

The Economics of Sports and Games (EC325)

Project – 2020

Overall summary of project / learning aims:

This is an applied economics / econometrics project. You will use data and apply what has been covered in the lectures. The project is very general. You will have substantial license to be creative, and go in almost any direction, so long as it reflects the course material. Some suggestions are given below, as well as a suggested dataset.

Impact:

Because this project is creative, you can report it on your CV and talk to employers about, if you want to. View it as a mini-mini dissertation, without an in depth literature review, but just getting your hands dirty with some data.

Instructions:

1. This is a group project. You will complete this in pairs. Pick a partner. E-mail me together by **5pm, Wednesday 26th February**. If you don't contact me as a group by then, I will assign partners randomly straight after. No swapsies!
2. Decide what you are going to do. E-mail me once with your idea and a very high-level plan by **5pm, Wednesday 5th March**. This should include a clear statement of what your research question is, a preliminary idea for your project's title (you don't have to stick to it), and a good idea of where you are going to get additional data from if you are not just using the datasets suggested. ***I will give you all feedback and advice at this stage.***
3. **Be realistic** – don't be too ambitious with the project aims. If you are adding data, or collecting it yourself, then consider limiting the sample period / estimation window to save time – you still need a decent size N though... (100s+ of observations).
4. Submit final piece of work on Blackboard. Deadline: **12 noon, Monday 30th March**

Suggested topics:

- An in-depth look at competitive balance, using different measures. Study must be comparative, looking across leagues and/or across time.
- Forecast the result of a football match using information known beforehand (e.g. Elo ratings, form, league position, who is at home, identity of the teams, etc. – use readings and lecture slides to give you ideas. Keep it simple. You don't have to estimate the bivariate Poisson scoring model --- you can estimate a linear probability model or the ordered logit/probit models. You should generate a small number of forecasts using the model (i.e. how good is the model at forecasting the next round of PL fixtures) and evaluate them too. How good is your model? Could you use it to make money?
- How good are the bookmakers as forecasters? Is there evidence of systematic bias/mispricing in their posted pre-match odds? Are the markets inefficient? (i.e. can you systematically make money by exploiting how the odds are generally mispriced?).

In practice, you can study any time period and any sport. I will give you advice at stage (2.) of the instructions, however, particularly on whether the project is realistic and the “right sort of idea”, so long as you are clear with me what you aim to do. I won't collect data for you.

Suggested dataset:

I recommend using this website: <https://www.football-data.co.uk/>

On here there is a lot of historical data, of match results and betting odds: <https://www.football-data.co.uk/data.php>

An example, English football: <https://www.football-data.co.uk/englandm.php>

See the **Notes.txt** on each web page for an explanation of what the datasets contain.

You could focus on the Premier League, or all English Leagues, by downloading each of the datasets, appending them (stacking them), adding season-level variables etc., using either Excel or Stata.

Sources of other useful information:

Final league tables: various, including Wikipedia.

Attendance data: e.g. <https://www.worldfootball.net/attendance/eng-premier-league-2003-2004/1/>

Transfer activity data and crowd-based squad valuations: <https://www.transfermarkt.co.uk/premier-league/marktwerteverein/wettbewerb/GB1>

You don't have to stick with football. You can go in a completely different direction. But you must source the data yourself. Fortunately, sports data is easy to get hold of. **But, Be Realistic!**

Format: Be sensible and precise! See Example below. Pay careful attention to the "Ingredients" and the marking criteria below also

Suggested Ingredients of write-up:

(Not necessarily in this order, and not necessarily all parts)

Title page --- as per an academic article, includes, Title, full names of all authors (this will not be blind-marked), abstract (100 words max.) keywords (normally a list of three to five terms), any acknowledgements or data disclaimers as a footnote.

Introduction --- short. Includes in no particular order: Statement of context, what the question is, why that question is important, what you do to answer it, the main findings, how it contributes, relates to some previous literature (approx. 500-700 words).

Methodology --- briefly explain your main methodology, including references (approx. 400-600 words).

Data – explain your data. Where does it come from? What is it? Any limitations? (approx. 200-500 words).

Results --- explain your results (approx. 800-1,500 words).

Conclusion --- briefly restate your main findings. What were the limitations of your analysis? Ideas for future research (approx. 200-400 words)

References --- standard.

Tables and Figures --- best presented at the end, after the references: as many as you like, so long as they are useful and clearly add value --- superfluous tables and figures, will result in reduced marks.

How many Tables and Figures? Rule of thumb, if you have more than 5 then either you have too many or you are not presenting and summarising your results as efficiently as possible.

Total suggested word count: 2,000-3,000 words (Introduction to Conclusion, not including Tables, Figure and References)

Be concise! – although this looks like a big project, the write-up is expected to be quite short.

Example:

As a guide of how to efficiently and precisely write up your project, see this example of one of my own published short (“letter”) papers on a closely related topic, which is a approx. 3,000 words:

Elaad, G., Reade, J. J., Singleton, C. (2019). “Information, prices and efficiency in an online betting market.” *Finance Research Letters*, Forthcoming (In Press).

<https://www.researchgate.net/publication/335718776> Information prices and efficiency in an online betting market

(Or as published here):

<https://doi.org/10.1016/j.frl.2019.09.006>

Marking and Assessment Criteria:

The standard Department of Economics rubric will be applied in the marking.

In addition, I will be looking for:

- Creativity
- Have you followed the instructions well – including formatting and ingredients
- The “Research Question” is clear and specific
- Depth of analysis and thought, rather than breadth. Stay focused on the research question. Don’t waffle through the write-up.
- Shown evidence of reading beyond the lecture material, using appropriate academic sources
- Credit will not be given for work which is over long (i.e. over 3,000 words)
- Precision in mathematical exposition, notation and explanation (i.e. equations).
- Tables and figures formatted and presented to an academic standard (i.e. precise, clear, captions, table and figure notes, sources etc.)
- Referencing: use consistent format (including for data sources), is precise and accurate, adheres to a well-known style (e.g. APA, Harvard)