. A clear guiding principle, which should apply to all economic support during the recovery phase, is that policy needs to be state-contingent: it must reflect the prevalence of the virus, and therefore the restrictions that are in place, rather than start and stop on arbitrary dates.

At the time of writing, the vaccine rollout is progressing in line with Government ambitions to cover all vulnerable groups by mid-February, and all over 50s by May. This will reduce the pressure on the NHS and lower the R rate, meaning that restrictions will be able to be gradually eased while keeping UK virus cases falling. But, although the direction of travel is clear, there is much less certainty about the pace of that easing, with the vaccines' impact on transmission, supply and effectiveness on different strains all being important factors. So the Government support for firms needs to reflect the nature and pace of that easing of restrictions (we review some suggestions made by other organisations in Box 1). The aims of policy in the coming phase of this crisis should be:

- *Avoid the failure of viable firms by reducing firm closure during the immediate crisis period*. Firms can fail due to liquidity shortfalls (their net outflows exceed the cash available to meet them) or solvency problems (where the assets in a firm are worth less than the liabilities). Imperfections in credit markets mean that businesses may not be able to access finance when they need it leading to a liquidity shortfall. Equally, the rise in debt levels during this crisis means that some formerly profitable firms may now be insolvent. The private and social cost of long-term viable firms failing is likely to exceed the cost of providing additional support because creditors are unlikely to value fully the firm's physical and human capital (much of which could not be moved to another firm while keeping the same value) and the labour market matches inherent in the workforce. Firms can also lose productive capacity during the crisis even without failure (e.g. shedding workers or selling capital) making a future recovery harder[23] – preventing that loss should also be a key policy aim.

- *Ensure a strong recovery by reducing the impact of debt overhangs on investment and hiring, while facilitating the reallocation of capital and labour between firms*. Higher debt levels can reduce firms' capacity to borrow to fund future investment, and reductions in future profits as a result of higher debt repayments reduce firms' own resources to invest. At the economy-wide level, evidence from past recessions show that the positive reallocation of resources after recessions is an important channel of productivity growth, thus driving faster recoveries.[24]

23 J Gonzalez-Uribe & S Wang, The Effects of Small-Firm Credit Guarantees During Recessions, Working Paper, September 2020.
24 See A Barnett, B Broadbent, A Chiu, J Franklin, & H Miller, Impaired Capital Reallocation and Productivity, National Institute Economic Review , Volume 228 , May 2014. And C Borio, E Kharroubi, C Upper, & F Zampolli, Labour reallocation and productivity dynamics: financial causes, real consequences, Bank for International Settlements, Working Paper No 534.

BOX 1: A review of policy proposals

A wide range of proposals have been made to address some of the issues highlighted in this paper. The CBI has proposed a comprehensive package of support designed to address immediate pressures within the corporate sector, including: extending the CJRS to the end of June, extending the VAT deferral payments and deferring Q1 2021 payments, extending business rates relief, extending an adjusted repayment term for loan schemes, and longer-term reforms of business rates.[25] Researchers from the Centre for Economic Performance from the LSE have focussed on the immediate cash-reserve shortfalls and proposed first extending the loan subsidies and then focussing on debt restructuring at a later date.[26] The British Growth Fund has argued for a larger role for government in supporting private sector equity finance, [27] and the IPPR argue that the Government should make direct equity injections into businesses.[28] There is merit in all of these proposals, but it is helpful to consider the appropriate approach for support by separating the necessary measure the Government needs to put in place for the immediate crisis period and those which can help facilitate a successful recovery period.

Direct crisis support

The results in Figure 13 clearly show that the financial position of some firms has been deteriorating even with the level of government support currently in place. With the government support schemes largely set to close at the end of March (the end of April in the case of the CJRS) and with lasting material restrictions on activity in those very same sectors likely to last several more months, more government support will be needed just to ensure no further deterioration.

When deciding what form this support should take, it is sensible to use measures which have a proven track record – which in turn suggests continuing existing, largely successful, policies – but that doesn't mean the package could not be refined to better support the most affected firms.

The immediate policy package the Government should adopt includes:

25 See CBI, CBI Budget submission letter, January 2021.
26 P Lambert, & J Van Reenen, A major wave of UK business closures by April 2021? The scale of the problem and what can be done, Centre for Economic Performance, Covid-19 Analysis Series No.016, January 2021.
27 A Seldon, & S Welton, From survive to thrive, British Growth Fund, November 2020.
28 G Dibb, C Jung, & M Lawrence, Taking a stake: Public equity for economic recovery and industrial strategy, December 2020.

