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**Public utility reform, quality and regulatory
design: a case study of the urban water supply
industry**

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ABSTRACT

This dissertation seeks to identify the implications for quality of utilities reform and regulatory design. As a case study, the structural, operational, ownership, institutional and regulatory changes taking place in the urban water supply industry are examined. The study seeks to establish ‘best practice’ regulatory design of the industry for quality outcomes, based on economic theory and, where possible, empirical evidence.

The urban water supply industry is used as a case study for several reasons:

- classic natural monopoly characteristics such as large sunk costs and economies of scale provide strong rationales for regulation of the industry;
- the public health implications of water supply can generate externalities and raise more complex regulatory design issues;
- the different ownership, institutional and regulatory arrangements of the industry across jurisdictions facilitates useful comparisons; and
- there are possible lessons from countries at more advanced stages of water industry reform, such as the United Kingdom.

The paper focuses on quality in the water industry as a result of reforms that have taken place in several Australian States and in the United Kingdom.¹ The full water cycle is not examined. However, it is recognised that water supply, drainage, wastewater, flood-plain management, ground water and river management are interconnected facets of water quality management.

A key finding is that the corporatisation model favoured in Australia appears to combine the benefits of public sector provision, in terms of transparency and accountability, with a more commercial focus reflective of the private sector. Quality standards and prices set by individual States and Territories enables them to better reflect local conditions and requirements.

A lesson to be drawn from the UK experience is to get the regulation right while the water utilities are still part of the public sector. Overseas models of privatisation which result in heavy costs to consumers should not be replicated in Australia.

¹ For the purposes of this study, United Kingdom refers to England and Wales only.

STRUCTURE OF DISSERTATION

The paper is structured as follows:

- Chapter 1 provides background to public utility reform;
- Chapter 2 discusses the operational and institutional characteristics of the Australian water industry and the major reforms taking place;
- Chapter 3 introduces the concepts of quality and regulatory design;
- Chapter 4 draws together the concepts introduced in the first three chapters to address the regulation of quality in the water industry;
- Chapter 5 more specifically surveys water industry reform and regulation in Australia and the UK in relation to quality;
- Chapter 6 presents empirical results for quality in the water industries surveyed; and
- Chapter 7 summarises the key findings and draws conclusions.

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LIST OF ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
ACT	Australian Capital Territory
ACTEW	Australian Capital Territory Electricity and Water Authority
ANZECC	Australian and New Zealand Environmental and Conservation Council
ARMCANZ	Agricultural Resource Management Council of Australia and New Zealand
Austel	Australian Telecommunications Authority
AWRC	Australian Water Resource Council
BCC	Brisbane City Council
BDW	Blake, Dawson & Waldren
BIE	(former) Australian Bureau of Industry Economics
BOO	Build, own and operate
BOT	Build, operate and transfer
BTCE	Australian Bureau of Transport and Communications Economics
COAG	Council of Australian Governments
CPA	Competition Principles Agreement
CPI	Consumer Price Index (Australia)
CSC	Customer Service Committee (UK)
CRC	Cooperative Research Centre for Water Quality and Treatment
CWW	City West Water
DGWS	Director General of Water Services (UK)
DoF	Department of Finance (Australia)
DWI	Drinking Water Inspectorate (UK)
EC	European Community
EPA	Environment Protection Authority
GBE	Government Business Enterprise
GTE	Government Trading Enterprise
HWC	Hunter Water Corporation
IC	Industry Commission
IPART	Independent Pricing and Regulatory Tribunal of NSW
K	Capital
LGA	Local Government Authority
MMC	Monopoly and Mergers Commission (UK)
MWC	Melbourne Water Corporation
NCC	National Competition Council

NHMRC	National Health and Medical Research Council
NRA	National Rivers Authority (UK)
NSW	New South Wales
NZ	New Zealand
OECD	Organisation for Economic Cooperation and Development
OFFER	Office of Electricity (UK)
OFGAS	Office of Gas Supply (UK)
OFT	Office of Fair Trading (UK)
OFTTEL	Office of Telecommunications (UK)
Ofwat	Office of Water Services (UK)
RoR	Rate of Return
RPI	Retail Price Index (UK)
SA	South Australia
S & W	Sly and Weigall
SA	South Australia
SA Water	South Australian Water Corporation
SBP	Strategic Business Plan
SCI	Statement of Corporate Intent
SCNPMGTE	Steering Committee on National Performance Monitoring of Government Trading Enterprises
SEW	South East Water
SWB	Sydney Water Board
SWC	Sydney Water Corporation
TCM	Total Catchment Management
The Office	Office of the Regulator General, Victoria.
The Tribunal	Government Pricing Tribunal of New South Wales
TPA	Trade Practices Act
UK	United Kingdom
US	United States of America
WHO	World Health Organisation
WSAA	Water Services Association of Australia
WSA UK	Water Services Association of England and Wales
WSD	Water, sewerage and drainage.
YVW	Yarra Valley Water