

PP4RS Final project

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Introduction

This is a course project work to create the first version of a snakemake workflow. The numbers illustrated here will check for a link between the population size and GDP growth rate, referred to as scale effects in endogenous growth theory. The workflow will use R to clean data and create a very simple regression and markdown + pandoc to draft a pdf version of the paper. Lorem ipsum. Blah blah.

Literature

This bit will check that the BibTex integration works correctly. I will replicate the figure presented in Laincz and Peretto (2006), but add some additional features such as grouping by continent.

Data

The dataset is taken from the Penn World Tables. Data include real GDP and population data for 156 countries for the period 1970-2010.

The summary of the statistics looks as follows:

Table 1:

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
ln_pop	121	2.007	1.449	-0.653	1.033	2.996	6.695
avg_pc_gdp_growth	121	0.025	0.018	-0.034	0.014	0.035	0.072

Results

As expected, there seems only to be a very weak link between population size and real GDP growth. The linear regression is presented in figure 1 below.

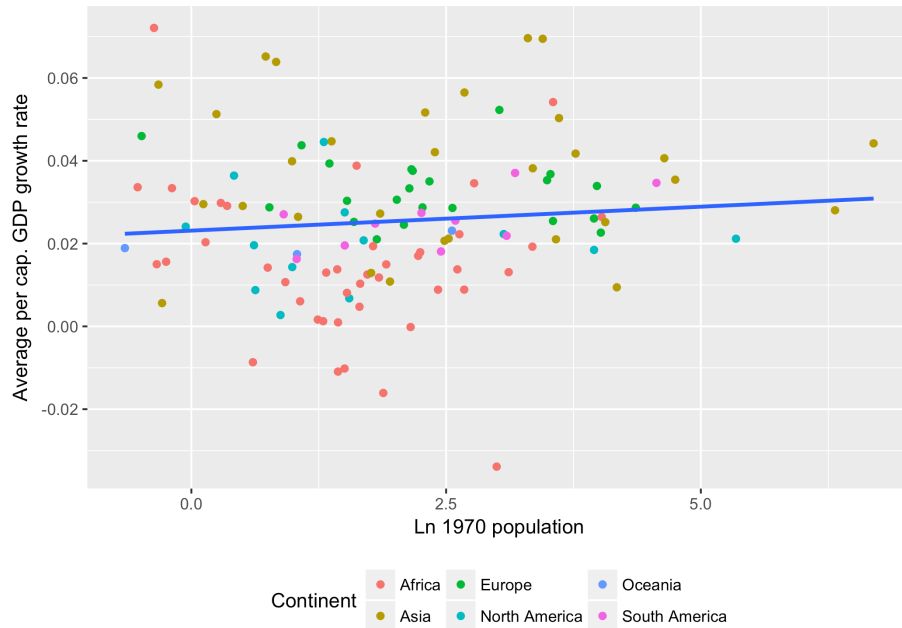


Figure 1: Average real GDP growth for 1970 - 2010 and log of 1970 population

Another table using stargazer, which, for this simplest regression, looks kinda weird.

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Table 2:

	avg_pc_gdp_growth
ln_pop	0.001 (0.001)
Constant	0.023*** (0.003)
N	121
R^2	0.009
Adjusted R^2	0.001
Residual Std. Error	0.018 (df = 119)
F Statistic	1.077 (df = 1; 119)

Notes:

***Significant at the 1 percent level.

**Significant at the 5 percent level.

*Significant at the 10 percent level.

Conclusions

Blah blah blah.

References

Laincz, Christopher A., and Pietro F. Peretto. 2006. "Scale Effects in Endogenous Growth Theory: An Error of Aggregation Not Specification." *Journal of Economic Growth* 11 (3): 263–88. doi:10.1007/s10887-006-9004-9.