

# Cambridge City and South Cambridgeshire

## MONITORING THE BUSINESS AND ECONOMIC IMPACT OF COVID-19

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**Week beginning 06 April 2020**

**Edition 01**

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### INTRODUCTION

This is the first edition in a series of briefings about the business and economic impacts of Covid-19 in Cambridge City and South Cambridgeshire. The briefing aims to give the global and national context, as well as focus on issues specific to the local area.

Currently the briefing uses information and intelligence from a range of national and local news, data and analysis. We welcome the input of additional local insights and data for inclusion in this report. If you have anything you would like to share please email: [glenn@mylocaleconomy.org](mailto:glenn@mylocaleconomy.org) with details.

This first briefing is slightly longer than subsequent versions will be, so that the full known impacts to date can be discussed. The next editions will focus on new developments and news, rather than past events. The briefing begins with a short summary, followed by more detailed analysis.

### SUMMARY

**Covid-19**, or the Coronavirus is a highly infectious respiratory virus which, since the first incident in China in December 2019, has infected the populations of many countries around the world. In the UK (as of 07 April), there were more than 51,608 cases and 5,373 deaths. To date (07 April) Cambridgeshire has registered 222 cases of Covid-19, or 3.4 per 10,000 residents compared to the UK's rate of 7.4.

**The impacts on the economy have been severe.** Travel and tourism industries were being badly affected by cancellations and lack of bookings towards the end of February and beginning of March. But the whole economy has been impacted as the country has entered into self-isolation for all but key workers. Businesses have temporarily closed, and customers have stopped using services. International travel has been, in the most part, closed down.

**Early indicators point to a recession.** Economists predict an economic contraction in 2020 of anything between 6% and 15%. Purchasing Managers Index measures of business confidence have reached their lowest levels seen in many years. However, China's economy is now recovering 5 months on from the Coronavirus, so this may give some hope. The question is now how the virus is spread or contained within the UK and whether the recovery plan will deepen or prolong the economic downturn.

**The government has launched a significant amount of help** for citizens and businesses, including benefits, salary furloughs, council tax relief, grants and loans. Assistance for the self-employed applies mostly to sole proprietors, who comprise one-fifth of the total. This is significant for Cambridge and South Cambridgeshire, with 6,600 and 12,800 residents respectively who are self-employed, freelancers, or run their own companies.

**A number of firms, which were already vulnerable before the Coronavirus, have gone into administration**, including Debenhams, Carluccio's, and Laura Ashley. Many large organisations (including Tui, Barnardo's, and British Airways) are beginning to use the government's furlough scheme which compensates for 80% of salaries. Notified redundancies have spiked over the past two weeks, with accommodation, retail, and air transport accounting for the largest shares.

**There are significant risks ahead for SMEs**, particularly with regard to delays to government assistance. The Corporate Finance Network member survey estimated that 18% of SMEs either probably or definitely will not be able to obtain additional cash from the government to survive for a four-week period. Similar to nationally, SMEs are significant in the economy. Cambridge has 4,910 SMEs and South Cambridgeshire has 8,460.

**There has been a massive increase (almost 1m) in new Universal Credit registrations.** There were 950,000 new registrations for Universal Credit between 16 and 31 March (14 days). If all registrations became claimants – this would represent a 75% increase in claimant unemployment. In a YouGov survey, conducted among almost 3,000 Britons on 23 and 24 March 2020, One in twenty Britons have lost a job thanks to COVID-19. In terms of the impact on employment, 5% of people report having lost their job, with a further 9% saying they have had their hours or pay reduced. Cambridge (claimant rate 1.6% in February 2020) and South Cambridgeshire (claimant rate 1.1%) are starting from much lower rates of claimant unemployment than the national average (3.0%).

**Firms and research institutes in Cambridge and South Cambridgeshire have been helping with the response to the Coronavirus.** Astrazeneca has donated face masks, and assigned diagnostic testing facilities and scientists to work on a treatment for the virus. Censo Laboratories, Benevolent AI, Healx, and DIOSVAX are amongst the Cambridge companies working on testing, treatment and vaccination. The Raspberry Pi foundation has setup new online courses and is working to get its desktop computer kits to children who have no access to a computer at home for home schooling.

