

MASTER'S THESIS

An economic evaluation of the education sector in China

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Date of Award:
2006

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An Economic Evaluation of the
Education Sector in China

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A thesis submitted in partial fulfillment of the requirements

for the degree of
Master of Philosophy

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Hong Kong Baptist University

June 2006

ABSTRACT

The education reform in China has brought about changes in the education sector of China since 1985. With continuous effort in raising the literacy rate, no formal assessment of the reform impact has been done. Based on three cross-section data points, the present study examined the efficiency of the education sector of China at the provincial level. To have a better understanding of the issue, both technical and scale efficiency were computed for the primary, secondary, and tertiary levels. Due to the imbalance growth across the continent of China under the Open Door Policy, efficiency issue was addressed by region, namely coastal and non-coastal regions. The Farrell output-oriented efficiency estimation indicated that many of the provinces were inefficient in producing education during the studies periods while scale efficiency played only a minor role in overall inefficiency. Accounting for the regional differences in the performance of the education sector, it was found that the performance of the provinces in the non-coastal region is relatively better in both the primary and secondary education and the provinces located in the coastal region performed better in the tertiary education.

Taking the advantage of the three-year data, productivity change of the three levels of education can be investigated. Year-to-year output-oriented Malmquist index and its decomposition were estimated for years 1994-1998, 1998-2003 and 1994-2003.

In general, all three levels of education experienced productivity growth between 1994 and 2003. For the two sub-period analyses, only the primary education exhibited negative growth between 1994 and 1998. Among the three levels of education, the productivity growth in the tertiary sector was the most noticeable. Tracking down the sources of growth, technological improvement dominated with relative small contribution of efficiency change in all cases. The only exception was the provincial performance in the primary and secondary education in the coastal region of which deterioration of over time efficiency was found. In other words, the education reform provided room for education expansion while the education institutions were unable to manage the resources in a more effective and efficient way.

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