

PAPER NUMBER CIB2007-095

**Mapping the Australian regulatory environment: Implications for construction firms**

Craig Furneaux

Professor Kerry Brown

Professor Keith Hampson

*Acknowledgement: This research has been conducted as part of a research project (Construction Industry Business Environment) funded by the CRC for Construction Innovation, Brisbane Australia.*

**ABSTRACT**

As regulators, governments are often criticised for over-regulating industries. This research project seeks to examine the regulation affecting the construction industry in a federal system of government. It uses a case study of the Australian system of government to focus on the question of the implications of regulation in the construction industry. Having established the extent of the regulatory environment, the research project considers the costs associated with this environment. Consequently, ways in which the regulatory burden on industry can be reduced are evaluated. The *Construction Industry Business Environment* project is working with industry and government agencies to improve regulatory harmonisation in Australia, and thereby reduce the regulatory burden on industry. It is found that while taxation and compliance costs are not likely to be reduced in the short term, costs arising from having to adapt to variation between regulatory regimes in a federal system of government, seem the most promising way of reducing regulatory costs. Identifying and reducing adaptive costs across jurisdictional are argued to present a novel approach to regulatory reform.

**KEYWORDS**

**Public policy, regulation, harmonisation, construction.**

## INTRODUCTION

In their role as regulator, governments are often criticised for over-regulating industry (OECD 1997). Research conducted internationally has shown that lack of coordination of policy, legislation and regulation between jurisdictions in countries can lead to reduced innovation and productivity in industries (OECD 2001). In Australia, overregulation has also been cited as a cause for inhibiting productivity (Productivity Commission 2004), and innovation (Manley 2004, Price Waterhouse Coopers 2002), and that research into this area should be given high priority (Hampson & Brandon 2004). Productivity gains from an improved regulatory system have been estimated in the hundreds of millions of dollars (ABCB 2003).

Aside from research which has documented the complaints of industry in relation to over-regulation, little academic research has been undertaken to identify the extent of this regulatory environment, nor to compare the ways that different states in Australia approach the regulation of construction in their respective jurisdictions. In order to understand the impact of a regulatory framework, it must firstly be understood.

This project employed an exploratory approach in order to answer the research questions: What is the nature and extent of the current regulatory environment affecting the construction industry in Australia? What are the implications of this regulatory environment for the construction industry? This research question is exploratory, as the question is seeking to provide information to use in analysing a situation (Zikmund 2003:55).

## METHODOLOGY

Trow (1957, cited in Bryman 1984, p. 76) argues that “the problem under investigation properly dictates the methods of investigation”. Types of research questions for which a qualitative design is appropriate, include: when the focus is on the process, implementation or development of a policy, when there is a need for detailed in-depth information; when there is a focus on diversity among, and idiosyncrasies of, participants (adapted from Mertens 2005: 233). Mertens (2005) criteria indicate that a qualitative research approach is appropriate for this research into the public arena.

For exploratory research, case studies are considered appropriate methodology, as information is sought to use in order to analyse a situation (Zikmund 2003:55). A case study is “a method for learning about a complex instance, based on a comprehensive understanding of that instance obtained by extensive descriptions and analysis of that instance taken as a whole and in its context” (U.S. General Accounting Office 1990, cited in Mertens 2005:237). Case studies in the area of public policy issues have been called for as a way of advancing public policy practice (Osborne & Brown 2005). Case studies can utilise a multitude of methodologies to achieve their outcomes (Yin 2003a, 2003b). In this project, a qualitative methodology was utilised to map the content of various regulations, as there was a requirement for gaining in-depth information, on the various regulations governing public policy analysed (Adapted from Mertens 2005: 233). Content analysis is a technique for gathering and analysing the content of text (Neuman 2000: 292), and is an approach that is ubiquitous in policy studies (Marinetti 1999: 68). The greatest strength of content analysis is that it is unobtrusive and nonreactive, and is viewed as an objective way of obtaining data (Marshall & Rossman 1999: 117).

