Helping Britain's start-ups

Further economic measures to address the coronavirus crisis

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Summary

- The Government has outlined an audacious package of measures aimed protecting as much of the UK's productive potential as possible. But it is an outlier among comparable European economies in that it is yet to announce measures to help start-ups and pre-revenue/lossmaking companies.
- The task of saving them is crucial because a swift recovery depends, among other things, on productive, high-growth companies being able to pick up where they left off quickly. VC-backed start-ups are disproportionately likely to be such companies – their workers are considerably more productive than the private sector on average.
- Yet many such companies are hard-pressed to access the range of measures available to businesses at the moment. Since they are not yet profitable and rely on runways of equity funding, and most of their value lies in IP and human capital rather than liquid assets, they would not ordinarily qualify for business loans, which is one of the requirements of accessing the Coronavirus Business Interruption Loan Scheme (CBILS).
- Furthermore, those firms are disproportionately likely to be in receipt of Innovate UK grants for R&D, which means that if they were to fold those projects will be abandoned, leading to R&D funding being wasted, projects having to start up again and the UK's target of reaching 2.4 per cent of GDP spent on R&D jeopardised.
- This is also important in the context of defending the UK's position as the start-up capital of Europe, especially considering that Germany and France already announced sizable packages, of €2bn and €4bn respectively. This is also relevant to the issue of trying to ensure that more of our promising early-stage firms follow the path of Revolut, Darktrace or Graphcore and grow into sizable independent companies.
- In its previous paper on the topic of COVID-19 economic disruption – *Scale, Speed, Simplicity* – Policy Exchange proposed a number of small-scale measures which could help promising companies not served by the existing set of policies, particularly targeted at R&D-intensive firms: first, both fast-tracking overdue and advancing not yet claimed R&D credits, secondly, creating an Innovate UK-administered fund for maintaining R&D capacity of affected firms so that they are ready to hit the ground running once the lockdown is lifted, and thirdly, allowing CBILS lenders to consider a greater range of evidence of viability and creditworthiness than allowed under current regulations.
- Ultimately, larger-scale measures are likely to be needed and the Government should press ahead with extending loans which convert to equity if not repaid as advocated by the Save Our Startups coalition. Such a scheme has the advantage of 'emulating' an equity

funding round which is how a lot of these schemes operate, except on advantageous terms, as there would be an option of 'buying out' the government as an investor by simply repaying the loan. If existing investors were to have any concerns about having the government as a co-investor, they could offer sufficient funding to the company to buy it out. Usually, convertible notes have a maturity of between 18 to 24 months, and in practice are almost never repaid, but convert to equity upon completion of a Series A funding round which also provides the valuation at which the conversion is executed. In this case, given the different objectives of the financing, a longer maturity such as 5 years might be appropriate, so as to give the firm as much chance as possible to pay off the loan and not have it convert.

Introduction

In less than a month, the Conservative Government has had to design an economic strategy for something that has never happened before. In this extraordinary crisis, the Chancellor, Rishi Sunak, has had to place the economy in an induced coma, ready to emerge as unaffected as possible after contagion measures are lifted. This last part is especially important – the longer the pandemic goes on, the more productive capital will be destroyed in the process. Measures need to be quick and effective to deal with the extent of the unexpected shock and flexible enough to be withdrawn if the economy rebounds quickly.

It has outlined a range of measures over the past week, which can broadly be categorised as:

- Measures to *underwrite payrolls* and prevent a huge spike in unemployment (such as the Job Retention Scheme and the Self-Employment Income Support Scheme)
- Policies to *postpone or remit any liabilities for businesses controlled by the state,* such as tax and social security payments due
- Steps to provide emergency *financing and liquidity to companies that are still unable to pay their bills* after taking advantage of the two aforementioned sets of measures, in the form of very cheap loans.

Those measures have largely been welcomed, although there has been concern about their execution, given that some funds will take time to be accessed and thresholds exist to access the funds. While the Chancellor's measures will undoubtedly have saved many jobs, it is hard to quantify fully this effect. Meanwhile, Universal Credit claims have skyrocketed already (a trend largely mirrored abroad). Considering the time pressure and the scale of the potential damage, the Government can be said to have performed a much-needed job in unprecedented circumstances.

However, an area which still requires urgent attention is help for highly promising, but at this stage lossmaking and/or pre-revenue companies.

Since they are not yet profitable and largely without major liquid assets which could serve as collateral, they do not qualify for the Coronavirus Business Interruption Loan Scheme (CBILS) – the Government-backed programme of cheap loans aimed at companies of this size. The Government has very recently introduced welcome changes to the scheme to make it more accessible, but ultimately it is still closed to lossmaking companies.

