

CORE Doing Economics Data Competition 2019 Overview

The CORE Doing Economics Data Competition is a project based around CORE's *Doing Economics* and funded by the [Nuffield Foundation](#). *Doing Economics* is an e-book which uses important real-world problems to teach students how to handle, analyse and present data. It is aimed at students who have not previously studied economics, statistics or advanced mathematics.

Click here to access the e-book and find out more: <https://www.core-econ.org/doing-economics/>

The competition is open to any student enrolled in any undergraduate degree program in any country.

How to enter:

Using the data in CORE's *Doing Economics*, produce a short report that identifies a specific policy problem related to one of the following topics: climate change, well-being or inequality; explains why it is important, and suggests how it can be solved. Entrants should use either Excel or R to analyse the data.

Explanation of your task

Your report should be a maximum of 10 pages, and aimed at a non-specialist audience that is interested in policy issues, for example government officials and policymakers. Make sure to use language that someone who has not studied economics or statistics can understand, especially when analysing and interpreting the data.

'Specific policy problem' means that you should focus on a particular aspect of your chosen topic, for example gender inequality in primary school education or the life satisfaction of the unemployed. You can further narrow the scope of your report by only looking at particular countries or regions.

To identify a policy problem, you should provide evidence that the issue exists, which can be in the form of tables or charts made from data. You should also use evidence based on the data to explain why the issue is important for governments to consider, and to recommend some policies that governments (or others) can use to address the issue. While there may be many possible policy solutions, you should choose a few (at most three) that you think are the most appropriate to the particular context, and justify your choices. You should also discuss any limitations with the data that are relevant to your analysis.

You can get ideas of policy issues by looking at the datasets in *Doing Economics* related to the three topics. See ‘Using and analysing data’ (below) for a full list of data sources on the three topics included in the competition and where to find them on the website. You will see that data sources are divided into projects according to topic (e.g. climate change, inequality). You may also find it helpful to do some additional research into your chosen issue.

However, your report should be your own original work. You should not simply replicate the tasks or solutions in the *Doing Economics* projects. See the section below on ‘Avoiding plagiarism and rules on third-party help’ for further details.

Using and analysing data

The table below lists the data sources in *Doing Economics* for each topic. You must use **at least one data source** from *Doing Economics*, but you can also use other relevant data sources you have found on the Internet, as long as they are free and publicly available.

If you use data sources that are not in *Doing Economics*, you must properly cite the source in your bibliography/references (including name of dataset and URL), and submit the data files along with your report.

Topic/Theme	Datasets in <i>Doing Economics</i>
Climate change (Project 1 & 11)	Goddard Institute for Space Studies temperature data US National Oceanic and Atmospheric Administration CO ₂ data Survey on willingness to pay for climate change mitigation
Well-being (Project 4 & 8)	UN GDP data Human Development Index data European Values Study
Inequality (Project 5)	Our world in data Global Consumption and Income Project OECD income inequality data World Health Organisation’s Universal Health Coverage Data Portal and Global Health Observatory data repository

There is step-by-step guidance in the e-book on some ways to conduct data analysis in Excel and R. You can use any of the techniques and concepts used in *Doing Economics* (see the [Glossary](#) of *Doing Economics* for a full list). You are strongly encouraged to use the simplest methods possible to answer your research question. You should not use techniques not covered in *Doing Economics* (e.g. regression).

You can look at the project tasks in *Doing Economics* for ideas on how to present your evidence. However, for data visualisation (charts, tables, and figures), you can use types not used in *Doing Economics* – be as creative as you want!

Judging Criteria

All entries will be assessed according to the following criteria (weights given in brackets):

- Policy problem (20%) – originality, clarity, focus, use of data to provide evidence about the problem, and within the given page limit.
- Content (50%) – appropriateness and quality of analysis and policy recommendations, (including a sound link between data and the recommendations), discussion of data limitations (where relevant), concise communication and accurate interpretation of results to a non-specialist audience. Entrants should refrain from excessive or inappropriate use of economics or statistical jargon.
- Presentation of results (30%) - the clarity, impact and visual appeal of figures and/or tables, creativity in presentation, and how well the overall report looks and fits together.

For entries exceeding 10 pages, only the first 10 pages will be considered. Entries can combine data, charts/figures/tables, and analysis, and the language used should be suitable for a non-specialist audience.

Entries will be judged anonymously by an independent panel selected by the CORE team. In case of a large number of submissions, a shortlisting panel composed of representatives from CORE will shortlist entries, which will then be evaluated by the judging panel in the final round.

