The Impact of Brexit on the Employment of EU Practitioners

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ABSTRACT

Leaving the EU would free Britain from what they called German dominance and would bring considerable political and economic benefits. But Brexit opponents have warned that leaving the European Union is akin to an act of selfmutilation, making Britain smaller, poorer, and more isolated. To test this effect, this paper analyzes the unemployment rate in the UK around the Brexit policy. This paper uses a difference-in-differences model to analyze the impact of Brexit on the employment of EU workers in the UK, and then analyze the current situation in the UK. The data for this article comes from the Office for National Statistics - Labour Force Survey. The sampling time is from the fourth quarter of 1999 to the fourth quarter of 2019, a total of twenty years of data. The article finds that the policy has a significant impact on the number of EU nationals working in the UK. The UK will also make some policy changes in the future to pursue a win-win situation.

Keywords: Brexit, Employment, Difference-in-Differences Model

1. INTRODUCTION

On 31 January 2020, the UK announced its formal withdrawal from the EU, followed by a transition period from the EU, which also means that the UK job market is no longer open to EU countries unconditionally. In the past decades, the UK has been the second-largest economy in the EU, and its local developed industries such as finance and animal husbandry have provided many jobs to the world, however, as more and more EU citizens enter the UK, the social security and healthcare systems are under pressure and this has led to discontent among British citizens, so in 2016 the UK government formally launched a referendum on Brexit in an attempt to take back 'their rights'.

There are many researchers investigating the impacts of Brexit. The British Daily Telegraph pointed out that, on the face of it, Brexit is a political farce in a democratic political system, where politicians are unable to effectively address issues of social justice, immigration and refugees, and the EU system and taxation, giving the right to solve problems to the people of society [1]. Brexit has created a great deal of uncertainty for the employment of ordinary people.

Alfano and Marco argue that Brexit has been very bad for overseas workers, especially those from the EU, with a sharp drop in work-related migration from EU countries after the referendum and a stagnant growth rate in overseas employment.

Jonathan believes that it does not have to be just a disaster for the UK job market [2]. Brexit takes the pressure off welfare in the UK, allowing more funding to develop new industries, and will lead to many new quality jobs [3-5].

This paper uses a difference-in-differences model to analyze the impact of Brexit on the employment of EU workers in the UK, and then analyze the current situation in the UK.

The organized structure of the article could be included in the following. In Section 2, the author introduces our theoretical methods and data. Then, in Section 3, we conduct a DID method to analyze the results. In Section 4, the article conducts a discussion to analyze the current situation and future strategies. Finally, we conclude the article in the last Section.

2. THEORETICAL METHODS

The data analysis in this paper takes a difference-indifferences approach by analyzing 20 years of data from 2000 to 2020, using the first quarter of 2016 as the cutoff point to explore whether this policy has had an impact



on employed people in the EU since the start of the implementation of the EU referendum in 2016. The data for each quarter is then plotted as a line graph for analysis, looking at the impact of the policy on employed people in the UK market from a macro perspective.

Specifically, the first step is a common trend analysis, illustrated by a chart that shows that the trend would not have changed if the policy had not occurred [6-8]. The second step is to set the post and treat variables, set 0 and 1, and import them into StataIC for regression analysis, resulting in significant results.

According to the general form of the DID model, this paper sets the econometric model as the following basic expression:

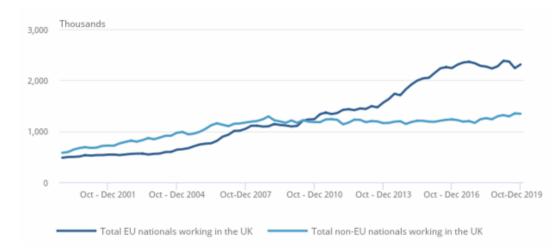
$$Y_{it} = \alpha_0 + \alpha_1 * treat + \alpha_2 * post + \alpha_3 * treat * post + e$$
(1)

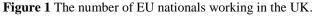
The time series of the DID model is from 1999 to 2019, setting the total number of EU nationals working in the UK from 2016 to 2019 as the experimental group and setting the data from 1999 to 2015 as the control group [9-10]. In the control group make the post variable equal to 0 and the treat variable equal to 1, yielding p*t equal to 0; in the experimental group the post variable equals 1 and the treat variable equals 1, so p*t equals 1.

