1 Social Infrastructure

Our models have shown that savings rates, investment in skills, and population growth rates are key determinants for output per worker in the long run. However, so far, our model takes these parameters as exogenous. Here, we will ask what lies behind some of the differences we observe across countries and within a country over time.

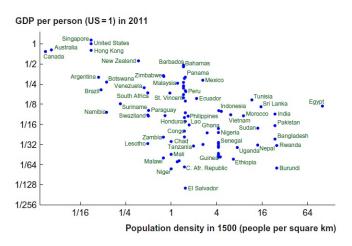
1.1 Is it all pre determined

One possibility for income differences across countries is that they are all determined by factors that are close to impossible to change. Factors that come to mind are geography and culture. One may be inclined to think that a country like Mali has simply a geography that makes economic development very difficult. It has low agricultural yields, and it has few natural resources. However, a country like Israel is not that different geographically, yet it is much more developed. Another explanation may be culture. For example, historians have argued that the work ethic of Calvin Christians has helped the development in Switzerland. However, we do observe huge income differences between countries with similar religions, such as Ethiopia and Italy which are both majority Roman Catholic. Acemoglu et al. (2001) study the importance of epigraphy and culture in more detail and find that these factors explain little of the variation in cross-country income levels.

In fact, Acemoglu et al. (2002) highlight a provocative historic fact. Comparing economic development in 1500 (proxied by the population density) with economic development today, we observe that countries most developed in 1500 tend to be poorer today than those countries less developed in 155, see Figure 1. They term this phenomenon the "Reversal of Fortune". Put differently, factors that are extremely persistent over time, like geography, do not appear to be very useful to understand income levels today.

Apart from this very long-run evidence, we also have more current examples of countries drastically changing over time, the already discussed growth miracles. If everything was pre determined, it would be impossible to understand why some countries move from among the poorest economies in the world to upper-income

Figure 1: Reversal of fortune



Source: Acemoglu et al. (2002)

countries within few decades. In fact, some of these growth miracles provide excellent anecdotal "natural experiments" that countries with very similar cultures and geographies can take very different paths of economic development. North and South Korea share most of a joint history and are geographically similarly situated, yet, the former is much poorer than the latter since separating in the 1950s. Similarly, East and West Germany had similar starting conditions after World War II, yet, at reunification in 1991, the former was much poorer. Both examples suggest that economic institutions, in this case socialism vs. capitalism matter for economic development.

References

ACEMOGLU, D., S. JOHNSON, AND J. A. ROBINSON (2001): "The colonial origins of comparative development: An empirical investigation," *American economic review*, 91, 1369–1401.