Abstract for "Embodied Technological Progress and the Economic Development of Poor Countries"

Raúl Fuentes (Universidad Técnica Federico Santa María, Chile) Tapas Mishra (Swansea University, UK) Javier Scavia (Universidad Técnica Federico Santa María, Chile) Juan Berríos

This paper introduces labor heterogeneity, sectoral allocation of capital and a certain degree of inefficiency into Boucekkine et al. (2006)'s model which study the development problem under embodiment. Using a calibrated version of the model, we first show that the optimality of an immediate and massive increase of adoption efforts when foreign technological acceleration occur. This result contradicts the main outcome reported by these authors. Then, it is suggested that a "package of measures" tending to increase both sectoral productivities and the number of educated people might be a good strategy to make less problematic the catching up process in the South. The performance of the economy looks wealthy and vigorous, either in the short- or in the long run. In particular, we report that gains in the reduction of both income inequality and the technological gap are significant. With this strategy, Kuznets hypothesis (1955) would not hold. However, robustness analysis suggests all these desirable achievements may be delayed if inefficiency in adoption is high.