

The Impact of Macroeconomic and Regulatory Factors on Bank Efficiency: A Non-Parametric Analysis of Hong Kong's Banking System

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Summary

This paper assesses the relative technical efficiency of institutions operating in a market that has been significantly affected by environmental and market factors in recent years, the Hong Kong banking sector. These environmental factors are specifically incorporated into the efficiency analysis using a new non-parametric Data Envelopment Analysis technique known as the Slacks-Based Method. This allows the environmental factors to be purged from the results and hence gives a new insight into the efficiency of different banking sectors in Hong Kong.

The results indicate that such adjustments can have a significant impact on relative efficiency measures, ranks and trends, which is an important issue if such relative efficiency measures are to be used in policy analysis. The results also indicate: high levels of technical inefficiency for many institutions; and considerable variation in efficiency levels and trends across size groups and financial sectors. We find that the Hong Kong banking sector had indeed been affected by external factors, including macroeconomic and housing market forces, but that different sized banks and different institutional sectors had been differentially affected. One of the most striking results was the finding of a very strong size-efficiency relationship, with the largest institutions clearly outperforming their smaller competitors. This has important consequences for merger policy in the region.