**Looking ahead**, the main risks for the economy going forward are in retaining business capacity, businesses who do not want or cannot access loans or other finance to survive, the vulnerability of hospitality and tourism industries, and supply chain disruption. There are also some upside risks. For some sectors, high demand and market positioning may be positive – including pharmaceuticals, life sciences, health and food retail. The financial protection offered by government may convert short term expensive debts into longer-term cheaper debt for some firms. Remote working may become more widespread, with benefits to the environment and work-life balance. New ways of working, accelerated automation and use of AI may also emerge.

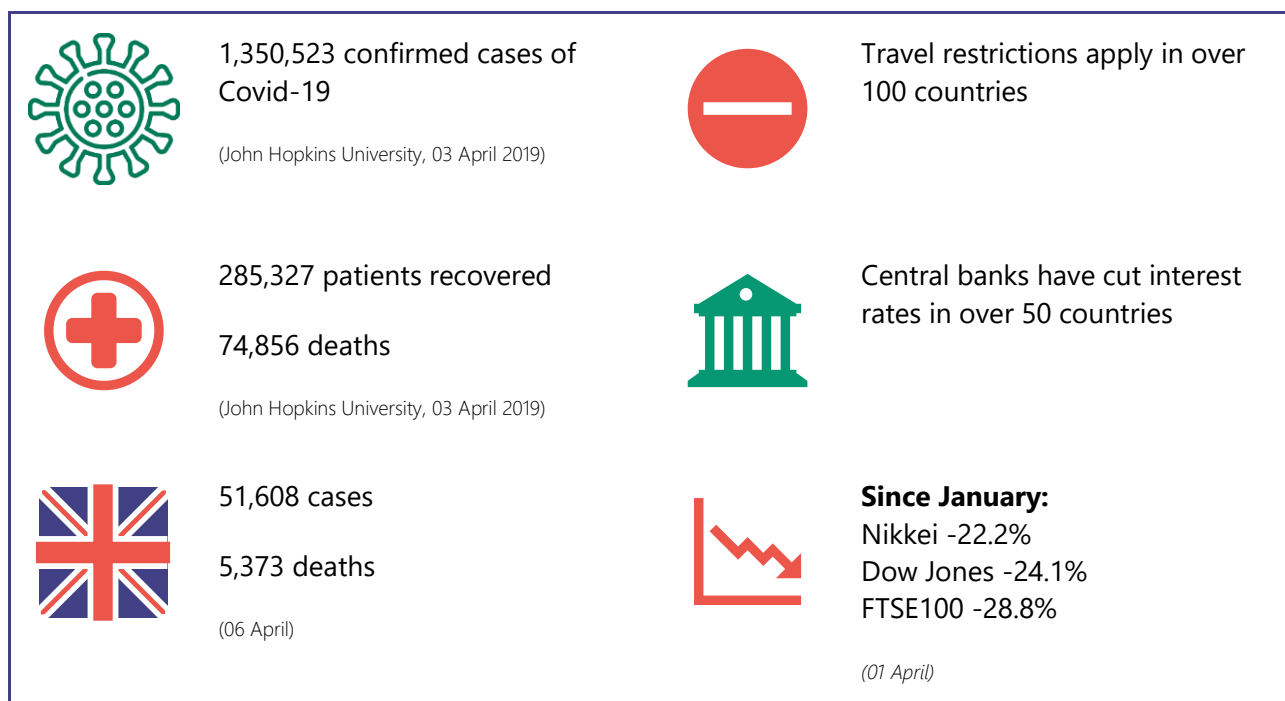
## BACKGROUND TO COVID-19 – THE CORONAVIRUS

**Covid-19** emerged as a virus infection of humans in Wuhan, China in December 2019. Since then, the virus has spread globally and there are now more than one million confirmed cases of coronavirus in 181 countries and at least 53,000 people have died. In the UK, there have been more than 51,000 confirmed cases and more than 5,300 deaths. Badly affected countries like Italy, Spain and the US are still ramping up measures to try to slow down the spread of the virus. Governments across the world have halted flights, locked down towns and cities and urged people to stay at home.

