TEAM-A

Impact of Brexit on Major Western European Economies

*Summary and division of work*

OVERVIEW

This project was aimed at discovering the effects of major events occurring throughout Brexit and their impact on the major economies in EU.

MODELS

Model was developed after background research on Brexit and its impact on various economies in EU. The previous research is mostly focused on UK and the duration of impact is measured in longer durations of about 6 months or so. Our models aim to look at daily data to better capture the effect of each event significant in Brexit story.

To achieve this, previously we implemented ARDL models. Particularly to study the effects on the returns of stock markets in France and Germany due to Brexit. In our previous model we included another ARDL model to study the effects on the returns in UK stock market because of France and Germany. Because ARCH effects were present in all three models, they were re-estimated using an ARCH model.

But this time, we made use of VAR models after confirming if the markets were not cointegrated. We came up with two ordering of variables. One based on granger causality test and second based on the size of the economies in the region. The variance decomposition also varies with respect to the different orderings of the variable. The effects were somewhat inconclusive and we found that our previously estimated ARDL model accounting for ARCH effects was better at predicting the effects of key events in Brexit on our economies than the VAR model.

A summary of key variables used can be found in the table below.

|  |  |
| --- | --- |
| LABEL | VARIABLES |
| Boris Johnson resigned as foreign secretary | dboris1 |
| Boris Johnson becomes PM | dboris2 |
| Covid lockdown during the year | dcovid |
| UK voted to leave EU | delection |
| UK sent the letter proposing to leave EU | dletter |
| Returns France | retfra |
| Returns Germany | retger |
| Returns UK | retuk |

DIVISION OF WORK

Each instance of the project was worked on collaboratively. The team dynamics was to work weekly together on the project. In terms of division of work, we feel that all the three members of the group - Stuart, Kushal and Dara have contributed equally to the project. Every one has experimented by testing out different model configurations, and performing various tests on the model. Also, the presentation was made using a google sheet which was worked on by all the three group members at the same time.