

Guidelines for Term Paper ECO 485F, Economic Growth and Structural Transformation

The goal of the term paper is to write an empirical assessment of a country (other than the US) or a small group of countries, and to apply the model(s) we saw in class to that country or region.

To do this, pick an outcome from the chapters we discussed in class (savings and investment, demographics, health, education, productivity), and analyze its importance in the context of growth and structural change in the country. You may have to keep data availability in mind when picking the country/topic/time range you are considering.

Two Example Topics for the USA: A) The relationship between education and income per capita. B) What are the determinants of the demographic transition in the US?

The general idea is to gather data to discuss questions such as: Is this country's experience in line with the predictions of the theory? If yes, how large were the effects of the factor you are considering on the country's overall structural change? If no, are there reasons that the theory does not seem to work for this country? Is there additional data from the country that we can use to test the theory/theories? What are fundamental causes that drive the experience of this country?

The structure of the paper typically looks like this:

- 1) Introduction: In 1-2 paragraphs, outline the question you are going to analyze and the main findings of the paper.
- 2) Data: Describe which data sources you have, how you measure your variables of interest and what the data looks like. Are there anomalies in the data? Is there data that would be better suited to answer the question but is unavailable? Use summary statistics, time series and scatter plots as appropriate.

Examples: A) What available datasets are there that have data about education? Where does the data for GDP/capita come from? How is "education" measured? Which time

period does data availability limit us to look at? Should we exclude certain datapoints based on “anomalies” (e.g. maybe education data are off for the periods of WW1 and WW2)? B) For topic B) similar issues apply. Also, which data is relevant here in addition to mortality and fertility data? For example data on contraceptive use? We discussed possible determinants of fertility in class (like child mortality, children’s employment or well-being, or the existence of a Social Security system for retirement) – is there data on those that we can use?

- 3) Analysis: Apply the model or models we saw in class. How well does the model fit this country’s data? What does the model have to say about causal relationships? Are there time periods or geographic parts of the country for which the model fits especially well/bad?

Example: A): What does the extended Solow say about the relationship between education and GDP? How much did education contribute to the change in GDP/capita? Did those contributions change over time? B): What does the data suggest were the main determinants of the mortality transition? What about the fertility transition? Are different factors more or less important in different US states or regions?

You can also go beyond the model: Of the fundamental factors in the textbook, are there any that are particularly relevant for the relationship you are considering? Are there other circumstances specific to the country that can explain the relationship you observe, but are not captured by the model?

Example: Are any of the fundamental factors discussed in part 3 of the book important for education/demographics in the US, like government or inequality? Are there factors specific to the US that we do not usually find in other countries that may affect education/demographics (for example its history as a country of immigrants)?

- 4) Implications: What is the significance of the analysis from part 3)? Does it suggest something about the country’s path in the future? Are there policy implications?

Example: A): How large would the effects be if the US increased education levels even more? Should it try to do so? B): What is the demographic situation we can expect for the future of the US? Will the determinants be the same?