**The impacts on the economy have been severe.** Travel and tourism industries were being badly affected by cancellations and lack of bookings towards the end of February and beginning of March. But the whole economy has been impacted as the country has entered into self-isolation for all but key workers. Businesses have temporarily closed, and customers have stopped using services. International travel has been, in the most part, closed down.

**What is clear is that this has been an endogenous shock to the economy.** Some economists have argued that the fundamentals were not weak or systematically developing into a shock – i.e. how recessions normally occur. However, without quick resolution there is a danger that this exogenous shock could turn into something with an ‘endogenous’ shock element – i.e. business confidence, demand, and supply factors can fundamentally change. The government’s economic response has been rapid – offering to pay for 80% of salaries of workers, loan schemes for businesses, additional business rates relief, and income support for the self employed who are sole traders.

## GLOBAL IMPACT



**The international economy has been significantly affected by the Covid-19 virus. With many countries in lockdown, and international travel halted, the implications for incomes, cashflow and unemployment have been stark:**

**In the last recession in 2009, the Purchasing Manager's Index (PMI) results were a useful leading indicator of downturn and recession.** The latest PMI results show a sharp downturn in business confidence and future orders. The Purchasing Managers Index (PMI) is based on a monthly survey of supply chain managers across 19 industries, covering both upstream and downstream activity – based on anticipated orders and sales. A PMI measure of 50 indicates no change to order and sales outlook, above 50 is improved; below 50 is contracting. As presented in Figure 1, for the 23/24 March results, the Eurozone PMI crashed to its lowest level since it was created in 1998 - to just 31.4. The U.S. PMI dropped to 40.5 in March from 29.6 in February. The German PMI dropped to 34.5 in March from 52.5 in February. The French PMI dropped to 29.0 in March from 52.6 in February. The UK's PMI dropped to 37.1 in March, down from 53.0 in February.

**US economy shocked by massive jobs losses and rise in 10m unemployment claims in 2 weeks.** The US economy shed 701,000 jobs according to March data, far more than the 100,000 fall expected on average by economists. The unemployment rate rose to 4.4%, up from 3.5% in February – with 9.9 million new claimants in the past two weeks (to 28 March) alone. This surpasses previous record of 695,000 new weekly claims set in 1982. 47 million Americans work in jobs at high risk of layoffs according to Federal Reserve analysis.

**China's economy showing signs of recovery.** The Chinese composite PMI, which tracks activity across service sector firms and factories, surged back to 53 in March (above 50 indicates expansionary behaviour) from a record low of 28.9 in February. That's stronger than economists expected. Other data on activity such as energy consumption and traffic, reinforce this view.

## UK ECONOMY

### Performance and risks

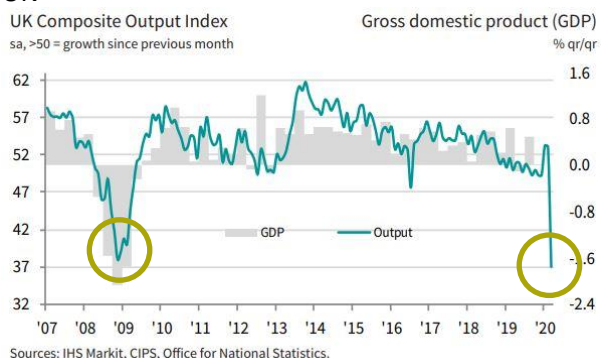
**Economists suggest that GDP could contract by up to 15%.** What is not known – length and severity of the downturn. There are three main scenarios:

- *Scenario 1: 'V' shaped recovery* - sharp shock, quick rebound. This has been witnessed in South Korea – which quickly implemented mass testing for Coronavirus and isolation
- *Scenario 2: Longer shock, quick rebound* – this assumes the economy can weather 2 months of lockdown, without much systemic damage, and can recover quickly
- *Scenario 3: Longer shock, turns into recession and endogenous shock.* The economic shock and events cause some systematic changes in the economy.

