REGULATORY CONSTRAINTS ON PUBLIC SECTOR INNOVATION: A NEW COMPARATIVE APPROACH

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Doctor of Philosophy

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DECLARATION

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program; and any editorial work, paid or unpaid, carried out by a third party is acknowledged; and, ethics procedures and guidelines have been followed. I acknowledge the support I have received for my research through the provision of an Australian Government Research Training Program Scholarship.

Aaron Matthew Lane
August 2019
[In] the study of society exclusive concentration on a speciality has a peculiarly baneful effect: it will not merely prevent us from being attractive company or good citizens but may impair our competence in our proper field – or at least for some of the most important tasks we have to perform. The physicist who is only a physicist can still be a first-class physicist and a most valuable member of society. But nobody can be a great economist who is only an economist – and I am even tempted to add that the economist who is only an economist is likely to become a nuisance if not a positive danger.

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PUBLICATIONS

The following publications have been accepted and form part of this thesis:

- Parts of chapters 2, 4, and 7 have been published as Lane, A 2018, ‘Overregulation in public services’ in Allen, D, and Berg, C (eds), Australia’s Red Tape Crisis: The causes and costs of over-regulation, Brisbane: Connor Court.

- Parts of chapters 2 and 5 have been published as Lane, A 2018, ‘Regulatory Constraints on Public Sector Innovation: A Case Study on Queensland’s Independent Public School Program’, Australian Journal of Public Administration, vol. 55, no. 4, pp. 685-699. (Note: an earlier version of this article was presented at the 2017 Australian Centre for Entrepreneurship Research Exchange Conference in Melbourne, Australia.)

- Parts of chapters 2 and 4 have been accepted for publication as Lane, A, ‘The Destruction Phase of Public Sector Innovation: Regulations Governing School Closure in Australia’ with the Journal of Evolutionary Economics (forthcoming). (Note: an earlier version of this article was presented at the 2018 International Joseph A. Schumpeter Society Conference in Seoul, Korea.)

The following publications are referenced but are not submitted for examination:


- Allen, D, Berg, C, Lane, A and Potts, J 2018, ‘Cryptodemocracy and its Institutional Possibilities’, Review of Austrian Economics (in press). (Note: an earlier version of this article was presented to the ‘Workshop on Linked Democracy: Artificial Intelligence for Democratic Innovation’ – Part of the 26th International Joint Conference on Artificial Intelligence, Melbourne.)

- Allen, D, Lane, A, and Poblet, M 2019, ‘The Governance of Blockchain Dispute Resolution’ currently under review with the Harvard Negotiation Law Review. Pre-print available on SSRN: <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3334674>. (Note: an earlier version of this paper was presented to
the 2018 Australian Law and Economics Association Conference in Brisbane, Australia.)

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ABSTRACT

Innovation is essential to the continual improvement of public sector services. Research on public sector innovation is important due to the size, scope, and complexity of public sector service delivery. The underlying assumption of the public sector innovation literature is that the public sector suffers from a lack of innovation. The standard explanation tends to focus on the management and culture that is typical of public sector bodies. From that basis, scholars have sought to foster public sector innovation by proposing the adoption of practices from the more innovative private sector. The impact of regulation on public sector innovation remains unclear within the existing theoretical framework, and that relationship has not been systematically examined. The lack of attention given to legislative and regulatory structures within public sector innovation research is a significant omission because any provision of public sector services is a deliberative decision by government guided by the political process rather than the market. This thesis makes a significant contribution to the economics of public sector innovation, developing a theoretical approach based on new comparative economics and evolutionary economics to examine regulatory constraints on public sector services, furthered by insight gained from case studies and legislative analysis of government schools, independent public schools, charter schools, and voucher programs.

This thesis develops two central claims. First, in any area of public sector service provision, a diversity of institutional possibilities for service delivery can be observed. This thesis draws on the new comparative economics framework (Djankov et. al 2003; Shleifer 2005) and extends its theoretical application to a public sector context. Second, each institutional possibility – embedded in its own legislative and regulatory frameworks – will have distinct constraints of the dynamism of how public sector services are first adopted, transformed, and ultimately come to an end. As this suggests, it is possible to identify mechanisms of creation and destruction by examining legislative and regulatory provisions. This approach draws on evolutionary economics and the Schumpeterian conceptualization of innovation as a dynamic process known as “creative destruction” (Schumpeter 1942) and uses this insight a conceptual lens for legislative and regulatory analysis.
Public school education provides an exemplar for examining legislative and regulatory frameworks governing public sector service delivery. There is no single method of the provision of school education. Instead, as this thesis shows, there is a spectrum of institutional forms that have emerged which seek to fulfill the aims of the public provision of school education. The institutional theory of regulation, drawn from new comparative economics, posits that society faces a trade-off between the perceived costs of private disorder and the perceived costs of government dictatorship. Institutional possibilities emerge to economize these competing risks. This thesis employs the Institutional Possibilities Frontier, associated with new comparative economics, as a tool to compare and contrast four examples of institutional possibilities – government schools and Independent Public Schools in Australia, and the American school choice programs of charter schools and voucher programs.

The new comparative approach to public sector innovation characterizes regulatory constraints as costs of dictatorship. In the school education service delivery context, the centralized regulation of public services – expressed in legislation and regulatory frameworks – attempts to control various perceived risks of disorder, including problems of duplication, positive externalities, information asymmetries, parental failure, and societal dysfunction. However, amongst other costs, the consequence of centralized control of service delivery is that local autonomy, professional discretion, and dynamism, in how schools are established and closed, are necessarily constrained. The new comparative approach predicts that decentralized institutional arrangements will be more favorable to innovation as compared to centralized institutional possibilities, as more dynamic and evolutionary mechanisms of creation and destruction will be embedded in the legislative and regulatory framework governing service delivery. This thesis provides empirical support for this theoretical prediction – demonstrating that there is a correlation between regulatory structures and dynamism in a public sector context and affirming the new comparative approach’s explanatory power.

This thesis makes four contributions. First, the new comparative approach to public sector innovation that is developed provides a novel theoretical explanation for the lack of public sector innovation framed around regulatory constraints. Second, a unique method of analyzing regulatory constraints is advanced, which contributes to
the literatures of new comparative economics, evolutionary economics, and public sector innovation, in conversation with the literature of school choice and school autonomy. Third, several empirical findings are presented through case studies and legislative analysis of public school education in the government, independent public school, charter school, and voucher program institutional contexts. Fourth, a number of insights are offered towards developing evolutionary public policy and greater dynamism in public sector service provision. Together, these contributions open up new avenues for research and chart a new agenda for public sector innovation based on regulatory and comparative institutional analysis.
ACRONYMS

ABS  Australian Bureau of Statistics
ACARA  Australian Curriculum, Assessment, and Reporting Authority
ALP  Australian Labor Party
APSC  Australian Public Sector Commission
AROS  Alliance to Reclaim Our Schools
CER  Centre for Education Reform
CPD  Center for Popular Democracy
COAG  Council of Australian Governments
DC  District of Columbia
EOI  Expression of Interest
GDP  Gross Domestic Product
ICT  Information Communications Technology
IPF  Institutional Possibilities Frontier
IPS  Independent Public School
NPM  New Public Management
NSW  New South Wales
NT  Northern Territory
QLD  Queensland
QPF  Quality Provision Framework
SAIL  School for Arts and Learning
SIPF  Subjective Institutional Possibilities Frontier
SOTF  Schools of the Future
LNP  Liberal National Party
OECD  Organisation for Economic Co-operation and Development
PCSB  Public Charter School Board
PISA  Programme for International Student Assessment
VCAT  Victorian Civil and Administrative Tribunal
WA  Western Australia
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*School Education Act 1999* (WA)

*States Grants (Independent Schools) Act 1969* (Cth)

*States Grants (Science Laboratories and Technical Training) Act 1964* (Cth)

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Victorian Qualifications Authority Act 2000 (Vic)

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Code of the District of Columbia

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Minnesota Session Laws of 1991

Scholarships for Opportunity and Results Act of 2011
Chapter 1 – Introduction

1.1 Introduction

There is a long history of research on the economics of innovation, and the importance of innovation to economic development (e.g., Schumpeter 1934; 1942; Solow 1957; Pavitt 1984; Romer 1990; Porter 1990; Baumol 2002; North 2005; Dopfer and Potts 2008). Scholars have long grappled with how innovative practices are adopted and diffused to create value in a public sector context (e.g., Walker 1969; Rogers 1995) and there has been a renewed focus on public sector innovation in recent years (e.g., Potts 2010; Potts and Kastelle 2010; Bloch and Bugge 2013, 2016; Mazzucato 2013; Mulgan 2014; De Vries, Tummers and Bekkers 2016, 2018a, 2018b; Demircioglu 2017; Torfing 2016; 2019; Arundel, Bloch, and Ferguson 2019; Cinar, Trott, and Simms 2019). However, the effect of regulation on public sector innovation has not been examined systematically – notwithstanding that there is a significant amount of regulation inside government (Hood et al. 1998; 1999; Hood, James, and Scott 2000).

The lack of focus on legislative and regulatory structures within public sector innovation research is curious because any provision of public sector services is a deliberative decision by government guided by the political process rather than the market (e.g., Downs 1957; Buchanan and Tullock 1962). Any government intervention of this kind necessarily requires a legislative and regulatory framework. In this way, regulation facilitates public service delivery at scale. As Joseph Schumpeter (1942, p. 184) wrote, ‘... bureaucracy is not an obstacle to democracy but an inevitable complement to it.’ However, there is no single way to legislate and regulate the provision of public sector services.

This thesis develops two central claims. First, in any area of public sector service provision, a diversity of institutional possibilities for service delivery can be observed. This thesis draws on the new comparative economics framework (Djankov et al. 2003; Shleifer 2005) and extends its theoretical application to a public sector context. Second, each institutional possibility – embedded in legislative and regulatory structures – will have distinct constraints of how the dynamism of how public sector services are first adopted, transformed, and ultimately come to an end. This approach
draws on the Schumpeterian conceptualization of innovation as a dynamic process known as “creative destruction” (Schumpeter 1942) as a tool for legislative and regulatory analysis. Therefore, the overarching contribution of this thesis is to provide a detailed examination of the regulatory constraints on the dynamism of public sector innovation.

The purpose of this chapter is to introduce the rationale, approach, structure, and contributions of the thesis. Accordingly, the remainder of this introductory chapter will be presented in the following way. Section two will discuss the importance of public sector innovation research and consider the broader policy context for the study. Section three explains that this thesis will be confined to one type of public sector service (public education) through a series of case studies (government schools, independent public schools, and school choice programs) examining regulatory constraints and showing the diversity of institutional possibilities. Section four will detail the research questions and outline how the thesis will address those questions. Section five will summarize the contributions of the thesis. Section six gives a disclaimer on the boundaries of the thesis. Section seven will conclude this introductory chapter.

1.2 The importance of public sector innovation research

Research on public sector innovation is important. One reason for this is that the size of the public sector means that there is considerable scope for innovation to drive improvements in service delivery (Potts and Kastelle 2010; Arundel and Huber 2013). In Australia, a significant amount of taxpayer funding is directed towards delivering public sector services. It is significant in terms of the total budget allocated to providing these services and as a proportion of Gross Domestic Product (GDP). For instance, data from the recent Productivity Commission Report (2019) on Government Services outlines the scale of government spending in Australia. For that report, public services encompassed childcare, education and training, justice, emergency management, health, community services, and housing and homelessness services. The report estimated that federal, state and territory governments spend a combined annual total of $235 billion on public services (Productivity Commission 2019). This level of expenditure each year is equivalent to approximately 14 percent of Australia’s GDP (Productivity Commission 2019). Access to these services is relied on by millions of
Australians – and improvements in the delivery of these services through innovation will improve living standards. Additionally, productivity and efficiency gains through innovation mean that improvements in service delivery can be achieved without the public sector becoming an increasing drag on economic activity (Moran 2010; Stewart-Weeks and Kastelle 2015). This is particularly true in the current Australian political context where federal, state and territory governments are under pressure to exercise fiscal restraint to return budgets to balance following the Global Financial Crisis (Axelson, Netz and Sandstrom 2017; Bloch and Bugge 2016; Torfing 2019).

The complexity of public sector services creates unique challenges for service delivery that demand innovative solutions (Demircioglu 2017; De Vries, Tummers and Bekkers 2018a). Accordingly, the study of public sector innovation is essential to foster continual improvement in the efficiency and quality of public services (Borins 2001; Albury 2005; Walker 2007; Osborne and Brown 2013; Torugsa and Arundel 2016), as well as create flexibility and responsiveness to meet citizens’ high expectations of these services (Demircioglu 2017; Gasco-Hernandez, Sandoval-Almazan, and Gil-Garcia 2017). Further, it is recognized that public services, such as educational institutions, make up part of a “National System of Innovation” being ‘the network of institutions in the public and private sectors whose activities and interactions initiate, import, modify and diffuse new technologies’ (Freeman 1987, cited in Autio 1998, p. 132). Rigidity in the public sector, therefore, will constrain dynamism in the private sector innovation (e.g., Murmann 2003). The complexity of public sector innovation is amplified by the fact that “National Systems of Innovation” also evolve (Kastelle, Potts, and Dodgson 2014).