## FINDINGS AND DISCUSSION

In the Australian Constitution, infrastructure, public works and main roads are the responsibility of the state and territory governments. While not specifically mentioned in the Australian constitution, local governments have an extensive history in providing service provision in the area of building inspections, town planning, and local roads. The Commonwealth has also increasingly become involved in construction, primarily through tied grants. The Commonwealth government has increased its provision of funding to the states of major grants for infrastructure – to which the Commonwealth can attach conditions (Fenna 2004).

It is beyond the scope of this paper to report on the regulatory environment in detail. A report is available from the authors which discusses the regulations in more detail (*Mapping the Regulatory Environment of the Construction Industry in Australia*). However, it is possible to provide a précis of this report (see Table 3 below). It is important to note that three spheres of government national, state and local – enact regulatory regimes which affect the construction industry, both at the firm level and also at the project level.

**Table 1 – Summary of government involvement in construction regulation**

<i>Jurisdiction</i>	<i>Role of state / territory government overall</i>	<i>Role of local governments overall</i>	<i>Engagement of Private Contractors</i>
<b><i>Australian Capital Territory</i></b>	Establishes regulatory environment for construction. Responsible for development assessment, planning, and occupancy certification. May also undertake building inspections. Regulates the requirements for licensing of builders, business registration OH&S <sup>1</sup> , workers compensation, insurance, taxation, procurement arrangements and dispute resolution.		Private contractors undertake vast majority of building inspections and certification (design, build, occupy)
<b><i>Commonwealth government (national)</i></b>	Establishes the Building Code of Australia (BCA) which is adopted by the states and territory governments. Also oversees establishment of national standards. Regulates the requirements for company registration and reporting, OH&S on Commonwealth funded projects, goods, services and income taxation, procurement arrangements and dispute resolution.	Some engagement with ACT government for specific commonwealth buildings (eg Canberra Airport)	Appears subject to state / territory legislation
<b><i>New South Wales (state)</i></b>	Establishes regulatory environment for construction. Regulates the requirements for licensing of builders, business registration OH&S, workers compensation, insurance, taxation, procurement arrangements and dispute resolution. Adopts the BCA.	Responsible for development assessment, planning, and occupancy certification. Undertakes building inspections.	Private contractors may be engaged were delegated authority (design, build, occupy)?
<b><i>Northern Territory</i></b>	Establishes regulatory environment for construction. Also responsible for planning, development assessment and building orders. Does not inspect constructions. Regulates the requirements for licensing of builders, business registration OH&S, workers compensation, insurance, taxation, procurement arrangements and dispute resolution. Adopts BCA.		Private contractors undertake vast majority of building inspections and certification (design, build, occupy)

<sup>1</sup> Occupational health and safety

<b>Jurisdiction</b>	<b>Role of state / territory government overall</b>	<b>Role of local governments overall</b>	<b>Engagement of Private Contractors</b>
<b>Queensland (state)</b>	Establishes regulatory environment for construction.. Regulates the requirements for licensing of builders, business registration OH&S, workers compensation, insurance, taxation, procurement arrangements and dispute resolution. Adopts BCA.	Responsible for development assessment, planning, and occupancy certification. Undertakes building inspections.	Private contractors undertake vast majority of building inspections and certification (design, build, occupy)
<b>South Australia (state)</b>	Establishes regulatory environment for construction. Regulates the requirements for licensing of builders, business registration OH&S, workers compensation, insurance, taxation, procurement arrangements and dispute resolution. Adopts BCA.	Responsible for development assessment, planning, and occupancy certification. Undertakes building inspections.	Private contractors may be engaged were delegated authority (design, build, occupy)
<b>Tasmania (state)</b>	Establishes regulatory environment for construction. Regulates the requirements for licensing of builders, business registration OH&S, workers compensation, insurance, taxation, procurement arrangements and dispute resolution. Adopts BCA.	Responsible for development assessment, planning, and occupancy certification. Undertakes building inspections.	Private contractors may be engaged where delegated authority (design, build, occupy)
<b>Victoria (state)</b>	Establishes regulatory environment for construction. Does inspection of public structures. Regulates the requirements for licensing of builders, business registration OH&S, workers compensation, insurance, taxation, procurement arrangements and dispute resolution. Adopts BCA.	Responsible for development assessment, planning, and occupancy certification. Undertakes building inspections.	Private contractors may be engaged where delegated authority (design, build, occupy)
<b>Western Australia (state)</b>	Establishes regulatory environment for construction. Regulates the requirements for licensing of builders, business registration OH&S, workers compensation, insurance, taxation, procurement arrangements and dispute resolution. Adopts BCA.	Planning approvals, and certification of most building classes. Building inspections not mandatory by government.	Limited involvement in building design.

