EBUS633 Assignment 2 Requirements

Module:	EBUS633 Big Data Analytics for Business
Semester:	2021/22 Semester 2
Submission date:	**19th May 2022 by 12 noon**
Submission method:	This coursework requires online submission only. You do not need to submit a hard copy of the coursework. You should submit your coursework via Turnitin, which is a plagiarism and collusion detection system. Make sure you comply with the Academic Integrity Policy adopted by the University of Liverpool (https://www.liverpool.ac.uk/media/livacuk/tqsd/code-of-practice-on-assessment/appendix_L_cop_assess.pdf). You are required to submit your report once only (i.e., your first submission is the final submission). If you do not submit to Turnitin, your work will not be marked. The submission link will be set up by the student support office before the submission date.
Penalty for late submission:	Standard UoL penalty applies
Word limit:	2000 words (excluding references and appendices)
Weighting:	50%
Requirements:	In this assignment, you need to quantify the impact of a specific event on a sample of publicly listed U.S. companies in terms of abnormal stock returns and also need to analyse how the impact of the specific event varies across different sample firms. • You can choose any specific event at any level as long as it occurred between 2013 and 2022. Some event examples include, but are not limited to, U.S.-China trade war, Ukraine invasion, Brexit, COVID-19 vaccine announcement, withdrawal from the Paris Agreement, #BlackLivesMatter movement, big data investments, data breaches, blockchain adoption, CEO appointments, joint venture formation, product recalls, supply chain disruptions, corporate scandals, etc. Please note that you cannot choose WHO's PHEIC declaration on 30 January 2020 as your event because we have analysed this event in our lectures.

- You can choose a sample of companies from the Russell 1000 Companies.xlsx file, which can be downloaded from CANVAS. This Excel file contains about 1000 companies extracted from the Russell 1000 Index (https://en.wikipedia.org/wiki/Russell_1000_Index). You can use all these companies as the sample for your analysis, or your analysis can focus on a subset of these companies from some industries with specific SIC codes (https://en.wikipedia.org/wiki/Standard_Industrial_Classification). Some industry examples include Manufacturing (SIC codes = 2000-3999), Transportation (SIC codes = 4000-4799), Services (SIC codes = 7000-8999), and Finance, Insurance and Real Estate (SIC codes = 6000-6799). Please note that you need to choose at least 100 companies for a meaningful analysis.
- For analysing how the impact of the specific event varies across different sample firms, you need to consider and analyse 2 factors that may explain the variation of the impact. Some factor examples include, but are not limited to, firm size, firm age, firm profitability, R&D intensity, IT capability, operational efficiency, inventory turnover, industry competition, industry sales growth, unemployment rate, political stability, etc.
- You need to prepare your report based on the following structure.

1. Introduction (250 words)

In this section, you need to introduce the specific event and the sample companies you choose for data analysis, explain why you choose this event and these companies, and state clearly what questions you are going to answer in your data analysis.

2. Hypothesis Development (450 words)

In this section, you need to develop 3 hypotheses. The first hypothesis (H1) is about the overall impact of the specific event on the sample companies and the next two hypotheses (H2 and H3) are concerned with the 2 factors used to explain the variation of the impact across different companies. You need to state your hypotheses clearly and also need to provide logical and convincing explanations of why you have these hypotheses. It is very important to cite appropriate references to support your explanations and arguments in the hypothesis development.

3. Event Study (350 words)

In this section, you need to document your event study results that are used to test your first hypothesis (H1). You need to justify your event study

settings (e.g., risk model, estimation window, event window), present your test results clearly in a table, and interpret the test results to determine whether H1 is supported or rejected.

4. Intergroup Comparison or Multiple Regression (450 words)

In this section, you need to document your intergroup comparison or multiple regression test results that are used to test your last two hypotheses (H2 and H3). You can choose either intergroup comparison or multiple regression for testing H2 and H3. You need to explain how to measure the 2 factors and conduct the analysis, present your test results clearly in a table, and interpret the test results to determine whether H2 and H3 are supported or rejected.

5. Discussion and Conclusion (500 words)

In this section, you need to discuss your test results, explaining how they are similar to or different from past studies, what are the implications for future research and/or practice, and what are the limitations of your data analysis. You also need to provide a summary of your research at the end of the report.

References

You need to provide relevant references to support your explanation and arguments across your report. References can be from various sources such as books, journal articles, and newspapers. The Harvard referencing style is currently used by the Management School (http://libguides.liverpool.ac.uk/referencing/harvard). You need to make sure your referencing style is correct and consistent. References will not be included in the word counts.

Appendices

You can include relevant supporting information (e.g., the direct outputs from the WRDS Event Study website or IBM SPSS) in the appendices, which will not be included in the word counts.