TFP disturbances as a result of misallocation in a Cobb-Douglas fashion for Mexico and Latin America: What does an input-output structure has to say to conventional growth analysis?

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The main purpose of the paper is to perform an empirical comparative analysis to determine the multiplier impact of misallocation through a generic disturbance in sectoral output in the overall TFP and, ultimately, in the growth of economies. We use an intermediate-final goods model for each Latin American country under scope: Mexico, Brazil, Chile and Uruguay. We chose these countries in order to maintain certain degree of comparability among similar economies with substantially differences in the growth rate of TFP during the last 10 years. We use Jones (2009, 2013) intermediate-final goods model based on a Cobb-Douglass function to determine multipliers and sectoral structure of each Latin American country. We depart from calibration of the Jones’ model according to the 2010 World Input Output Database (WIOD) and other empirical research, then we calculate multipliers, factors shares and the sectoral and whole economy TFP according to a random shock in allocation. Finally we make a comparison of our results. The expected result will be that intermediate key sectors structure in the economy might act as an amplifier of misallocation of resources and greater disturbances in the country aggregated TFP and, in the end, in the growth rate among economies which is actually observed in reality.