Their cashflow problems are of a very different nature to those faced by established businesses. Since they're either pre-revenue or lossmaking, their main sources of funding are angel investors, venture capital (VC) funding rounds, and – in the case of R&D-intensive firms – public research grants. Secured funds in exchange for an equity stake serve as a 'runway' – a pot of cash sufficient for a firm to function for a specific amount of time. When a firm approaches the end of its runway, it returns to the market for another funding round, both to secure follow-up funding from its existing investors and to try to secure new ones.

The current disruption caused by COVID-19 does not mean all VC funds will pull back from the market to wait for better times, leaving firms time only until the end of their current runway. But it does mean raising funding will become much more difficult, leaving otherwise viable businesses with the prospect of going bankrupt, or securing much less advantageous funding terms (less cash for more equity). There are different reasons for this depending on the stage of growth a given firm is in:

- For early-stage companies without a solid track-record and only a persuasive story to tell bold investors with a high-risk appetite, it will simply be a matter of operating in an environment where investors switch to defensive mode and their risk appetite will be much lower. According to research from CB Insights, global private market funding in Q1 2020 was projected to fall 16 per cent compared to Q4 2019 – the sharpest quarterly fall in the last 10 years. This is set to be particularly pronounced for early stage seed funding, as VCs focus on follow-up funding and protecting their existing portfolio – seed funding is projected to fall 22 per cent from Q4 2019 to Q1 2020.
- For later-stage companies, the key difficulty will be inability to unlock 'milestone' funding – rounds of cash predicated on the company reaching certain milestones, which for a biotech start up might be the number of clinical trials conducted, while for an internet firm it might be the number of users registered. Though this will vary from industry to industry, reaching those milestones may now be much more difficult due to virus contagion measures in place that make, for example, completing clinical trials impossible.

Why save pre-revenue companies?

Questions might be asked why these companies deserve special attention, especially as they tend to not be large employers and frequently employ highly skilled and therefore well-paid individuals who may have little trouble finding employment elsewhere. The answer – aside from being companies like any other who happen to fall through the cracks of the current system through no fault of their own – is that they are precisely the sort of innovative, productive companies which have the best chance of kick-starting a swift economic recovery, as well as addressing the more long-term problems with the UK economy such as low productivity growth.

For example, research from Oxford Economics has shown at the beginning of March that workers in venture-backed businesses are 60 per cent more productive than those in private firms, with the average output per worker standing at £88,100 per year, compared to £54,000 in the UK private sector. Not every start-up falls in this category, but beginning with VC-backed firms is a good start as that will be an easy way to demarcate viable, productive and valuable companies most worth saving.

Further, those types of firms will be crucial to reaching the Government's ambition of spending 2.4 per cent of GDP on R&D annually. R&D intensive sectors such as healthcare & biotech and digital technology are overrepresented amongst such companies: 43 per cent of VC users are in the digital sector compared with 7 per cent of all UK business, while 12 per cent are in the biotech space, compared, again, with 7 per cent of all UK businesses. If we compare these figures against data for R&D spending by sector, we find that the sector which spent the most on R&D in 2018 was the pharmaceutical sector (spending £4.5bn), while computer programming & information technology was third at £1.9bn , though that figure has to be read in the context of the fact that R&D spending in that sector does not require expensive materials or machinery. It is also true that it is precisely that type of companies that apply for Innovate UK research grant funding, and therefore allowing them to fail would potentially compromise those research programmes, leading to waste of Government science funding, something which is a priority under this Government.

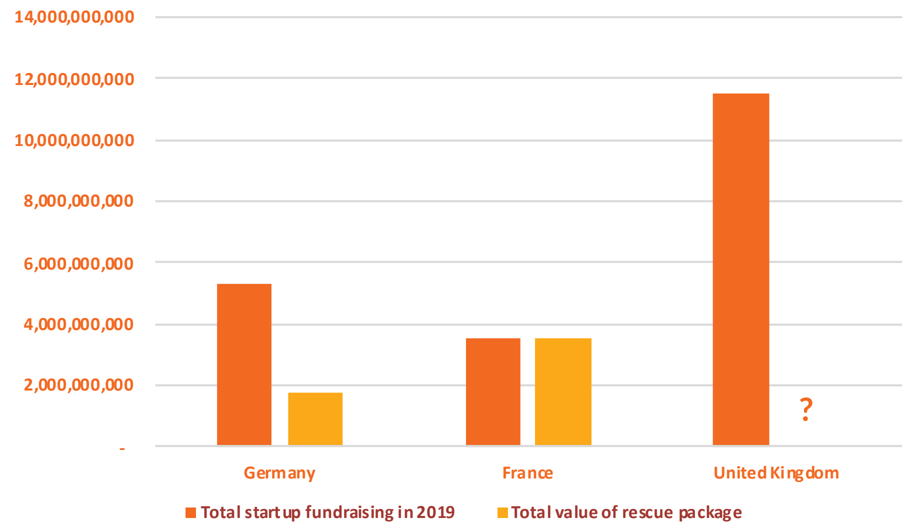
Furthermore, there is a matter of defending the UK's reputation as the start-up capital of Europe. By all accounts, the UK has had a fantastic year for its venture capital industry and its innovative start-ups and scale-ups. According to data from KPMG, 2019 saw a 22 per cent increase in the amount of money invested in UK high growth businesses on 2018, with almost £2bn invested in Q4 2019, a year which saw near-record amounts invested.