As can be seen from this summary, state and territory governments are involved in regulating the activities of construction firms, including the human resource issues associated with these firms, such as industrial relations, licensing, training, occupational health and safety. They also set the regulatory environment in which construction firms operate. It is interesting to note that the Commonwealth government of Australia is beginning to legislate in areas which have traditionally been the role of the states and territories – particularly industrial relations and occupational health and safety (Productivity Commission 2006). Local governments are more involved in the construction project level – development assessment, building approvals and inspections, authorising occupancy of buildings, although some states and territories are also involved in these activities.

#### **Costs associated with the regulatory environment in Australia**

The costs normally associated with regulatory regimes are compliance costs and direct charges. Typically, approaches to estimation of the cost of regulations examine **direct costs**, such as fees and charges, together **with indirect costs**, such as compliance and reporting costs (OECD 1997). However, in a fragmented system, such as Australia, costs can also be incurred due to procedural delays, either by government, or by industry having to adapt documentation for different spheres of government; lack of predictable outcomes, with variations occurring between spheres of government and sometimes within the same government agency; and lost business, with delays and red tape preventing realisation of business opportunities (OECD 1997). In this paper, we argue these costs should be termed **adaptation costs**.

As a first step in advancing improvements to the current situation, a summary of the current costs experienced by industry will be outlined. First, Table 2 sets out the regulatory costs incurred by construction firms:

**Table 2 – Regulatory costs incurred by construction firms (Furneaux *et al.* 2006)**

	Australian Government	State and Territory Governments	Local governments
<b>Regulatory Costs on Building firms</b>			
Builders Licensing		Direct Costs Indirect Costs Adaptation Costs	
Insurance		Direct Costs Indirect Costs Adaptation Costs	
OH&S	Direct Costs Indirect Costs Adaptation Costs	Direct Costs Indirect Costs Adaptation Costs	
Taxation / Duties and Fees	Direct Costs Indirect Costs	Direct Costs Adaptation Costs	<b>Direct Costs Adaptation Costs</b>
Procurement	Indirect Costs	Indirect Costs Adaptation Costs	<b>Indirect Costs Adaptation Costs</b>
<b>Dispute resolution</b>		<b>Direct Costs Indirect Costs Adaptation Costs</b>	

The regulatory costs associated with construction projects are outlined in Table 3:

**Table 3 – Regulatory costs incurred by construction projects (Furneaux *et al.* 2006)**

	Australian Government	State and Territory Governments	Local governments
<b>Regulatory Costs on Building Projects</b>			
Planning approval	Indirect Costs	Direct Costs Indirect Costs Adaptation Costs	
Approval to commence building			<b>Direct Costs Indirect Costs Adaptation Costs</b>
Inspection of Buildings			<b>Direct Costs Indirect Costs Adaptation Costs</b>
Enforcement of Building Orders			<b>Direct Costs Indirect Costs Adaptation Costs</b>
<b>Occupancy</b>			<b>Direct Costs Indirect Costs Adaptation Costs</b>

Most costs associated with building *firms* occur at the Commonwealth and state government level, while those costs associated with construction *projects* occur primarily at a local government level. State governments provide a layer of compliance costs with integrated planning acts and similar instruments. There are fees and compliance costs associated with most aspects of the building process, and this is exacerbated when firms work across jurisdictions. Compliance costs can also occur when working across local government boundaries as well. These costs are discussed in detail below.

#### **Direct costs**

The most significant area of direct costs is associated with financial payments to government – typically in the form of taxes, fees and duties. Taxes levied by the Commonwealth government on construction firms include company income tax, goods and services tax, payroll tax and fringe benefits tax (Department of Industry 2007). Income for the Commonwealth government directly related to property was in the order of \$474 million in the 2004-2005 financial year (Australian Bureau of Statistics 2006:11). Unfortunately, disaggregated income data from GST and company tax for the construction industry is not available.

