

ABSTRACTS OF DISSERTATION CHAPTERS

ARHAN S. ERTAN

Essays on Determinants and Economic Consequences of Institutions: Analyses of Colonization and Trade Policy and a Public Good Experiment

Institutional weaknesses have been the main source of problems related to economic development, especially in developing countries. The topics of the papers of my dissertation complement each other while approaching this problem from very different aspects. My aim is to provide a new perspective to understand the developmental differences observed around the globe regarding the prevalence and consequences of inefficient institutions and policies.

Chapter 1:

Determinants and Economic Consequences of Colonization:

A Global Analysis

(with Louis Putterman)

Existing research in the area of economic growth suggests that the era of colonization has had an impact upon the modern levels of economic development of countries around the globe. However, why some countries were colonized early, some late, and others not at all, and what effect these differences have on current national income, has not been studied systematically. In the first part of this paper, we show that both the occurrence and timing of colonization can be explained by (a) differences in levels of pre-1500 development associated with different dates of transition to agriculture (Neolithic revolution) and with the associated history of state-level polities, (b) geographic proximity to the colonizing powers, and (c) the disease environment faced by the colonizers. In the second part, we analyze the developmental consequences of colonization taking the endogeneity of colonizations occurrence and timing into account. We find evidence that history of colonization does not have a direct affect on recent levels of income and recent rates of economic growth. But we also find that the share of the population that migrated from the places of greater pre-modern development had a positive impact both on current level and growth rate of income and on the quality of institutions in the newly settled places. Thus we conclude that the positive effect of colonization on current development works largely through the impact on the quality of institutions of the pre-colonial development levels of the ancestors of current populations.

Chapter 2:

Differential Effects of Trade Liberalization on Economic Growth: Role of Human Capital Accumulation

In a small open economy Schumpeterian growth model where the human capital accumulation is endogenized, the short-run and long run effects of a trade liberalization policy is analyzed. Opening up to trade influences educational decisions of individuals through its effect on the relative wages of the educated labor force relative to the uneducated due to specialization in low-tech as opposed to high-tech products. Therefore, gains from trade are likely to benefit richer countries disproportionately leading to divergences in relative welfares. Countries with low initial experience in industrial production specialize in sectors with low learning potential and may thus loose from trade. The results of the analysis suggest that, in an economy which is relatively more abundant in the unskilled labor resources compared to its trading partners; in short-run, trade liberalization may have beneficial effects on the per capita income growth rate whereas in long-run, it may decrease the equilibrium growth rate. An important policy implication of the model is that reforms in schooling system, which increases the returns to (or decreases the costs of) schooling, might cancel out the negative effects of trade liberalization on educational incentives.

Chapter 3:

Role of Endogenously Chosen Institutions on Mitigating the Free-Rider Problem and Reducing Perverse Punishment

(with Louis Putterman and Talbot Page)

Previous experiments on public goods dilemmas have found that the opportunity to punish leads to higher contributions and reduces the free rider problem; however, it has been observed that a substantial amount of punishment is targeted on high contributors, lowering average earnings. We conduct the first laboratory experiment in which subjects are given the opportunity to vote on rules governing punishment, and in which the rules can evolve with learning both from own group and other groups' experiences. We let groups vote on allowing or disallowing punishment of team members in any of three different categories: above-average, below-average, and average contributors. We find that groups allowing punishment of low but not high contributors had not only higher contributions but also significantly higher earnings than comparison groups with unrestricted punishment. We also observed that, from their first opportunity to vote, no group ever allowed punishment of high contributors, a minority of groups never allowed any form of punishment and most groups eventually voted to allow punishment of low contributors; a finding which suggests convergence towards the most efficient type of institutional structure.