

## **Structural Decomposition Analysis (SDA) for the Mexican Economy: 2003-2012.**

Topic: Perspectives on Structure and Change

Author: ANA BELEN RIOS

Co-Authors: Rafael C sar Bouchain, Zeus GUEVARA, Lizeth Rojas

The purpose of this paper is to conduct a comparative statics analysis concerning the change in sectoral structure of production in the Mexican economy. The authors use a methodology set forth by Structural Decomposition Analysis (SDA), which is an analytical tool that allows the detailed analysis of the fundamental sources of change in the sectoral structure of production using a wide range of variables. The authors use an SDA methodology known as three-part basic. In the first part, SDA allows the separation of the changes in production caused by changes in technology (represented by the technical coefficients), from the changes caused by the specialization of final demand; at the same time, it is also possible to separate each of the final demand components. In the second part, SDA can be used to break down the effects of imported intermediate inputs, as well as the contribution of primary factors such as labor requirements. The third part makes it possible to break down the synergistic effects that arise from the interaction of both demand and supply effects. The authors then build upon the three-part basic form by including a reliable input output system that contains figures on both sectoral employment (labor productivity) and valuations of sectoral capital stocks (capital/production relationships), allowing for the simultaneous analysis of investment expansion, technological change and production specialization.

SDA for Mexican economy allows the measurement of sectoral production change through comparative statics analysis of key parameters of input output tables and therefore requires at least two input-output tables (first and final year). This paper uses Mexican input output tables from 2003, 2008 and 2012 , converted to 2008 prices.