Covid-19 Analysis Series

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A major wave of UK business closures by April 2021? The scale of the problem and what can be done

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Introduction by Gordon Brown
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The scale of the problem and what can be done

CEP COVID-19 ANALYSIS

Peter Lambert and John Van Reenen

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GOVERNMENTS cannot afford to be behind the curve - especially in a crisis. They have to be at least two steps ahead. But today the fate of thousands of small businesses hangs in the balance; millions face an uncertain future after March when the furlough is to end; youth unemployment is already at record levels: all concerns that a forward-looking government should be dealing with today.

This meticulously researched pamphlet for the Alliance for Full Employment, entitled “A major wave of UK business closures by April 2021? The scale of the problem and what can be done,” by John Van Reenen and Peter Lambert highlights the scale of the crisis facing small business and the urgent need for a plan for long term recovery.

It shows that the liquidity crisis of 2020 will soon become the solvency crisis of 2021. And yet, for all its welcome focus on help through loans and the financing of the furlough, the government has said little - and done little - to offer struggling businesses the prospect of long-term survival.

The report based on the most recent survey data from the Office for National Statistics (ONS) suggests that unless remedial action is agreed, businesses are on a cliff edge and about to face a major collapse. The authors say that more than one in seven UK businesses —almost 15%— are at risk of failure in the next few months.

The scale of the problem is such that the ‘at-risk’ group comprises 390,000 registered businesses or 906,000 of all businesses - an alarming set of figures in themselves.

And when we examine the fall out for employment, we see the true measure of the crisis. The registered businesses the report shows are at risk employ 1.9 million people and when we include all businesses 2.5m jobs are affected.

The crisis is so extensive that between 8% and 9% of total employment in businesses is in the “at risk” category.

Not surprisingly the figures show that micro enterprises with fewer than ten employees are particularly vulnerable to closure.
The authors demonstrate there is a need for urgent action for they fear a major wave of bankruptcies for UK firms looms as many current business support programmes expire at the end of March and April.

This report is thus a clarion call for action in the budget of March 3, 2021.

Britain is not alone in facing these challenges and all over the world governments are examining what can be done to save their small business sector from a wave of closures and redundancies.

A few days ago a report from the G30 - a group of former central bank governors and finance ministers - set out the global scale of the crisis for small businesses and itemised measures that all advanced and emerging market economies should be planning to take.

The authors include Mario Draghi, former head of the European Central Bank, and Raghuram Rajan, former head of the Bank of India and economics head of the IMF, and they focus on what they call “growing corporate solvency challenges.”

They point out that we now have to deal not only with the immediate fall out from the pandemic but with the structural changes in the economy that Covid has forced to the top of the agenda.

And they call for a comprehensive approach far beyond what the UK government has so far contemplated or delivered, proposing an across the board mobilisation of resources in “measures, mechanisms, tools, and markets to promote financial restructuring with policy makers administering additional support where necessary.” The key to their plan, they say, is ‘to identify and support firms that will be viable in the post pandemic recovery’.

‘The problem is worse than it appears on the surface,’ writes Draghi in language relevant to the UK. ‘Massive liquidity support and the sheer confusion caused by the unprecedented nature of this crisis are masking the full extent of the problem.

‘We have a cliff edge of insolvencies especially of small and medium size enterprises coming in many sectors and jurisdictions as support programmes run off and existing net worth is eaten up by losses.’

The measures they recommend are wide ranging and are discussed in the report below.

The fear is that as loans run out and have to be repaid, viable innovative firms cannot afford to make the investments in new technology, new equipment and staff training that they need to compete in a fast changing economy.

These measures include equity injections – the government taking equity in place of loans to help vibrant businesses facing cash shortfalls invest in the future.

Other measures could include quasi equity support; bankruptcy adjustment in bankruptcy rules; pandemic insurance, but such measures have to be part of a comprehensive growth strategy in the form of a UK wide business recovery plan.

Our authors have looked at proposals made by respected organisations across the UK. One set of proposals has come from Stephen Welton, head of the Business Growth Fund, for a private
public partnership designed to support innovative firms in need of investment. He has proposed a £15b facility - with government funding matched by private sector funding - to prevent what he called ‘a totally unsustainable debt mountain,’ and ‘a devastating economic crash worse than the last financial crisis’.

His fund builds on the Coronavirus Business Interruption Loans and the Bounce Back scheme. £7.5b would come from banks, pensions funds, insurance companies, sovereign wealth funds with a matching fund from government. The CBI, the Chambers of Commerce and regional leaders have all proposed new finance facilities especially for innovative technology-based firms. All proposals need to be examined in detail, but as the authors show, the time for decision is now.

If we are to save good small businesses that are innovative and forward looking but which, without help with their investment plans, are in danger of going under, the Budget must bring forward measures. It is time to offer new hope to what will otherwise be dying firms.

Gordon Brown
January, 2021
Executive Summary

- A major wave of bankruptcies for UK firms looms as many current business support programmes expire at the end of March and April.
- The most recent survey data from the Office for National Statistics (ONS) suggest that almost 15% – more than one in seven – UK businesses are at risk of failure by early April 2021.
- This ‘at-risk’ group represents 390,000 registered businesses (1.9 million people covering 8% of employment in registered firms), or 906,000 of all businesses (2.5 million people covering 9% of employment).
- Micro enterprises with under ten employees are particularly vulnerable to closure.
- The potential increase in registered business deaths in the first quarter of 2021 would be unprecedented in recent history, and 356% higher compared with the first quarter of 2019.
- The current policy trajectory must be altered in order to provide protection now and to map a path for post-pandemic prosperity.
- Loan subsidies will need to stretch well into 2021, but should be tapered as the economy improves.
- We need to move to a system of debt restructuring in the recovery period. There are various options, but a form of swapping debt for equity should be considered.
This report presents an analysis of the financial health of UK businesses, which shows that immediate action is needed to prevent a wave of corporate failure in early April. We cannot delay action. Now is also the moment to consider how we rebuild our economy and society as the welcome vaccination programme rolls out.

