Pandas and Statsmodels

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Econ 126: Computational Macroeconomics

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February 27, 2019

Background

- Recall human capital-augmented Cobb-Douglas production function:

$$Y = AK^{\alpha} (hL)^{1-\alpha}, \tag{1}$$

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  - A *total factor productivity* or TFP

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- Of course macroeconomic measurement is subject to *measurement error*.

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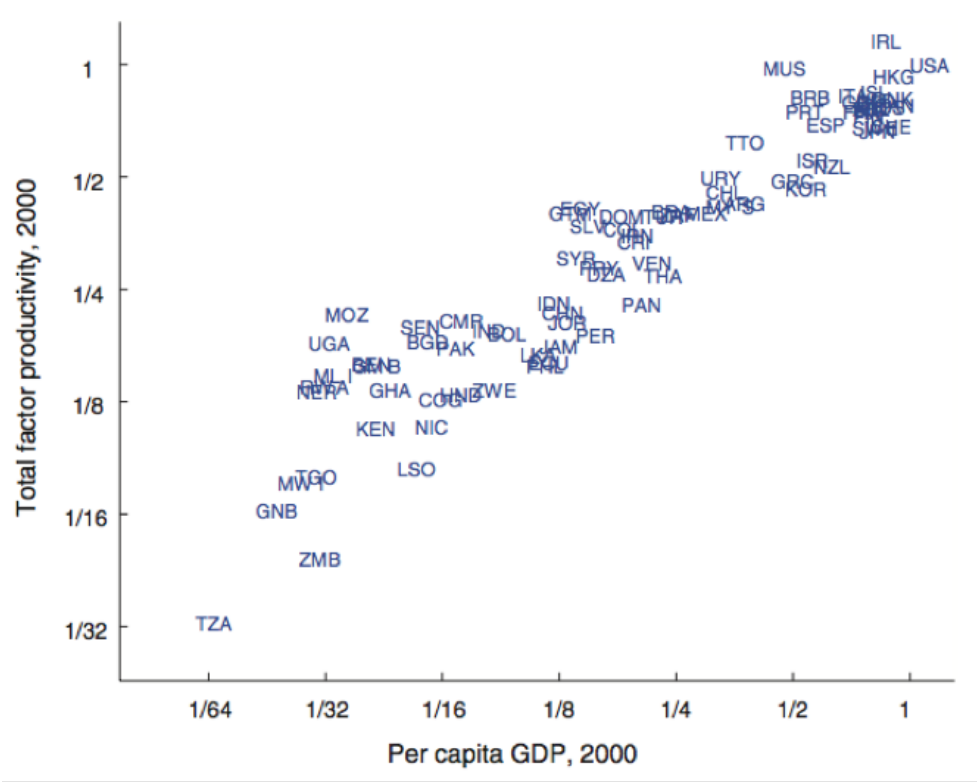
  - Degree of technology adoption
  - Public health

Figure 1: **TFP and GDP per capita across countries.** All values relative to the US. Source: Jones and Romer (2010)



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- Workers in lower-income countries use what human and physical capital the *do* have less efficiently than workers in higher-income countries.
- Since TFP isn't directly observable, we still don't know exactly why.

References

Jones, Charles I. and Paul M. Romer, "The New Kaldor Facts: Ideas, Institutions, Population, and Human Capital," *American Economic Journal: Macroeconomics*, 2010, *2* (1), 224–45.