State governments gain income from construction related activities in the form of property taxes, land tax, stamp duty on conveyancing, payroll tax, and land tax (Department of Industry 2007). Income for state and territory governments from property (excluding payroll tax which could not be disaggregated) was \$2,330 million for the 2004–05 financial year (Australian Bureau of Statistics 2006:18). “Taxes on property were the single largest taxation revenue source (38.5%) for state governments in 2004-05” (Australian Bureau of Statistics 2006:4). The property related income has increased in recent years due to the significant rise on property values in most of the states (Australian Bureau of Statistics 2006).

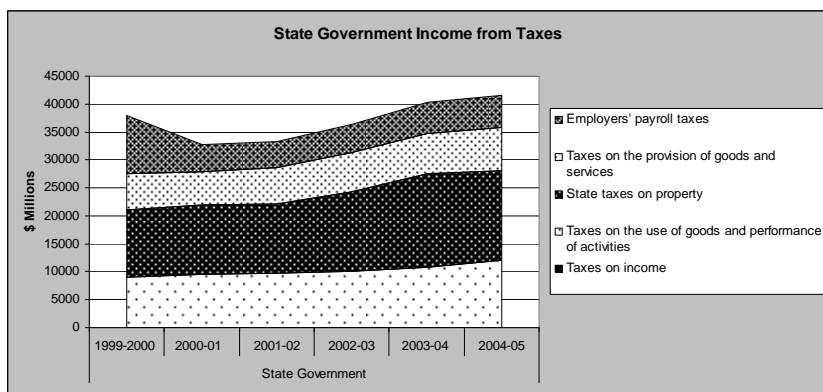
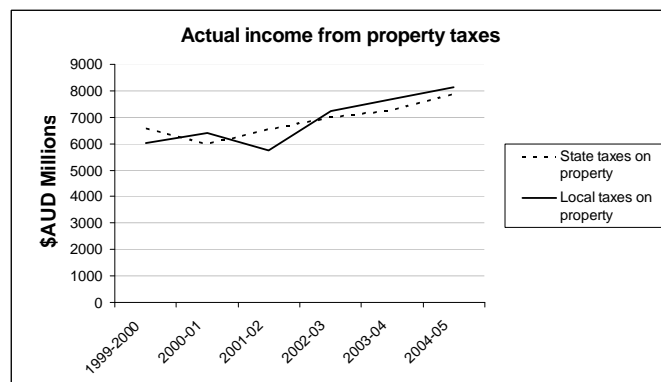


Figure 1 – State income derived from taxes (ABS 2006)

Local governments gain income from property primarily from rates, although they also derive some income from application and inspection fees (Department of Industry 2007). Income from municipal rates was \$6,080 million for the 2004–05 financial year (Australian Bureau of Statistics 2006:12). Taxation from rates on real property, “are the sole form of taxation income for local governments” (Australian Bureau of Statistics 2006:4). It is interesting to note that actual income for state and local governments from property related taxes are almost identical for state and local governments (see Figure 3 below).

Figure 2 -



Actual state and local government income from property (ABS 2006)

Direct costs on the construction therefore were in the order of at least \$8,553 million dollars in the 2004-05 financial year.

#### Indirect and Adaptation costs

Indirect costs are associated with companies needing to comply with government regulations. At the national level, this means the Building Code of Australia, together with various national standards, as well as completing taxation returns and GST reporting. At the State and Territory level, this involves business registration and licensing, insurances, compliance with planning acts, occupational health and safety, and training obligations. At the local government level, this means application and inspection processes, for construction. Adaptation costs occur due to: procedural delays, when industry has to adapt documentation for different spheres of government; lack of predictable outcomes, with variations occurring between spheres of government; and lost business opportunities, with delays and red tape preventing realisation of business venture (OECD 1997). Adapting to different development assessment processes is particularly vexing for construction forms as this falls under the jurisdiction of local governments. Local governments have been charged with fostering national inconsistency due to their focus on meeting local needs (Productivity Commission 2004). The sheer number of local councils (360) compounds this issue.

