# Impact of COVID-19 on the UK Labor Market

Mengyue Liu<sup>1,a,\*</sup>

<sup>1</sup>King's College London, LondonWC2R 2LS, UK a. k21032015@kcl.ac.uk \*corresponding author

*Abstract:* Under the influence of the epidemic on many aspects, the unemployment rate has become a hot topic of concern to the whole United Kingdom society in the present era. Based on the data of the present three years, the unemployment situation in the United Kingdom is analyzed from redundancy and wage. By comparing the average value, dig out the period of abnormal value, and consult the value when to increase and decrease, and then discover the impact of the events in that period on the unemployment rate and analyze the trigger of the events, to better understand the situation of unemployment. According to research findings, the unemployment rate fluctuated significantly during the epidemic period, which was influenced by multiple policy and social factors. Moreover, the analysis of the redundancy rate and wage changes can also reveal the unemployment situation and reflected social problems in the UK, and provide case reference analysis for future solutions.

Keywords: unemployment, COVID-19 pandemic, the UK labour market

# 1. Introduction

Unemployment become a serious problem in the UK society under COVID-19. Since COVID-19, a lot of people lose their job in the UK. The job can make people feel self-worth and self-identity which is a crucial criterion to estimate whether someone is happy or not. The unemployment rate (the proportion of people in work or looking for work aged 16+ who are unemployed) rose from 4.0% in January-March 2020 to 5.2% in October-December 2021 but fell to a rate of 3.7% in January-March 2022. It was the highest unemployment rate had been since 1974 [1]. The UK government applied JRS, and the heart of the policy is employers can receive 80% of the pay of employees (up to £2,500 a month) who are temporarily off work. This policy was regarded as one of the most effective ways to do with the COVID-19 situation, but the rate still fluctuation [2]. After getting coronavirus, people will not feel well, so most of them choose not to go out to work or do several activities outdoor. Based on the data from the office for national statistics, the inactivity rate among working-age people with reported covid grew by 3.8 % between July 2021 to July 2022. In particular, the age between 50 to 64 years old had an effectively high rate of inactivity. What's more, workers experienced a long-term absence of 18 to 29 weeks after the coronavirus, and the number of people aged 15 to 64 who took retirement time was as high as 69.1 percent. Therefore, COVID-19 distributing to a decreasing percentage of taking part in the UK labor market during the pandemic. The inactivity rate decrease means a low flow of people, which lead to lower income in

some industries. When this kind of industry does not need such many employees, then quite a few people will lose their jobs.

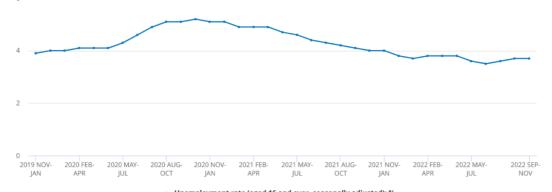
Research on the gender aspect to expound unemployment situation which reveals gender disparity in unemployment under COVID-19. The rate of women who lose their job is 5 per cent higher than men, which reflects that gender differences also influence the unemployment situation [3]. A slice of other research studies the unemployment situation from the manner of work, which focuses on self-employed workers. The UK's LSE-CEP survey showed that self-employed have the biggest impact during COVID-19 [4]. The study can get a job is also one of the parts to affect the unemployment rate. Nevertheless, this research is based on a subdivided aspect. In the global economic situation is not positive, the company has to make several policy adjustments to survive, there is no doubt that redundancy is the most direct way. Not only use that way to adjust but decreasing the wage is also a straightforward method. Therefore, the use of redundant and wage trends is intuitive to aid the analysis of the unemployment rate.

This paper is based on the UK unemployment rate chart, redundant chart, and wage chart from 2019-2022, and through the chart peaks changes, which assists to analyze the UK unemployment rate under a pandemic. This research is divided into three aspects, the first one will analyze the unemployment rate from a chart from an overall aspect, and then the study will use two redundant charts and wages to assist the analysis.

## 2. Unemployment Rate

The UK society has had a big change since COVID-19. After the lockdown and policy adjustment, people start paid attention to the problem of unemployment seriously. Several papers used Z-test to show that unemployment has significant change due to COVID-19 [5]. Unemployment can be interpreted as someone who is not able to get a job at a working age (16 or over) but intends to be in full-time employment. Since the COVID-19 period, the number of unemployed people has soared, which can be directly seen in Figure 1. It shows that the rate has a significant increase from April 2020. From January 2020 to October 2021, the rate contains above 4 %. The value reached a staggering number which is 5.2 % between October to December 2022.