The report is in two parts. In Section I, we detail our estimates for a potentially very harmful wave of business bankruptcies coming in the spring. In Section II, we consider what policies can be used to address this looming crisis.

I. The scale of the problem

A grim picture

Almost 15% of UK businesses are at-risk of permanently closing by the start of April, according to the most recent ONS Business Impacts of Coronavirus Survey (BICS). The latest fortnightly BICS surveyed 8,764 UK businesses between 29 December 2020 and 10 January 2021. It revealed that 3.9% of businesses have ‘no confidence’ that they will survive over the next three months, the highest fraction ever reported in the history of the survey. A further 10.8% have ‘low confidence’ of survival. Together, we define these two groups as being ‘at-risk’.

Table 1 looks at how many businesses this represents. According to the latest ONS Business Population Estimates (BPE), there were 2.65 million registered businesses in the UK at the start of 2020, with a combined employment of 24.1 million jobs. These registered businesses include all those that are VAT and/or PAYE registered, based on the Inter-Departmental Business Register (IDBR). The at-risk proportion (14.7%) of this group implies 390,000 businesses are at serious risk failure before April 2021.

There are a further 3.33 million unregistered businesses in the UK (those that are not PAYE or VAT registered). The employment this group covers includes owner/operators. If we extrapolate BICS survey responses to cover the population of all businesses (registered and unregistered), we find that 15.1% are at-risk of exit. This is likely to be an underestimate, given that the survey responses do not reflect that these unregistered businesses are smaller and therefore likely at a higher risk of closure (see also the recent Federation of Small-business report).
The second row of Table 1 multiplies this 15.1\% of ‘at-risk’ population with the total number of businesses (registered and unregistered), which total 5.98 million. This calculation implies that 906,000 UK businesses will be at serious risk of failure before early April 2021.

**Table 1:** Number of businesses and employment at risk of closure by the end of March (*all figures in thousands*)

<table>
<thead>
<tr>
<th></th>
<th>(1) Percentage at risk</th>
<th>(2) Total numbers (businesses or employment)</th>
<th>(3) Total number at risk (businesses or employment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Registered businesses</td>
<td>14.7%</td>
<td>2,652</td>
<td>390</td>
</tr>
<tr>
<td>2. All businesses (includes unregistered)</td>
<td>15.1%</td>
<td>5,981</td>
<td>906</td>
</tr>
<tr>
<td>3. Registered businesses’ employment</td>
<td>8.1%</td>
<td>24,100</td>
<td>1,946</td>
</tr>
<tr>
<td>4. All businesses’ (includes unregistered) employment</td>
<td>9.0%</td>
<td>27,733</td>
<td>2,506</td>
</tr>
</tbody>
</table>

**Notes:** In column (1), ‘At-Risk’ is derived from businesses that replied they had ‘Low’ or ‘No Confidence’ to the question ‘How much confidence does your business have that it will survive the next three months?’ ([BICS](https://www.bics.org.uk) Wave 21, released January 14th, 2021). 8,764 registered businesses answered between 29th December 2020 to 10th January 2021, so this relates to whether they expected to be alive by late March and early April 2021. These responses are weighted by the ONS to be reflective of the population of registered businesses, based on the Inter-Departmental Business Register (IDBR (excluding four sector Agriculture, Public Administration and Defence; Public provision of education and health’ and Finance and Insurance’)). ‘Registered businesses’ are those that are either VAT and/or PAYE registered. ‘All businesses’ also include unregistered businesses. The data for column (2) uses the latest Business Population Estimates ([BPE](https://www.nomisweb.co.uk), 2020, released Oct 8th, 2020). Employment includes salaried and non-salaried workers (e.g. owner operators). To derive our number of at-risk businesses in the first two rows we multiply the percentage at-risk in column (1) by the estimated number of businesses in column (2) to get the absolute number at risk in column (3). To derive our number of at-risk jobs in the last two rows, we multiply the employment-weighted percentage at-risk in column (1) by the employment number in column (2) to get total employment at risk in column (3). Note that the employment-weighted proportion at risk is relative to private-sector employment. The last two rows in Column (1) are lower than the first two rows because small businesses are at greater risk (see Table 2) and by definition have lower employment. See Appendix A for full details on these calculations.

The last two rows of Table 1 estimate how many jobs are in the businesses that are at risk of closure. The employment-weighted percentage at risk is lower because larger businesses are at lower risk of closure than smaller ones (see Table notes and Appendix A). We calculate that about 1.9 million jobs are at risk in registered businesses of being lost by April 2021 (8\% of all registered business employment). Including unregistered businesses and their owner/operators increases this number to 2.5 million (9\% of all business employment).

Table 2 breaks down the at-risk group by business size. It is clear that the risk of failure is much greater for smaller businesses. Micro enterprises with nine employees or less have the highest
risk of failure (15.4%) whereas medium-sized enterprises (100-249 employees) had the lowest risk (4.0%). Thus, the brunt of the impact will be on the smallest enterprises that are likely to be the least prepared. This is why the at-risk proportion in Table 1 is higher for all businesses (which have a greater share of small businesses) than for registered business only.

### Table 2: Businesses ‘at-risk’ by business size

<table>
<thead>
<tr>
<th>Business size by employees:</th>
<th>Percentage At risk</th>
<th>Total Number Of businesses At Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 or under</td>
<td>15.4%</td>
<td>369,083</td>
</tr>
<tr>
<td>10 – 49</td>
<td>10.4%</td>
<td>22,032</td>
</tr>
<tr>
<td>50 – 99</td>
<td>5.0%</td>
<td>1,192</td>
</tr>
<tr>
<td>100 -249</td>
<td>3.7%</td>
<td>455</td>
</tr>
<tr>
<td>250 or more</td>
<td>4.7%</td>
<td>368</td>
</tr>
</tbody>
</table>

**Sample:**
- Registered
- All

**Notes:** See notes to Table 1 for sources and definitions. Business size is measured by number of employees who receive salary/wages, at the enterprise group level.