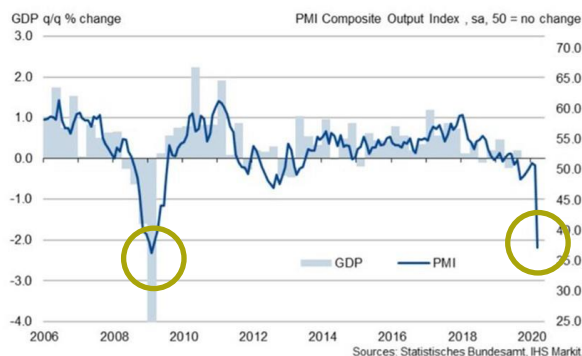
Policy makers are focusing on Scenario 2, but analysts are beginning to look at Scenario 3 as being plausible - with economic actors anticipating a gradual exit from this situation, with a high probability of future lock-downs and restrictions. This will lead to more defensive behaviour by firms and households - such as redundancies, disposing under-utilised property, and attempts to re-build cash reserves.

**FIGURE 1: PURCHASING MANAGER'S INDEX FLASH MONTHLY RESULTS, 23-34 MARCH 2020**

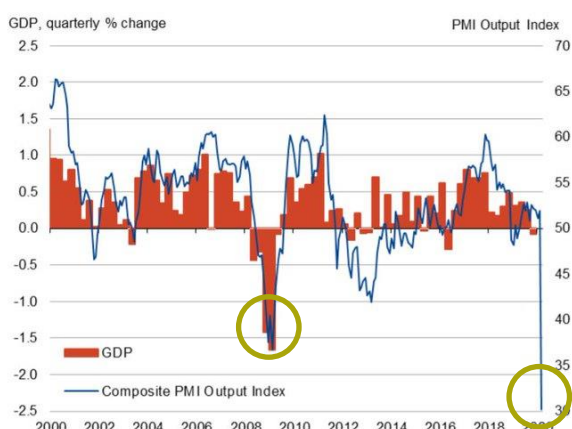
**UK**



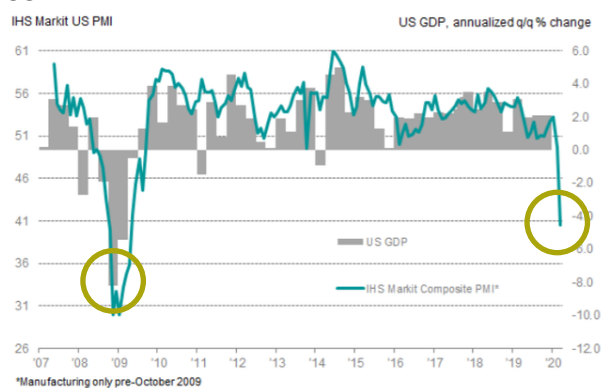
**Germany**



**France**



**USA**



**UK Policy is attempting to ‘flatten the curve’ of downturn and keep capacity ready for recovery**

by: retaining labour (paying towards furloughing employees, compensating self employed people who are sole traders) and protecting business cashflow and investment (£330bn loan fund, extended business rates relief, VAT payment deferral, grants for hospitality businesses). HMG has been swift and ambitious in its response, with the value of assistance representing 15% of GDP. However, the situation has moved on and there have been weaknesses in the UK government’s approach as identified by business representative groups:

- Many businesses are weeks away from insolvency and the assistance is not coming quickly enough
- Roughly 4/5 of self employed are not eligible for support, or receive a small amount of support to compensate for lost earnings
- The employee furlough scheme only applies to employers who mothball operations. It is not flexible enough to retain emergency or skeleton services, or for employers to respond quickly to changing circumstances

**Businesses and market confidence**

**Companies entering administration (over past 4 weeks)** include Debenhams (20,000 employees, 142 stores), Carluccio’s (2,000 staff nationally – HQ: London), Brighthouse (2,400 staff nationally – HQ: Cardiff), and Laura Ashley (70 store closures, 268 redundancies, 1700 furloughed – HQ: London).

**There have also been some prominent staff furloughs announced across a broad range of sectors:**

Travel agents (Tui, furloughing 11,000 out of 13,200 staff), Brewers/pub chains (Fullers, Shepherd Neame), Charities (Barnado's furloughing 3,000 out of 8,000 staff), British Airways (30,000 out of 36,000 staff).

**Accommodation and retail account for bulk of Covid-19 related notified redundancies.**

Notified redundancies have spiked over the past two weeks, with accommodation, retail, and air transport accounting for the largest shares.

