The Specification Analysis of Cross-Country Growth Regressions: Institutions and Augmented Solow Model Approach

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Abstract

I examine the forty countries which were colonized by European colonists to estimate the effect of institutions and augmented Solow model - physical capital, human capital and population growth- on economic performance. Europeans followed very different colonization policies in different colonies depending on the mortality rates that they faced. Where they faced high mortality rates, they did not settle down and they created extractive institutions. Where they faced low mortality rates, they settled down and they replicated the European institutions in these areas. I use mortality rates that Europeans faced in colonies as an instrument for current institutions and find that the institutions have large effects on income per capita. Also I find that augmented Solow model explains almost eighty percent variation in income per capita. I use specification approach based on non-nested hypothesis tests to see which of the two models is better specified. The results suggest that when I add continent dummies, colonial dummies, legal origin dummy and religion dummies in the institutions approach, the institutions approach is well specified against the augmented Solow model. Also in different subsamples I find differences in which model performs best.