How do these figures compare to ‘normal’ times? In a typical year, there is a high volume of business closures (deaths) as well as a high number of new business start-ups (births). This business dynamism is a desirable feature of market economies as jobs from old businesses are replaced by new jobs, and capital is redeployed. But a large excess of deaths over births can create economic and social problems, contributing to large-scale unemployment and the scrapping of productive capital. It can also trigger more systemic financial instability.

In the first quarter of 2019, the number of UK registered business deaths was 85,520 and rose to 119,560 for 2020Q1, when the pandemic started. In both these quarters, however, new business births were greater than deaths, so on-net the economy gained registered businesses. To compare, if the entire at-risk group of 389,912 registered businesses we identified in Table 1 were to permanently close in 2021Q1, then quarterly deaths would be up 356% compared to 2019Q1, or 226% compared to 2020Q1. If realised, these numbers would be unprecedented in modern times.
Our comparisons above show that the looming wave of business closure is startling relative to both a ‘business-as-usual’ benchmark (2019Q1) as well as compared to the initial shock of the pandemic (2020Q1). Other surveys also point to an impending wave of bankruptcies of small and medium-sized enterprises (SMEs) by April 2021, with similar numbers to our own.

**Some caveats: could things be better than we think?**

**How realistic are business survey expectations?** The question on business confidence has been asked since 8 October 2020 (Wave 14). The most recent BICS survey used in this report (Wave 21), has the highest proportion at risk since the survey began (it has ranged from 10.8% to 14.7%, with an average of 13%). Since the survey represents business’ own views of survival, it may be inaccurate. There may be undue pessimism due to the tougher restrictions or news of the new strain of Covid-19.

But there could just as easily be over-optimism due to the new vaccination programme or the Brexit deal with the EU. ONS analysis finds that business predictions of their future turnover in BICS have generally been over-optimistic, suggesting our report may actually understate the number of businesses at-risk.

Even if businesses are unduly pessimistic in their own self-assessments, these attitudes have real consequences on investment in capital and people (e.g. hiring and training). For example, in 2020Q3, the level of business investment in the UK was down 19% relative to the end of 2019. Likewise, the value of intellectual property assets was down nearly 10%. Respondents lined at least half of this unprecedented drop in investment to uncertainty.

**How robust are these results to our definition of ‘at-risk’?** If we use only the businesses that say they have ‘no confidence’ in their survival chances (and exclude those with ‘low confidence’), the exit numbers are much lower (3.9% instead of 14.7% in Table A1) which paints a rosier picture. On the other hand, we might also want to include those businesses that responded that they are ‘not sure’ if they will survive, which would increase our calculation to 23.2% of businesses at risk of exit. Our preferred calculation strikes a balance between these alternatives.

**What about the ‘business baby boom’?** There has been an uptick in business births during the pandemic (see Table A3), a pattern that has been seen across the world. But the notion that births could sufficiently rise to offset fully our predicted group of ‘at-risk’ businesses seems
unlikely, especially since it takes time to reallocate activity across the arriving and departing companies.

Has there already been a mass exit of businesses during 2020? Table A3 shows that the births-to-deaths ratio has remained close to or above parity throughout the pandemic. There has also been a fall in the company liquidation rate during 2020 and the Insolvency Service reports that insolvencies in a rolling twelve-month period declined by around 40% from 2019Q3 to 2020Q3. According to the Insolvency Service report, ‘The emergence of the coronavirus pandemic may have had at least some effect on the timeliness of insolvency registration, ... resulting, in the short term, in insolvency practitioners, intermediaries, Companies House and courts not being able to process insolvencies in the usual manner.’

While this evidence suggests that 2020 did not exhibit any substantial net business deaths to date, this is more likely evidence of a build-up in the stock of at-risk businesses that have been able to avoid permanent closure because they are obtaining near ‘free’ revenue from various policy measures.

Put together, the slow rate of exit since the pandemic hit is more likely due to a delayed response in large part due to policies aimed at propping up many of the at-risk businesses we identify (see Appendix B for more details of current support schemes). Although the lower-than-normal exits suggest many of the policies implemented in 2020 had the desired effect of preventing large destruction of businesses and jobs, a mass exit of businesses by April 2021 (when many of these policies are due to end) is still a real threat.

Downsizing by businesses still in operation. Our analysis looks only at the risk of a business closing down entirely. Much of overall job loss is actually from businesses downsizing rather than closing down completely. For example, the BICS Wave 21 survey suggests that 10.4% of UK businesses are planning to temporarily or permanently close some sites in the next two weeks, which means some redundancies in businesses still in operation. This is one reason why we may understate job losses in Tables 1 and 2.

Jobs calculations. Because of the way we calculate jobs at risk, there is also at least one reason to think they are overstated. This is because the businesses at greatest risk of closure within the most detailed size bands available from ONS (those in Table 2) employ fewer people. We control for this bias between size bands (this is why the employment-weighted proportions at
risk in column (1) of the last two rows of Table 1 are lower than the first two rows). This is not an issue for our calculation of the numbers of businesses at risk.

**Summary.** Our view is that the estimates of 390,000 registered businesses, more than one in seven, at-risk of permanent shutdown and bankruptcy by April 2021 is a realistic estimate. We need to act now.

**II. The policy response**

The pandemic has hit the UK [harder](#) than most other Western nations. There has been a pro-active economic policy response at huge cost. But the future path of policy support is [uncertain](#), especially beyond the 2021Q1 cliff-edge when deferrals of business taxes are due to be paid and many loan support schemes are due to end.

There has been much written about the policy response to support workers (e.g. [Gregg](#), 2020). The biggest single UK programme to date is the Coronavirus Job Retention Scheme (CJRS), which offers wage subsidies to furloughed workers. Since labour is often the single largest cost, this has helped many businesses stay afloat during the pandemic. In this report, we focus on other measures that more directly help businesses both to survive and thrive, as we transition out of the pandemic economy.