The broader policy context of public sector innovation research is that executive governments have been advocating innovation as a solution to improve the quality of the public services that they provide (Mergel and Dezousa 2013; Taylor 2016; Demircioglu 2017). In the Australian context, Demircioglu (2017, p. 8) observes that ‘Australian public management reforms and public sector innovation have been pursued very seriously in Australia since the 1980s.’ Two recent examples appear to continue in this direction. First, in March 2014, the Australian government commissioned a "root and branch" review (known as the “Harper Competition Review”) of Australia’s competition laws and competition policy (Bilson 2014).
panel’s final report recommended, amongst other matters, that one way of promoting innovative service delivery in human services is to promote user choice and encourage a diversity of service providers – rather than a single government monopoly, a system where the government is the sole funder, provider, and regulator. Yet there was little detail about how this is to be achieved, in either in the panel’s final report (Harper et al. 2015) or the Commonwealth government’s response adopting this proposal (Treasu
or 2015). Second, in December 2015, the Australian Commonwealth government published its National Innovation and Science Agenda (Department of the Prime Minister and Cabinet 2015). The policy document lists one of the four pillars as ‘Government as an exemplar’ (Department of the Prime Minister and Cabinet 2015). However, there is scant detail in that document how the government will provide this example and overcome any current barriers – although one government minister subsequently advocated greater use of digital technology for the public sector (Taylor 2016). Accordingly, within this policy context, there is a significant opportunity for academic research to have an impact in providing theoretical and empirical support to efforts that promote innovation in a public sector context.

How has the public sector innovation research literature approached understanding how to improve innovation in the public sector context? The extant public sector innovation literature is highly fragmented (De Vries, Tummers and Bekkers 2016) and comprises of several sub-fields including, but not limited to, e-government, public management, and public policy (De Vries, Tummers and Bekkers 2018a). The public sector innovation literature does not present a unified theory of why public sector innovation occurs. Most of the literature does not empirically test whether there is a lack of innovation in the public sector as compared to the private sector (De Vries, Tummers and Bekkers 2016). Instead, there is a widely held assumption that there is. Indeed, there is a common perception that public sector innovation is an oxymoron (Bommert 2010; Torfing 2019; Vigoda-Gadot et al. 2005). However, the predominant problem that the conceptual literature seeks to address is “why is there a lack of innovation in the public sector?” (Potts and Kastelle 2010). Nevertheless, as Sanford Borins (2014, p. 1) observes, ‘innovation in government persists’; and innovators can be found in all levels of government. Indeed, Mariana Mazzucato (2013) has ventured that the public sector is inherently entrepreneurial in financing high-risk projects (c.f.,
Potts 2015). As such, recent empirical efforts have sought to counter the general negative perception by showing that the public sector does, in fact, innovate (e.g., Arundel and Huber 2013; Bloch and Bugge 2013; 2016; Bernier, Hafsi and Deschamps 2015, Torugsa and Arundel 2015; Pandey, Pandey and Miller 2017; Demircioglu and Audretsch 2017; 2019; Ramli et al. 2017).

As for the connection between regulation and public sector innovation, “red tape” has been noted as a barrier to public sector innovation (e.g., Vigoda-Gadot et al. 2005) and surveys have asked about the impact of innovation as part of more extensive studies (e.g., Bloch and Bugge 2013; 2016). However, there remains a dearth of research on public sector regulation (e.g., Cope and Goodship 1999; Cope, Goodship, and Holloway 2003) and specifically on the connection between public sector innovation regulation and public sector regulation (e.g., Wagner and Fain 2018). A novel and systematic approach is needed for gaining new insights that address the overarching public sector innovation problem.

1.3 Approach

This thesis aims to develop a new comparative approach to the study of public sector innovation by examining legislative and regulatory frameworks in a public sector context. The novelty of this approach is exemplified in providing a systematic and detailed account of regulation in the public sector. However, given the sheer breadth of public sector services, a specific area of focus is needed. This thesis will concentrate on public school education as an example of a public sector service to build a series of case studies.

School education provides an exemplar as a significant component of the public sector, currently accounting for over a quarter of total Australian government expenditure on public services. The most recent data shows that recurrent funding from federal, state and territory governments combined to $57.8 billion in 2016-2017 – a real increase of $12.2 billion equating to a 26.75 percent increase from $45.6 billion spent in 2006-2007 (Productivity Commission 2019). Recent inquiries commissioned by the Federal government have focussed on reviewing funding models so that expenditure on school education is carried out transparently and equitably, and in a way that improves student outcomes (Gonksi et al. 2011; Gonski
et al. 2018). Although this might have been a worthy task, at the same time as Australian governments have significantly increased school funding, Australian students’ performance has fallen compared to other Organisation of Economic Cooperation and Development (OECD) nations in scientific literacy, mathematical literacy, and reading literacy (e.g. Thomson, De Bortoli, and Underwood 2017). This suggests that there may be deeper structural issues affecting productivity, efficiency, and performance in public school education services – and a focus on innovation is an important task.

There is no single method of the provision of school education. In Australia, the school education landscape is typically characterized as simply government schools versus the funding of private schools (e.g., Bonnor and Caro 2007). Donnelly (2015) proposes that Australia has a tripartite system consisting of government schools, independent public schools, and private schools. In this thesis, I will extend this list by analyzing two other institutional possibilities from the United States of America (charter schools and voucher programs). Separately, these institutional possibilities provide individual case studies for gaining insight and building theory for public sector innovation more broadly (e.g., Flyvbjerg 2006; Yin 2018). Together, these institutional possibilities evidence that there is a spectrum of institutional forms that have emerged which seek to fulfill the aims of the public provision of education (e.g., Djankov et al. 2003).

School education services also provide a useful context for exploring the connection between regulation and public sector innovation within Australia because there has been a trend towards state governments giving government schools greater autonomy (e.g., Victoria in 1993, Western Australia in 2009, Queensland in 2013, Northern Territory in 2015). A key claim from proponents of decentralized service models is that schools will be incentivized to be more innovative if they are given more autonomy (Chubb and Moe 1990; Wohlstetter, Wenning, and Briggs 1995; Lubienski 2003a; Preston et al. 2012). Therefore, these case studies will draw on the sector-specific literatures of school autonomy and school choice. For example, the American literature on school choice (e.g., Lubienski 2003a; Bulkley and Fisler 2003; Lake 2008; Preston et al. 2012) and the more recent Australian Independent Public Schools literature (e.g., Gobby, Keddie, and Blackmore 2018; Keddie, Gobby, and Wilkins
consider innovation and innovative practices within these public sector contexts.

The analysis of legislative and regulatory frameworks governing school education requires a theoretical framework. As alluded to, this thesis will approach the public sector innovation problem from an institutional perspective. Specifically, I will use the Institutional Possibilities Frontier (IPF) developed out of the new comparative economics (e.g., Djankov et al. 2003; Shleifer 2005). This framework posits that society faces a trade-off between two types of perceived social costs – disorder and dictatorship. Institutional responses economize on these costs in different ways. The IPF framework facilitates a critical comparative analysis between one institutional possibility and another. The IPF, combined with the underlying institutional theory of regulation (Shleifer 2005; Davidson 2010; 2013) provides further explanatory power by enabling a critical evaluation of the purpose behind regulatory features of an institutional possibility. This thesis will present an original application of the IPF framework showing that there is an inherent trade-off between centralized government control in the delivery of public services and public sector innovation.

There is no universal definition of innovation within the public sector innovation literature (De Vries, Tummers and Bekkers 2016). I will approach this research using the Schumpeterian conception of innovation as the dynamic process of “creative destruction” (Schumpeter 1942). This Schumpeterian approach has been adopted by researchers in the public sector innovation context (Windrum and Garcia-Goni 2008; Potts 2009; 2010; Potts and Kastelle 2010; Mazzucato 2013; Stewart-Weeks and Kastelle 2015) along with others in a regulatory context (Bauer 1997; Yandle 2002; Diamond 2014).

1.4 Research questions and outline

The research questions for this thesis are as follows:

• Question one – what is a new comparative approach to public sector innovation?
• Question two – how can mechanisms of the creation and destruction phases of innovation be observed within public sector services?
• Question three – what are some examples of the institutional possibilities that can be observed for the provision of public school education services, and what are the key legislative or regulatory characteristics of these possibilities?
• Question four – does the potential for the dynamism of innovation change if regulatory constraints change?
• Question five – given the new comparative approach that has been developed, and the research findings, what are the implications for future research exploring the relationship between regulation and public sector innovation?

This thesis will develop answers to these research questions in three parts. In the first part of this thesis, I will develop the theoretical and methodological framework by providing a critical synthesis and evaluation of the public sector innovation literature through the prism of “creation” and “destruction” (Chapter 2) and applying the IPF framework and institutional theory of regulation to the public school education context (Chapter 3). In the second part of this thesis, I will examine centralized government schools (Chapter 4), Independent Public Schools – focusing on Queensland (Chapter 5), charter schools (Chapter 6), and publicly funded voucher programs (Chapter 6). Individually, each chapter in the second part of the thesis presents separate studies that make distinct contributions. Together, the individual chapters will provide evidence of the diversity of institutional possibilities for service delivery in a public sector context from which to draw insights for public sector innovation. In the third and final part of the thesis, the implications of the findings will be discussed (Chapter 7).

1.5 Summary and findings

1.5.1 Chapter two

The purpose of chapter two is to develop the theoretical approach of the thesis through a critical synthesis and evaluation of the public sector innovation literature. I will begin this chapter by exploring how the terms “innovation” and “public sector” have been defined in the public sector innovation literature, and discuss how these definitions inform the scope of my inquiry (Section 2.2). I will then turn to examine the difficulties presented in measuring innovation (Section 2.3). Next, I will critically assess the public sector innovation literature through the prism of the Schumpeterian
concept of innovation, “creative destruction,” critiquing the extant research program (Section 2.4). In this exercise, I find that the theoretical understanding of the connection between regulation and public sector innovation is not clear and there remains a lack of focus on mechanisms of creation and destruction within a public sector context. Following this finding, I propose a new research agenda focused on institutional and regulatory structures governing public service delivery (Section 2.5). Overall, this chapter underscores that my theoretical approach on the constraints on public sector conceives innovation as an economic problem rather than as a management problem.

1.5.2 Chapter three

Chapter three further develops the theoretical and methodological approach of the thesis. The chapter begins by providing an overview of the rationale for the public provision of education services – using the example of school education (Section 3.2). Next, I will argue that public sector services are creatures of regulation (Section 3.3). That is, regulation is a way of legally enforcing the government’s spending and policy decisions. Following this, a critical synthesis of the economics of regulation will be presented (Section 3.4). The institutional theory of regulation (Shleifer 2005; Davidson 2010; 2013) posits that society faces a trade-off between the costs of private disorder and the costs of government dictatorship. Applying the institutional theory, I find that debates over the regulation of public school education services can be seen within this context. In this chapter, the IPF is introduced, along with a review of the relevant literature (Section 3.5) which will provide an organizing tool for comparative institutional analysis in the school education context (Section 3.6). Finally, I will apply new evolutionary economics (e.g., Witt 2003; Dopfer, Potts, and Foster 2004; Hanusch and Pyka 2007) in developing a Schumpeterian lens for legislative and regulatory analysis that will be used in the application chapters to follow (Section 3.7).

1.5.3 Chapter four

In chapter four, the application section of the thesis commences with a focus on the institutional possibility of centralized government schools. This chapter aims to discuss the key regulatory characteristics of government schools and to provide a
legislative analysis of one mechanism of destruction. In this task, two levels of analysis will be presented.

First, a macro view of legislative frameworks will be presented to show the growth in regulatory complexity over time for New South Wales and Victoria. This part will begin by offering a historical account of public education in Australia (Section 4.2). I find that (i) publicly-funded denominational schools can be seen as an institutional response to the perception of high dictatorship costs, specifically in regards to the state imposing values on students; and (ii) government schools can be viewed as an institutional response to the perception of high disorder costs emanating from duplication, unequal access to services, sectarian and social divisiveness. These broad institutional structures have not substantially changed over the last century. Despite this, however, I will show that there has been a measurable increase in regulatory complexity over time. I will do this by analyzing the historical and current primary legislative provisions in New South Wales and Victoria (Section 4.3). I find that the overall historical trend is the same in both jurisdictions – an increase in regulatory complexity over time.

The second level of analysis in the government school context is an analysis of the regulations governing school closure in Australia. In this part of the chapter, I will present a comparative analysis of the legislative provisions governing government schools in each Australian jurisdiction (Section 4.4). I find that ministerial discretion is the sole mechanism for school closure, despite some jurisdictional variations around how an education minister will exercise this discretion relating to notice, consultation, and reporting. I supplement this finding with a historical case study on Victoria’s “Schools of the Future” reform (Section 4.5). This case study highlights the practical difficulties of exercising ministerial power. This case study also shows that regulatory constraints on the exercise of ministerial power limit the perceived costs of disorder but have the effect of constraining the sole mechanism of destruction in the government school context.

Overall, the contribution of chapter four is to provide the first attempt at quantifying the regulatory burden in the Australian government schooling sector and show how mechanisms for destruction can be identified in the public sector context.
1.5.4 Chapter five

In chapter five the application section of the thesis continues with an analysis of a relatively recent institutional development in Australia – Independent Public Schools (IPS). Although sharing the same legislative characteristics to centralized government schools, I argue that greater school autonomy distinguishes independent public schools as a separate institutional possibility. This chapter will draw on the school autonomy literature (e.g., Chubb and Moe 1990; Caldwell and Hayward 1998) and uses Queensland’s Independent Public Schools program as a case study example of regulatory change (Sections 5.2 and 5.3). The Queensland IPS program commenced operation in 2013. Schools are accepted into the program through an expression of interest application. Application forms require individual schools to outline the “innovative educational programs or practices” the school will be able to implement if it is accepted as an IPS (“Innovation Question”). In this chapter, I will undertake a textual content analysis of the Innovation Question for a total of 127 successful applications in the 2013, 2014, and 2015 rounds using coding based on the Schumpeterian forms of innovation (new programs, new methods, new supply, new markets, and new organization) (Section 5.4). Overall, I find that the Queensland IPS initiative will likely foster innovation, according to principal’s perceptions about the innovative practices that they will be able to implement (Section 5.5). The contribution of this chapter is to show how government school principals perceive that the centralized service delivery model of government schools is constraining innovation in that setting. Finally, through a critical review and synthesis of the recent education research on the Western Australian and Queensland IPS programs, I show that my case study findings are consistent with the theory of school autonomy and discuss the implications of this for public sector innovation (Section 5.6).

