

Abstract

Shifts in the sectoral employment and output (commonly referred to as structural change) are essential conditions as well as a connected phenomenon of economic growth. Despite the importance of structural changes for economic development, for a long time, this body of work was dormant. In recent times, the curiosity about alternative viewpoints to understand growth process and outcomes has also increased. Furthermore, it is also acknowledged in literature that empirical studies about developing countries in this domain are limited. Accordingly, this study addresses these gaps in literature. For this purpose, a sample consisting of 24 developing countries of Asia is studied for the period 1992-2016 as a case in example. In contrast with several studies found in literature related with the topic, this study deploys modern macro-panel data econometric techniques that generate more robust and reliable estimates, and are more appropriate empirically while dealing with macro-panels. Therefore this study is updated, timely and more robust.

After careful examination of alternatives, this study uses the 'sectoral labor relocation' as a proxy of structural change that is constructed through the application of Shift-share analysis (SSA). A unique feature of this study is that it includes structural change (labor relocation) as a predictor of economic progress, along with other growth related variables such as capital stock, institutions, human capital and trade openness. The choice of these variables is based on theoretical as well as empirical literature. Two-step analytical strategy is used in this study; firstly, the SSA is applied using sectoral labor and value added data for each country and change in labor productivity is decomposed into three components i.e. 'within effect', 'between-static effect', and 'between-dynamic effect'. The last two effects are used for assessing the 'structural bonus' and 'structural burden hypotheses' in relevant literature, and collectively these two are referred to as 'structural change effect'. In the second analytical step, the calculated 'structural-change effect' is used in econometric modelling. The parameters are estimated, after necessary pre-and-post estimation requirements, through Common Correlated Effects Mean Group, and the Augmented Mean Group estimators. These estimators show empirical superiority over other older techniques in the presence of cross-sectional dependence and other issues. Overall results suggest that there is a positive significant relationship between structural change (measured as labor relocation) and economic progress (except in the case of AMG estimation without trend). Capital accumulation is also a positive significant explanatory variable of the economic progress in this empirical setting and this is in line with the standard growth theory. Both these findings support the conceptualization that structural change as labor relocation across sectors as well as capital accumulation play a supportive role in economic progress of the countries under study. However, the estimated coefficients of the structural change variable are relatively smaller than that of capital stock. Interestingly, the role of trade openness is statistically insignificant. In much of the 1990s many developing economies included in the sample were undergoing market reforms under the Structural Adjustment Programs. This may imply that labor relocation across sectors, and capital stock matter more for economic growth than just opening up the economies for increasing the size of tradables. The role of human capital is also statistically insignificant. Institutions are found to be playing a supportive role towards economic progress in case of the developing countries of Asia included in the sample over the study period.

Key words: Structural change; Labor relocation; Shift-share Analysis, Structural Bonus, Structural Burden; Augmented Mean Group estimation