- *Targeted grants to firms in the worst-affected sectors, in line with the January 2021 package.* Additional grant support should be targeted on those sectors most affected by ongoing restrictions, building on measures put in place during January's renewed national lockdown. Those amounted to roughly £4 billion in direct payments worth up to £9,000 per business property targeted at those businesses most directly affected by restrictions in the retail, hospitality and recreation sectors. Figure 15 shows that these are largely the right sectors to focus on, although the retail sector has relatively fewer cash-constrained businesses. Businesses indirectly affected by restrictions as a result of supply chains also need additional support; Local Authority-administered restriction grants should be extended further, with a repeat of funding in January costing roughly £500 million.
- *Extending business rates relief.* The OBR estimated in November 2020 that business rate relief had amounted to £9.6 billion in 2020-21. Maintaining similar levels of support for an additional three months would cost around £2.5 billion.
- *Extend the Coronavirus Job Retention Scheme*. As recognised during the summer of 2020, ending the CJRS with a cliff-edge in support risks a sudden and unnecessary rise in unemployment. Clearly the CJRS cannot be in place permanently and it is right support is withdrawn as the economy recovers. So the Budget should include an extension and a plan for the phase-out. We will cover this issue in more depth in a forthcoming paper later this month.
- *Shift the start date for payments under the VAT deferral scheme*. £2 billion of VAT payments were deferred in 2020-21 and are due from April 2021. This is inconsistent with the point at which many firms' revenues will have recovered. Payments should be delayed by three months in the first instance, and for longer if restrictions are still in place. Firms should also be able to delay payment of VAT from Q1 2021 if useful. VAT deferral has a small impact on government finances as it mostly represents a change in timing of tax revenue. These measures would raise borrowing by £500 million in 2021-22 and lower borrowing by the same amount in 2022-23.

Application deadlines for loan schemes run until the end of March. It is less clear that extending these schemes would be helpful, for four main reasons. First, reflecting the rollout of vaccines, the level of uncertainty in the outlook in the UK has fallen significantly since earlier in the pandemic. This reduces the need for precautionary financing significantly in the coming months. Second, loan schemes have an adverse selection problem. Specifically, there is an incentive for non-viable firms to take out loans and extract value from the business (e.g. through wages) while viable businesses may try to minimise their level of debt and not make use of the schemes.[29] Third, after a year of significant increases in debt levels, further loans may present longer-term problems for the recovery, due to the impacts on future investment and hiring decisions. And fourth, as we have outlined above, cash constraints do not appear to be an economy-wide problem.

Rejecting further rounds of the exceptional loan schemes used over the past year does not mean that there are no grounds for policy intervention when it comes to the provision of finance. Extending and expanding the existing Enterprise Finance Guarantee scheme would encourage lenders to provide riskier loans by providing partial loan guarantees (up to 75 per cent of the loan value) in exchange for a fee. In practice, this approach would particularly benefit those sectors hardest hit by the crisis who may struggle to access traditional financing options.

Recovery support

Crisis support has been right to focus on preventing firm insolvencies, but this should not be the primary goal of government policy during the recovery period.

As shown in Section 3, the fall in insolvencies during the crisis suggests that there is a population of firms who would have failed in normal times but are yet to do so – the 'pent up' insolvencies – who should be allowed to come to a natural end. Furthermore, the widespread increase in debt in the corporate sector will have moved many firms closer to the point at which they become insolvent – when their liabilities exceeds their assets – given higher debts. This has been compounded by the necessary lack of credit controls for the government-backed loan scheme, particularly for Bounce Back Loans, where access to loans was deliberately designed to be accommodative. The scale of the impending insolvencies is not small: the OBR forecast in November that uptake of the government-backed loan scheme would reach £87 billion, and that about a third of that (£29.5 billion) would end up needing to be paid to banks to compensate for defaults (this compares to £41 billion in sterling public non-financial corporate write-offs by financial institutions between 2009 and 2014).[30] There is, of course, a huge amount of uncertainty in these forecasts, as estimating default rates and the rate of recovery on loans is very difficult at this stage. Nevertheless, we can be confident that many firms have taken out loans which they will not be able to repay.[31]

Policy, therefore, needs to address two specific issues: ensuring that firms who are insolvent are identified, and that the process for resolving these firms is quick and