1.5.5 Chapter six

Chapter six provides the final chapter in the application section of this thesis. In this chapter, the focus will turn to decentralized institutional possibilities that exist in the United States. Specifically, this chapter will offer a legislative analysis of charter schools and publicly-funded voucher programs.
Charter schools are publicly-funded schools that, in theory, operate with freedom from many of the regulations that apply to government run schools (Allen and Mintrom 2010; Garda 2012). Voucher programs effectively outsource public education services to the private sector. These “school choice” programs co-exist in several American states. While structurally different, they have similar aims in that parents using the public education system are given a choice about where to educate their children – increasing dynamism in the way that services are established, operate, and come to an end. I will begin this chapter by drawing on the school choice literature (Section 6.2). Next, I will set out the legislative methodology using the example of Washington, D.C. to show how these theoretical institutional possibilities of charter schools and voucher programs are made concrete in legislation (Section 6.3). I will then undertake a Schumpeterian legislative analysis of charter school laws (Section 6.4) and voucher program laws (Section 6.5), respectively, guided by the institutional theory of regulation.

Through this legislative analysis, I find that charter schools provide for more dynamic delivery of public services, as compared to government schools, by facilitating the organic establishment of charter schools and the revocation of those charters where operators have breached the conditions. This finding gives support to the school choice research literature on charter schools and innovation (e.g., Lubienski 2003a; Bulkley and Fisler 2003; Lake 2008; c.f., Preston et al. 2012). Despite this, I show that charter schools are still subject to extensive regulatory constraints – mitigating the perceived costs of dictatorship associated with decentralized institutions. In regards to voucher programs, I find that voucher programs offer a more dynamic environment for service delivery, with fewer regulatory constraints, as compared with charter schools. This finding suggests an increased scope for innovative practices to be developed within private schools participating in voucher programs. There is support for this proposition regarding the knowledge and learning generated by evolutionary processes (Hayek 2002; Witt 2003) in addition to the recent school choice research showing that increasing regulatory constraints will limit the participation in voucher programs (DeAngelis, Burke, and Wolf 2018; 2019). Overall, the contribution of this chapter confirms that barriers to creation and destruction in public sector services can be found by analysing the legislative structures governing service delivery – and this has implications for public sector innovation.
1.5.6 Chapter seven

Chapter seven will provide the final part of the thesis. In this concluding chapter, I will draw together the findings and contributions shown throughout this thesis (section 7.2). The significance and implications of a new comparative approach to public sector innovation will then be discussed, along with avenues for future research in the areas of regulatory reduction, choice and competition in public services, and the consequences of high dictatorship costs in service delivery (Section 7.3). I will then move to note the limitations of the research (7.4). Lastly, I will conclude the thesis (section 7.5).

1.6 Boundaries of the thesis

It is necessary to provide a disclaimer noting the boundaries of this thesis. In this thesis, I will use public schooling education services as an example of a public sector service. The application part of this thesis (chapters four, five, and six) will draw on the education policy literatures of school autonomy, charter schools, and voucher programs to inform the case studies in order to build theory and provide insight to public sector innovation more broadly. However, this thesis is about the trade-offs that are inherent within different legislative and regulatory frameworks – it is not about public education as such. Accordingly, this thesis will not provide a comparative analysis of academic or other educational outcomes, funding models, pedagogy, teaching practice, or other specialist education topics. While these are important areas of research, they are not relevant to my research questions. Instead, the thesis will provide a legislative analysis to further understand the dynamics of public sector innovation and the connection between regulation and innovation within the public sector context.

Additionally, this thesis will examine five institutional possibilities (government schools, independent public schools, charter schools, voucher programs, and for-profit schools). The case studies utilized for analysis are not intended to be exhaustive but instead build evidence for the proposition that there is a variety of institutional possibilities for the provision of the same public sector service.
Further, it is important to note that this thesis is not an exercise in advocacy for one form of institutional possibility against another. As will be developed in the first part of this thesis (chapters two and three), the desirability of one institutionally possibility over another is guided by the perception of comparative social costs – and there are trade-offs for policymakers to consider. Whether fostering innovation in this context is politically attractive is beyond the scope of this research. Instead, the aim of this thesis is to generate new knowledge about the relationship between regulation and public sector innovation by developing a theoretical framework and applying that to a number of contexts through legislative and regulatory analysis.

1.7 Conclusion

Public sector innovation is important for increasing the quality and efficiency of public sector services. I will approach public sector innovation as an economic problem framed as a function of institutional trade-offs, drawing on new comparative economics and a Schumpeterian perspective of innovation. My claim is that the way to stimulate public sector innovation is through comparatively better institutional frameworks rather than through better management practices or changing organizational culture. The background and outline provided in this chapter notes that this thesis will focus on one area of public sector services – school education – to build a series of case studies. The next chapter begins this exercise by reviewing the public sector innovation literature.
Chapter 2 – Public Sector Innovation: Towards a Regulatory Research Program

2.1 Introduction

Public sector innovation is important for a variety of reasons. These include the size and scope of the public sector (Potts and Kastelle 2010; Arundel and Huber 2013), the complex nature of public services (Demircioglu 2017; De Vries, Tummers and Bekkers 2018a), and the high expectations that consumers have about public sector service delivery (Demircioglu 2017; Gasco-Hernandez, Sandoval-Almazan and Gil-Garcia 2017). However, there is a popular perception that a culture of bureaucracy in the public sector is pervasive (e.g., Bommert 2010; Torfing 2019; Vigoda-Gadot et al. 2005). That is, public servants have a reputation for being too preoccupied with following a strict interpretation of the rules to worry about satisfying the consumers that rely on their services. As Ludwig von Mises (1944, p. 1) observed, ‘nobody calls himself a bureaucrat or his own methods of management bureaucratic.’ Rather these are pejorative terms, pointing criticism at those tasked with carrying out rigid policies and procedures – and at the system itself. Although nobody sets out to be an inflexible bureaucrat, there does seem to be a measure of truth in these stereotypes. There appears to be inbuilt incentives in the public sector that make service delivery tightly regulated and cause these constraints to grow in number and complexity over time. However, to date, there has been no systematic examination of the regulatory constraints on public sector innovation.

The purpose of this chapter is to provide a critical review and synthesis of the public sector innovation literature through the Schumpeterian prism of “creative destruction” (Schumpeter 1942). While originally conceptualized to explain the dynamics of private sector activity, creative destruction can also be used as a lens to observe non-market production. Accordingly, this chapter contributes to a stream of research that seeks to apply the Schumpeterian conception of innovation to a public sector context (e.g., Windrum and Garcia-Goni 2008; Potts 2009; Potts 2010; Potts and Kastelle 2010; Mazzucato 2013; Stewart-Weeks and Kastelle 2015).
The remainder of the chapter will be set out as follows. In section 2, I will explore how the terms “innovation” and “public sector” have been defined in the public sector innovation literature, and discuss how these definitions have informed the scope of my inquiry. In section 3, I will examine the difficulties presented in measuring innovation. In section 4, I will critically assess the public sector innovation literature through the prism of the Schumpeterian concept of innovation, “creative destruction”, critiquing the extant research program. In section 5, I propose a new research agenda focused on institutional and regulatory structures governing public service delivery. Section 6 concludes the chapter.

2.2 What is “innovation” in the “public sector”?

This section of the chapter will consider efforts in the literature to define “innovation” and the “public sector”. This task is made difficult by the fact that there are no settled or uniform definitions. Many scholars appear to avoid this problem. The aim of this section, however, is not to build consensus or propose a new working definition, but rather gain insight into the competing perspectives and contributions to public sector innovation theory from those researchers that have offered definitions.

First, let us consider the definition of innovation. As De Vries, Tummers and Bekkers (2016) note, the majority of public sector innovation research does not offer a definition. As a starting point, Moore, Sparrow and Spelman (1997), in writing about innovation in policing, set what the authors themselves describe as a low standard in defining innovation as ‘novelty’ combined with a ‘degree of change in relation to the organisation’ (cited in Bloch and Bugge 2013, p. 137). This is an inward-looking definition as novelty is not meant in comparison to other organizations, but the subject organization itself. This allows for incremental changes to be considered innovation. Similarly, Andersen and Jakobsen (2018) – borrowing their definition from Damanpour (1987) – define innovation as ‘the implementation of an idea— whether pertaining to a device, system, process, policy, program, or service—that is new to the organization at the time of adoption’ (p. 3). In contrast, Torfing (2019, p. 1) states that ‘innovation is more than just the continuous improvement of existing practices and ideational mindsets. It involves a step change that problematizes and transforms the way that things are usually imagined and done.’
Mulgan (2007) utilizes an outward-facing definition, stating that innovation means ‘new ideas that work at creating public value’ (Mulgan 2007). Here, innovation has three requirements. There must be a new idea, that idea must work and be capable of implementation, and the execution of that idea must create value. Variations on this three-part definition have been adopted by other scholars (e.g., Kastelle and Steen 2011; Stewart-Weeks and Kastelle 2015).

Another approach focuses on the systematic processes of innovation. Schumpeter describes innovation as the ‘perennial gale of creative destruction’ – a transformative process where economic development results from entrepreneurs employing new combinations of resources that blows through and displaces existing ways of doing things (1934; 1942, p. 73). Known as the “Schumpeterian definition” of innovation, this holds that ‘innovation refers not simply to something new, but rather to a micro and macro dynamic process by which agents, organizations, institutions and the macro structure of the economy are transformed by the effects of a novel idea, however embodied’ (Potts and Kastelle 2010, p. 123). There are various schools of thought within the broader innovation field that adopt a Schumpeterian approach (Tzeng 2009). On its face, the Schumpeterian definition conceptualizes innovation as market competition through consumer substitution – something that is mostly absent in public sector service provision (Potts and Kastelle 2010). Indeed, Schumpeter himself had a profound cynicism for bureaucratic management, writing that ‘often the machine gives little scope for initiative and much scope for vicious attempts at smothering it’ (2015 [1942], p. 184). Nevertheless, in more recent years, it has been argued that the Schumpeterian definition provides a solid platform for analysis for new directions in public sector innovation scholarship, as it focuses attention on the types of innovation identified by Schumpeter (Windrum and Garcia-Goni 2008) and the dynamic process of innovation (Potts 2009; Potts 2010; Potts and Kastelle 2010) that ultimately moves towards a more evolutionary economic policy (Witt 2003). Later in this chapter, I adopt a Schumpeterian approach to provide a critical summary and analysis of the current literature.

Shockley et al. (2006) adds to the theory by proposing that ‘public sector entrepreneurship occurs whenever a political or governmental actor is alert to, and acts on, potential political profit opportunities, thus equilibrating the policy subsystem
in which the actor is embedded and moving it towards a new equilibrium’ (p. 218). This combines Schumpeter’s “creative destruction” with Kirzner’s “entrepreneurial alertness” (Kirzner 1973). The benefit of this definition is that it incorporates both micro and macro aspects of the innovation process – and Shockley et al. (2006) cite a body of research as authority for the proposition that the Kirznerian concept of entrepreneurship perfectly complements the Schumpeterian macro conception of innovation. However, it does not appear that this model has been adopted by subsequent public sector innovation research. This is perhaps because this definition of public sector entrepreneurship is broader in scope than public sector innovation. While Mazzucato (2013) also employs the “entrepreneurial” term in her work, The Entrepreneurial State, her central thesis does not relate to public sector innovation as such, but rather relates to the provision of government funding for innovation. Mazzucato (2013) argues that the government’s role extends beyond fixing market failures to actively funding high-risk scientific research and development – providing several examples including the technologies behind Apple’s iPhone and the “green” renewable energy industry. In a critical review, Potts (2015, p. 73) claims that Mazzucato ‘misunderstands entrepreneurship, which is not about technological boldness or discovery really at all, but about, literally, the market discovery of an entrepreneurial opportunity.’ The title of Potts’ (2015, p. 70) review article succinctly puts his case: ‘financing risky science does not make the State an entrepreneur.’ The caution is that, returning to the contribution of Shockley et al. (2006), the focus for public sector innovation is examining the political or governmental actors (i.e. individuals) and the mandates placed on them by legislative and regulatory frameworks – not on the state as a black box.

There is an effort in the literature to develop typologies of public sector innovations, as both an exercise in taxonomy and as a framework for analysis. For example, Windrum (2008) breaks public sector innovation into six types; service innovation, service delivery innovation, administrative and organizational innovation, conceptual innovation, policy innovation, and systemic innovation. As Torugsa and Arundel (2015) observe, this has informed the development of public sector surveys. Similarly, in their meta-synthesis on diffusion and adoption, De Vries, Tummers and Bekkers (2018a) note four distinct categories in public sector innovation research; process innovations (whether administrative or technological), product and service
innovations, governance innovations, and conceptual innovations. These efforts are useful because some studies examine only one specific type of innovation (as a recent example, Andersen and Jakobsen (2018) focus exclusively on organizational innovations). By contrast, Stewart-Weeks and Kastelle (2015) construct a framework by adopting Schumpeter’s five forms of innovation (i.e. new products, new methods of production, new sources of supply, the exploitation of new markets and new ways to organise business) and contend that there are many occurrences of public sector service innovation in each of those categories. In Chapter 4 of this thesis, I will employ an adaption of these five forms as a framework for analysing Queensland’s Independent Public Schools program.