The reason is also a crucial part of the analysis of the change in the unemployment rate. For a rudimentary reason, the coronavirus cases and deaths result in unemployment [5]. During the 2020 period, when the unemployment rate is on the rise, from the data of UK government's COVID-19 data. The infection rate and death rate are also on an upward trend. The second reason is a lockdown, there are two times of lockdowns in 2020. The economy was in enforced hibernation and a lot of people lost their jobs. From the office for National Statistics, the number of part-time workers decreased to a negative percentage during 2020-2021, which has a significant influence on the unemployment rate.



- Unemployment rate (aged 16 and over, seasonally adjusted): % Figure 1: The unemployment rate in the UK during COVID-19 [6].

Unemployment has a great impact on people and society. For the family, several families with low income or little savings will face severe challenges, and the possibility of family conflicts will also increase. Millions of families and people are currently trapped in a world full of instability and uncertainty. Long-term unemployment and increased economic stress are negatively correlated with self-esteem and have serious consequences for physical and mental health and family harmony [7]. For the age proportion in unemployment. According to the data on Statista, approximately 10.5 % of people who is aged between 16 to 24 years old were unemployed in the UK. There are a few reasons young people are more likely to lose their jobs. Firstly, young people lack experience compared with old people, and training them to need time and money. But under the COVID-19 period, more employers need employees who have a higher efficiency to complete work rather than young people who do not discover how to fix the problem. For society, it will be harder for young people who are finishing school to find that job offers which they thought can get the offer withdrawn. It will be tricky for people with less education to find work. Historically it will be harder for individuals to find work again, and the longer the period of unmatched employment, the harder it will be to find work [2]. The brutal reality of the unemployment situation cannot show from this single aspect. Then the study will show two ways that are more elaborate to explain the situation.

# 3. Redundancy Rate

The economic impact brought by COVID-19 has forced quite a few employees to redundant, which has a certain negative effect on employment and social stability. The redundancy also is a crucial part that influences the unemployment rate. The global economy is in an extremely hard status since hundreds of thousands of companies have been compelled to shrink the number of employees, so millions of people lost their jobs [8]. Then the people who lost their jobs will become part of unemployment rate. The redundancy rate is a really promising aspect of the analysis of the unemployment rate. The redundancy can be explained by a situation in which someone loses their job since their employer does not need too much labor. The redundancy rate can be seen how changed in the last three years in Figure 2 below. The values above the average value are from April 2020 to January 2021. After comparing with Figure 1, it barely has a peak at the same time as the unemployment rate. The peak is 14.5 people will be redundant in 1000 people when September to October 2020, which is the highest rate in these 4 years.

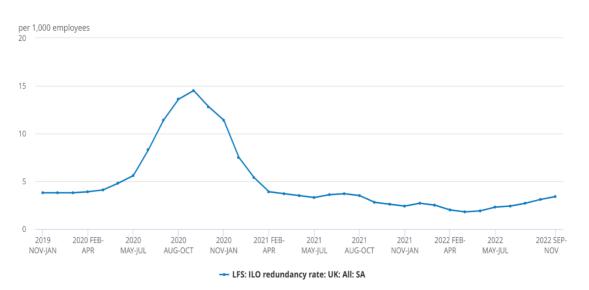


Figure 2: Redundancy rate in the UK during COVID-19 [6].

The study will analyze the reason from the government part and the people part. In terms of government policy, JRS works at the beginning but it produces several other problems. The government has formulated the JRS policy, which aims to keep workers attached to their employers, so that they can easily return to work once lockdown restrictions begin to be lifted, thus avoiding mass layoffs and the subsequent problem of a large number of unemployed people trying to return to work [2]. However, this policy will not last forever. Many employers realize that it is much cheaper to pay unemployment assistance to unemployed people than to maintain JRS. Moreover, more and more employers quit JRS since August 2020, so the redundancy rate almost reached its peak around August [2]. The tourism industry is a perfect instance to explain why employers tend to quit JRS. People do not figure out when COVID-19 is ending, and there are a host of uncertainties. The company like Airlines, hotels, and travel agencies will be seriously affected. According to the data report, nearly 5 million jobs in the global hotel industry have been affected by the COVID-19 pandemic [9]. Laying off workers is a more direct way to reduce a company's expenses since there is so much uncertainty about the pandemic

