The University of Manchester

A step-change in quantitative social science skills

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Measuring the resilience of the food industry in the UK

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Overview of the Data Fellowship

I worked for the FSA during 8 weeks. My project consisted in reviewing one previous study that analysed the resilience of the food industry, and updating it with a special focus on the COVID-19 crisis. This way, the new estimates would be more applicable to reality, and would be more useful to determine what consequences low resilience can have in an industry facing a crisis.

In the beginning, I thought that I would be part of a team focused on this project. However, I soon realised that I was the only one that had this task assigned. This ended up being good news for me, as the internship at the FSA was a great opportunity to learn and to gain experience in a field I am very interested in.

Data Analysis

The data I analysed was was national publicly available data. I had to gather it from several different sources (Eurostat, Defra, ONS,…). The fisrt thing I had to do was downloading and putting it together. Once I had done this, I used the Hodrick-Prescott filter to obtain a trend component from the data, which was essential to get a variable that would be analysed afterwards. I also used a Dynamic Common Correlated Effects method (DCCE) which, as it is explained in the original study, "approximates the projection space of the unobserved common factors with the inclusion of cross-section averages of the contemporaneous and lagged dependent variables in the regression equation".

UK's supermarkets have been affected by the COVID-19 crisis.

In this process, I used Excel (for the data cleaning), R (for the application of the Hodrick-Prescott filter and the obtention of nice looking graphs) and Stata (for the rest of the model).

The farmers from the UK have struggled with production in the recent times.

Findings

I cannot summarise all the findings in this space, but I will say that some sectors have shown an incredibly low capacity to recover from the recent shocks, which is a major change from the last findings. However, the opposite case has also taken place.

My final report is going to be published on the FSA website (or that is what I have been told), so once it is uploaded anyone will be able to see it.

Key Skills Learnt

I have now enough experience to face challenges related to data-analisys during my career. I have learnt to code in one new language, I have been almost entirely responsible of my own project (which will probably be published) and I have met many interesting people in the team.

I have developed my comunication skills through the frequent meetings I had withthe rest of the team. In these, I sometimes had to not only explain what I was doing but also convince my superiors about why the approach I am using is the best to achieve the desired results. This also involved networking and collaboration with other members of the economics department.

I'm also happy about having learnt how to code in Stata. Using new software of this kind is really like learning a new language; the more different ones you understand, the easier it is to learn new ones.

Finally, I also want to mention that being constant, even if I had to face completely new challenges for me, proved to be the most important thing. There is always a solution somewhere to most of the problems.

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