The key issue is how to balance the need for protection to avoid the destruction of what would be viable businesses in normal times, against the need for reallocation as we adjust to a new post-pandemic world. Some businesses will simply not be viable going forward because of permanent structural changes to the economy such as the shift to online commerce, less international travel and more working remotely.

The positive flipside is that there will be many new industries and new opportunities brought about by these changes. In order to make the most of these opportunities and ensure a strong recovery, the economy must undergo a transition. This means that a lot of human and financial capital must be redeployed. While our findings in Section I highlight the urgent need for protection, this need for reallocation must also be addressed.

While many policies can provide targeted support to specific industries such as hospitality (e.g. VAT cuts, business rates holidays and ‘Eat Out to Help Out’), our main focus will be on policies aimed at reducing the cost of finance across the entire economy through subsidised
loans. More specifically, we first discuss how *loan guarantees* and *debt restructuring* should be used to balance the need for immediate protection with longer-term reallocation. We then touch on the benefit of more targeted support, especially as it relates to long-term post-pandemic prosperity.

**Loan guarantees**

State guarantees on bank loans to businesses were introduced to ensure emergency access to liquidity across most developed countries. Appendix B details the main Covid-related business loan support schemes in the UK. In December 2020, around £70 billion was outstanding in these schemes (see Figure B1). This means that Covid-related business loan support schemes account for about 16% of the £430 billion in all loans outstanding to private non-financial corporations.

The best-known Covid-related business loan scheme is the Coronavirus Business Interruption Loan Scheme (CBILS). This provides government guarantees of 80% of a loan, as well as paying interest and fees for a year. But the Bounce Back Loan Scheme (BBLS) is even larger in cash terms, and provides a more generous 100% guarantee for loans up to £50,000 with essentially zero checks on creditworthiness (with the aim of getting loans out as quickly as possible). Launched in May 2020, by mid-December 2020, the BBLS had lent £43.5 billion to about 1.4 million businesses compared to £19 billion under CBILS to just over 83,000 businesses (see Figure B1). The National Audit Office expects up to 60% of businesses to default on BBLS loans.

The case for maintaining these partial guarantees on loans, even in the recovery phase, is strong. It is very hard to assess which businesses will survive and which will close. Banks cannot fully diversify credit risk and so, left to their own devices, will generally ask for too high a risk premium or refuse to lend altogether. Furthermore, because the lock-down has hit the capital ratios of banks, they will be more reluctant to lend even to viable businesses that may be short on liquidity.

The government can alleviate this problem by providing partial loan guarantees. This makes sense as it is best placed to diversify credit risk and to absorb the macro risk due to uncertainty. By offering partial (instead of full) guarantees, losses are shared, which mitigates the problem of bank lending to fundamentally bad creditors. Note that CBILS is generally a partial
guarantee whereas the BBLS is fully guaranteed and more vulnerable to having a bigger stock of bad loans.

As we exit the lockdown phase, these loan guarantee programmes should be modified in at least two ways. First, the generosity of the guarantees should decrease over time. This should be gradual and tied to the state of the economy. Second, the use of state guarantees should be linked to more obligations such as restrictions on dividend payments and/or higher future corporate income taxes.

**Debt restructuring**

Even with the subsidies and loans, some businesses are likely to find themselves insolvent or unviable. There are various ways that restructuring can be organised, depending on the seniority structure of private and public claims, information problems, and administrative burden. As they exit the lockdown, businesses will differ in their financial health and some will have excessive debt levels. Businesses in the post-pandemic environment can be thought of as being in one of three states: (i) privately viable (the present value of their profits exceeds recovery value) and solvent (the present value of profits exceeds current debt); (ii) not viable and thus not solvent; or (iii) viable but have been made insolvent by the shock and thus need debt restructuring.

Viable businesses are covered by loan guarantees. But even with subsidies, there is still a case for intervention if the social value of the business exceeds the private value. This may happen because there is a value in the bundle of assets and relationships a business has with its employees, suppliers and customers, that is not fully priced in by the businesses’ creditors. A depressed economy with high unemployment and underutilised capital can be severely affected by a wave of bankruptcies, and this ‘scarring’ effect can be very persistent. Private creditors may end up closing too many businesses from the social point of view.

A large wave of businesses needing debt restructuring is likely to overwhelm the current insolvency system. But since the government has neither the information nor bureaucratic capacity to do the restructuring by itself, it must work with banks that have such skills. The state needs a quick and semi-automatic process to make this happen.

Blanchard et al (2020) propose the following general process. If a business is closed, the government claims the full extent of its rights as creditor. Under the UK schemes, although the
formal lender is the bank, most of the loan has been guaranteed by the State. If a business continues but needs restructuring, the government takes a haircut on its claims over the haircut agreed by private creditors of the same rank (say an extra 30% reflecting the social-private wedge). The government can also turn its debt-like claim into equity-like claim (e.g. by higher corporation tax rates in the future). By giving up its senior status, the government can make the restructuring process even simpler, but at some fiscal cost.

Businesses could be offered the option to convert guaranteed credit into equity or quasi-equity in the form of preferred shares or higher profit taxes in the future. The advantage for shareholders or business owners would be to improve their balance sheet by lowering debt and increasing the equity buffer. The advantage for the State would be to improve the viability of businesses and lower the risk of costly defaults. For smaller businesses, quasi-equity in the form of an agreement to pay higher taxes in the future might be preferred to proper equity as the latter requires more monitoring and there is a limit to the extent to which the state can manage a large number of small equity claims.

In our view, the government should resist the temptation of discretionary intervention in the restructuring of SME debt. Although it may have the expertise and the experience required to negotiate the restructuring of claims on mid-cap companies with creditors and stakeholders, this does not apply to SMEs. During the 2008-09 financial crisis, UKFI was set up to manage a couple of large banks. It is not purpose built to manage a multitude of small players. Moreover, if a government entity were given discretion to restructure SMEs debt on a case-by-case basis, it would be hard to resist political pressures and to ensure consistency in the treatment of individual cases. It is better to define a menu of clearly pre-specified options and let the main creditor bank take charge of the restructuring.