29 FCA lending guidance should provide some protection against this action. See, Financial Conduct Authority, Bounce Back Loan Scheme – Pay as You Grow options and CONC 7 compliance, Guidance consultation, December 2020.
30 Office for Budget Responsibility, Economic and fiscal outlook – November 2020.
31 National Audit Office, Investigation into the Bounce Back Loan Scheme, October 2020.

protects the social value remaining in them. This is important because, as shown in Section 3, the pace of business investment plays an outsized role in whether a recession is followed by a slow or fast recovery, and that firms which are struggling to pay debt will not be investing. Until these firms fail, their existing labour and capital will be trapped in lower-productivity firms, reducing aggregate economic activity.[32]

The resolution process for businesses usually starts when banks, as the major creditor, trigger and facilitate the insolvency process. This is a valuable feature of the system, as banks are set up to have experience in assessing the viability of businesses. But one potential issue for this recovery period is that the 100 per cent loan guarantee for the Bounce Back Loan Scheme reduces the incentive for banks to recognise that a business has become insolvent.[33] In fact, banks have an incentive to try to recoup as much of the debt repayment as possible before claiming on the government guarantee for the bad loan. Indeed, the lack of incentives to resolve small firms with Bounce Back Loans will be compounded by the 'pay as you grow' part of the scheme which allows businesses to extend the term of the loan to 10 years, but, more importantly, take six-month payment holidays (once during the term of the loan) and six-month interest-only repayment periods (available up to three times). These are valuable features of the loans because it will prevent unnecessary firm failures during the recovery period due to cash constraints, but policy needs to recognise that this will slow the resolution of insolvent firms further.

Of course, some businesses will have existing debt that was not issued under the Government's loan schemes and so normal incentives for banks will exist for these firms. And larger businesses were not eligible for the Bounce Back Loan Scheme, and the government guarantee for loans schemes for larger firms was set at 80 per cent. This guarantee does increase the incentive for bank forbearance, compared to a normal non-guaranteed loan, but banks are still likely to trigger the insolvency process.

Policy proposals to address this problem have largely focussed on two options – economy-wide support for firms via equity injections[34] and focussing on delivering an enhanced insolvency procedure with a new government-backed institution to run the process.[35] Neither of these policies is a perfect solution. A wide-scale equity injection scheme would have large administration costs[36] and would come with significant

32 For more detail, see: Ò Jordà, M Kornejew, M Schularick & A M Taylor, Zombies at Large? Corporate Debt Overhang and the Macroeconomy, Federal Reserve Bank of New York Staff Reports, no. 951, December 2020.

33 This is a useful feature of the scheme during the immediate crisis in preventing additional firm failures, but could hold back the macroeconomic recovery. The regulatory treatment of these loans also contribute to the lack of incentive by banks to take action against insolvent firms, see, for example, Bank of England, Statement on credit risk mitigation eligibility and leverage ratio treatment of loans under the Bounce Back Loan scheme, May 2020.

34 G Dibb, C Jung, & M Lawrence, Taking a stake: Public equity for economic recovery and industrial strategy, December 2020 and P Lambert, & J Van Reenen, A major wave of UK business closures by April 2021? The scale of the problem and what can be done, Centre for Economic Performance, Covid-19 Analysis Series No.016, January 2021.

35 CityUK, Supporting UK economic recovery: recapitalising businesses post Covid-19, July 2020.

36 This could be mechanised through grant payments and subsequently higher corporate tax rates in the future rather than actual equity holdings which would reduce the administrative costs.

fiscal implications, and a more narrow-focussed equity injection scheme would require the Government to assess firm viability – a task for which it has no experience, or informational advantage, and would require substantial additional administrative capacity. Similarly, setting up a new institution to manage the process of insolvencies would be expensive, and it is not clear that it would improve the outcomes of the process. The existing UK framework is already well designed, and recent policy changes in this area are likely to further strengthen the capacity for an effective insolvency process.[37] Finally, neither of these policy suggestions targets the solution at the source of the problem: the slow recognition and resolution of insolvency for small firms utilising the Bounce Back Loan Scheme.