**Other changes to pay and conditions have been seen.** Grant Thornton has asked for voluntary pay cuts and sabbaticals from its 4,400 staff to avoid redundancies. M&S have offered staff who continue working a 15% pay bonus. Barclays is offering triple overtime pay to frontline staff as it juggles surging demand for services and staff shortages. Metro Bank announced on 06 April that it would be paying, on average, a £1,000 bonus to frontline staff.

**18% of SMEs are unlikely to get the cash they need to survive.** The Corporate Finance Network member survey estimated that 18% of SMEs either probably or definitely will not be able to obtain additional cash from the government to survive for a four-week period; almost one-third of their 13,000 small-company clients from around the UK would be unable to acquire the cash needed to ride out an extended, three-month lockdown. In the Opinium survey of 500 UK SMEs, 39% had already closed temporarily or plan to do so within the next month; 7% have already shut permanently, a further 12% think they are likely to do this within the next month; and 23% have made or are planning to make redundancies.

**Take-up of government loan schemes is now underway.** Easyjet has borrowed £600m under the Covid Corporate Financing Facility (CCFF).

**Consumer confidence falls.** The GFK Consumer Confidence Overall Index Score in March 2020 is -9, this breaks down as:

**Personal Financial Situation** - The index measuring changes in personal finances during the last 12 months has increased by three points this month to +2; this is two points higher than March 2019. The forecast for personal finances over the next 12 months has decreased to +3 this month; this is one point higher than March 2019.

**General Economic Situation** - The measure for the general economic situation of the country during the last 12 months remains the same this month at -23; this is ten points higher than in March 2019. Expectations for the general economic situation over the next 12 months have decreased six points to -27; this is nine points higher than March 2019.

**Major Purchase Index** - The Major Purchase Index decreased eight points in March to -2; this is three points lower than it was in March 2019.

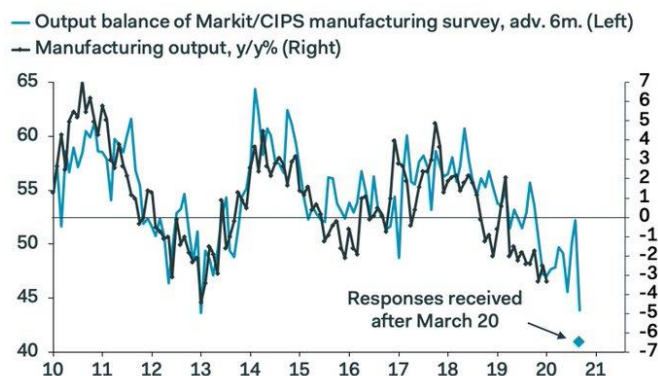
**Savings Index** – The Savings Index decreased ten points this month to +10; this is ten points lower than at this time last year.



## Industries

**Manufacturing outlook worsens.** The Latest UK manufacturing PMI (01/04/2020) was 47.8. The data points to a 7% decrease in manufacturing output year-on-year. A sector that accounts for around 1/7th of the UK economy is effectively closed for business. Many firms have had to shut and lots of those that remain open have seen orders or output suffer. Others have switched to making products that are vital to the national attempt to stop the spread of the virus

**FIGURE 2: UK MANUFACTURING PMI RELEASED ON 01.04.20**



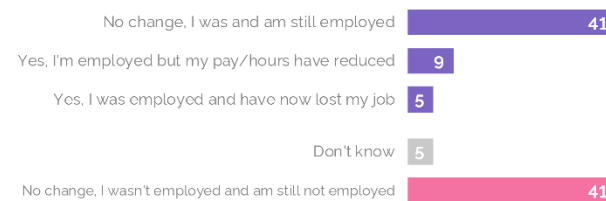
## People

**There has been a massive increase (almost 1m) in new Universal Credit registrations.** There were 950,000 new registrations for Universal Credit between 16 and 31 March (14 days). If all registrations became claimants – this would represent a 75% increase in claimant unemployment. This could move claimant unemployment up from 1.27m (3.0%) in February to 2.2m (5.3%) in March (one month). In the 2008/09 credit crunch and recession – a 2% increase took 20 months – from 2.0% in Dec 2007 to 4.0% in Aug 2009. During the last recession claimant unemployment rate peaked at 4.1% in Feb and March 2009