One practical set of proposals for implementing these ideas is through a UK Recovery Corporation, as proposed by CityUK. Our sense is that something like this is the clearest path forward, but there is an alternative: debt forgiveness. Although our proposal avoids the economic damage of a sharp withdrawing of support, even the more generous provisions of equity for debt swaps will leave businesses with diluted incentives to grow, as the State shares more of the upside benefits. Hence, this may reduce the incentive to invest in order to grow. These disincentives could be mitigated with other programmes of investment support focused on key areas – for example, research and development, training and technology adoption (especially around the climate change agenda).
A more radical alternative would be to just write-off all debts. Businesses that were viable would have strong incentives to grow. Those that were not could simply sell assets and exit. The problem with forgiveness is twofold. First, the hit to the public finances would be larger. Second, if businesses suspect this will be the case, then they will be more likely to borrow excessively now. There may also be moral hazard issues for future bailouts, but given the likely one-off nature of the pandemic, this is a lesser concern.

**Long-run outcomes and policy**

Getting the policy response right can have implications lasting for decades, as debt-burdened businesses are less innovative and have a lower appetite for risk, slowing overall productivity and suppressing wage growth. Our policies are not just aimed at avoiding crises today; they are also aimed at supporting longer-run performance.

In addition to tackling debt overhang, one can also target the longer-run growth prospects of the UK by providing support to businesses with high growth potential. There have already been a number of schemes aimed at exactly this (see Appendix B for examples like the Future Fund). We support additional, targeted assistance to businesses that not only have large growth potential themselves, but which might also provide productivity benefits to other businesses through spillovers from innovation.

As part of this more targeted support to high growth-potential businesses, support that explicitly targets start-up businesses should be extended. Existing schemes like the Seed Equity Investment Scheme should be expanded. The general principle behind this to (i) reduce investment risk for ‘angels’; (ii) encourage start-ups and (iii) foster new investment. It is important that we make it more likely for high growth businesses to be born, not just help existing companies.

**Conclusions**

Our calculations suggest that almost 15% of businesses are at serious risk of closing by April 2021, when many Covid-related support schemes are due to expire as well as delayed VAT payments. This represents nearly 906,000 businesses in total and covers as many as 2.5 million jobs, the bulk of which are in SMEs.

Although some reallocation of activity is part of a healthy market economy, such a huge wave of bankruptcies will include many viable businesses, and some that might have significant
growth potential. Left to themselves, creditors will close down more businesses than would be optimal from the perspective of society as a whole.

We call for an immediate extension of loan support schemes to address the urgent need for protection. We suggest that these should continue well into the recovery. We also outline a more coherent set of policies for debt restructuring, including debt-equity swaps. This will provide some flexibility for longer-term reallocation, to support post-pandemic prosperity.
Appendix A: The scale of the problem

Here we provide additional detail the calculations and evidence outlined in Section I. Table A1 has the original BICS responses. From the raw BICS survey data, the ONS weights the responses to be representative of all registered businesses in the UK, using the IDBR. Figure A1 shows some evidence that these survey results are overly optimistic. Tables A1 and A2 give details of our calculations.

Weighting
The response values in Table A1 have been weighted by the ONS in order to try to make the ‘within-size band’ and ‘All Size Bands’ values representative of the count of registered businesses across the UK. This weighting procedure was conducted along two dimensions: size (number of employees) and industry. The explicit values of the weights are not reported, but the procedure is documented here.

Table A1: BICS Survey Response (Weighted by Business Counts):

‘How much confidence does your business have that it will survive the next three months?’

<table>
<thead>
<tr>
<th>Size band</th>
<th>High confidence</th>
<th>Moderate confidence</th>
<th>Low confidence</th>
<th>No confidence</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 9</td>
<td>38.3%</td>
<td>37.7%</td>
<td>11.2%</td>
<td>4.2%</td>
<td>8.7%</td>
</tr>
<tr>
<td>10 - 49</td>
<td>44.7%</td>
<td>37.8%</td>
<td>8.4%</td>
<td>2.0%</td>
<td>7.1%</td>
</tr>
<tr>
<td>50 - 99</td>
<td>60.3%</td>
<td>30.3%</td>
<td>4.3%</td>
<td>&lt;1%</td>
<td>4.4%</td>
</tr>
<tr>
<td>100 - 249</td>
<td>65.9%</td>
<td>25.5%</td>
<td>3.5%</td>
<td>&lt;1%</td>
<td>4.9%</td>
</tr>
<tr>
<td>250 +</td>
<td>61.2%</td>
<td>28.1%</td>
<td>4.1%</td>
<td>&lt;1%</td>
<td>6.0%</td>
</tr>
<tr>
<td>All size bands</td>
<td>39.2%</td>
<td>37.6%</td>
<td>10.8%</td>
<td>3.9%</td>
<td>8.5%</td>
</tr>
</tbody>
</table>

Notes: Responses from the question ‘How much confidence does your business have that it will survive the next three months?’ (BICS Wave 21, released January 14th, 2021). 8,764 registered businesses answered between 29th December 2020 to 10th January 2021, so this relates to whether they expected to be alive by late March / early April 2021. These responses are weighted by the ONS to be reflective of the population of registered businesses, based on the Inter-Departmental Business Register (IDBR (excluding four industry groups: ‘Agriculture’, ‘Public Administration and Defence’, ‘Public provision of education and health’, and ‘finance and insurance’)). ‘Registered businesses’ are those that are either VAT and/or PAYE registered.