Implicit in much of the public sector innovation literature is that innovation is a “good thing”. Innovation is a worthwhile process that adds value. Individuals, firms, and governments all aspire to be innovative. As I have mentioned, Australia has a national innovation agenda which states that ‘Innovation is critical to improving Australia’s competitiveness, the standard of living, high wages and generous social welfare’ (Department of the Prime Minister and Cabinet 2015). Historically, however, innovation has not always been cast in such positive light. For instance, in the Middle Ages, innovation was a pejorative term used by opponents of change – applied to heretics or deviants (Godin 2015; see also: Godin and Vinck 2017). Nevertheless, this thesis accepts there is a normative need for the process of innovation in the delivery of public sector services – with the caveat that it is important to note that not all innovative changes will be beneficial or “normative goods” (Osborne and Brown 2011a). For example, technological advancements may be adopted and diffused in a public sector context and bring efficiency or productivity dividends – but those benefits may come at the expense of privacy or civil liberties (Osborne and Brown 2011a). There is also a possibility of failures, mistakes, or unforeseen circumstances. Torfing (2019, p.1) cautions that ‘innovation frequently fails to deliver on its promises and may create unforeseen negative externalities.’ A healthy level of cynicism may be required to guard against being swept up in pursuing a buzzword-led innovation agenda. Even still, it can be said that, overall, the public sector is characterized by too little failure and experimentation (Potts 2009).
Most of the literature surveyed is also silent on explicitly defining the “public sector”. Among the few who do are Potts and Kastelle (2010), who employ a precise definition stating that the public sector refers to ‘the coordination, production and delivery of goods and services by publicly owned and accountable organisations’ (2010, p. 124). Arundel and Huber (2013), adopt the OECD definition of ‘the general government sector at the national, regional and local levels plus all public corporations including the central bank’ (2013, p. 3). De Vries, Tummers and Bekkers (2018a, p. 5) structure their meta-synthesis based on Flynn’s (2007) characterisation of the public sector meaning ‘those parts of the economy that are either in state ownership or under contract to the state, plus those parts that are regulated and/or subsidized in the public interest’. This definition could be criticized as being too broad because there is almost no field of private endeavor that is untouched by regulations or subsidies. Below, I discuss the problem of incorporating the amorphous “public interest” into ways of measuring public sector innovation and this criticism applies here too. However, Flynn’s definition does provide a prompt in considering that governments are able to fulfill public policy objectives without undertaking the tasks directly. Indeed, this thesis argues that public service delivery is not merely a distinction between public and private – but that institutional possibilities exist along a spectrum of central government control (Djankov et al. 2003). In any case, one can ascertain the breadth of the term “public sector” from combining case examples contained within the literature. These include many services areas that one would expect as being emblematic of the public sector including education (e.g., Haelermans 2010; Pandey, Pandey, and Miller 2017; Demircioglu and Audretsch 2019), central government administration (e.g., Arundel and Huber 2013; Bloch and Bugge 2013, 2016; Torugsa and Arundel 2015; Demircioglu and Audretsch 2017), health (e.g., Windrum and Garcia-Goni 2008, Piening 2011), library services (e.g., Scupola and Zanfei 2015), local government (e.g., Walker 2007), policing (e.g., Moore et al. 1997, Moranto and Wolf 2013), public transportation (e.g., Ongkittikul and Geerlings 2006), public housing (e.g., Walker and Jeanes 2001), and state-owned government enterprises and utilities (e.g., Luke, et al. 2010, Wagner and Fain 2018).

The public sector innovation literature has also included abstractions such as the development of ‘the welfare state’, the establishment of diplomatic relations between countries (Stewart-Weeks and Kastelle 2015, p. 67), through to the use of social
media by the President of the United States of America (Borins 2018) as examples of public sector innovation. While it could be argued that the actors or decision-makers in these examples are public officials or otherwise fulfilling public functions, this thesis is concerned with the provision of specific services where public providers, regulators, and users are readily identifiable. This is important in considering the incentives, costs, and trade-offs that occur within institutional arrangements.

The maintenance of military forces is a core function of government, pre-dating the public provision of human services (see: e.g., Smith 1776). However, it is an area not covered by the public sector innovation literature. One example that explicitly carves out the military from public sector innovation is a Nordic pilot study to measure innovation, where the authors note that units within defense were typically excluded in the framing of the survey (Bloch 2011; Bloch and Bugge 2013). Although the authors do not provide reasons for doing so, there would appear to be different rationales for the state providing a military force and the provision of human services. Similarly, there are different economic incentives for innovation. There is a separate literature dealing with innovation in the military and defense industries (see: e.g., Grissom 2006). There is also a separate field on the political economy of war (see: e.g., Coyne and Mathers 2011). These fields of research are distinct and military and defense innovations do not appear to be considered as part of the public sector innovation problem. Having now dealt with definitions, I will now turn to consider the measurement issues in public sector innovation research.

2.3 Measuring public sector innovation

Developing systems of measurement for innovation in the public sector is a crucial task for analysis. However, it is a problem that is far from settled. As Demircioglu and Audretsch (2017, p. 1681) argue, there is a ‘paucity of measurement’ in this area. A major reason for this is because the measurement is dependent on how innovation is defined in the first place (Arundel and Huber 2013). Again, I do not intend to solve the measurement problem here. Instead, it is my aim to set out the competing theoretical perspectives and recent scholarship to provide context for my contribution. This task is important because it does assist in framing the methodology of the thesis. As I explain in further detail in this chapter, this thesis takes a cost-based approach to
analyze institutional and regulatory structures surrounding public service provision – adapting a model from new comparative economics – which will yield implications for public sector innovation and avoid some of the measurement problems identified in this section.

To answer the question of why there is a lack of public sector innovation the standard starting-point in the literature is to compare the public sector to the private sector (Potts and Kastelle 2010; Bloch and Bugge 2016). Yet, this approach yields measurement problems. In the private sector, the motivation for innovation and measures of innovation are closely related. That is, profitability provides both the motivational force and the core standard of measurement for innovation (e.g., Mulgan and Albury 2003; Potts and Kastelle 2010). This measure does not exist in the public sector, principally because public sector services do not operate as profit-making enterprises. Indeed, many public services are provided without any direct user costs. As Torfing (2019, p. 2) correctly observes, ‘the absence of competition and profit motives creates different conditions for innovation in the public sector.’

Some authors explain away the measurement difficulties in terms of multiple and sometimes competing objectives. That is, the provision of public services involves both ‘providing services cost-effectively’ and ‘creating societal wellbeing’ (Bloch and Bugge 2013, p.4; see also: Mulgan and Albury 2003). This is otherwise referred to as “public value” (Hartley 2005; Mulgan 2007; Bommert 2010; see also: O’Flynn 2007). Because of this, it is claimed that ‘the public sector is more complex and harder to measure’ and ‘any one measure of output may fail to capture the full effects on performance’ (Bloch and Bugge, 2013, p.4) – and it is for this reason standard output measures do not exist in the public sector (Bloch and Bugge, 2013).

Further, along this line of “public value,” Klein et al. (2010) contend that one reason that public sector innovation or public sector entrepreneurship is so imprecise is that public interests are subject to change over time. Incorporating any measure of “public value” into the measurement of public sector innovation seems problematic because it is completely vague. It is unclear what exactly is meant by that term at any one point in time, and it also calls for a socio-political judgment about the perceived value. A more theoretical criticism with the “public value” approach to measurement is that it
implies that there is a “public interest” that is somehow distinct from the collection of disparate subjective private interests (Buchanan and Tullock 1962).

Arundel and Huber (2013) contend that the reason for the uncertainty surrounding measurement of innovation could be, in part, due to the dominant method of research in this area being object-based case studies. The argument that these authors outline is that while the case study method does provide valuable insights towards constructing a theory of public sector innovation, it does not provide any solid indicators for benchmark comparisons; nor is it a good tool for tracking innovation activity over time (Arundel and Huber 2013). Likewise, Potts and Kastelle (2010) offer a criticism of the case study method that the examples of innovation studied may be a mixture of ‘lucky accidents’ and ‘selection bias’ – rather than the ‘strategic outcome of a deliberate plan’ (Potts and Kastelle 2010, p. 124).

The insight that the above criticisms provide is that, within the standard public-private comparison approach, object-based case studies may be useful in identifying areas to improve innovation outcomes, but the approach lacks any real explanatory power. That is, object-based case studies are – in themselves – unable to explain why (or why not) public sector innovation occurs. A more systematic framework for analysis is required.

Accordingly, there has been a trend towards a more robust phenomenological approach using survey data (Arundel and Huber 2013; Demircioglu 2017). Sanford Borins pioneered this approach by analyzing the best applications from the Ford Foundation – Kennedy School of Government Innovation in American Government Award Program (Ford-KSG Awards) (Borins 1998).¹ Borins’ initial study analyzed coded samples of the semi-finalists’ responses to questionnaires for applications between 1990 and 1994 (n = 217). Later studies compared this sample with the later 1995 to 1998 applications (n = 104) (Borins 2000a) and a more recent study compared the 1990 and 1994 sample to those applications received in 2010 (n = 234) (Borins 2014). Among other matters, the questionnaires included questions about the barriers to the innovative program or policy initiative being implemented, which will be

¹ Although Borins (2002) notes that others had previously reported on the Ford Foundation’s awards (e.g., Osborne and Gaebler 1992).
discussed further in the next section of this chapter. Based on the Ford-KSG Awards questionnaires, Borins surveyed applicants to similar innovation awards of the Institute of Public Administration of Canada (IPAC) (Borins 2000b) and the Commonwealth Association for Public Administration and Management (Borins 2000c). Bernier, Hafsi, and Deschamps (2015) reviewed 21 years of data from the IPAC Innovation Management Awards and included all applications in their analysis rather than just the finalists (n = 1,563). As Borins (2008) argues, the value in analyzing innovation awards is that the awards function as a good proxy for “best practice” in the public sector. For my purposes, public sector innovation awards provide an example of the availability of data sources driving research insights. Similarly, my analysis of Queensland’s Independent Public Schools program in Chapter 4 of this thesis is based on a newly available secondary data source – applications to a new government program – and the successful applications function as a proxy for best practice in that setting.

Some scholars have chosen to develop their own surveys to gain insights into public sector innovation. For example, Arundel and Huber (2013) utilized a method of innovation surveys based on the Oslo manual guidelines for measuring innovation in the private sector in a pilot study of Australian Federal Government managers. To deal with differences in agency size, the survey respondents were branch-level managers (Senior Executive Service Band 1) that had ‘sufficient responsibility to develop and implement innovations’ (Arundel and Huber 2013, p. 7). Questionnaires asked these managers about a range of innovation activities that occurred over a two-year period. As part of the questionnaire design, cognitive testing was undertaken to determine if ‘potential respondents understood the questions as intended and if they were able to answer them’ (Arundel and Huber 2013, p. 8). According to Arundel and Huber (2013), the benefit of a survey over a case study is that it collects a wide range of data on different types of innovations and helps to avoid the selection bias inherent in object-based case studies (see also Potts and Kastelle 2010; for further on the importance of the Oslo guidelines, see e.g., Arundel, Bloch and Ferguson 2019).

Similarly, Bloch and Bugge (2013; 2016) building on Bloch (2011) develop a methodology known as “Measuring public sector innovation in the Nordic countries (MEPIN)” which also included a large-scale pilot survey across the five Nordic
countries (Denmark, Finland, Iceland, Norway, and Sweden). This survey encompassed public sector institutions at the central, regional, and local levels. More recently, Ramli et al. (2017) distributed survey questionnaires to heads of units and divisions across 21 Federal Ministry and Central Agencies in Malaysia, featuring a scale of 72 items on innovation capability, innovation activities, innovation performance, and wider public sector conditions. Other researchers have sought to use existing datasets that have been collected for other purposes – in a comparable way to the study of innovation awards. For example, Bysted and Hansen (2015) analyze data from Denmark, Norway, and Sweden collected as part of the European Employee Index, while Torugsa and Arundel (2017) use data from “Innobarometer 2010” which the authors describe as a randomized telephone survey of public administration agency heads about innovation activities in their agencies (between January 2008 and October 2010).

