

Title

Your Name

October 17, 2017

1 Introduction

Introduce the problem you wish to study. Include a brief literature review. Why is this an important question and how do you propose to answer it?

2 Model Specification and Inference

In this section you will detail your model, including your likelihood, priors, and posterior. You will also detail how will proceed with inference, i.e. the use of a Gibbs Sampler, STAN, Metropolis-Hastings, etc.

3 Data

A detailed description of your data.

- What is the source of your data?
- Why is the data appropriate for the problem?
- What, if any, data manipulation occurred, i.e. were outliers discarded, certain countries or years excluded, and if so why?
- What are the potential limitations of the data?

It is important in this section to convey important information about the data, such a table of summary statistics, Tukey box plots, time series, etc. as well as all steps you have taken to get to the final data set used in the model. The data should be easily reproducible for anyone reading this section.

4 Results

This section should describe your model results and posterior inference in detail. In this section make sure to include plots of posterior distributions, posterior summaries, HPDs, etc.

5 Model Checks

In this section diagnose your model. Include convergence checks and robustness checks.

6 Conclusion

What can you conclude based on your model and inference and what are the implications of your findings?

7 References

Please cite all references appropriately.

8 Appendix

Please include an appendix for such things as detailed tables, mathematical proofs, model diagnostics, etc.