An empirical analysis of productivity sources in Latin American countries

ABSTRACT. This paper examines two sources of global knowledge spillovers: foreign direct investments (FDI) and trade. Empirical evidence demonstrates that FDI and trade can contribute to overall domestic productivity growth only when the technology gap between domestic and foreign firms is not too large and when a sufficient absorptive capacity is available in domestic firms. In this paper we propose the terms R&D and Labor quality to capture the innovative and absorptive capacity of the country. The spillovers effects in productivity are analyzed using a stochastic frontier (SFA) approach. This productivity (in terms of total factor productivity) is decomposed using a generalized Malmquist output-oriented index, in order to evaluate the specific effect in technical change (TC), technical efficiency change (TEC) and scale efficiency change (SEC). Using country-level data for 16 Latin American countries for the period 1996–2006, the empirical analysis shows positive productivity spillovers from FDI and trade only when the country has absorptive capacity in terms of R&D. FDI and trade spillovers are found to be positive and significant for scale efficiency change and total productivity factor change.

Documento completo en: http://goo.gl/9rxIb8

Fuente: Banco Mundial