A limitation of the Arundel and Huber (2013), Bloch and Bugge (2011, 2013, 2016), Ramli et al. (2017) and Torugsa and Arundel (2017) studies is that they survey mainly top management within each agency. This approach contrasts with several studies that use the Australian “State of the Service” (SOS) survey, a large-scale randomized survey of public servants conducted annually by the Australian Public Service Commission (APSC), where only (approximately) a quarter of respondents were classified at executive or senior executive level. This survey series includes a number of questions about innovation – and this is measured at the workplace level. For instance, Torugsa and Arundel (2015) used a targeted sample of the 2011 SOS survey (n = 4,369) to investigate multi-dimensionality of the most significant innovation in the respondents’ workgroup. The same authors used the same sample from that dataset to examine a separate research question on innovation complexity (Torunga and Arundel 2016). Likewise, Demircioglu and Audretsch (2017) use the 2012 census for their study on conditions for innovation in the public sector. Demircioglu (2017) uses a subset of the 2011 survey (n = 3,625) to study the impact of sources of innovation on employee job satisfaction in the Australian Public Service, a sample of the 2012 census (n = 21,093) to also investigate innovation complexity, and a different sample of the 2012 census (n = 74,571) to see whether an “innovation climate” can be a solution to reduce employee turnover in the public sector. Finally, Acker, Wynen, and Op de Beeck (2018) analyze data from the 2014 census (n =
47,305) in their study into the role of gender in the innovation process. In 2012, the APSC moved from a sample survey methodology to a census model sent to all current APS employees, which removes sampling bias and reduced sampling error (APSC 2012). Another obvious benefit of this methodology is that a large sample size provides more robust results. However, a limitation of the APSC data is that the respondents to the SOS surveys are Commonwealth government employees. This means that staff involved in front-line public service delivery in major areas such as public education will necessarily be excluded because these services are managed by state government employees. The equivalent public sector commissions in Australian state jurisdictions do not appear to have surveyed employees about innovation as part of their mandated annual reporting processes. Until these are developed, case studies will still be an appropriate tool for knowledge building in the context of public sector services.

In any case, using surveys as a measurement tool has its limitations. According to Pandey, Pandey, and Miller (2017, p. 79), ‘there are issues such as accurate recall of past events that may not be salient to the respondent’ and ‘specific data collection modality can introduce distortions such as experimenter bias and socially desirable responding’ contending that these can be avoided by using administrative reports. On this basis, Pandey, Pandey, and Miller (2017) develop a measure of innovativeness using an emerging technique of computer-aided textual analysis to analyze letters to the board of education from a sample of New Jersey school districts. Although the authors encountered challenges in this novel approach, there is the potential for it to be applied further in public sector research given the number of reports produced by departments and service delivery entities each year. Indeed, computer-aided textual analysis is being used as a revolutionary tool in measuring regulation (Al-Ubaydli and McLaughlin 2015). Another way of alleviating the problems with survey approaches may be to make more use of longitudinal research designs (Andersen and Jakobsen 2018).

Potts and Kastelle (2010) and Potts (2010) (building in part on Potts (2009)) advance a more radical methodology: a scientific experimental method. Potts and Kastelle (2010) posit that the incentive structures in public sector innovation are more analogous to those in the science sector. The authors advance three main reasons
for this. First, the reward structure for successful innovation is reputational capital – not money. Second, science is generally conservative in its approach – operating within existing frameworks, as opposed to the more aggressive strategies found in private sector competitive markets. Third, public sector innovation should act on tested knowledge, rather than a speculative hypothesis – and so there is a need to experiment with new ideas in a controlled environment that minimizes harm (Potts and Kastelle 2010). In critiquing other approaches, Potts and Kastelle (2010) offer that the core scientific problem of the inductive approach of surveys and case studies is that there is no control group. In other words, ‘there is no way of asking whether the same effect would have occurred in the absence of the mechanism identified’ (Potts and Kastelle 2010, p. 130). Potts (2010) builds on this by proposing an experimental elimination. That is, experimental innovation in public sector innovation by eliminating programs, rather than adding to the existing stock. The purpose of this would be to discover which public sector activities could be eliminated to add overall value. On this basis, Potts (2010) proposes a five-step destruction system. In summary, every public sector program would be identified and coded, a proportion of these would be randomly selected for elimination, the experiment would be implemented for a period of time, the results would be analysed, and finally if the program was found to have net value it would be reinstated – if not it would be permanently eliminated (Potts 2010). In surveying the literature, it does not appear that this approach has been taken up by policymakers. Potts and Kastelle (2010) recognise some of the practical difficulties with the scientific experimental model of analysis. The authors note that the scientific method is relatively new in economics and social science, that the approach would not come naturally to most public sector employees, and it may be costly and time-consuming (Potts and Kastelle 2010). Having canvassed the issues in measuring innovation, the next section of this chapter will analyze the causes of the public-sector innovation problem through a Schumpeterian lens.

2.4 Causes of the public sector innovation problem – a Schumpeterian reading

In this section, I return to the Schumpeterian view of innovation and apply it as a way of reading the public sector innovation literature. Schumpeter describes innovation as
the “perennial gale of creative destruction” – a transformative process where economic development results from entrepreneurs discovering new combinations of resources that displaces existing practices (1934; 1942). Innovation in this sense is the dynamic mechanism of economic development which offers the ‘carrot of spectacular reward or the stick of destitution’ (Schumpeter, cited in Dodgson and Gann 2010). In this view, innovation consists of two phases – the creation of the new and the destruction of the old.

As I have previously mentioned, the standard approach of the literature is to compare the public sector to the private sector – and to adopt private sector practices to address the problem of a lack of innovation. Recall also that it is argued that the Schumpeterian definition provides a solid platform for analysis and scholarship (Potts 2009; Potts and Kastelle 2010; Potts 2010). In this section, I will use this lens to provide a critical analysis of the extant public sector innovation research. First, I will explore factors that inhibit the “creation” phase, and then briefly examine factors that prevent the “destruction” phase in a public sector context.

2.4.1 Barriers to creation

Of the literature surveyed on the creation side, common themes focused on financial incentives and rewards, an overly conservative approach to risk management, the innovation cycle, and promoting a culture of innovation. I then consider regulation as a barrier to the creation phase of public sector innovation.

Financial Incentives

The first theme in the literature that I will explore is the contention that the public sector lacks the incentives for innovation otherwise found in the private sector. Typically, the public sector offers fewer financial rewards and incentives for employees than the private sector (Borins 2001). This is particularly when compared to innovative start-up companies who may utilize employee share schemes in order to keep initial wage costs low, or senior management positions that may come with a combination of share options based on performance. This is because inherent in the public sector’s performance management system is a focus on efficiency rather than profitability (Mises 1944; Potts 2009) – that is, services are run on a cost-minimizing basis rather
than profit-maximizing. While poor rewards and incentives are seen as barriers to innovation, there is research to suggest that there may be ingrained cultural factors which mean that monetary reward is a less powerful motivating force in the public sector (Mulgan and Albury 2003; Moran 2010). However, on the contrary, Bloch and Bugge (2013) found that a lack of funding and internal incentives were barriers to innovation in Nordic public sector organizations. In addition to performance-based remuneration, Borins (2001) also noted that a lack of property rights and a lack of venture capital were also factors that limited innovation creation. Both factors limit the financial rewards available as an incentive to innovate, which include secondary actors in the innovation process that financially back innovative ideas. In reviewing the previous studies, Borins (2001) found that the leading characteristics of innovation in the public sector (i.e., process reengineering, applied information technology, developing alternative service delivery mechanisms and staff empowerment) were analogous to private sector innovation. Borins (2001) suggests that public sector bodies could emulate the private sector’s access to venture capital funding by creating innovation support funds, or alternatively public sector organizations could have access to a centrally administered fund. This may go some way to mitigating the downsides of the experimental approach to public sector innovation suggested by Potts (2010) – discussed above – and systematically entrench this experimental methodology.

**Risk-Averse Culture**

The second major theme in the literature is the overly conservative approach to risk management in the public sector, otherwise referred to as a “risk-averse culture”. This culture is a ‘fundamental obstacle to innovation’ (Bommert 2010, p. 21) (see also: Mulgan and Albury 2003; Albury 2005; Koch et al. 2006; Mulgan 2014). Yet, this increased scrutiny promotes risk adversity, which may be problematic when it prevents or unduly delays efforts to innovate. Paradoxically, when an organization suppresses small risks it increases the risk of catastrophic failure (Stewart-Weeks and Kastelle, 2015 citing McGrath 2013). There appear to be a number of distinct reasons for a risk-averse culture in the public sector.
First, as advanced by Potts and Kastelle (2010), is the link between the lack of financial incentives, discussed above, and risk-taking. In the private sector, powerful profit motives encourage organizations to innovate in order to add value to consumers – and there are pay-offs for risks undertaken. In the public sector, however, the main incentive is promotion within a hierarchical organization in which there are limited benefits from taking on risk (Potts and Kastelle, 2010). Related to the autonomy within the public service, Davidson and Potts (2016a; 2016b) present a model of the institutions of innovation, which provides insight into the different forms of costs where innovation is centralized. Second, the fear of negative media and public blame for failure is a significant reason for the culture of risk aversion (Albury 2005; Hartley 2005; Langergaard and Scheuer 2012; Mulgan 2014; Moran 2010; Bommert 2010; Potts and Kastelle, 2010; Koch et al. 2006; Mulgan and Albury 2003). This is of growing importance as the media interest in innovation has increased in recent years (Borins 2014). As Albury (2005) observes, the public sector is more heavily scrutinized than the private sector. In a public policy sense, this is positive due to the relative absence of direct accountability measures; public services are financed through taxpayer’s funds and yet taxpayers have no meaningful input into the management of those services – and public services are rarely subject to market discipline. Media scrutiny is an important mechanism to highlight public sector waste and mismanagement. High levels of scrutiny are also important because individuals and communities rely on vital services provided by the public sector and there is always a risk that innovations will fail and have a negative effect on welfare (Albury 2005; Torugsa and Arundel 2017). Failure in this context means implementing innovative projects that do not achieve their expected objectives or fail completely (Koch et al. 2006; Borins 2018).

There is an argument to be made for decentralization of services here in that experimentation, and any subsequent failure, will affect fewer people compared to a centralized service delivery framework – but the benefits of innovation still have the potential to disperse throughout the wider service network. Accordingly, this is not just a question of how to manage risks inside a single public sector organization – there is a bigger question of how the institutional arrangements governing service delivery are designed to limit the costs of failure.
Nevertheless, in public sector organizations, there is a disconnected link between those taking risks and those that claim the credit for success. That is, it is the public servants that will be blamed if innovative ideas fail, but it is the politicians or agency heads that will often be credited with the success. Mulgan (2014, p. 17) explains this perception, ‘If things go wrong those responsible will be mercilessly blamed: by hostile media, opposition politicians. Experiments that don’t work will be denounced as a waste of scarce public money. So, it’s natural to default to safe bets.’ Similarly, Hambleton et al. (2012) noted a personal experience arising from one of their interview-based case studies. One participant shared that “a blame culture” presented a major challenge to innovation: ‘if an initiative did not work out, politicians would look for someone to blame’ (Hambleton et al. 2012, p. 18). Relatedly, Potts and Kastelle (2010, p. 124) implicitly acknowledge this problem when they identify an analogy of how innovation works in the public sector in that what financiers do for market sector entrepreneurs (i.e. ‘insuring down-side risk for reward of up-side profit’), noting that the political class can provide this for public sector entrepreneurs (i.e. ‘providing cover’). As such, there is a role for politicians and policymakers to explain that there are necessary risks involved in the innovation process and that failure is an ordinary and proper aspect of innovation (Koch et al. 2006), and also to protect public servants that have managed the failed innovations (Borins 2014; 2018). This is important because an evolving public sector necessarily involves wastage as a cost of experimentation (Potts 2009).

Stewart-Weeks and Kastelle (2015) propose another reason for a risk-averse culture by pointing out that public sector organizations are not set up to change. Rather their function is to carry out a longer-term program of expenditure after having first identified, or have had imposed upon them, distinct products and services to be produced for that foreseeable period. In this way, the delivery of public sector services is relatively fixed, rather than being flexible and subject to change. This makes sense because public services – and the public sector entities that are charged with providing them – are necessarily a creature of regulation. This issue is the key focus of Chapter 3 of this thesis. I will review the extant research on the relationship between regulation and public sector innovation in more detail below as there is a final counterpoint on risk adverseness that is worth noting.
There is research that questions the premise that a risk-averse culture acts as a barrier to the creation phase of innovation. For instance, Bloch and Bugge (2013) found that risk aversion was not a major barrier to public sector innovation. Instead, this Nordic study identified a ‘lack of funding,’ ‘inadequate time’ and ‘lack of financial incentives’ as the three most important barriers in this setting (Bloch and Bugge 2013, p. 10). A later study on Scandinavian respondents found no significant differences in the risk culture between the private and public sectors (Bysted and Hansen 2015). Osborne and Brown (2011b) argue that the focus should be on risk governance rather than risk management. Continuing this theme, Torugsa and Arundel (2017) encourage a “rethinking” of the effect of risk aversion on public sector innovation. In this study of European public administration agencies, the authors distinguish between large and small agencies, and also between high and low risk-averse agencies. In this view, managers can yield benefits from their innovation efforts in each type of organizations – but ‘the strategic behaviours of managers…differ significantly’ in achieving this task (Torugsa and Arundel 2017, p. 909).

Something that cannot be discounted from these findings is that the surveys were generally answered by the top executive level managers and agency heads, rather than lower-ranking employees. It may be that these respondents do not perceive themselves as risk-averse, whereas operational-level employees within the same agency have a different view. As discussed above, executives and agency heads will often carry the burden of any risks and, therefore, may have a heightened awareness of the risks of innovation. However, what is perceived as sensible risk mitigation by one executive-level public servant could be categorized as risk-averse behavior by an operational-level employee.

Nevertheless, there is an obvious truth that underpins the nuanced approach of Torugsa and Arundel (2017) – public sector organizations are not all the same. My approach adds to this by zeroing in on this fundamental idea. Every public sector agency provides distinct services based on its own legislative and regulatory mandate. My approach goes further in proposing that each service can be provided in a number of different ways. In doing so, the comparative institutional approach that I advance can explain the ingrained risk-averse culture that has formed the archetypal public servant working within the stereotypical public sector organization and also
explain the counterpoint that some agencies are not necessarily burdened by excessive risk-averse behavior.