The second part to analyze the reason is from individuals. During the lockdown, people have a really low demand. During the lockdown, everyone was forced to stay at home, except for food and drink, and people's demand for clothes, travel, shopping, and so on dropped dramatically. COVID-19 presents a unique scenario of a simultaneous fall in supply and demand, along with a reduction in production and employment [10]. Manufacturing and logistics have been halted as a result of the strict blockade, and supply and demand for various products have been affected by the restrictions imposed on shopkeepers and retailers [10]. If people have a low demand for a certain item, the business will produce fewer things, require fewer employees, and the demand for raw materials will also decrease. During the 2020 period, the lockdown always happened so fewer demand which for take-out food, no take-out food means a slice of the man takeaway will lose their job. So it can be seen that the demand of people is also a big part of redundant. The relationship between redundancy and unemployment is worth exploring. Unemployment can be realized as voluntary, the day you are paid off, your unemployment may be passive, but on the next day, everything will become qualified.

# 4. Wage

After analyzing the unemployment rate, this paper will analyze the unemployment rate from the aspect of wages. When people's unemployment rate is high, it is not difficult to perceive that their wages will decrease. However, during the period of COVID-19, a multitude of companies reduce wages to reduce expenses, which undoubtedly has an impact on people's lives. One part to note from this analysis is that studies of the trajectory of COVID-19, and its subsequent economic impact, show that the crisis has been worse for low-wage workers than for all others [11]. Fewer low-wage workers in the workforce mean higher average income for the remaining workers. The next step is to use the chart for analysis. From Figure 3, it can be seen that from March 2020 to October 2020, the wage trend like the valley bottom, and from April 2020 to August 2020, the value reached a negative. AWE is our main measure of near-term changes in earnings. From the office for National Statistics, it can be seen that AWE is the ratio of estimated total paid in wages and salaries for the whole economy, divided by the total number of employees for any given month.

Proceedings of the 2023 International Conference on Management Research and Economic Development DOI: 10.54254/2754-1169/19/20230152

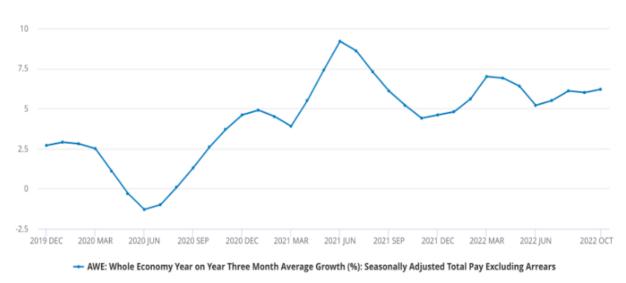


Figure 3: AWE in the UK during COVID-19 [6].

The first fall is from March to May 2020, since at that time the UK experienced the first time lockdown, even though a multitude of workers benefited from JRS which was enacted by the UK government, the working hours were decreased. Then from other people's research, the decrease in wages was completely passive by the private sector [12]. In the early days of COVID-19, many people were forced to stay at home. The construction part of the hospitality and retail industries was hit hard, and working hours were drastically reduced, thus leading to lower wages. After this sharply decreasing, the wage slowly rise again, people were working more hours as COVID-19's control and lockdown policy eased. But at the same time, it was found that the unemployment rate during this period was still at the trough, but why did the average wage rise? This could be attributed to the high unemployment rate of the low-income group. As fewer people were employed, the average wage would naturally rise. Low-income people have been the hardest hit by the crisis, and many industries have been slow to recover, making them part of unemployment. By comparing the wage change chart with the unemployment rate chart, it can be seen that they directly show a negative correlation, and the obvious range of change is in roughly the same period.

The relationship between wages and unemployment is also trivial to understand, but the factors that affect it are more complex. Since the number of people will also be variable to influence the average wage. But from a total page to see, when the average wage is decreased unemployment will increase, so these two have a negative correlation. From another perspective, it has been mentioned before that unemployment is a voluntary behavior, why several people take the initiative to lose their jobs because the salary cannot reach their expectations. The result of mass layoffs is not unemployment, but a decrease in wages and life quality which is extremely to figure out the increase of job seekers, enterprises reduce the number of jobs, then the decrease in wages.