**FIGURE 3: YOUNG SURVEY OF UK HOUSEHOLDS**

**One in twenty Brits have lost a job as a result of COVID-19, and another one in eleven have had their pay or hours reduced**

Has the Coronavirus outbreak changed your employment situation? %



YouGov

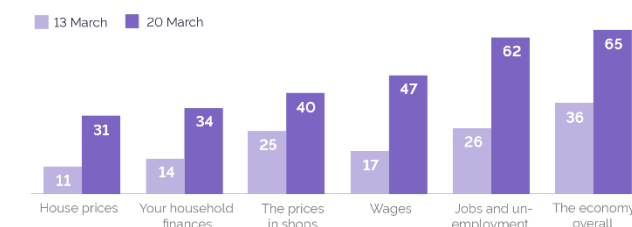
23-24 March 2020

**As of 23/24 March, yougov estimated 1 in 20 Britons had lost their job due to Covid-19.** In a YouGov survey, conducted among almost 3,000 Britons on 23 and 24 March 2020, One in twenty Britons have lost a job thanks to COVID-19. In terms of the impact on employment, 5% of people report having lost their job, with a further 9% saying they have had their hours or pay reduced. With workplaces closing their doors around the country the survey finds that the majority of workers are now working from home more often than before. More than four in ten (42%) say they are having to work from home all the time, and another 12% now work from home some of the time.

**FIGURE 4: YOUNG SURVEY OF UK HOUSEHOLDS**

**The number of Brits who worry about jobs has more than doubled in a week**

Do you think a widespread coronavirus (COVID-19) outbreak in the UK will or will not have an impact on...? % Who say it will have an impact and the damage will be long lasting



YouGov

Latest update 20 March 2020

## IMPACTS ON CAMBRIDGE AND SOUTH CAMBRIDGESHIRE

**Current rates of infection.** To date, Cambridgeshire has registered 212 cases of Covid-19, against the national rate of 47,806. If we were to calculate this on a per capita basis (using total estimated resident population in 2018), on 06 April 2020, Cambridgeshire has had 3.3 Covid-19 cases per 10,000 residents compared to 7.2 for the UK.

**CBI industry analysis.** The CBI conducted a RAG rating by industries – this is summarised in **Figure 5** over the page with additional insights into how important these industries are for Cambridge and South Cambridgeshire. Other industries relevant to the local area have been added for consideration.

### Company and industry news

**AstraZeneca donates nine million face masks and steps up Covid-19 drugs research.** AstraZeneca is donating nine million face masks to help support healthcare workers around the world during the Covid-19 pandemic. The company has also stepped up its diagnostics testing capabilities and has assigned more than 50 of its scientists to work on monoclonal antibodies that could be used as a treatment to minimise the impact of the coronavirus.

**Cambridge laboratory leads development of Covid-19 vaccination.** From the bacteria that causes tuberculosis, to the West Nile virus and on to SARS, the Laboratory of Viral Zoonotics, and its spin-out company –DIOSVax – has been working on the coronavirus since the Chinese released its genetic sequence on January 9.

**BenevolentAI**, which has R&D premises on Babraham Research Campus, has used artificial intelligence to identify and analyse an approved drug that may have potential as a coronavirus treatment. Baricitinib is approved for treating rheumatoid arthritis, but clinical testing is required to prove it would be safe and effective for use against the Covid-19 virus.

**Healx announced that it is using its AI platform to develop drug combinations from approved drugs to contribute towards global efforts to find treatments for COVID-19.** This focus on combination therapies, where two or more drugs simultaneously target different aspects of the disease pathology, has the potential to ensure a more effective treatment.

**Raspberry Pi Foundation responds to the Coronavirus.** Based on feedback from the community, the Raspberry Pi Foundation has launched a series of direct-to-student virtual and online learning experiences called Digital Making at Home. To help young people who don't have access to a computer for learning at home, The Raspberry Pi Foundation is working with donors and partners in the UK to get Raspberry Pi Desktop Kits distributed for free to children who need them.