**Innovation Cycle**

The third major theme in the public sector innovation literature is the innovation cycle – a question of where innovation occurs in public sector organizations. This theme is important in establishing the locus of the creation phase of innovation and then in targeting the right parts of the organization to stimulate innovation. But there is conflicting literature on this point.

Bommert (2010) contends that the public service is overly bureaucratic, and that the innovation cycle is dominated by senior management of a public sector organization, with limited input from junior and mid-level employees. This explains the creation phase of public sector innovation as a top-down process. This provides a basis for Bommert’s contention for an “open innovation” or “collaborative innovation” approach in the public sector – a management theory borrowed from the private sector (Bommert 2010; see also Mergel and Desouza 2013). This approach seeks to ‘open the innovation process to a large group of actors, to internalize external ideas but also to leverage internal knowledge externally’ with the assumption that ‘tapping into the vast innovation assets across organizational boundaries will increase the quantity and quality of innovations’ (Bommert 2010, p. 19). This seeks to overcome this barrier to innovation because the ‘exchange of different experiences, ideas and opinions tends to disturb the established practices and their cognitive and normative underpinnings…’ (Torfing 2019, p. 4; see also: Sørensen and Torfing 2011; Hartley, Sørensen, and Torfing 2013; Torfing 2016). There has been documented success of “open innovation” approaches in Australia and elsewhere (e.g., Lee, Hwang, and Choi 2012). In not seeking to detract from these results, the need to introduce creation mechanisms to solve problems with top-down innovation appears to run counter to other research.

Bloch and Bugge (2013), who found that over 60 percent of the Australian public sector organization’s representatives surveyed ranked internal actors as highly important to driving innovation. Similarly, Borins (1998; 2014), in reviewing the Harvard Kennedy School of Government’s *Innovations in American Government*
Awards finds that the most frequent initiators of innovations are public servants in frontline or middle management positions – although collaborative and interagency projects often require initiation by agency heads and elected officials. A reason for the inconsistency could be that Bommert’s contention is quite a generalized macro view – while Bloch and Bugge surveyed individuals involved in the process and Borins analyzed successful projects.

The answer may indeed be in the middle somewhere, with Bartlett and Dibben (2002) finding that there is a need for both political sponsors as well as internal champions in the innovation process to drive change (see also Bartlett 2017). It is true, also, that different internal stakeholders will have different perceptions and attitudes about the innovation process (De Vries, Tummers and Bekkers 2018b). In any case, this aligns with a recent trend in public sector “innovation labs” utilising the management theory of “design thinking” (McGann et al. 2018). The private sector’s role in public sector innovation should not be discounted either as Bloch and Bugge (2013) found that a high share of innovative public sector organizations used input from external consulting services in developing their innovative activities.

**Public Sector Culture**

The fourth major theme is culture more generally. A typical view is that the public sector consists of ‘rule-bound, bureaucratic silos characterized by red tape, inertia, and stalemate’ (Sørensen and Torfing 2011, p. 5). The claim here is that this cultural environment presents a barrier to innovation. This environment is the product of economic incentives. The combination of a lack of financial incentives and the risk-averse nature of public service delivery, discussed at length above, provide an explanation of why this public sector culture exists. Accordingly, there is an effort within the literature to address cultural change. For instance, it has been proposed that gender balance in the public sector workplace may be a relevant cultural consideration as ‘the organizational innovation climate that supports and encourages the creation, promotion, and implementation of new ideas may be different for women than it is for men’ (Acker, Wynen and Op de Beeck 2018, p. 2). This is unlikely to be a major factor in the Australia public sector given that the proportion of female Commonwealth public servants now sits at almost 60 percent of total staff – and
approaching 50 percent for executive-level positions (APSC 2017). Although data on the broader education and training industry indicates that there is a higher degree of gender imbalance in that female staff account for 71.8 percent of the workforce (ABS 2018). Stewart-Weeks and Kastelle (2015, p. 63) argue that to be effective, ‘innovation has to engage an almost emotional, visceral level of commitment and energy’. Stewart-Weeks and Kastelle (2015) present a model of the innovation process through the metaphor of innovation as a virus to be caught. The transmission of the virus has three stages: an organization must deliberately expose itself to the innovation virus; relatedly, the organization must be willing to mix with other people and organizations infected with the innovation virus; and finally, there must be a process of lowering the organizations immune system by countering its defenses against innovation. After the bug is caught, organizations must then grant permission, and provide courage and opportunity in order to lead to ‘deep and influential inspiration’ (Stewart-Weeks and Kastelle 2015, p. 65). Similarly, others have expressed the barriers to innovation as being ‘in the mindset of public officials as policy makers…’ (Vigoda-Gadot et al. 2005, p. 58). This view presents the issue of a lack of public sector innovation as a management problem. That is, recruitment decisions and leadership activities will be the main drivers of a more innovative public sector. This thesis departs from that approach.

Specifically, the insights of the public choice economics literature (e.g., Buchanan and Tullock 1962; Tullock 1965; Niskanen 1971; Stigler 1971) suggest that bureaucratic problems limiting innovation will worsen over time because of bureaucratic and regulatory capture, for example. Applying the institutional theory of regulation from new comparative economics (e.g., Djankov et al. 2003) to the public sector context suggests that it is more complex than the public choice school would present – there is no single way to regulate public sector services. This means that some institutional structures are more open to the dynamism of innovation than others. Applying this institutional approach, organizational culture is a symptom of a broader structural problem rather than a cause in and of itself. Therefore, it will take more than “catching the innovation bug” (c.f., Stewart-Weeks and Kastelle 2015) to change entrenched attitudes. It will likewise take more than better management or leadership. This is because public sector management decisions are governed on the regulatory frameworks that are put in place for service delivery. As a precursor to the next
chapter, I will now deal with the extant research on how regulatory structures present barriers to the creation phase of public sector innovation.

**Regulation**

The final theme of the literature on barriers to the creation phase of innovation is regulation. It is often assumed that issues such as bureaucracy and red tape are barriers to public sector innovation (e.g., Torfing 2019). For example, Vigoda-Gadot et al. observe, that the ‘concepts of innovation and bureaucracy seem to be mutually exclusive’ (2005, p. 27). Given the scale of regulation inside government (e.g. Hood et al. 1998; 1999; Hood, James, and Scott 2000), it is curious that the effect of regulation on innovation has not been a core focus of public sector innovation scholarship. Although there is limited empirical research in this regard, it is possible to observe two categories of regulation that may constrain the creation of new innovative practices in the public sector context. First, there are those regulations which prescribe how the publicly-owned service is to be run, which is necessary without a profit motive to guide the allocation of resources (e.g., Mises 1944). This includes legislative and regulatory provisions imposed by the parliament to achieve policy objectives (Freiberg 2017; Windholz 2018) and also the various bodies, policies, and procedures that monitor a public sector agency’s compliance with its mandate (Hood et al. 1998; 1999). The second category is “red tape” which consists of those ‘rules, regulations, and procedures that remain in force and entail a compliance burden but [do] not advance the legitimate purposes the rules were intended to serve’ (Bozeman 2000, p. 12). This category can be further broken down into “organizational” – which can have internal and external sources – and “stakeholder” red tape (Bozeman 2000; Brewer and Walker 2010). Public choice economics can explain how these regulations grow over time through bureaucratic capture (Stigler 1971; Peltzman 1976; Becker, 1983) and are made more difficult to repeal through the manipulation of transaction costs ultimately impacting on the size and scope of government (Twight 1988; 1994). Although Pincus (2014) argues that the insights of public choice economics has not had a significant influence on Australian policy development, and this is one reason for a growth in regulatory complexity. While there is a body of literature on the empirical evidence on red tape
and performance (see: e.g., Brewer and Walker 2010), innovation is not considered specifically.

There is limited Australian research on the regulation of public sector services. An exploratory study by Austen et al. (2012) found that there was a range of governance models in Queensland non-state schools. This study was restricted to six non-state schools in one Australian state – and did not specifically address innovation. In a report that did focus on innovation in the Australian Public Service, Moran (2010) provides a limited analysis of regulation focussed specifically on procurement.

Looking further afield, an exception is the study of Bloch and Bugge (2013) which – as part of a broader study – found that between 34 percent and 57 percent of respondents to a Nordic survey (depending on jurisdiction and category) stated that fulfilling new regulations was a highly important objective for their organization’s innovations. Regardless of the specific Nordic jurisdiction, Bloch and Bugge (2013) found that fulfilling new regulations is more important for central government agencies. The authors argue that this ‘suggests that regulations can have a significant impact on stimulating innovation’ (Bloch and Bugge 2013, p. 9). Specific regulations were not identified. In commenting on the paper’s broader issue of a high number of innovations reported, the authors note that ‘if the public sector as a whole is under constant change, then public sector organizations may continuously need to adjust to a changing environment or be frequently required to make changes based on new regulations or policies’ (Bloch and Bugge 2013, p. 8; see also Bloch and Bugge 2016). Conversely, the authors reported that a ‘lack of flexibility in laws’ was a barrier to innovation – although there was more variability in this measure across the surveyed jurisdictions. For instance, only 7.3 percent of Norway’s central government organizations identified this as a barrier to innovation, compared to 52.6 percent of central government organizations in Iceland. Again, specific regulations were not identified. The relevant survey results are extracted in Table 1.1, below.

It is not clear whether these results would be replicated in other jurisdictions. For example, the Australian Public Sector Commission ‘State of the Service’ does not ask respondents about regulation or legal frameworks. However, Borins (2014) made similar findings based on a United States data set of innovation awards noting that
regulation could be an objective as well as an obstacle. In that study, 26 percent of the 2010 cohort of semi-finalists to the Harvard University Kennedy School’s Innovations in American Government Awards reported that ‘the innovation itself required new legislation or regulations or that it was a response to new legislation’ (Borins 2014, p. 20). Meanwhile, 3 percent of semi-finalists in the same cohort reported that laws and regulations acted as a barrier to innovation (Borins 2014). It was also found that building political support (6 percent) and changing laws (2 percent) were among the tactics employed by public sector organizations to overcome barriers to innovation among the 2010 semi-finalists (Borins 2014).

Table 2.1 – Extracted results from the MEPIN pilot study, 2008-2009 (in percent)

<table>
<thead>
<tr>
<th>Drivers</th>
<th>Denmark</th>
<th>Finland</th>
<th>Iceland</th>
<th>Norway</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation objectives</td>
<td>Central govt.</td>
<td>Other</td>
<td>Central govt.</td>
<td>Other</td>
<td>Central govt.</td>
</tr>
<tr>
<td>Fulfil new regulations</td>
<td>48.9</td>
<td>48.2</td>
<td>34.2</td>
<td>24.7</td>
<td>57.1</td>
</tr>
<tr>
<td>Barriers to innovation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of flexibility in laws</td>
<td>15.9</td>
<td>28.0</td>
<td>23.8</td>
<td>7.8</td>
<td>52.6</td>
</tr>
</tbody>
</table>

Source: Bloch and Bugge 2013, pp. 8 and 10.

A recent systematic review of the public sector innovation literature found that that laws and regulations were ‘dominant contextual barriers’ that public sector innovators encountered, providing three examples of procurement regulation, restrictive rules around public-private partnership, and the inhibiting effect of high compliance costs (Cinar, Trott, and Simms 2019, p. 277). The authors conclude their treatment of regulatory barriers with the truism that ‘laws and regulations can affect the innovation process in various ways’ (Cinar, Trott, and Simms 2019, p. 277). The paper is correct in highlighting that context does matter – but it does not go beyond this fact and consider the specific regulatory provisions (and possible alternatives) in those cases.
In short, the effect of regulation on public sector innovation is unclear within the standard public-private comparison approach. It is a complex problem in that regulation appears to act a driver for innovation, tending to a more innovative public sector, but it also acts as an impediment to innovation occurring, resulting in a lack of public sector innovation. Regulation is inherently restrictive – which would tend to constrain innovation (Mises 1944; Ongkittikul and Geerling 2006; cf: Rogers-Dillon 1999). However, it has been accepted that regulation can enable diffusion where innovation has already occurred (Ongkittikul and Geerling 2006; De Vries, Tummers, and Bekkers 2018a). Further, regulation can provide a method of standardization for e-platforms (Cinar, Trott, and Simms 2019). These ostensibly conflicting positions can be reconciled in the following way: regulation can be categorized as a barrier to innovation if a specific regulatory action imposes barriers on innovation into the future; meanwhile, regulation can be categorized as promoting innovation if a specific regulatory action removes past impediments to innovation.

Ongkittikul and Geerlings (2006) provide a helpful dichotomy to clarify the above summary further. In considering the sources of innovation, Ongkittikul and Geerlings (2006) observe two patterns. The first pattern is where regulatory change leads to innovation. Applied to the public sector context, regulatory change fosters the dynamic process of innovation and leads to new methods of service delivery, for example, being developed and adopted in the public sector (endogenous innovation). Conversely, regulation may constrain innovation by limiting the ability of public sector actors to adopt innovative practices. The second pattern is where regulatory tools are used to enable diffusion where innovation has already occurred. For example, regulatory changes impose new methods of service delivery on the public sector (exogenous innovation). From a methodological standpoint, the second pattern is problematic. New methods of service delivery, as one example, that are imposed on the public sector organization by regulation should not properly be considered public sector innovation. Regulation that mandates that public servants conduct a public service in a prescribed way is the antithesis of our conceptualization of public sector innovation as a dynamic process in the Schumpeterian sense. This second pattern presents a practical problem for measurement in that a high number of observed innovative practices over time could be the result of a high amount of regulatory or policy change – rather than because there is a more innovative public sector. Indeed,
this criticism is foreshadowed in Bloch and Bugge’s own discussion of their results (Bloch and Bugge 2013; see also Bloch and Bugge 2016).

