The Determinants of Labour Productivity in the Greek Economy

Topic: Productivity and efficiency analysis 3
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Decomposition techniques are widely used to detect and evaluate the relative importance of determinants that identify the changes of a specific variable. The aim of this paper is to investigate the impact determinants of labour productivity changes, using both Index Decomposition Analysis (IDA) and Structural Decomposition Analysis (SDA). Both methods are applied to the Greek economy, over the period 1995-2008, at a sectoral level.

Although IDA and SDA approaches are used to assess the driving forces of labour productivity, there are significant differences between them. IDA is based on index number theory and expresses simple relationships using aggregate data. On the other hand, SDA is based on input-output analysis and expresses complex interindustry relationships using analytical data in matrix form.

In this paper, both decomposition techniques are adapted to generate a framework to identify the potential sources of increased labour productivity and to determine significant differentiation in productivity between sectors of economic activity.

Keywords: Structural Decomposition Analysis, Index Decomposition Analysis, Labour Productivity, Greek economy