

Discussing the pivotal factor
behind the UK's economic uptake:
The COVID-19 Vaccine





Introduction

The UK has become the first country to approve the Pfizer-BioNTech vaccination, paving the way to mass immunisation as they commit to deliver this vaccine as early as the second week of December. Britain's medicines regulator (MHRA) pledges an efficacy of 95% protection against the Covid-19 virus and satisfaction of the highest safety standards for mass consumption. Health secretary Matt Hancock adds that the first 800,000 doses will be administered as of the second week of December. He further reiterates his confidence that mass distribution of this vaccine will allow society to function as normal, allowing all to enjoy the summer of 2021. Those who will be prioritised for this vaccine, care homes and care home staff, will receive their first doses imminently.

On October 16th the government released a consultation document to enact changes to the Human Medicine Regulations in order to support the mass distribution of multiple Covid-19 vaccines. The Independent Joint committee on Vaccines and Immunisation (JCVI) will advise the UK government as to which vaccines are safe for use, and also identify who the priority groups are, based on the best available clinical, modelling and epidemiological data. The usual, and obligatory, route for approving a new vaccine is through the marketing authorisation (product licensing) process. However, until the end of December 2020 EU legislation requires biotechnological medicines such as Covid-19 vaccinations to be authorised by the European Medicines Agency and this would automatically translate to approval in the UK also. From January 2021 the UK's licensing authority will have a new monopoly of powers to license all medicines, including vaccines. Due to the significant threat which this coronavirus poses to the country and with several vaccinations entering the final stages of clinical trials, the government intend to implement temporary legislation to speed up this process. This new law will allow for the UK's regulatory authority to bypass this time-consuming formality and approve the use of a Covid-19 vaccination before the end of the Brexit deadline, as we have seen happen most recently.

Biotechnology

The highly anticipated distribution of a Covid-19 vaccine comes as welcome news for all as we finally begin to see, with more clarity, an end to these challenging times. Rumours as to the development of a successful SARS-CoV-2 virus immunisation vaccine have been circling for the past few months and yet have always seemed somewhat out of reach. According to the Coronavirus Vaccine Tracker, compiled by the health correspondents of The New York Times, 7 vaccinations have reached approval for distribution to the elderly and the most vulnerable in society. The leading Pfizer and BioNTech vaccine has been praised by top infectious disease specialists as 'extraordinary' in its ability to protect more than 95% out of tens of thousands of trial participants from symptomatic infections. Both companies are now eligible to apply for the first regulatory approval of a vaccine in the United States. In their final analysis, Pfizer's vaccine is proven to be 95% effective with no significant safety issues, a welcome boost to the mentality of many operating in the economic market. This news came shortly after rival competitor Moderna released their successful pre-liminary results proving to be of just over 94% in efficacy. As of the 17th of November, the UK have placed an order for 5 million doses to be delivered as soon as possible, with distribution to be underway by mid-December. No doubt this is a nod towards the goal to 'save Christmas' by making visits to care-homes and household mixing viable over the holiday season.

The Oxford AstraZeneca vaccine has produced some promising results in their phase two findings. It has been shown to produce a strong immunity response in adults from the elder, and most at risk, generation. As the vaccine moves into phase three, it will be tested to see whether it prevents people from developing the Covid-19 virus. The UK government have placed their faith in this vaccine, more than any other, with an order of 100 million doses as compared to 40 million of the Pfizer-BioNTech and 5 million of the Moderna. Perhaps, this is partially due to this vaccine's more favourable storage and distribution capabilities. The technology for this vaccine does not require it to be stored and transported in a deep freeze. Essentially, scientists have taken the genes for the spike protein on the surface of coronavirus and placed them into a harmless virus which is then injected into the patient. This harmless spike-carrying virus enters the cells which then start to produce the coronavirus spike protein, prompting the immune system to create antibodies. These antibodies activate killer T-cells which destroy all other infected cells. Therefore, if the patient contracts coronavirus again, the body is already equipped with the antibodies and T-cells required to destroy the harmful virus.

The UK's commitment to this virus means, if this Covid-19 vaccine is approved before Christmas, it will be available for wide-spread distribution early next year. In a matter of months, we could see a complete return to normalcy.



The viability of mass distribution

Most vaccines which are being developed in clinical trials require a double dose and Pfizer-BioNTech and Moderna's vaccines are no exception. As pre-liminary results continued to exceed expectations this summer, supply companies began to negotiate deals with many large orders to countries throughout the world. As mentioned earlier, the UK have placed an initial order for 5 million of the Moderna vaccine, which requiring two doses due to the mRNA technology, will protect 2.5 million. Whilst this first order will be distributed to the elderly and vulnerable first, the UK have invested another £350m in a further 6 potential vaccine candidates entering phase 3 of clinical trials. Needless to say, it is very likely that more vaccines will be approved and become widely available in the coming year. Oxford University Professor, Sir John Bell, encouraged optimism upon the news that the government would begin distribution of the vaccine in December. He even claimed that if distribution is handled effectively the UK may resume normalcy as early as Easter next year.