Another reason that the effect of regulation on public sector innovation remains unclear is that the answer to the question of whether regulation acts as a barrier depends on the substance of the specific regulatory framework. As I have foreshadowed above, the detail of regulatory provisions is not captured by the studies surveying public servants. There is no discussion or analysis of content, quantum, quality, or purpose of the regulations that inhibit or encouraged innovative activity. Table 2.1 shows variations between jurisdictions. An explanation for this variation is that the binding regulatory frameworks are likely to differ considerably between countries, within sub-national jurisdictions (i.e., local governments, state or province government), and between the various public sector agencies. Capturing this detail does not lend itself well to the research design of multi-sector and multi-country surveys. Case studies will, therefore, provide a stronger ground to explore the relationship between regulation and public sector innovation. This is because public sector services by their nature are ‘very specific markets’ (Blind 2012, p. 391; cited in Wagner and Fain 2018).

My review of the public sector innovation literature revealed only one case study that purposefully examined the relationship between regulation and innovation. In research commissioned by the Water Industry Commission for Scotland, Wagner and Fain (2018) present a “scoping study” on the Scottish water sector. Scottish Water is a publicly owned commercial corporation established in 2002 to ‘introduce innovation, improve customer service, and reduce costs’ (Wagner and Fain 2018, p. 1214). This case study involved ‘interviews with senior executives in all stakeholder organizations within the Scottish water sector’ (n=12) in addition to reviewing ‘government documents, media reports, annual reports, and organizational documentation’ (Wagner and Fain 2018, p. 1214). The authors also considered internal and external influencing factors on innovation and the role of collaboration in the innovation process. That is, regulatory frameworks are presented as one factor among others. In summary, the authors presented three findings in addressing the research question of ‘to what extent, if any does a regulatory framework inhibit innovation within the public-sector environment?’ (Wagner and Fain 2018, p. 1222). First, stakeholder
collaboration was found to be important in enabling a ‘clear understanding of roles, responsibilities, and resources necessary for promoting an innovative culture across the industry’ (Wagner and Fain 2018, pp. 1222-1223). Second, the ‘regulator and government must share responsibility for allowing risk and managing uncertainty in order to promote experimentation and forwardthinking in the network organizations’ (Wagner and Fain 2018, pp. 1223). Third, ‘compliance is tacit and explicit in all regulations and the regulator provides the structure to enable innovation beyond established protocols’ (Wagner and Fain 2018, pp. 1223). Overall, the authors concluded that ‘…the regulation within the Scottish water sector supports innovation orientations within the main companies in the network’ (Wagner and Fain 2018, p. 1223). This case study provides an example of where regulatory structures have changed and promoted innovation and provides insight into how innovation occurs within a new regulatory context for a heavily regulated public monopoly. However, details of the specific regulatory changes are not covered in any detail. The study does not provide or examine changes in the regulatory framework. Rather, it analyses the experience of senior management after these changes were implemented. The conclusions are focussed more on stakeholder management and the relationship between the public sector organization and the regulator – rather than providing analysis of the regulatory framework. This is curious, given the study’s research question, noted above, and in the context of a new regulatory environment.

There remains a lack of empirical evidence examining the relationship between regulation and public sector innovation (Vigoda-Gadot et al. 2005; Wagner and Fain 2018). This is required in moving past a mere stereotype of the public sector to providing concrete examples of how the public sector is regulated and the consequence for public sector innovation. The extant literature presents the regulatory environment as one factor among many inhibiting the creation phase of innovation. The conclusions fit within the predominant theme of public sector innovation research – that regulatory barriers are a management problem. While survey and interview data provide some insight into the question of how regulation affects public sector regulation, no analysis has been undertaken on the detail of regulatory frameworks. Accordingly, there is more research that needs to be undertaken to understand the relationship between regulation and innovation in the provision of public sector services. A systematic framework for this analysis is
required, and a method for observing barriers to innovation. Part five of this chapter will detail a way forward in this task.

In briefly summarising this section of the chapter, much of the public sector innovation literature is geared towards the creation side of innovation – which has not changed in a decade after this was first asserted by Potts (2009). Common themes to explain the lack of innovation focused on financial incentives and rewards, an overly conservative approach to risk management, the innovation cycle, creating a culture of innovation, and regulatory barriers. I will now briefly turn to the destruction side of the public sector innovation literature.

### 2.4.2 Barriers to destruction

Joseph Schumpeter famously maintained that ‘the process of Creative Destruction is the essential fact about capitalism’ (1942, p. 83). The key insight of this proposition is that economic progress and the process of innovation will unfold over time with new products and services, new methods of production, new sources of supply and new markets, and new organizational forms displacing existing practices. The destruction phase of the process is where existing products and services are displaced, old methods are made redundant, prevailing sources of supply dry up, and old structures buckle. The resources that are freed up in this evolutionary process are then able to be redeployed for new productive uses – continuing the cycle. However, studies in public sector innovation are almost exclusively focused on the creation phase. As Potts (2010, p. 238) notes, ‘the second phase of the innovation process – the destruction of the old – is just as important as the first phase – the creation of the new; but it typically receives far less attention in innovation theory and practice’.

In the private sector, the price mechanism and consumer substitution function as the key destruction mechanisms that reallocate resources to where they are most valued at the product level. Meanwhile, bankruptcy, insolvency and other forms of take-over and re-structuring loom as firm-level destruction mechanisms. If a firm does not innovate to compete with new market entrants, its revenues, profits, and share price will decline to lead to market exit in some form – freeing up land, labor, and capital resources to be redeployed by entrepreneurs in the “creation” phase. These spontaneous mechanisms are largely absent in the provision of public sector services...
(Potts 2010). In observing this, Potts (2010) argues that, although creation mechanisms are weaker in the public sector, the fundamental difference between private sector innovation and public sector innovation is found in the destruction phase. This is illustrated in Figure 2.1, below.

**Figure 2.1 – Private and Public Sector Innovation Models**

This model explains the consequence of weak or non-existent destruction mechanisms is that, in the long run, there is an increase in the size of government as new programs and methods of service delivery are added to the existing stock. Another consequence of poor destruction mechanisms may be that there is too much “bad waste” (i.e., cost of inefficient public services) and not enough “good waste” (i.e. costs of failed experimentation) (Potts 2009).

Potts (2010) proposes an experimental elimination model of randomized trials as a solution to the lack of destruction mechanisms. It is based on an evolutionary understanding; even where public programs had initially passed a cost-benefit analysis when introduced, socio-cultural-political factors or technological changes, for example, may change this result and lead to programs being retained when they
should otherwise be removed (Potts 2010). The experimental elimination model in one sense is a critique of the prevailing public sector innovation paradigm – structural changes, not necessarily better management, are required to promote innovation. However, in another sense, it is an internal critique as the idea of the experimental elimination model fits squarely within the existing framework. That is, the public sector has no spontaneous destruction mechanisms which inhibit innovation, and the solution is to construct new destruction mechanisms to spur innovation, making the public sector function more like the private sector.

What are the mechanisms of destruction in the public sector? Potts (2010) proposes two at different extremes. Destruction could be sharp and shift during major crises affecting the public sector’s ability to provide services (actual or political perceived), or destruction may be a slow death due to irrelevance or long-term neglect. However, while these describe the circumstances leading to destruction – they do not detail the specific destruction mechanisms. In a private sector setting, there may be many circumstances that lead to consumers substituting one product or service for another, including a consumer’s income, tastes and preferences, and the price and availability of substitutes and complements. As these demand factors change, the old product is discarded for the new product on the market. In this setting, changing tastes and preferences – for example – are not the mechanism of destruction. Rather, the mechanism of destruction is consumer substitution – that is, the decision by the consumer to choose one product or service over another under scarcity. Similarly, in a public sector setting, a budgetary crisis or a poor usage of a particular service may lead a decision-maker to stop providing a particular service – or provide that service in another way – but it is the process that the decision-maker goes about executing this decision that is properly the mechanism of destruction. Accordingly, the question of “what mechanisms of destruction exist in the public sector” remains open.

As the only paper in the surveyed literature to touch on the destruction phase, Potts’ key contribution – in addition to his experimental elimination model as a solution – is in highlighting the deficit of scholarship on this side of the innovation equation. Focusing on mechanisms of destruction is then a logical direction for new research to take in public sector innovation research. Just as regulation may affect the creation phase of public sector innovation – it is conceivable that there may be regulatory
constraints on the destruction phase of public sector innovation as well. This is especially true in the public sector, as the public sector’s destruction mechanisms will be governed by legislative and regulatory frameworks.

This chapter has noted that the standard approach of the literature is to compare the public sector to the private sector. In providing a lens for critical analysis, the Schumpeterian conception of innovation as a dynamic and evolutionary process has arranged the extant research into identifying barriers to the creation phase of innovation and barriers to the destruction phase of innovation. It has been noted that the majority of existing research is focussed on the creation phase, and identifying mechanisms of destruction remains elusive in the public sector context. It is on this basis that I will now outline a new agenda for public sector innovation research.

2.5 A new agenda for public sector innovation research

This chapter has set out the preliminary research context for this thesis. There is a widely-held assumption in the literature that there is a deficit of public sector innovation. The major contribution of this chapter was to provide a critical synthesis of this perceived innovation deficit through the prism of the Schumpeterian conception of innovation. As a framework for analysis, the discussion in this chapter was organized around identifying barriers to the creation phase and the destruction phase of public sector innovation. In this task, it was observed that the current explanation for the innovation deficit has to do with the structure and culture that is typical of public sector bodies: an overly conservative approach to risk management matched with a lack of financial incentives and rewards. It was also observed that the current research program reduces the public sector innovation problem to one of management. That is, public sector organizations can navigate the barriers to the creation and destruction phases of innovation through management strategies. In contrast, this thesis proposes to take an economic approach.

A specific area that was identified as requiring further research was the relationship between regulation and public sector innovation. The existing research on the effect of regulation on public sector innovation is mixed, and this relationship remains unclear. However, overall, this chapter has highlighted that legislative and regulatory
frameworks are not neutral in considering the creation and destruction phases of public sector innovation.

According to the standard paradigm, the innovativeness of a public sector organization is a function of a variety of internal and external factors that drive innovation outcomes, mediated by management. For instance, Agolla and Van Lill (2013) present a conceptual feedback loop model that is an example of the standard paradigm, where “political” and “legal” factors are external drivers of innovation within public service organizations – among internal drivers, other external drivers, and feedback loops (see also, e.g., Cinar, Trott, and Simms 2019). Nevertheless, in explaining this model, Agolla and Van Lill (2013, p. 172) make a significant observation.

[Public sector organisations] are founded through legislation, therefore, their operations are prescribed by what is known as a “mandate”; to fulfil their mandate, [public sector organisations] are required to operate within given parameters. By its very nature, the mandate thus imposes a degree of constraint on innovation.

This statement is inconsistent with the authors’ presentation of the standard paradigm that treats regulation as one factor among many other internal and external drivers that feed into a public sector management process. Instead, this observation suggests that establishing legislation and regulatory provisions are the starting point in the public sector innovation process. Nevertheless, the observation of Agolla and Van Lill (2013), above, provides a pathway forward in public sector innovation research by focusing on the legislative provisions governing service delivery. Accordingly, there is a research agenda here that has not yet been explored in a comprehensive or systematic way.

The research that will be presented in the chapters to follow will move beyond the prevailing public sector innovation paradigm by focussing on the economics of regulation. To foreshadow the next chapter, new comparative economics and evolutionary economics provide the theoretical foundations to analyze legislative and regulatory provisions governing service delivery. In this new research agenda focussed on regulatory structures, regulation is not one factor among many; the regulatory mandate is the starting point in the innovation story.
The approach that is being developed in this thesis can be distinguished from an approach known as “New Public Management” (NPM). Homburg and Bekkers (2005, p. 115) explain that, commonly, NPM ‘focuses on the application of private sector management techniques in the public sector’, including accrual accounting, performance pay, customer focus, and ‘market-style relations’ between government organizations (see also, e.g., Dunleavy and Hood 1994; Gruening 2001; Carroll and Steane 2002; O’Flynn 2007; Hall and Holt 2008; Hughes 2018). At first instance, the standard approach in the public sector innovation literature may appear to reflect the various NPM concepts (De Vries, Bekkers, and Tummers 2016), and researchers have pointed to examples of Australian governments taking up NPM propositions – including in public school education context (e.g., Armstrong 1998; Carroll and Steane 2002; Fitzgerald and Rainnie 2012). However, NPM is not a single theoretical perspective and “NPM” has been a nebulous term for perhaps as long as the label has existed (Hood 1991). Instead, NPM is more accurately described as a “shopping basket” (Pollitt 1995) or a “buffet” (Borins 2002) of policy proposals from which policymakers can select their choices. On this basis, Hughes (2018) considers that NPM is too vague to be useful, maintaining that ‘there is an almost total absence of identifiable advocates [for NPM, and it] has become a term used almost exclusively by critics of public sector reform’ (Hughes 2018, p. 338). While one strand of the NPM literature will prove useful in the next chapter for considering “regulation inside government” (Hood et al. 1998; 1999; Hood, James, and Scott 2000; James 2000), a more useful literature will be found in school autonomy and school choice (e.g., Chubb and Moe 1990) because it is framed around various institutional possibilities for public school education service delivery.