However, the crisis will likely exacerbate an already existing trend of increasing amounts of funding being concentrated in later-stage deals. From 2012 to 2019, median deal size at seed and series A funding stage increased by $0.8m and $4.5m respectively, while series B, C and D+ median deal sizes increased by a sizable $15.5m, $28.9m and $59.3m respectively.

Similarly, while London saw record amounts invested, there was a decline in early and seed stage deals closed, highlighting further that firms at the early stages are particularly vulnerable during this crisis.

This is especially important considering that Germany and France already announced substantial packages. In addition to its general business measures, France has announced a €4bn liquidity support package specifically aimed at start-ups while Germany pledged a €2bn in assistance to early stage businesses. Yet as shown by the graph below, both countries attract much less global venture capital compared to the UK – in 2019, the UK reported 1,425 deals worth $14.31bn (£11.5bn) which makes up 40 per cent of total European funding. By contrast, Germany reported 444 deals worth $6.65bn (£5.3bn) which makes up 18 per cent, while France had 425 deals worth $4.39bn (£3.5bn) making up 12 per cent:

Total Startup Fundraising in 2019 VS Total size of rescue package, £



Source: Crunchbase Data, Reuters[123]

Both of those countries arguably had a head start as they operate relatively large-scale public investment banks – KfW in Germany and Bpifrance in France – but the British Business Bank could be further co-opted into the response. It is also important to be clear what is meant by startup – namely, a business still raising capital from investors: for example, one the biggest deals in the UK during Q4 2019 was $575m raised by Deliveroo, but few people would consider the company a 'startup'. When we talk about start-ups, therefore, we also mean scale ups and other companies unable to operate without money from equity funding rounds.

It is particularly notable that not all of France's €4bn fund is new money or comes from tailor-made measures - significant proportion comes from extending general-businesses measures to start-ups. Examining the French package more closely, it includes:[4]

1. https://news.crunchbase.com/news/europe-an-venture-report-vc-dollars-rise-in-2019/
2. https://uk.reuters.com/article/us-health-coronavirus-economy-startups/germany-pledges-2-billion-euros-to-help-start-ups-through-coronavirus-crisis-idUKKBN21J4U6 and https://uk.reuters.com/article/us-health-coronavirus-france-tech/france-launches-4-billion-euro-support-plan-for-start-ups-minister-idUKKBN-21C0R9
3. All figures in pounds sterling converted with exchange rates from 11 April 2020: $1 to £0.8 and €1 to £0.88
4. https://techcrunch.com/2020/03/25/france-announces-4-3-billion-plan-to-support-startups/

- First, start-ups whose funding rounds were interrupted will be eligible for a 'bridge round' through Bpifrance from an overall pot of €80m, alongside another €80m invested alongside the Bpifrance by the private sector.
- Secondly, start-ups with shorter-term problems like liquidity issues will be able to access the €320bn liquidity scheme aimed at French business as a whole, but unlike the UK equivalent scheme (CBILS), lossmaking or pre-revenue start-ups *are* able to access it, on a condition that the amount is limited to either 2 years of payroll of France-based employees, or 25 per cent of annual revenue, whichever is higher. That measure alone is worth an estimated €2bn.
- Speeding up tax refunds for start-ups, in particular VAT and the French equivalent of the R&D tax credit, all of which amounts to a liquidity extension of €1.5bn, and a €250m advancement of already planned investments and public support payments to start-ups, all taken on by Bpifrance which means it can be processed more quickly.

The lessons of this multi-faceted French approach for the UK might be, for example, to hand the British equivalent of Bpifrance – the British Business Bank – more responsibility for administering the existing measures aimed at businesses in general, but providing bespoke help for start-ups, scaleups and VC-backed companies, depending on remaining administrative capacity given that it is already administering CBILS. Advancing already planned investments and support might be another – R&D tax credit seems like the ideal place to start.