Our view remains that banks are best placed to manage the process of resolving firms, but we do need to address their lack of incentive to resolve smaller firms' insolvencies. The large number of firms who are at risk of being insolvent will also present a challenge for the system – utilising the capacity that already exists in the financial sector is sensible to reduce this concern. Ideally, to better align social objectives and banks' incentives, banks should take over a portion of the government guarantees. The full loan guarantee for Bounce Back Loans was needed during the crisis period to ensure that finance reached firms as quickly as possible. Post-crisis, it is sensible for part of the guarantees to be transferred to the financial sector, in line with the other guaranteed loan schemes (i.e. to transfer 20 per cent of the liability to the issuing banks). This 'skin in the game' will help align incentives between the Government and the banks. The theoretical basis for this is that the extent of the debt restructuring warranted by the need to allow all firms with a long-term viable future to continue depends on the aggregate hit to productivity and wages.[38] This should be reflected in the price that is paid to the financial sector to transfer the schemes, plus a necessary premium for them to accept the risk of the loans. In practise, it is too soon to assess how much this would likely cost, not least because there is still much uncertainty about the path of the macroeconomy and thus the scale of losses on these loans, and the process will need to be a negotiation between the Government and the financial sector.[39]

While an effective firm recovery process is vital given the rise in corporate debt, the most important change needed to enable the corporate sector to expand investment and drive the recovery is a swift return of consumer demand and a reduction in uncertainty. The Government plays a crucial role in achieving both these outcomes. A fast recovery in consumer demand, within the constraint of keeping cases of the virus on a falling

37 See S Djankov & E Zhang, As COVID rages, bankruptcy cases fall, VoXEU, February 2021 for recent changes to the UK system, and S Djankov, O Hart, C McLiesh & A Shleifer, Debt Enforcement around the World, Journal of Political Economy, vol. 116, 2008 for an international comparison.
38 T Philippon, Efficient Programs to Support Businesses During and After Lockdowns, NBER Working Paper 28211, December 2020.
39 The reputational risks to banks in having to participate in the resolution of large numbers of small over-indebted firms will mean that the Government will need to pay a premium above the revenue neutral cost to banks.

path, would raise the return on new business investment. Additionally, a recovery in firm revenue and profits will provide firms with additional internal resources to make new investments. The marked weakness in business investment since 2016 partially reflects heightened levels of uncertainty first over the Brexit process and then the pandemic. The relationship with the EU is now a largely known factor, and the Government can reduce virus uncertainty further by operating a health policy which keeps the virus in check, and by committing to sufficient fiscal stimulus to ensure a recovery.[40]

Conclusions

The overall financial state of the corporate sector is better than might be expected, given the enormity of the economic crisis in the past year. The level of government support has been fundamental in preventing a large wave of business failures during the crisis.

But despite the overall stability of the corporate sector, there are pockets of increasing strain in businesses relying on social consumption, with problems most acute for small firms in those sectors. Government policy needs to support these businesses further to protect productive capacity now and in the future. Longer-term, the increase in corporate debt will weigh on the ability of some firms to invest and could push some viable businesses to close. Insolvency procedures need to be ready for higher-than-normal levels of failures post-crisis; an efficient well targeted insolvency process should rely on the financial sector's experience in distinguishing between viable and non-viable firms. To align incentives between the Government and financial sector, part of the liability for Bounce Back Loan schemes should be transferred to the financial sector in return for a fee.

There remains significant uncertainty about how much debt levels might slow the recovery. A strong fiscal stimulus package to ensure a rapid recovery in consumer demand, alongside a health approach which ensures that virus case levels do not rise again, is the best way to support businesses.

Key policy conclusions

Preventing short-term business failure

- *Targeted grants to sectors directly affected by ongoing restrictions*
- *Extend business rates relief for a further three months*
- *Extend CJRS beyond April cliff-edge and announce a phase-out path*

40 For more details on the level of fiscal stimulus needed for the recovery see L Gardiner, J Leslie, C Pacitti, & J Smith, Easing does it: Economic policy beyond the lockdown, Resolution Foundation, July 2020 and G Bangham, A Corlett, J Leslie, C Pacitti & J Smith, Unhealthy finances: How to support the economy today and repair the public finances tomorrow, Resolution Foundation, November 2020.

- *Delay start date for VAT deferral payments, and defer payments for January to March 2021 for 1 year*
- *Expand and extend the existing Enterprise Finance Guarantee scheme*

Supporting a strong recovery

- *Drive an improving health outlook, and provide certainty that the virus will remain supressed in future with strong health safeguards*
- *Large-scale fiscal stimulus to drive a rapid recovery in private demand*
- *Transfer part of the liability for Bounce Back Loans to the financial sector in exchange for a fee*

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