



## Case Study

We'd like to build a model to systematically forecast medium-term inflation: (our forecast horizon typically runs 18-24 months ahead).

Attached is an Excel file containing a variety of publicly available data. Descriptions of the data are available via internet search. You can use as much of the data as you think appropriate. Note that the data series may be different frequencies, have different start months, and, because they are released at different times, may not end at the same month either.

- Please propose a model that generates a medium-term forecast, and write a concise note that:
  - Describes the model clearly;
  - Explains why you chose this approach;
  - Shows a time series of estimates (and explain how you calculated historical estimates);
  - Provides other appropriate visualizations that help the reader understand the conclusions of the model;
  - Proposes a way for evaluating the goodness-of-fit from the historical estimates and for judging in the future whether the model is working well;
  - Explains any past large anomalies in the model's performance;
  - Summarizes the main economic implications of the model's most current estimates in language accessible to a market participant.

### Notes:

- Please provide the code you used to obtain your response.
- You are welcome to use AI assistants, academic research, or any other tool you view as appropriate, but ask that you confine yourself to systematic aids and simple understanding of ideas (i.e., don't just ask your professor). Please cite the tools you use.