Calculations
Table A2 shows how we arrive at our estimates in Tables 1 and 2. Because the survey response data has already been weighted by the ONS to be representative of the count of registered businesses across the UK (excluding some industries, see note in Table A2) value of 14.7% covering ‘all size bands’ at risk can be used directly to infer the aggregate number of registered businesses at-risk. In other words, the population of registered businesses (from BPE) and the BICS survey sampling population are comparable, so the total population of registered businesses ‘At-risk’ shown in Column (8) simply uses the ‘All size bands’ value of 14.7%. Because of the weighting procedure, the total in Column (8) ‘All size bands’ is not the sum of the sub-groups (though the discrepancy is small – 389,914 in our calculation compared to the across size band sum of 393,130).
For Columns (9) – (11), since these are out of sample groups relative to the BICS survey, we derive the total at-risk numbers by multiplying the number of at-risk businesses within each size band, and summing over these size bands to get the total. This ensures that the differences between the business size distribution informs our total. For example, since the population of all businesses has a much larger proportion in the 0-9 employees category, and since this group is more at-risk, the aggregate proportion of the population at-risk is higher (15.1%) for all businesses compared to that for registered businesses (14.7%).

In columns (10) and (11) of Table A2, we multiply the number of businesses at-risk by the average employment per business. We do this for each of the five size bands, and then take the sum as the number of total employment at-risk. We do not have an ONS version of the sampling and employment weighted proportion at-risk, so this is the best that can be done in a straightforward manner.

Note that our approach in Columns (9)-(11) implicitly assumes that, within each size band, the proportion of registered businesses ‘at-risk’ is the same as the proportion of unregistered businesses / employees at-risk. In other-words, we are making an assumption that the within size-band probability of being an ‘at-risk’ business from the BICS can be extrapolated to unregistered businesses, as well as employment. Further, we assume that within each size band, the probability of being at-risk is uniformly distributed. This ‘within-group uniform distribution’ assumption will likely lead to under-estimation of the unregistered businesses at-risk, since we expect that if the BICS survey included unregistered businesses then business confidence would have been lower. In contrast, there is possible over-estimation of the jobs at-risk within each size band, since a reweighting by employees will give more salience to larger businesses (less at-risk) and less salience to the smaller businesses (more at-risk), making the proportion of employment at-risk lower. This is only an issue within each size band, not across size bands, which we feel should take out the main sources of potential bias.

The BPE data is the latest available from the start of 2020, so may not represent the position at the end of 2020. The composition of businesses has not changed dramatically over the course of 2020, however, so this seems like a reasonable assumption. In addition, using a pre-pandemic timing as baseline has some attractions.

**Proportions**

The proportions of registered businesses that are in our ‘at-risk’ group in Table 1, comes directly from the ONS BICS (which are already weighted to be representative of the count of registered businesses across the UK). In order to calculate the at-risk fractions for Columns (9)-(11), we take the sum across each of the five size bands, and then divide this by the total number of unregistered businesses or total employment from Column (3)-(5). These are reported in the final row: ‘Proportion at-risk’.

**Business Populations**

We take our measures of the numbers of businesses and their employees from the BPE, which is the best source of total business information. We show results separately for registered businesses and all businesses (including unregistered businesses). One reason for this is that the BICS sampling frame is from the IDBR, which consists of businesses registered for VAT and/or PAYE, so the populations are consistent. There is some discrepancy, since the BICS excludes four industries: ‘Agriculture’, ‘Public Administration and Defence’, ‘Public provision of education and health’, and ‘finance and insurance’. Our total population only includes private entities, so we really only extrapolate the BICS results to agriculture and
finance/insurance. We therefore assume that the survey responses in the BICS are, on average, also representative of these unsampled private industries.

Our estimates for all businesses is somewhat speculative because although we have a reasonable estimate of their numbers and employment from BPE, we do not know if the BICS ‘at risk’ answers can be extrapolated to this group. As has been mentioned, if anything the BICS responses would be more pessimistic if unregistered businesses had been sampled.

Table A2 shows that the extra 3,328,055 unregistered businesses are all in the 0-9 employee range – we would expect any business with one employee to be PAYE registered, so the vast majority of these will have zero employees. But this does not mean they have zero employment (which included owner/operators, for example). As noted in the text, it is likely that the risk of bankruptcy is higher for this group than the registered businesses with nine or less employees, as we can see there is a sharply increasing risk of death for smaller businesses from Table 2.

Note that not all registered PAYE/VAT businesses register at Companies’ House. Companies’ House businesses are required to ‘register’ due to their legal form (e.g. Public Limited Companies, Private Limited Companies, Limited Liability Partnerships). By contrast, sole proprietorships, for example, are not required to file at Companies’ House, but need to be VAT registered when their revenues exceed a certain threshold, and need to be PAYE registered where they have employees. From Table A2 we can see that there are 2.652 million registered businesses. 2.027 million of these file at Companies’ House; 195,000 are ordinary partnerships and 430,000 are sole proprietorships. Ordinary Partnerships and sole proprietorships are registered for VAT and/or PAYE (so should be in IDBR), but do not file at Companies’ House.

Over-Optimism of BICS Respondents?
ONS have conducted analysis suggesting BICS responses show over-optimism. This implies that our calculations under-estimate the number of businesses and jobs at risk. One caveat is that the ONS focused on a different question in the survey to ours: predicted turnover over the next two weeks rather than survival over the next three months.

Births and Deaths
Actual births and deaths numbers are in Table A3. These are taken from the ONS IDBR, which is the sampling frame for BICS and is based on registered businesses
Table A2: Number of businesses 'at-risk' of exit

