## Modelling Productivity Effects of Trade Openness: A Dual Approach

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## **Abstract**

A cost function approach is followed to model the productivity effect of trade openness in terms of cost saving. The idea of 'cost saving' is closer to the entrepreneur's view of productivity. An entrepreneur would expect a reduction in the cost of production if trade openness brings any benefits to his firm. The output-enhancing (primal) productivity effect of openness is obtainable from the cost-saving (dual) productivity effect through the cost output link. The cost function framework also enables us to investigate whether trade openness induces firms to adopt a technology that is biased towards the use or saving of any factor of production. An empirical exercise based on time series data for the Australian two-digit manufacturing industries reveals significant cost-saving and output-enhancing productivity effects of trade openness. Trade openness is biased towards the saving of labor and the use of capital. These results are quite insensitive to the choice of alternative measures of openness.

## **Brief Profile**

**Dr Satya Paul** is Professor in Economics, School of Economics and Finance, University of Western Sydney. He also is and has been visiting professor/Fellow at various universities and institutes such as Fudan University, Shangai, UNU, Helsinki, FASID, Japan, Monash University, Malaysia, University of New south Wales, Institute of Economic Growth, Delhi, University of Otago, New Zealand, Queens University, Canada.

Dr. Paul received his Ph.D. from the Delhi School of Economics and his main research interests are in the areas of income and wealth inequality, poverty, relative deprivation, levels of living, quality of life, happiness, unemployment, trade, public infrastructure, growth, productivity and efficiency measurement.

His authored books include *Trade and Growth - New Theory and the Australian Experience*, *Pricing of Postal Services in India, Inequality, Poverty and Consumption*, and he has numerous refereed papers and chapters in books.