**Censo Biotechnologies** will repurpose its laboratories at the Babraham Research Campus in Cambridge and at Roslin near Edinburgh to process a minimum of 500 diagnostic tests every day. The tests will enable the NHS to test their staff and tell anxious patients whether or not they are suffering from the virus.

**Rapid COVID-19 diagnostic test developed by Cambridge team to be deployed in hospitals.** The SAMBA II machines, developed by Diagnostics for the Real World, provide a simple and accurate system for the diagnosis of COVID-19 infection. They will be used by healthcare workers at point-of-care in order to rapidly diagnose patients, directing those who test positive for the infection to dedicated wards. They



can also help identify which healthcare workers are infected, enabling those who test negative to return to the front line. The machines will be made available to a number of hospitals across the country thanks to a US\$3million (about £2.4 million) donation from the businessman and philanthropist Sir Chris Hohn, which will enable the purchase of 100 machines. The donation has enabled Addenbrooke's Hospital, part of Cambridge University Hospitals NHS Foundation Trust, to obtain the first 10 SAMBA II machines this week for use in wards where suspected COVID-19 patients are brought in. The donation will be matched by the purchase of 10 additional machines by the Cambridge Trust.

**Cambridge companies unite to meet the COVID-19 ventilator challenge.** On 13th March, Cambridge Consultants, PA Consulting, Sagentia, Team Consulting and TTP plc were asked by the UK Government to assist in the rapid development and manufacture of ventilators to meet increased hospital requirements, caused by COVID-19. The companies are all working to a specification published by the government, established in response to the clinical interventions understood to be effective in the treatment of COVID-19.

## People

### SELF EMPLOYMENT

#### Cambridge City

- In 2019, there were 6,600 residents that were self-employed, freelancers, or run their own companies – representing 7.8 per cent of all employment (UK = 10.8%)
- In 2019, Out of 4,935 private businesses in Cambridge City – 645 are sole proprietors or 13.1% of total (UK=16.3%)
- 4,910, or 99.2% of organisations in Cambridge City are SMEs (UK=99.6%)

#### South Cambridgeshire

- In 2019, there were 12,800 residents that were self-employed, freelancers, or run their own companies – representing 13.3 per cent of all employment (UK = 10.8%)
- In 2019, Out of 8,420 businesses in South Cambridgeshire – 1,260 are sole proprietors or 15.0% of total (UK=16.3%)
- 8,460, or 99.5% of organisations in South Cambridgeshire are SMEs

### UNEMPLOYMENT

#### Unemployment is at a lower starting point compared to the national average

- Cambridge City - latest number of unemployment-related benefits claimants: 1,415 (February 2020) – a claimant rate of 1.6%, which has increased from 1,000 (rate of 1.1%) in February 2019 (UK=3.0%).
- South Cambridge - latest number of unemployment-related benefits claimants: 1,055 (February 2020) – a claimant rate of 1.1% – which has increased from 655 (rate of 0.7%) in February 2019 (UK=3.0%).
- If assume that all of the 950,000 universal credit applicants were to become registered claimant unemployed, an increase in claimants of 75% from February to March, would rise from to 2,475 in Cambridge (2.8%) and 1,845 in South Cambridgeshire (1.9%).