Policy Exchange recommendations

We recommend the following measures:

- First, for firms making heavy use of R&D tax credits – in the case of lossmaking companies, cash credits calculated on the basis of a firm's R&D spend – outstanding payments should be fast-tracked while future payments, which could be based on a firm's track record of R&D spending, should be advanced. This would be revenue neutral and would be similar to a €150m fund established in France for similar purposes – HMRC generally has a backlog of outstanding payments, so it would be a matter of expediting the process, while future payments could be recouped if the company subsequently fails to make the requisite R&D spending. Additionally, although it may prove too administratively burdensome at this stage, a matter of what spending can be claimed against R&D tax credits can also be considered. For example, spending crucial to R&D in the software space such as hosting and storage costs cannot at present be claimed against, yet software consistently accounts for the lion's share of VC funding every year, oscillating at around

40 per cent of total closed deals since 2012, and rose from 25 per cent in 2014 to 40 per cent of total funding in 2019 in Europe.[5]

- Secondly, Innovate UK administrative infrastructure should be considered as a way of distributing special grants aimed at firms at risk of losing their R&D capacity – for example, on the basis of 'milestone' VC funding which a given firm was expecting but now is at risk of losing as milestones such as clinical trials cannot be completed due to lockdown – so that once lockdown is lifted, these firms can achieve 100% planned R&D activity as quickly as possible.
- Thirdly, rules around access to CBILS could be further relaxed so that the lender partners could take a greater range of factors into account when performing the viability test, such as its fundraising record, patent applications, how long it's been operating etc. However, given the low take up rates of CBILS even among the eligible companies, a more general overhaul is warranted, and the Government may have to go much further, for example institute higher rates of guarantees across the board, or make more decisive moves towards a system of grants. This would then give the Government more flexibility about who is able to access the assistance and how quickly they're able to do so. Even if the Government does stick with the current approach, the additional cost of more generous guarantees and grants could be incurred anyway if the banking sector shows signs of trouble as loans are defaulted on in an environment of much higher leverage.

What is the Government considering?

The main measure which the government is reportedly considering for such companies is offering loans which convert into equity if not repaid.[6] Such a scheme has several advantages – it would to a certain extent 'emulate' an equity funding round which is how a lot of these schemes operate, except on advantageous terms, as there would be an option of 'buying out' the government as an investor by simply repaying the loan. If existing investors were to have any concerns about having the government as a co-investor, they could offer sufficient funding to the company to buy it out.

The downside of such an approach might be that it still leaves early-stage companies exposed. Because this scheme would require the Government to invest alongside VCs as a requirement of EU state aid regulations, there is a risk early-stage companies will be underserved as VCs take a more cautious risk profile and invest in less risky, later-stage firms. It is therefore important that this is accompanied by other measures such as the ones sketched out above.

It also highlights the importance of striking the right balance of risk-sharing between the Government and its co-investors, so that the cash is channelled to highly promising firms that nevertheless would be in

5. P61, https://www.kpmgenterprise.co.uk/media/1885/kpmf_venture_pulse_q4_-2019_report.pdf
6. https://www.ft.com/content/14c84cc7-5422-4ef9-b511-9dbf1bc38bf5?sharetype=blocked

trouble if it was left completely up to investors, such as firms still at earlier rounds of fundraising which are likely to be particularly affected. The co-investment model must not become an obstacle and more importantly, an unduly delay as speed is of the essence in such a crisis.

Which route should the government be taking?

The difficulties of the present situation are not lost on the government, which is considering several options. Below, we outline some of the key consideration the Government should be thinking about when designing a package for high-growth pre-revenue companies:

- **Speed** – as with any crisis, the key is to provide assurance *quickly*, before a business is legally forced into insolvency by its creditors, whereby it is too late and potentially productive capital has been destroyed. The Government should therefore err on the side of blunt tools which can nevertheless be deployed quickly.
- **Protect existing capacity** – equally, it is worth spending a little more time instituting measures for *matching* previous levels of funding rather than going for a uniform approach. This is because operations of high-growth start-ups can be complex and once they are compromised due to lack of funds, it may not be possible to restore them quickly or easily, which would again mean that subsequent recovery is jeopardised. This is why scale will be important

Conclusion

The Treasury has had to innovate at an unprecedented speed in recent weeks and has devised a set of measures without which the scale of the economic downturn would have been unthinkable. One of the most important tests of this package will be how easily the economy can be brought back to life. The more productive capacity the Government saves at this stage of the crisis, the less the permanent damage that this crisis will cause and the easier the eventual revival of the economy after the lockdown.

This means that saving innovative, high-growth companies is especially important. The task is complicated by the fact that many such companies are currently at risk of falling through the cracks of the new policies – their wealth is tied up in intangibles like IP, software, human capital and innovative production processes that do not make good collateral.

For those reasons, they require a separate package, and a range of available options have been outlined here. In making its decision, the Government must act quickly and use relatively blunt tools – being too discerning for the sake of making savings runs the risk of allowing too many productive companies of tomorrow to be permanently destroyed.

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