

**Abstract for “An Economic Approach to Identifying the Drivers of Productivity Change in the Market Sectors of the Australian Economy”**

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This paper uses a geometric Young TFP index to measure productivity change in eighteen sectors of the Australian economy over the period 1970 to 2007. One of the advantages of the geometric Young index is that it can be exhaustively decomposed into measures of technical change, environmental change, and various types of efficiency change. The paper identifies common assumptions concerning technologies, markets and firm behaviour that are sufficient for least squares estimators to be consistent estimators of these components. In this paper, a two-stage least squares estimator is used to overcome an endogeneity problem. The paper finds that the main driver of productivity change over the sample period has been scale-mix efficiency change. Scale-mix efficiency is a measure of how well a firm is capturing economies of scale and scope. In the case of the Australian mining industry, for example, significant changes in scale-mix efficiency in the last decade are found to have been associated with increases in the use of labour.