The adaptation costs of variations in regulations between the states has been estimated by the Building Product Innovation Council (2003) as up to \$600 million per annum for building product manufacturers alone. Productivity gains from increased harmonisation of the regulatory system have been estimated in the hundreds of millions of dollars (ABCB 2003). This argument is supported by international research which found that increasing the harmonisation of legislation in a federal system of government reduces what we have termed adaptation costs (OECD 2001).

However, indirect costs and adaptation costs are particularly difficult to quantify, with no method of estimating this agreed on in Australia. The *Construction Industry Business Environment* project is working with the Productivity Commission in order to identify the best way of assessing compliance costs incurred by construction (Productivity Commission 2006). It is likely that the method for assessing regulatory costs will be derived from the *Standard Cost Model* (OECD 2004).

An observation was articulated by an industry partner in the early stages of the CIBE project: “The construction industry in Australia is one of the most regulated industries in Australia” (personal communication). This research has shown that each sphere of government in Australia is involved in regulating the activities of construction firms. Additionally, each sphere of government is involved in all of the phases of a building project. Thus, construction firms experience direct, indirect and adaptation costs from all levels of government, and at every phase in a construction project. The situation becomes more complex once an organisation works across jurisdictional boundaries, as they have to adapt to varying regulations at the commonwealth, state, territory or local levels.

#### IMPLICATIONS FOR AUSTRALIAN CONSTRUCTION FIRMS

Geiger and Hoffman (1998) have noted that the extent of regulation in an industry tends to be negatively associated with firm performance. Consequently, the need to “reduce red tape” and regulatory inconsistencies is argued to be a desirable outcome (OECD 1997) for developed countries. Stoeckel and Quirke (1992) have argued that if regulatory compliance costs on the construction industry could be reduced by 10%, this could have a strong positive effect on GDP. Significantly, the authors predict that a 10% reduction of costs to non-residential construction would have the biggest positive effect on GDP. This finding was reinforced by macroeconomic modelling conducted on behalf of *Construction Innovation* by ACIL Tasman (2005), who found that improvement of productivity in the construction industry will have significant improvement in GDP over time. So how likely is it that regulatory costs experienced by construction firms can be reduced?

#### Reduction in regulatory direct costs (taxes) to the construction industry

Firstly, is a reduction in the category of direct costs likely? The Commonwealth gains income from the construction sector through company taxes, income taxes, and the GST. State governments gain income from construction and property through property taxes, stamp duties and the like. In fact, 38.5% of the income received directly by states, not through grants from the Commonwealth, was derived through property tax in 2003-2004 (Australian Bureau of Statistics 2006). Local government derives income from construction and property through application fees, development fees, and rates.

As long as each jurisdiction in Australia derives significant income from the construction industry, relinquishing authority and reduction of the burden would appear unlikely. While it is possible that the states may reduce their direct taxes on construction related duties (e.g. property taxes and stamp duty) in lieu of increased distributions from the Commonwealth GST income, although the spectre of increased reliance on the Commonwealth for funding, and the forgoing reduction in direct income and therefore independence, would appear to make this unlikely (Hamill 2005). Is a reduction in indirect costs more likely then?

#### *Reduction in indirect (compliance) costs to the construction industry*

In the Australian Constitution, infrastructure, public works and main roads are the responsibility of the states. Each state has enacted building acts and regulations and some have developed integrated planning acts. Additionally, each state has regulations which address construction related activities – occupational health and safety, builders licensing, and training; as well as specifications for various types of buildings and building products. Moreover, many state government departments become involved in construction activities: public works authorities in the construction of roads, infrastructure and public works; environmental authorities to monitor the impact of construction projects and firms of the environment; and heritage departments to preserve buildings of historical significance. In addition to the roles of the states in construction regulation, much of the day to day construction activity in Australia is overseen by local councils – particularly the provision of development assessment and town planning, building inspections, and local roads and drainage.

