Homework 1: Computational Methods for Economists

Iddrisu Kambala Mohammed

August 31, 2021

Research Interest

My main research interest is Development Economics. More specifically, my research focuses on the determinants of contemporary comparative development, with a particular focus on historical trajectories or determinants such as colonial rule, political or civil unrests, state building, among others.

There is a growing interest among development economists in terms of understanding the historical determinants of comparative economic development across the world. This probably started with (Acemoglu, Johnson, & Robinson, 2001) who investigated the colonial roots of comparative economic development. They hypothesised and proved that colonisers built stronger, growth-enhancing institutions in colonies where they settled due to favourable disease environment. In areas where they could not settle, they established "extractive institutions" which are growth-inhibiting. This two set of institutions persisted overtime, and, therefore, engendered contemporary development divergences across the world.

My secondary research interests are Institutional Economics (the effects of both formal and informal institutions - culture, customs, traditions - on comparative economic development), Political Economics, and Economics of Religion.

I am currently working on the topic:

"Colonial Origins of Comparative Development in Ghana"

In this study I look at the colonial origins of the development divergence between Northern Ghana and Southern Ghana. First, I show the current development differentials between the regions using specification (1):

$$y_c = \beta_0 + \beta_1 North_c + X_c' \Phi + \epsilon_c \tag{1}$$

where y_c represents cell c's local development level as measured by light density at night. North is a dummy equal to 1 if the cell is a northern cell and 0 otherwise. X' represents a vector of controls including geography, economic geography, climate, location fundamentals, and presence of minerals. The coefficient β_1 depicts the current development gap between the North and the South. We hypothesise that $\beta_1 < 0$ and large.

The following figure is drawn from (Jedwab & Moradi, 2016)

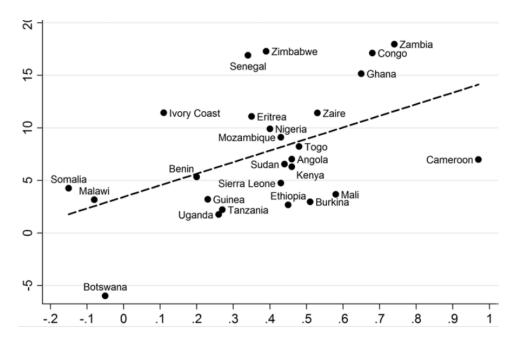


Figure 1: Country-Specific Railroad Effect (0-10km)

References

Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). The colonial origins of comparative development: An empirical investigation. *American economic review*, 91(5), 1369–1401.

Jedwab, R., & Moradi, A. (2016). The permanent effects of transportation revolutions in poor countries: evidence from africa. Review of economics and statistics, 98(2), 268–284.