<table>
<thead>
<tr>
<th>Survey Response</th>
<th>(1) 'At-Risk' Businesses</th>
<th>(2) Total</th>
<th>(3) Total</th>
<th>(4) Emp.</th>
<th>(5) Emp.</th>
<th>(6) Average Emp/ Business</th>
<th>(7) Average Emp/ Business</th>
<th>(8) Total At-Risk Businesses</th>
<th>(9) Total At-Risk Emp.</th>
<th>(10) Total At-Risk Emp/ Business</th>
<th>(11) Total At-Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculation:</td>
<td></td>
<td>(4) / (2)</td>
<td>(5) / (3)</td>
<td>(1)×(2)</td>
<td>(1)×(3)</td>
<td>(6)×(8)</td>
<td>(7)×(9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample:</td>
<td>Registered</td>
<td>Registered</td>
<td>All</td>
<td>Registered</td>
<td>All</td>
<td>Registered</td>
<td>All</td>
<td>Registered</td>
<td>All</td>
<td>Registered</td>
<td>All</td>
</tr>
<tr>
<td>Source:</td>
<td>BICS</td>
<td>BPE</td>
<td>BPE</td>
<td>BPE</td>
<td>BPE</td>
<td>BPE</td>
<td>BPE</td>
<td>BICS &amp; BPE</td>
<td>BICS &amp; BPE</td>
<td>BICS &amp; BPE</td>
<td>BICS &amp; BPE</td>
</tr>
<tr>
<td>Size bands (# of employees):</td>
<td></td>
<td>(%)</td>
<td>(1,000s)</td>
<td>(1,000s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 9</td>
<td>15.4%</td>
<td>2,396,645</td>
<td>5,724,700</td>
<td>5,529</td>
<td>9,162</td>
<td>2.307</td>
<td>1.600</td>
<td>369,083</td>
<td>881,604</td>
<td>851,466</td>
<td>1,410,948</td>
</tr>
<tr>
<td>10 - 49</td>
<td>10.4%</td>
<td>211,845</td>
<td>211,845</td>
<td>4,140</td>
<td>4,140</td>
<td>19.543</td>
<td>19.543</td>
<td>22,032</td>
<td>22,032</td>
<td>430,560</td>
<td>430,560</td>
</tr>
<tr>
<td>50 - 99</td>
<td>5.0%</td>
<td>23,835</td>
<td>23,835</td>
<td>1,645</td>
<td>1,645</td>
<td>69.016</td>
<td>69.016</td>
<td>1,144</td>
<td>1,144</td>
<td>82,250</td>
<td>82,250</td>
</tr>
<tr>
<td>100 - 249</td>
<td>3.7%</td>
<td>12,305</td>
<td>12,305</td>
<td>1,890</td>
<td>1,890</td>
<td>153.596</td>
<td>153.596</td>
<td>492</td>
<td>492</td>
<td>69,930</td>
<td>69,930</td>
</tr>
<tr>
<td>250 +</td>
<td>4.7%</td>
<td>7,835</td>
<td>7,835</td>
<td>10,896</td>
<td>10,896</td>
<td>1,390.682</td>
<td>1,390.682</td>
<td>360</td>
<td>360</td>
<td>512,112</td>
<td>512,112</td>
</tr>
<tr>
<td>All Size Bands:</td>
<td>14.7%</td>
<td>2,652,465</td>
<td>5,980,520</td>
<td>24,100</td>
<td>27,733</td>
<td>9.086</td>
<td>4.637</td>
<td>389,912</td>
<td>905,651</td>
<td>1,946,318</td>
<td>2,505,800</td>
</tr>
<tr>
<td>Proportion ‘At-Risk’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14.7%</td>
<td>15.1%</td>
<td>8.1%</td>
<td>9.0%</td>
</tr>
</tbody>
</table>

Notes: ‘At-Risk’ is defined as deriving from survey responses that replied they had ‘Low’ or ‘No Confidence’ to the question ‘How much confidence does your business have that it will survive the next three months?’ (BICS Wave 21, released January 14th, 2021). 8,764 registered businesses answered between 29th December 2020 to 10th January 2021, so this relates to whether they expected to be alive by late March/early April 2021. These responses are weighted by the ONS to be reflective of the population of registered businesses, based on the Inter-Departmental Business Register (IDBR). The BICS survey excludes four industry groups: ‘Agriculture’, ‘Public Administration and Defence’, ‘Public provision of education and health’, and ‘finance and insurance’. To derive our at-risk numbers (columns (8) – (11)), we multiply the percentage of ‘at-risk’ businesses by the estimated number of businesses, using the latest Business Population Estimates (BPE, 2020) released Oct 8th, 2020. The BPE 2020 lists 2.65 million registered businesses, or 5.98 million registered and unregistered businesses. Registered businesses are those that are VAT and/or PAYE registered. Since the population of registered businesses (from BPE) and the BICS survey sampling population are comparable, Column (8) simply uses the ‘All-size bands’ value for ‘at-risk’ to determine the total at risk. Because of the weighting procedure, the total in Column (8) ‘All-size bands’ is not the sum of the sub-groups (see Appendix text). For Columns (9) – (11), since these are out of sample groups relative to the BICS survey, we derive the total at-risk populations here by multiply the number of at-risk businesses within each size band and summing over these. For Employment in columns (10)–(11), we use the product of businesses at-risk and average employment per business, summed over all size bands.
Table A3: Births and deaths on the IDBR

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Deaths</th>
<th>Death Rate</th>
<th>Births</th>
<th>Birth Rate</th>
<th>Births-to-Death Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 Q1</td>
<td>85,520</td>
<td>0.033</td>
<td>126,510</td>
<td>0.048</td>
<td>1.48</td>
</tr>
<tr>
<td>2019 Q2</td>
<td>101,495</td>
<td>0.039</td>
<td>101,990</td>
<td>0.039</td>
<td>1.00</td>
</tr>
<tr>
<td>2019 Q3</td>
<td>83,145</td>
<td>0.032</td>
<td>90,590</td>
<td>0.035</td>
<td>1.09</td>
</tr>
<tr>
<td>2019 Q4</td>
<td>77,820</td>
<td>0.030</td>
<td>81,795</td>
<td>0.031</td>
<td>1.05</td>
</tr>
<tr>
<td>2020 Q1</td>
<td>119,560</td>
<td>0.045</td>
<td>120,045</td>
<td>0.045</td>
<td>1.00</td>
</tr>
<tr>
<td>2020 Q2</td>
<td>93,725</td>
<td>0.035</td>
<td>88,960</td>
<td>0.034</td>
<td>0.95</td>
</tr>
<tr>
<td>2020 Q3</td>
<td>76,970</td>
<td>0.029</td>
<td>95,395</td>
<td>0.036</td>
<td>1.24</td>
</tr>
</tbody>
</table>

Notes: Births and deaths are defined by enterprises added to, and removed from, the Inter-Departmental Business Registry (IDBR), respectively. The IDBR covers registered businesses (those that are VAT and/or PAYE registered). These quarterly death rates are our own calculations based on the annual number of businesses (BPE 2020), which were 2,573,700 (in 2018), 2,623,100 (in 2019), and 2,652,300 (in 2020). Our calculations above are aligned with the annually reported death-rates and birth-rates by the ONS in ONS Business Demography (2019) report that were 12.7% in 2018, and 13.0% in 2019.
Appendix B: Notes on current Covid-related business schemes

This is a fast-moving area, so some of these details may already be out of date. Details of the schemes and amounts spent through mid-December are in the Spending Review 2020 update (December 15th 2020) here, and in Figure B1 below. Table B1 summarises the policy schemes relevant to business, including the current date that these schemes end.