The Commonwealth government has also become increasingly involved in construction, primarily through tied grants. Indeed part of the increasing role of the Commonwealth government is in the provision of funding to the states of major grants for infrastructure – to which the Commonwealth can attach conditions (Fenna 2004). Through this mechanism of tied grants, the Commonwealth government appears to also be pursuing a range of other agendas, particularly in the industrial relations and occupational health and safety areas. Thus all three spheres of government have regulatory responsibilities and interests in the construction industry. While minor adjustments may be possible, large scale reduction in regulation in direct and indirect costs appear unlikely in the near future. This leaves a reduction in adaptation costs as a possible area of reduced regulatory burden.

#### *Reduction in adaptation costs to the construction industry*

The CRC for Construction Innovation is working with various government agencies and industry associations to improve the harmonisation of regulation in Australia, thereby reducing the regulatory burden on construction firms.

**Table 4 – Initiatives of the CIBE Project and Construction Innovation**

<b>Policy Area</b>	<b>Current situation</b>
<b>Builders / Professional licensing &amp; training</b>	COAG agreement in place. Working with builder's licensing Australasia to develop a mutual recognition framework
<b>OH&amp;S Regulation</b>	Working with the Heads of Workplace Health and Safety improve the harmonisation system
<b>Procurement</b>	Working with Australian Procurement and Construction Council to encourage sharing of information between jurisdictions
<b>Development planning and assessment</b>	Currently working with multiple local government authorities to develop a case study around the use of ICT tools to harmonise development approval processes between local governments
<b>Sustainability</b>	Working with the Australian Sustainable Built Environment Council to identify ways of harmonising approaches to sustainability reporting and goal setting.

## **CONCLUSION**

The research has identified that in a federal system such as Australia the construction industry is regulated by every sphere of government, both at a firm level, and at a project level. Reducing 'red tape' is a consistent response to calls for improving productivity in the construction industry. However, this research has demonstrated that simply reducing amount of regulation may not achieve better or more productive construction outcomes. There is a need to examine the points of intersection between jurisdictions in common areas of the construction arena and determine appropriate mechanisms to ensure effective translation and transition of these construction activities across these borders. Further, it has been found that while direct and indirect regulatory costs derive from the constitutional and historical role of various governments – adaptation costs are the result of differences between jurisdictions. Focusing on improving the regulatory impact across the different jurisdictional boundaries for the construction industry is argued to establish a more effective response to the 'red tape' reduction effort. Increasing harmonisation would reduce the adaptation costs noted above, and potentially have a positive impact on industry productivity. *Construction Innovation* is actively working to reduce adaptation costs through the *Construction Industry Business Environment* project

