

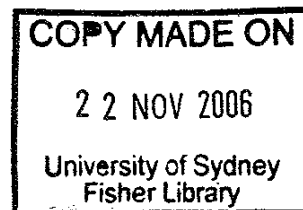
COST EFFICIENCY OF NSW  
RAIL PASSENGER SERVICES  
1951/52–1991/92:  
A CASE STUDY IN CORPORATE  
STRATEGIC MODELLING

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A thesis presented for the  
degree of Doctor of Philosophy



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## TO WHOM IT MAY CONCERN

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university and, to the best of my knowledge and belief, the thesis contains no material previously published or written by another person, except where due reference is made in the text.

Ian Tudor Molyneux De Mellow

# DEDICATION

To those thousands of honest, hardworking, railwaymen and railwaywomen (from all parts of the organisation), who died, became ill, or simply gave up in despair, over the last 50 years, trying to give the people of NSW a modern, efficient railway system. The human cost has been appalling.

# ACKNOWLEDGMENTS

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It needs to be clearly noted that no official State Rail help was sought, or given, in the completion of this study.

# ABSTRACT

During the 1990s, governments, managements and unions have been focused upon improving the cost efficiency of firms. This focus has been strongest for firms in the public sector where improved outcomes can be expected to significantly improve the Gross Domestic Products of whole economies.

This case study looks at the cost efficiency of NSW rail passenger services over a 41 year period to 1991/92, long suspected (but hitherto only tentatively demonstrated) as a paradigm of cost inefficiency.

The case study focuses upon the use of the total factor productivity (TFP) index, as a datum point for measuring change in productivity in four markets: suburban, interurban, country and interstate passenger services since 1951/52. From this datum, changes over the years in management, technology and other external factors can be identified and assessed.

The thesis identifies management quality (the organising element in the firm) as the pre-eminent factor in determining productivity change, and the role that new technology plays in its impact on failures in management.

We establish the linkages between management and innovation, with TFP, pricing efficiency and economic resource use efficiency, to present a rich paradigm for assessing the economic performance of any business firm.

Borrowing from systems theory and other management practices such as total quality management, we disaggregated the case firm into its component systems, sub-systems and processes, for separate study in relation to impact on TFP. The database for 41 years of rail behaviour is the richest ever compiled for any railway in Australia, and with enhanced modelling, enables a systematic treatment of the performance through time of State Rail's passenger services.

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