3. DATA ANALYSIS

3.1. Common Trend Analysis

By collecting data from 1999 to 2019, trends in the number of non-UK nationals working in the UK over the last two decades were obtained (Figure 1)





There are two key points in the chart, in 2008 and 2016, where the UK signed the European Community Treaty, which states in Article 48 that "the free movement of workers implies the abolition of all discrimination between workers in the Member States on the grounds of nationality in respect of employment, remuneration, and other labor conditions. " According to the principle of non-discrimination, workers have the right to work, to seek employment, or to retire in any of the member states [11-12]. Following the signing of this treaty, a large number of EU labor and skilled workers entered the UK for employment, and the graph clearly shows a clear upward trend in discounting from around 2008 to 2016, which of course has been attributed to the accession of Poland and other Eastern European countries, but the labor mobility treaty with the EU was clearly a more important influence.

Another key point in time was 2016 when the introduction of various policies following the announcement of the official opening of the EU referendum led to an abrupt end to the growth in the number of people employed in the EU, and the numbers remained largely unchanged for the following four years, even as the overall trend in the figures fell under the impact of the Covid-19 outbreak in 2020.

This indicates that the event of Brexit is a key factor in the trend of the line chart.

3.2. DID Model

The regression analysis was carried out by importing Excel into Stata software to obtain Table 1.

Table 1. Results of regression analysis

	Ln_Total number of EU
VARIABLES	nationals working in the UK
Post	2.209**
	(0.0900)
Treat	-0.0790
	(0.0566)
P*t	0.686***

	(0.127)
Constant	6.919***
	(0.0400)
Observations	162
R-squared	0.400

From the regression analysis results, it can be seen that after the Brexit referendum in 2016, the policy has a significant impact on the number of EU nationals working in the UK.

4. CURRENT SITUATION AND STRATEGY ANALYSIS

Things did not go as smoothly as previously expected in the UK after Brexit, and after problems such as labor shortages, petrol shortages at petrol stations, and shortages of medical and nursing staff were revealed, the UK government was put under a lot of pressure, so the strategy chosen by the UK can be broadly divided into two scenarios - one is strongly pro-Brexit, believing that even if the UK sticks to long-term austerity policies, as the UK has a better quality job market after optimizing its employment structure, skilled people from the EU will still choose to return to the UK market, even if it is difficult, and that the UK can save a large amount of expenditure to develop its own industries during the transition period so that the UK will get a higher return than before. Another point of view is that we hope that the UK will choose to relax the policy appropriately, which can solve the UK's immediate problems in the short term, otherwise, if the UK market continues to deteriorate, the pound continues to fall, the job market is not favorable will put the UK in an even more disadvantageous situation, after which the policy will not be relaxed to receive the same staff resources as before.

In addition, there is the possibility of cooperation in this game between the UK job market and EU job seekers, with the UK government having an incentive to initiate policies such as opening up a visa (similar to the PSW visa) that would change the gains for EU workers while keeping the general direction of the UK's strategy intact so that the UK does not have to face such a dilemma.

Or to use the UK's position in the EU to put pressure on individual EU countries to reduce the number of lowskilled workers within the UK and increase the proportion of highly skilled people, changing the value of the gains the UK makes when choosing its strategy and thus getting out of the trouble it may encounter.

5. CONCLUSION

Since the UK joined the EU, as the second-largest economy in the EU, the UK's positive role in the EU is self-evident, one of which is the acceptance of EU employment staff, however, since the signing of the European Community Treaty in 2008, a large number of EU nationals have flooded into the UK market, which has brought considerable pressure on the UK's social welfare system, healthcare system and education system, and the UK has been under the leadership of three governments and amidst public outcry, the initiative to leave the EU was completed from 2016 to 2020. The data in this paper visualize the impact on the employment of EU citizens since the start of the referendum in 2016, and also analyses the post-Brexit UK job market and the situation faced by EU employed people and the choices they may make.

This paper also has some deficiencies in data processing. The first is that other complex influencing factors are not considered in the model setting. For example, economic problems in the United Kingdom also have some impact on employment. And Covid-19 is not over yet, and the impact is difficult to measure, these are areas where the article should be improved in the future.

From the analysis in this paper, the Brexit policy initiated in 2016 significant challenges for EU nationals coming to the UK for employment, and that the UK may choose to cooperate and threaten in its subsequent policies to change the strategic choices of EU workers to pursue a win-win situation.

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