## REFERENCES

- ABCB (2003) *Submission to Productivity Inquiry into first Home Ownership*. Downloaded from <http://www.pc.gov.au/inquiry/housing/subs/sub198.pdf>.
- ACIL Tasman (2005) *Economic Impact Modelling Study: TG Construction Documentation and Scenario Analysis*. A report prepared for the CRC for Construction Innovation. Sydney: ACIL Tasman.
- AusIndustry (2005) *Regulation Reduction Incentive Fund Costing Tool*. CD ROM. Canberra: AusIndustry.
- Australian Bureau of Statistics (2005) *Taxation Revenue 2003 – 2004*. Downloaded from <http://www.abs.gov.au/Ausstats/abs@.nsf/0/ACE2B395A8657B91CA256A6800820742?Open> on 19 December 2005.
- Building Products Innovation Council (2003) *BPIC Submission to the Productivity Commission into First Home Ownership: The Hidden Costs of Inconsistent Building Regulations*. Downloaded from <http://www.pc.gov.au/inquiry/housing/subs/sub031.pdf> on 15 November 2005.
- Chun, P. and Associates. (2000). 'State of Play' Document: Comparison of Building Regulatory Framework in Australian States and Territories. Department of Industry, Science and Resources. [http://www1.industry.gov.au/library/content\\_library/BC-StateofPlay.doc](http://www1.industry.gov.au/library/content_library/BC-StateofPlay.doc)
- Collie Planning and Development Ltd (2002). *State of Play Document: Comparison of Planning Systems in Australian States and Territories*. National Office of Local Government. [http://www.daf.gov.au/sop/SOP\\_updated\\_2002.pdf](http://www.daf.gov.au/sop/SOP_updated_2002.pdf)
- Dunn, W.N. (1981). *Public Policy Analysis: An Introduction*. Englewood Cliffs: Prentice-Hall,
- Dutch Administrative Burdens Model (2005). Downloaded from [http://www.administratievelasten.nl/default.asp?CMS\\_ITEM=40A700923A254E96A944E0DF8998DAA9X1X40221X35](http://www.administratievelasten.nl/default.asp?CMS_ITEM=40A700923A254E96A944E0DF8998DAA9X1X40221X35).
- Fenna, A. (2004). *Australian Public Policy*, 2nd Edition. Frenchs Forest, NSW: Pearson Education.
- Furneaux, CW, Brown, K., Abel, N. and Burgess, J. (2006) *Mapping the Regulatory environment of the Construction Industry in Australia*. Brisbane: CRC for Construction Innovation. Unpublished report.
- Geiger, S.W. & Hoffman, J.J. (1998). "The Impact of the Regulatory Environment and Corporate Level Diversification on Firm Performance" *Journal of Managerial Issues* Vol. 10(4), 439 – 453.
- Hampson, K & Brandon, P. (2004) *Construction 2020: A Vision for Australia's Property and Construction Industry*, Brisbane: Cooperative Research Centre for Construction Innovation.
- Manley, K. (2004) *BRITE Innovation Survey: Executive Summary*, Brisbane: Cooperative Research Centre for Construction Innovation. [http://www.brite.crcci.info/publications/pdfs/executivesummary\\_brite\\_survey.pdf](http://www.brite.crcci.info/publications/pdfs/executivesummary_brite_survey.pdf).
- Mertens, D.M. (2005) *research and Evaluation in Education and Psychology: Integrating diversity with Quantitative, Qualitative and mixed methods. 2<sup>nd</sup> Edition*. Thousand Oaks: Sage Publications.
- OECD (1997) *OECD Report on Regulatory Reform*. Paris: OECD /OCDE.
- OECD (2001) *Government Capacity to Assure High Quality Regulation*. Paris: OECD / OCDE
- OECD (2004) *The Standard Cost Model: A Framework for Defining and Quantifying Administrative Burdens for Businesses*. Downloaded from: [http://epp.eurostat.ec.europa.eu/pls/portal/docs/PAGE/PGP\\_DS\\_QUALITY/TAB47143266/STANDARD%20COST%20MODEL\\_DK\\_SE\\_NO\\_BE\\_UK\\_NL\\_2004\\_EN\\_1.PDF](http://epp.eurostat.ec.europa.eu/pls/portal/docs/PAGE/PGP_DS_QUALITY/TAB47143266/STANDARD%20COST%20MODEL_DK_SE_NO_BE_UK_NL_2004_EN_1.PDF)
- Osbourne, S.P. and Brown, K.A. (2005) *Managing change and innovation in public service organizations*. New York : Routledge.
- Pandley and Scott (2002) "Red Tape: A Review and Assessment of concepts and measures" *Journal of Public Administration and Theory* 12:4, pp. 553 – 580.
- PriceWaterhouseCoopers (2002) *Innovation in the Australian Building and Construction Industry – Survey Report*. Canberra: Australian Construction Industry Forum, Department of Industry, Tourism and Resources.
- Productivity Commission (2004) *Reform of Building Regulation: Productivity Commission Research Report*, Canberra; AGPS. Downloaded from <http://www.pc.gov.au/study/building/finalreport/building.pdf>, on 7 December 2004.
- Stoeckel, AB & Quirke, D. (1992) *Services: Setting the Agenda for Reform*, Canberra: Services Industries Research Program, Department of Industry, Technology and Commerce.
- Yin, R.K. 2003a. *Case Study research: Design and Methods*. 3rd Edition. Thousand Oaks: Sage Publications.
- Yin, R.K. 2003b. *Applications of Case Study Research*, 2nd Edition. Thousand Oaks: Sage Publications.
- Zikmund, W.G. (2003). *Business Research Methods*. Mason, OH: Thompson, Southwestern.