Stochastic-Dominance-Efficient Welfare Indices in Development
Mehmet Pinar

Abstract

This dissertation provides an empirical analysis of the two important development indices that help to explain welfare differences across countries.   The latest econometric techniques, consistent tests for stochastic dominant efficiency, are employed to analyze the optimality of the equal weighting scheme used to construct those development indices: human development index and world governance indicators.   The first essay considers the optimality of the weighting scheme used to construct the Human Development Index (HDI).   The results show that the equally weighted HDI is not optimal and that education needs to be weighted considerably more in the best (optimal) indicator of welfare.   The second essay considers the optimality of the weighting scheme used to construct the World Governance Indicators (WGI).   The results show that the equally weighted composite WGI index is not optimal and that each indicator should be weighted differently.   We also find that the indicator composite index for each indicator is not optimal and each year should have different weighting combinations.   The final essays proposes optimal weighting scheme of world governance indicators for each study specific samples.   Furthermore, we revisit the institutions hypothesis in the empirical growth literature using optimally constructed institutional quality indices to capture institutional quality.   We find that not only institutions matter for economic development but also geography and macroeconomic policies do affect economic development directly.