In November 2020, the Office of Budget Responsibility (OBR) expected a total of up to £87 billion of business borrowing to be backed by government guarantees. OBR also estimates overall losses to government of £29 billion (mainly from BBLs). There are many concerns with all of these interventions, including their distortionary nature, fiscal cost and fraud. But given the scale of the crisis, massive intervention of some sort was necessary.

Most of these are currently due to end around March-April 2021, which we argue is the possible cause for the oncoming wave of bankruptcies (or, at least, the information driving the pessimism towards businesses’ own survival). The government is reviewing these programmes, which are expected to be revised on a more permanent basis later this month.

Figure B1: Cost of business relief schemes

UK government Covid-19 business loan schemes

[Bar chart showing the value of loans approved, 2020* (£bn)]

Number of loans approved by Dec 2020

[Circle chart showing the number of loans approved for each scheme]

*Figures from the middle of each month
Source: Treasury
© FT

Source: https://www.ft.com/content/41d56e0a-7b46-4dd7-96e3-710977df81c
<table>
<thead>
<tr>
<th>Policy:</th>
<th>Beneficiaries:</th>
<th>Scale</th>
<th>Currently Scheduled End</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Support for employment:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronavirus Job Retention Scheme (CJRS)</td>
<td>Employers and employees in affected industries where employees would otherwise be laid off</td>
<td>80% of wages, up to £2,500 per month</td>
<td>30th April, 2021</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Financing support:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronavirus Business Interruption Loan Scheme (CBILS)</td>
<td>Businesses with annual turnover under £45 million</td>
<td>Loans up to £5 million</td>
<td>31st March, 2021</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bounce Back Loan Scheme (BBLS)</td>
<td>Small businesses struggling to access CBILs</td>
<td>Up to £50,000</td>
<td>31st March, 2021</td>
</tr>
</tbody>
</table>
**Coronavirus Large Business Interruption Loan Scheme (CLBILS)**

Government guarantee of 80% of value of loans to be provided by British Business Bank up to £50 million. Companies borrowing more than £50 million through CLBILS are subject to restrictions on dividend payments, senior pay and share buy-backs during the period of the loan.

| Businesses with annual turnover above £45 million | Ad hoc | Open to claims until at least 30th March, 2021 |

**Trade Credit Reinsurance programme**

Government guarantees of £10 billion against losses by providers of trade credit insurance

| 600,000 businesses, especially in manufacturing and construction, that take out credit insurance to protect their transactions from risk of default | Ad hoc | 30th June, 2021 |

**Future Fund**

Unsecured government loans to match equity raised from private investors

| Unlisted or UK registered businesses reliant on equity funding, that may not qualify for the CBILS | Loans from £125,000 to £5 million | 31st January, 2021 |

**Covid-19 Corporate Financing Facility**

Large (investment-grade) businesses in need of temporary loans

| Caps based on credit rating e.g. maximum of £300 million for BB | Ad hoc / At least another 12 months |

**Grant Schemes:**

| £25,000 one-off grant | All retail/leisure businesses and hotels in a property with a rateable value between £15,000 and £51,000 | £25,000 | One-off |
| £10,000 one-off grant | All businesses operating in properties with rateable value below £15,000 | £10,000 | One-off |
| Innovate UK funding: | R&D-intensive SMEs, which may be reliant on equity funding. 2,500 existing Innovate UK customers, plus 1,200 additional businesses. | Ad hoc | Rolling |
**CBILS Interest Waiver**
Commitment to pay the first 12 months of interest on loans taken up under the CBILS

<table>
<thead>
<tr>
<th>Businesses with annual turnover below £45million in need of temporary loans</th>
<th>12 month interest forgiveness</th>
<th>12 months from initial loan</th>
</tr>
</thead>
</table>

**Tax Holidays/cuts:**

<table>
<thead>
<tr>
<th>Business rates holiday in 2020/21</th>
<th>All retail/leisure businesses, hotels and nurseries</th>
<th>100% discount for year after April 1st 2020</th>
<th>5 April 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VAT cut</strong></td>
<td>Supplies of hospitality, hotel and holiday accommodation</td>
<td>VAT cut from 20% to 15% from 15th July 2020</td>
<td>31st March 2021</td>
</tr>
</tbody>
</table>

**Tax Deferrals:**

| VAT quarterly payments | VAT payments due between 20th March and 20th June 2020 could be delayed by a year | VAT registered businesses | 31 March 2021 (new deferral scheme to be announced soon) |
| Self-assessment payments | People who pay tax via self-assessment (mainly the self-employed and those with dividend, property and other non-employment income) | Ad hoc repayment schemes |

**Notes:** This list is not exhaustive, and things are constantly changing throughout this period. This is based on our best research, using only official government webpage information. We compiled this list on 12th January 2021.
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The Centre for Economic Performance is a world-leading economics and policy research institute. CEP studies the determinants of economic performance at the level of the company, the nation and the global economy by focusing on the major links between globalisation, technology, the educational system and the labour market and their impact on productivity, inequality, employment, stability and wellbeing. It is part-funded by the Economic and Social Research Council and based at the London School of Economics and Political Science.

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