**FIGURE 5: SUMMARY OF CBI SECTORS HEATMAP OF RISKS NOW, AND IN THE NEXT 9 MONTHS**

Sector	Impact now	Impact in Q1 – Q3	Local implications (Cambridge and South Cambridgeshire)
<b>Critical sectors (keeping the lights on)</b>			
Food and drink retail	Demand: Unpredictable spikes in demand Supply: Supply chain disruption Workforce: high risk of infection	Cashflow / lease costs / payroll Disruption to business / supply chains by Jun-Aug	Employs 3,600 or 3.4% of the total in Cambridge City (UK=5.3%) Employs 2,700 or 3.2% of the total in South Cambridgeshire.
Energy/utilities	Demand: Unpredictable spikes in demand (lockdown & isolation)	Supply chain disruption Workforce continuity	Employs 600 or 0.6% of the total in Cambridge City (UK=1.2%) Employs 800 or 0.9% of the total in South Cambridgeshire.
Health and social care	Demand: Increasing Workforce: Pre-existing workforce shortage	Rising demand, lack of workforce	Employs 16,000 or 14.9% of the total in Cambridge City (UK=13.1%) Employs 8,500 or 10.2% of the total in South Cambridgeshire.
Freight / logistics	Demand: Change in nature of demand Workforce: Pre-existing workforce shortage	Current and future workforce shortages impact distribution	Employs 300 or 0.3% of the total in Cambridge City (UK=2.8%) Employs 1,100 or 1.4% of the total in South Cambridgeshire.
Insurance	Demand: Steady increase in insurance claims	Insurance losses could be heavy	Employs 200 or 0.2% of the total in Cambridge City (UK=1.0%) Employs 100 or 0.1% of the total in South Cambridgeshire.
Banking	Proactively supporting vulnerable firms Little stress in funding markets currently	Reserves run short Cash flow / liquidity difficulties	Employs 1,000 or 1.0% of the total in Cambridge City (UK=2.4%) Employs 900 or 1.1% of the total in South Cambridgeshire.
<b>Sectors most at risk</b>			
Hospitality / tourism	Demand: Sharp decline in trade since Jan c. 500,000 redundancies in past week Seasonal hires of c 500,000 cancelled	National changes seeing 70% drop in bookings YOY Likely lose a full season of trade	Employs 9,900 or 9.2% of the total in Cambridge City (UK=6.5%) Employs 3,200 or 3.9% of the total in South Cambridgeshire.
Aviation / Travel	Demand: has declined rapidly	Revenue and cashflow crisis Unlikely international travel will pick up in 2020	

Retail & wholesale (non-food)	Demand: for non-food retail depressed Supply: severe supply chain disruption Workforce: high risk of infection	Recession further depresses demand Cashflow problems – salaries and leases Disruption to supply chain	Employs 6,000 or 5.6% of the total in Cambridge City (UK=8.1%) Employs 3,900 or 4.7% of the total in South Cambridgeshire.
Manufacturing	Demand: urgent for some products Limited demand for others – e.g. automotive	Fall in export market and domestic demand Ongoing supply chain disruption	Employs 1,900 or 1.8% of the total in Cambridge City (UK=8.1%) Employs 10,000 or 12.1% of the total in South Cambridgeshire.
Construction	Demand: Site work ongoing Supply: Materials supply chain disruption	As work slows down, could see significant downturn and layoffs	Employs 1,400 or 1.3% of the total in Cambridge City (UK=4.7%) Employs 5,000 or 6.0% of the total in South Cambridgeshire.
<b>Priority sectors in Cambridge and South Cambridgeshire</b>			
ICT & Digital	Demand: Consumer sector likely to surge / B2B decline; Unpredictable spikes in demand (lockdown & isolation)	Disruption to market demand Disruption to supply chains Workforce continuity Trade/ travel restrictions – less of an impact	Employs 6,800 or 6.4% of the total in Cambridge City (UK=3.8%) Employs 6,400 or 7.7% of the total in South Cambridgeshire.
Advanced Manufacturing, Engineering Design and Scientific Research	Demand: urgent for some products Limited demand for others – e.g. automotive Supply: shut down of many manufacturing plants	Fall in export market and domestic demand Ongoing supply chain disruption	Employs 9,400 or 8.8% of the total in Cambridge City (UK=3.2%) Employs 17,800 or 21.4% of the total in South Cambridgeshire.
Life Sciences	Demand: Medicines, medical devices, Covid-19 related R&D	Supply chain disruption Advantage in rapid R&D and production	Employs 5,200 or 4.9% of the total in Cambridge City (UK=0.9%) Employs 13,000 or 15.7% of the total in South Cambridgeshire.

## RISKS GOING FORWARD



Retaining businesses, capacity and workforce in face of downturn



For some sectors – high demand, and market positioning (pharma, life sciences, health, food retail)



Businesses that don't want loans, won't get loan guarantees, and up to 4 million in UK ineligible for self-employment support



Financial protection – debt/loan conversions (to LT loans), liquidity



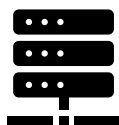
Vulnerability of tourism & hospitality



Remote working – may become more widespread



Supply chain disruption



New ways of working, accelerated automation and AI