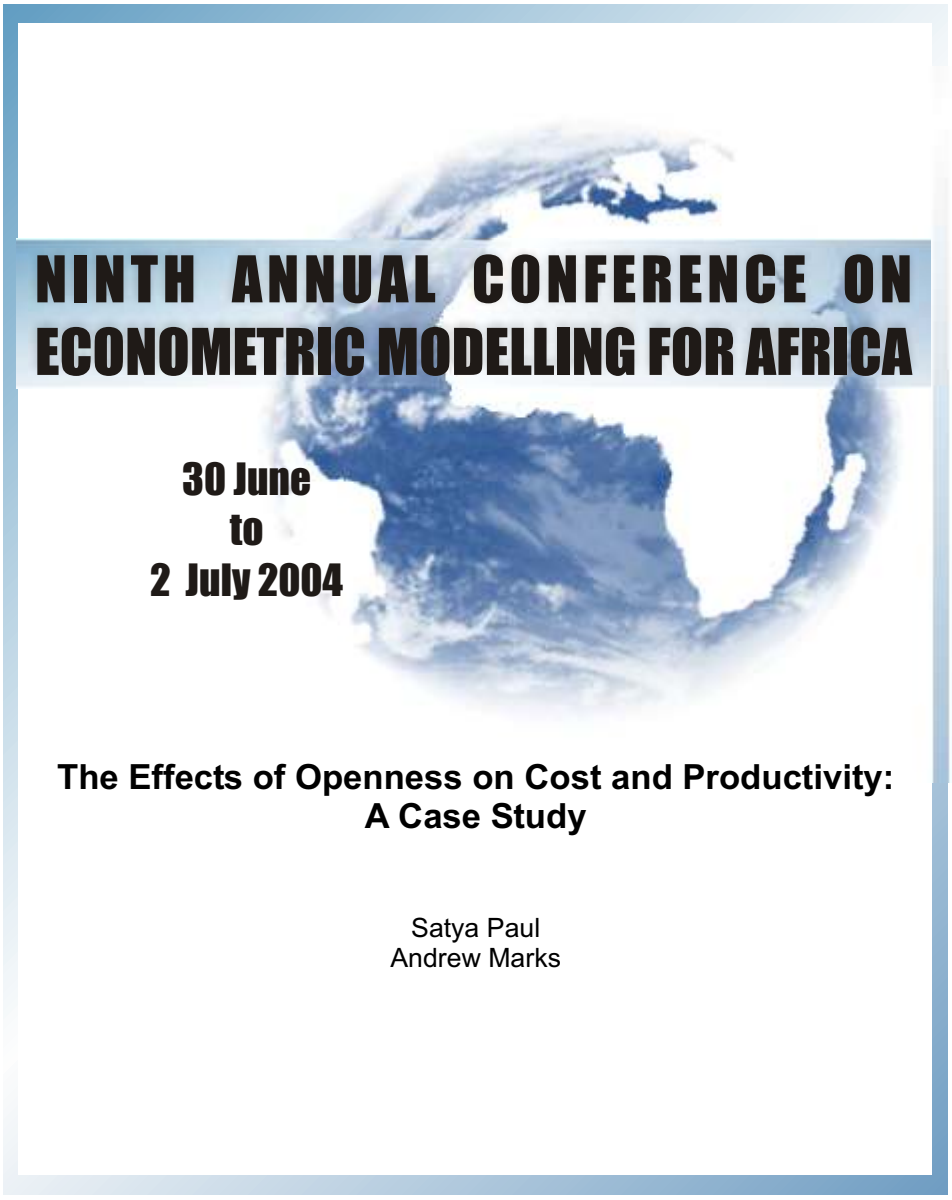

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The Effects of Openness on Cost and Productivity: A Case Study

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The Effects of Openness on Cost and Productivity: A Case Study

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Abstract

Based on a cost function approach this paper examines the effects of openness on cost and productivity in manufacturing industries in Australia. The cost function approach facilitates the investigation of the productivity effects of openness in terms of both cost-saving and output enhancing measures. Both measures of the productivity effects are related to each other through the cost-output relationship. The output side measure of the productivity effect is the negative of the cost saving measure under constant returns to scale. They differ from each other only if there exist scale economies/ diseconomies.

This approach also enables us to examine the effects of openness on input demand. Translog cost functions incorporating openness variables are estimated based on the annual time series pooled data for the two digit manufacturing industries for the period 1968/69- 1994/95. Three measures of openness, namely, export ratio, import penetration ratio, and trade ratio (TR) are tried. The empirical results revealed significant cost saving effects of openness. The output enhancing effects of openness are stronger than the cost saving effects due the existence of significant scale economies. The elasticity of labour demand with respect to each openness variable is negative and significant implying that trade orientation leads to combating costs through labour saving efforts. However, openness does not seem to be effecting the demand for capital significantly.