#### 5. Conclusion

There is a close link between COVID-19 and unemployment, and the UK society is also facing great challenges in the recovery of the economy. Therefore, this study examines the changes in the unemployment rate during COVID-19 and the influencing factors. The study found that the unemployment rate had a great impact on British society during the period of COVID-19, which lead to a great fluctuation in the data and reached a peak of 5.2% in recent decades. In addition, through the changes in the redundancy rate and wage, the redundancy rate and the unemployment rate were positively correlated, while the redundancy rate and wage changes were negatively correlated. It also concluded that changes in the unemployment rate of COVID-19 are influenced by

factors such as social policies and the employment environment. The government has put forward quite a few solutions to alleviate the high unemployment rate. After the JRS policy, the high unemployment rate has been alleviated to several extents, but the government will be greatly affected by this policy since the government needs to spend too much money. The help is temporary, but it does not solve the problem. The probability of psychological problems will also increase if this person is the sole source of the family income, the blow to the family is also huge. Social problems will also emerge in an endless stream, low-paid people will be more likely to be laid off, due to the company will no longer need more people to produce because of the decrease in people's demand, and these people with low skills and academic backgrounds will lose their jobs and can not to find a job easily. If they are in a redundant condition, there will be no source of wages, and the problem will focus on unemployment again. Only by understanding and analyzing the situation and reasons for unemployment, can people better deal with the occurrence of similar events next time. Both society and government can have a lesson from this surge of unemployment under Covid-19 which can have better responses to the next crisis.

This paper will provide references for the research on the causes of the unemployment rate and the fluctuation of the unemployment rate. Based on data analysis and reasons analysis, people pay more attention to the influence of the unemployment rate on society. It can be concluded that these two aspects which are redundant and wage fluctuations are also factors affecting the unemployment rate. The current research only analyzes the problem from two aspects, future research should be more directions to analyze and improve, since there are many small aspects easy to be ignored, and these issues also can be applied to the mathematical model for theoretical analysis.

## References

- [1] Coronavirus: Impact on the labour market, Commons Library Research Briefing (2022).
- [2] Mayhew, K., & Anand, P.: COVID-19 and the UK labour market. Oxford Review of Economic Policy, 36, 215–224 (2020).
- [3] Oreffice, S., & Quintana-Domeque, C.: Gender inequality in COVID-19 times: Evidence from UK prolific participants. Journal of Demographic Economics, 87(2), 261-287 (2021).
- [4] Blundell, J., Machin, S., & Ventura, M.: Covid-19 and the self-employed: Six months into the crisis. Centre for Economic Performance, London School of Economics and Political Science (2020).
- [5] Su, C. W., Dai, K., Ullah, S., & Andlib, Z.: COVID-19 pandemic and unemployment dynamics in European economies. Economic Research-Ekonomska Istraživanja, 35(1), 1752–1764 (2021).
- [6] Offices of National Statistics, https://www.ons.gov.uk/, last accessed 2023/1/5.
- [7] Achdut, N., & Refaeli, T.: Unemployment and psychological distress among young people during the COVID-19 pandemic: Psychological resources and risk factors. International journal of environmental research and public health, 17(19), 7163 (2020).
- [8] Blustein, L., Duffy, R., Ferreira, A., Cohen-Scali, V., Cinamon, G., & Allan, A.: Unemployment in the time of COVID-19: A research agenda. Journal of Vocational Behavior, 119 (2020).
- [9] Tu, Y., Li, D., & Wang, J.: COVID-19-induced layoff, survivors' COVID-19-related stress and performance in the hospitality industry: The moderating role of social support. International Journal of Hospitality Management, 95 (2021).
- [10] Loayza, N., & Pennings, C.: Macroeconomic Policy in the Time of COVID-19: A Primer for Developing Countries. Research and Policy Briefs, 1–9 (2020).
- [11] Singh, S., Kumar, R., Panchal, R., & Tiwari, K.: Impact of COVID-19 on logistics systems and disruptions in food supply chain. International Journal of Production Research, 59(7), 1993–2008 (2020).
- [12] Cubrich, M.: On the frontlines: Protecting low-wage workers during COVID-19. Psychological Trauma: Theory, Research, Practice, and Policy, 12(1), 186–187 (2020).