Financial Development and Convergence Clubs

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Extended Abstract

This paper studies the convergence process for a large set of countries in terms of the Gross Domestic Product (GDP) levels, accounting for changing intra-distributional dynamics. We propose a methodology that identifies groups of countries (convergence clubs) that show similar GDP structures, while allowing for changes in club memberships over time. As a second step we analyze the short-run and long-run effects of financial development (measured by financial intermediary development and stock market development) on the GDP process, and the composition of convergence clubs.

For the GDP club analysis, we propose a regime switching model that endogenously defines the groups of countries that show similar GDP structures. Real GDP levels and growth rates for each convergence club are modeled as latent variables. We do not make stationarity assumptions for club memberships, but rather allow countries to switch between clubs over time. In order to check whether financial development affects these club memberships in the short-run and the long-run, we extend the regime switching model allowing for covariates to affect the transition between GDP clubs, as well as the short-run fluctuations in GDP levels. The key point in this second model is the distinction between the short-run and long-run effects of financial development. We distinguish the short-run effects as factors affecting fluctuations around the common club levels. In the long-run however, financial development and the initial conditions are anticipated to explain the composition of GDP clubs. To our knowledge, neither the individual countries’ movements between convergence clubs, nor the possible factors affecting these changes are analyzed in the existing studies. In order to estimate the parameters, we pursue a Bayesian approach and use MCMC methods to obtain posterior results.

We find that the club memberships are quite persistent, but still their compositions change substantially over time. In particular, several EU member countries and East Asian countries are found to belong to a higher GDP club in recent times compared to the beginning of the 1970s. In terms of the effects of financial development indicators on the GDP process, our results partially confirm the theoretical basis for different effects of financial development indicators in the short-run and the long-run. In the long-run, financial development is found to affect the countries’ GDP level positively. The short-run effects of financial development indicators however are found to be less clear, in the sense that we do not find a negative short-run effect of financial intermediary development on GDP levels, while the short-run effect of stock market development is found to be negative.

JEL Classification: C11, C23, O40, O57.