Yet, as with any other ground-breaking medical advancement, we may expect a few teething difficulties. Transporting the vaccine from the laboratory to local doctors' surgeries could pose some significant challenges. The leading vaccines, Moderna and Pfizer-BioNTech, all rely on mRNA technology. Essentially, the

mRNA messenger delivers genetic instructions for building viral proteins within the body, this specific strain will produce a protein known as spike. Once injected into the cells, the vaccine causes the body to produce and release spike proteins which provoke a response from the immune system. In this case, it enables the body to create antibodies which are immune to the SARS-CoV-2 virus. However, for the mRNA to remain intact it must be kept in a deep freeze, the vaccine must be cooled to minus 80 degrees until it is ready to be injected. Pfizer are currently designing transportable containers which will keep the vaccines at this imperative temperature as they are being distributed throughout the UK.

The vaccine is not compulsory but for those who choose to receive it, it will be distributed in three ways across the UK. The first will be through NHS hospitals as they are already equipped with the infrastructure for the storage requirements, conditions of -70 degrees Celsius. The second to be rolled out will be vaccination centres, using the same structure as the Nightingales project and even including some of these centres. Finally, the third will be distributed locally through supplying GP practices and pharmacies. The preparation work is well underway as 50 hospitals are on stand-by to receive the first doses of the vaccine and vaccination centres are being constructed using conference



centres and sports stadiums. It has been estimated that over a million doses could be delivered on a weekly basis, following this triple distribution structure, once there is more availability of dosage. With the efficiency of delivery, it is entirely possible that the ability to vaccinate will vastly outstrip supply.

Should their vaccine reach the final stage of authorisation, globally, Pfizer-BioNTech expect to manufacture over 1.3 billion doses of their vaccine worldwide by the end of 2021.

Another consideration is the country's infrastructural capability to administer Covid-19 vaccinations on a mass scale and with suitable urgency.

The new legislation introduced by the government will allow for the training of more healthcare workers to safely deliver the vaccinations to the public and will also support the MHRA to grant a temporary authorisation to license vaccines providing they meet the highest safety, quality and efficacy standards. To ensure that patient safety remains the priority, this expanded workforce will be required to complete a robust training programme. Staff for this will be recruited from the NHS Bring Back Scheme, drawing on a selection of experienced NHS-related professionals. The implementation of new legislation is intended to improve accessibility to the vaccines for those most at risk.



How the availability of a Covid-19 vaccine has affected investor confidence

Reports from various financial analysts have suggested an encouraging correlation between the progression of vaccine availability and the performance of the investor market. According to Bloomberg, the publication of the positive pre-liminary results for the Pfizer and BioNTech vaccine caused a surge in share value and an increase in company trading by as much as 24% in a matter of hours. The effect was felt globally as the value of the MSCI All Country World Index increased by over £1.36 trillion. A global trend which was reflected in our own statistics as a noticeable increase in trading took place shortly after the positive news earlier this month.

It seems that the early distribution of this vaccine has provided a much-needed boost in morale to developers and investors alike. The global increase in appetite for risk bolstered the UK stock market. Sterling currency strengthened almost immediately as the pound was raised by 0.5%, versus the U.S dollar, within minutes of the Pfizer-BioNtech announcement reaching the public. The renewed optimism has provided relief to many real estate investors in urban centres. Once a vaccination is in mass distribution, urban centres will become safe for large companies, schools and Universities to return and, in this respect, we may see a reverse from the lockdown-inspired suburb migration to re-urbanisation. House price increases through the final quarter of 2020 and into 2021 provide an encouraging picture for those with real estate assets in the country's economic hub, London.

The replacement of multi-generational high street giants, such as Debenhams, with e-commerce giants, such as Amazon, has caused many investors to question the longevity in this digital-shopping shift. However, according to the investment director of AJ Bell, demand for warehouse sites and logistics space is set to increase as more businesses look to expand their delivery capabilities and at an improved pace. Subsequently, industrial property supply has been placed under significant pressure in the UK, causing demand to rocket as storage rental growth is predicted to increase by up to 1.7%. News of widespread distribution of a vaccine also appears to have increased investor confidence in the industrial sector as the number of leases for long-term warehouse rental peaks. The specificity of the vaccine storage conditions could also provide for another element of demand in this area of the property market. Pharmacies, hospitals and testing facilities will require a significant amount of controlled storage space to meet the conditions required to contain the active biotechnologies of the Pfizer-BioNtech and Moderna vaccines.

As the countdown to Christmas has officially begun, the encouraging approval of a Covid-19 vaccination for immediate distribution in the UK provides a new hope for families and businesses alike. As we discussed, the wide-spread availability of a Covid-19 vaccination has become a pivotal factor to the success of the investment market and a symbol for which many investors have placed their confidence in.



Canterbury Innovation Centre
University Road, Canterbury, Kent. CT2 7FG
Email: info@accumulatecapital.co.uk
Tel: 01227 936 996
www.accumulatecapital.co.uk