Submitting entries

A complete entry consists of:

- 1) A report (in PDF format) of maximum 10 single-spaced pages in 12pt font with 1-inch margins, (the page count includes all figures, tables, and appendices, but does not include references or a bibliography);
- 2) All data files used to produce the results in the report (for Excel entries, you should provide a single Excel file containing the original data and the results, with each chart, figure, or table in a separate tab; for R entries, you should provide a single .r file containing the code needed to generate all the reported results from the original datafiles);
- 3) A signed and completed CORE Doing Economics Data Competition 2019 entry form.

You can submit **one entry total** - either an individual or a team entry, using either Excel or R. Teams are limited to a maximum of 4 students, who can be enrolled in different universities. Entries should be written in the English language. Entries will be anonymised, so **make sure your name(s) and university name(s) are not anywhere on your report.**

You must submit your entry, as a single .zip file, to contact@core-econ.org by 11:59 pm UK time (BST) on **15th May 2019**. You must use your institutional email address (i.e. an email address assigned to you by your university), with 'Doing Economics Data Competition' as the email subject. The judging panel will choose a final set of winners by 15th July 2019.

Prizes

There will be two categories in the competition, one for R and one for Excel.

The prizes will be awarded to the top two entries in each category (2 prizes for Excel, 2 prizes for R), as judged by the CORE judging panel:

1st place = £750 Amazon vouchers

Runner-up = £500 Amazon vouchers

Prizes are non-transferable.

For team entries, the stated prize will be divided equally between all team members. Winning entries will also be displayed on the CORE website. Very high-quality entries may be turned into teaching material for *Doing Economics*.

Prize-winners will be notified by email and an announcement will be published on the CORE website by 15th July 2019.

ADDITIONAL INFORMATION FOR ENTRANTS

Presenting data in charts and tables

Charts and tables should be presented in a way that someone who is unfamiliar with your data can understand without having to rely on the text in your report, and should accurately represent the data. Some guidelines on how to format your charts and tables are given below.

For charts:

- Include a title that explains what the chart is about. Be specific where possible e.g. ‘Global average temperatures (1800-1900)’ conveys more information than ‘Global temperatures’.
- Give the horizontal and vertical axis appropriate labels, including units of measurement.
- Do not narrow the scale of the axes to exclude zero e.g. starting the vertical axis at 10, unless your data is difficult to read otherwise. This could make your chart misleading because it exaggerates the differences between values.
- Include a legend if your chart shows more than one variable.
- Keep charts readable by limiting the number of variables you show. For example, if a line chart has twenty variables, it is difficult to see the information for a particular variable.
- If using different colours on the same chart, make sure the differences between colours are clear even if the chart is printed in black and white.
- Try to keep the style of charts (font, font sizes, colour scheme) consistent.

For tables:

- Include a title that describes the contents of the table.
- Label columns, including units of measurement if it is not obvious how the variable is measured e.g. ‘Year’ is self-explanatory, ‘Per-capita income’ is not.
- Round numbers to an appropriate number of decimal places (1 or 2).

Avoiding plagiarism and rules on third-party help

The report must be your/your team's own original work. While you are allowed to brainstorm potential ideas and areas of research with third parties (anyone who is not submitting a joint entry with you, for example, your teachers or friends), please do not ask any third parties to help put the report together. For example, you are not allowed to:

- Ask a third party to give you a policy problem;
- Ask a third party to make charts, tables, and/or figures for your report, or use charts, tables, and/or figures made by a third party;
- Ask a third party to conduct data analysis for your report (which includes writing code or parts of code), or use data analysis made by a third party as your own;
- Ask a third party to write part of your report, or use words written by a third party as your own.

You are, however, allowed to refer to other people's work (for example, you might make use of an explanation of a concept or books/journal articles that were produced by someone else). When this occurs, you must credit the original source. Otherwise, you are attempting to pass this work off as their own - this is plagiarism.

Plagiarism is presenting another party's thoughts, words, artefacts or software as though they are your own. Using other people's work directly (i.e. copying it) or indirectly (i.e. summarising it) are both considered to be plagiarism if you do not acknowledge whose work you are copying or summarising. Use of unacknowledged information downloaded from the internet also constitutes plagiarism.

Examples of plagiarism include:

- turning in someone else's work as your own,
- copying words or ideas from someone else without giving credit,
- failing to put a quotation in quotation marks,
- giving incorrect information about the source of a quotation,
- changing words but copying the sentence structure of a source without giving credit,
- copying so many words or ideas from a source that it makes up the majority of your work, whether credit is given or not.

UCL has a [fuller explanation](#) which may help.

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Referencing

The easiest way to avoid plagiarism is to ensure you always acknowledge when you have been inspired by the ideas/works/products of other people - to give them credit for their role in what has been produced. When you use someone else's idea, cite them and where the idea can be found. You can use any referencing style as long as you are consistent.