This chapter argues that regulation could inhibit both the creation and destruction phases of innovation. However, a review of the literature showed that one of the key limitations of the extant research is that it does not provide a survey or analysis about the detail of regulatory provisions in a public sector context. This was so even in one study that specifically sought to explore the relationship between regulation and public sector innovation (Wagner and Fain 2018). There is a clear need for more empirical

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2 Although it is claimed that the conceptual basis for NPM derives from new institutional economics (Hood 1991; Gruening 2001), public choice theory (Gruening 2001; Hall and Holt 2008; Volacu 2018), and neo-Taylorism (Hall and Holt 2008).
research to understand the effect of regulation on public sector innovation. One problem that was observed with widespread surveys is that they lack an ability to account for the possibility that there are regulatory differences between different public sector organizations. This existed even in studies that considered multiple jurisdictions (Bloch and Bugge 2013). Those assumptions are erroneous. While every public sector organization will have a regulatory structure governing service delivery, each agency will have its own distinct mandate. Some regulatory structures may tightly prescribe how a particular service is to be provided while other regulatory structures may provide a high degree of autonomy. Further, the regulatory structures governing service delivery are likely to differ across jurisdictions. These details are of fundamental importance to understanding why there is a lack of public sector innovation.

Therefore, the objective of this thesis is to examine the regulatory constraints on public sector innovation. This chapter charts a new course for public sector innovation research. However, because every public sector service will have its own distinct regulatory and institutional frameworks governing service delivery, a specific public sector service is required for analysis. In the previous chapter, I noted that this thesis will provide a regulatory comparison using several case studies on public school education services. School education was chosen for analysis because it is a major public sector service accounting for over a quarter of government expenditure on public services in Australia (Productivity Commission 2019). In addition, there is an ability to leverage from an established literature on school autonomy and school choice, as innovation is specifically considered within those contexts (e.g., Lubienski 2003a; Bulkley and Fisler 2003; Lake 2008; Preston et al. 2012; Wohlstetter, Smith, and Farrell 2015).

2.6 Conclusion

This chapter has provided a critical summary and analysis of the academic research into public sector innovation using a Schumpeterian lens. This thesis is interdisciplinary, necessarily bridging economics, public administration, law, regulation, and broader issues of public policy. However, this thesis will approach the public sector innovation – and its application within the context of public education –
as an economic problem. That is, public sector innovation is framed as a problem of competing costs, trade-offs, and institutional choices. As such, the way to stimulate the public sector is through comparatively better institutional and regulatory frameworks for service delivery rather than through better management practices or changing public sector culture. This chapter outlined a new research agenda focussing on the regulatory structures for service delivery. The next chapter will detail the methodological approach for embarking on such an inquiry.
Chapter 3 – Regulation of public education services: a new comparative framework

3.1 Introduction

Regulation is often perceived as something that is imposed on private businesses in the course of providing goods and services to consumers. However, regulation also occurs inside government (Hood et al. 1998; 1999; Hood, James, and Scott 2000; James 2000; see also: Durant et al. 1986; Cope and Goodship 1999; Cope, Goodship, and Holloway 2003). Unlike the private sector, the public sector cannot provide services without some level of regulation. When governments decide to undertake expenditure decisions, the actions are not carried out by the executive themselves (i.e., government ministers) but by government agencies that run services. These agencies require direction about how the services will be provided. There is an inherent link, therefore, between public sector regulation and the justification for government expenditure. Regulation in this sense is a mechanism of executive control over the bureaucracy in order to achieve a government’s policy objectives (Mises 1944; Freiberg 2017; Windholz 2018).

There are many reasons that governments undertake public expenditure on services. As a specific context for inquiry, as mentioned in the previous chapter, this thesis will focus on the regulation of public education services. This chapter will show that the regulation of public education services in Australia has occurred since its inception. This chapter will begin with a survey of the main reasons that have been advanced for the provision of public education services and their application to the Australian experience. Although these reasons are not unchallenged, this is a necessary task in presenting the argument that the reasons for public sector provision do not appear to mandate a single regulatory or institutional structure. Instead, it is argued that a variety of institutional arrangements have emerged that are compatible with the justifications of public provision.

How does society make choices about these institutional arrangements? This chapter addresses this question by introducing the “New Comparative Economics” framework developed by Andrei Shleifer and his colleagues. In brief, this framework posits that regulation is one institutional enforcement strategy among many to manage the
competing costs of “disorder” and “dictatorship”. Recent developments to this model argue that dictatorship and disorder costs are subjective, suggesting that analysis should focus on how costs are perceived by relevant actors (Allen and Berg 2017). This framework has been applied in many different contexts as a tool for regulatory analysis, and its strength lies in focusing ‘our analytical attention, given institutional possibilities, on the trade-offs that exist in policing predation at the public and private levels’ (Boettke et al. 2005, p. 291). Importantly, the framework assumes that all institutions are imperfect – and on this basis, the task is evaluating policy from an ‘institutional efficiency perspective, rather than from an allocative efficiency perspective’ (Davidson and Potts 2016a, p. 202 (original emphasis)). In the new comparative framework, “institutional efficiency” can be defined as ‘minimising the overall social cost’ (Davidson and Potts 2016a, p. 202). That is, greater institutional efficiency will be achieved where a new institutional possibility comparatively lowers the cost of disorder without increasing the cost of dictatorship or, alternatively, comparatively lowers the cost of dictatorship without increasing the cost of disorder (Djankov et al. 2003; Shleifer 2005; Davidson and Potts 2016a; 2016b). The thesis adopts this framework to map various institutional possibilities of public education in the chapters that follow, conceptualizing a lack of public sector innovation as a cost of dictatorship.

The remainder of this chapter is arranged as follows. Section two considers the role of the state in the provision of education. Section three argues that when a service is publicly provided there will need to be a regulatory framework in place. Section four reviews the economics of regulation literature. Section five introduces the institutional possibilities frontier (IPF). Section six maps the institutional possibilities of public education and explains how the IPF will be used as a tool of analysis in later chapters. Section seven briefly outlines the Schumpeterian lens that will be used to assist the regulatory analysis. Section eight concludes the chapter.

### 3.2 The role of the State in the provision of education

In Australia, some form of public education has been provided since the early colonial period. Today, state and territory governments are the dominant provider of primary and secondary education, with 65.4 percent of all Australian school students attending
government schools in 2016 (Australian Bureau of Statistics 2017). This section of the chapter will consider the traditional justifications for the provision of public education. As mentioned above, these justifications provide a foundation for a government’s institutional responses in establishing and regulating public education systems. This survey is not exhaustive, but rather is limited to those that seem to have the most relevance to the Australian historical experience; namely, that education is necessary for a free and democratic society, that a single provider may be necessary to achieve economies of scale, and that education produces positive externalities or neighborhood effects. This section will now consider these three justifications individually.

The first contention for the state involvement in education is that education is inherently good, and necessary for the working of any free society (e.g., Smith 1776; Mill 1859; Hayek 1960). The essence of this moral claim is that citizens need to be capable of reading, writing, and comprehending material to make informed choices, to be productive, and to be able to govern themselves. Although the primary responsibility for children’s education rests with parents, society will bear the burden of failure. Accordingly, there will be a legitimate role for the government to provide schools for children whose parents cannot provide for them, and where charitable efforts are not sufficient.

Adam Smith (1776 [1904], v.1.177) considered that the public should concern itself with the education of the people in situations where the ‘attention of government is necessary in order to prevent the almost entire corruption and degeneracy of the great body of the people.’ Smith notes that ‘the education of the common people requires, perhaps, in a civilized and commercial society the attention of the public more than that of people of some rank and fortune’ because ‘their parents can scarce afford to maintain them even in infancy’ with the consequence that children are put to work as soon as they are physically able to (1776 [1904], v.1.180-181). As Quinn’s commentary (2013) observes, Smith is not making a market-failure argument here but rather a moral one; education is intrinsically good.

In Smith’s mind, requiring children to be provided with a basic education of reading, writing, and accounting will not result in a direct-pay off to government, but it will foster a more cohesive society; educated people will be less likely to fall into the ‘delusions
of enthusiasm and superstition’ that threaten to fracture society, be ‘more decent and orderly’, show due respect to ‘their lawful superiors’, and more able to judge government actions sensibly rather than ‘rashly or capriciously’ (1776 [1904], v.1.189).

In a similar way, John Stuart Mill (1859 [2001], p. 96) asks, rhetorically, ‘is it not almost a self-evident axiom, that the State should require and compel the education, up to a certain standard, of every human being who is born its citizen?’ For Mill, the failure of parents to educate their children is a ‘moral crime, both against the unfortunate offspring and against society’ (1859 [2001], p. 97). In dealing with a number of objections to a state-enforced level of education, Mill contends that such requirements are not a question of restricting individual liberty. But a minimum level of education is required for the maintenance of the institutions that exist in a free society. One example Mill (1859 [2001]) mentions is the institution of trial by jury, which requires suitably qualified jurors to comprehend the case before them. Another aspect is more general – education takes people ‘out of the narrow circle of personal and family selfishness, and accustoming them to the comprehension of joint interests, the management of joint concerns’, Mill explains and ‘without these habits and powers a free constitution can neither be worked nor preserved’ (1859 [2001], p. 101).

On these grounds, both Smith and Mill accept state funding for a minimum level of education where parents cannot afford these expenses – although they give slightly different proposals about how this should be achieved. For instance, Smith (1776 [1904]) proposed that the state could: (i) establish subsidized schools with fees low enough so that poor parents could afford to send their children (although importantly, not completely subsidized to ensure teachers still had incentives to perform); and (ii) set minimum educational standards through public exams as a precondition for working in a corporation or engaging in a trade. By contrast, Mill (1859 [2001]) adopts a three-tiered cascading approach depending on how dire the circumstances are. In the first instance, Mill argues that if the state required – and enforced – a minimum level of education then ‘[the state] might save itself the trouble of providing [an education directly]’ (Mill 1859 [2001], p. 97). Second, Mill accepts that a minimum level of education might not achieve the outcome and may need to be combined with ‘State aid to those unable to defray the expense’ (Mill 1859 [2001], p. 98). Third, it may be that, facing a choice between direct state provision of education and no
education at all, a government could run schools itself on the moral principle of the “lesser of two evils” (Mill 1859 [2001], p. 98). In summary, both Smith and Mill see a role for the state, on a moral basis, to provide minimum educational standards and funding for parents that cannot afford this expense. This general principle would seem to be even stronger for children that did not have parents to provide for them whatsoever.

Indeed, in the Australian colonial experience, it was abandoned children that were in front of mind. In this historical context, government expenditure for educational purposes was based on averting the social and moral problems of a new colony where a sizable proportion of the population were convicts. Writing in 1800, New South Wales Governor Philip King noted a need to ‘…save the youth of this colony from the destructive examples of their abandoned parents, and others who they unavoidably associate with’ (cited in Barcan 1980, p. 12). Accordingly, the beginning of state involvement in education in Australia appears to be justified on moral grounds.

The moral view expressed by classical scholars has been carried forward to the twentieth century. For example, Hayek (1960, p. 377) states that the justification of a government-mandated minimum standard of education rests on two grounds: (i) fostering a shared culture; and (ii) providing literacy for democratic representation –

There is the general argument that all of us will be exposed to less risks and will receive more benefits from our fellows if they share with us certain basic knowledge and beliefs. And in a country with democratic institutions there is the further important consideration that democracy is not likely to work except on the smallest local scale, with a partly illiterate people.

Modern Australian governments rely on a version of this as a justification for compulsory schooling regulations, expressing it in terms of the principal-agent problem. For example, the Victorian Department of Education and Training (2017, p. 14) states:

Parents have strong incentives to ensure their child receives a high quality education. However, there may be cases when the best interest of a child (as principal) in pursuing education is not fully reflected in decision making by their parent (as agent) where the parent is unable or incapable of promoting education for their child. If
uncorrected, the principal-agent problem could result in children receiving suboptimal levels of education at critical early stages of learning, which can be costly to remedy.

The child-parent example offered here is not a principal-agent relationship or a principal-agent problem in the true sense. This is because (i) the child lacks the autonomy to appoint or revoke an agent; and (ii) there is no information asymmetry. This problem is better characterized as an example of “disorder costs” discussed later in this chapter.

Nevertheless, as Hayek (1960, p. 378) observes, ‘it is true that historically, compulsory education was usually preceded by the governments’ increasing opportunities by providing state schools.’ This claim finds support in the early Australian experience where, by the 1830s, the colonial government had begun to expand into rural areas where the churches had not yet established schools (Barcan 1980). This expansion occurred around 40 years before compulsory attendance laws were introduced (Barcan 1980). This expansion could be justified on moral grounds, ‘when society in general is in so backward a state that it could not or would not provide for itself any proper institutions of education unless the government undertook the task’ (Mill 1859 [2001], p. 98). One could also characterize the justification for this expansion on equity grounds, in that people living in remote areas should not be disadvantaged by not receiving a minimum level of education because the establishment costs of privately providing education are prohibitive. However, there was another argument operating in the minds of New South Wales legislators at the time – what modern economists would now refer to as “economies of scale” or the existence of a “natural monopoly”. This is the second principal contention for the public provision of education that can also be observed within the Australian experience.

Milton Friedman (1955, p. 5) explains the “natural monopoly” argument in the following terms.

In small communities and rural areas, the number of children may be too small to justify more than one school of reasonable size, so that competition cannot be relied on to protect the interests of parents and children.

Friedman (1955, p. 5) describes this argument as ‘clearly valid and significant’ but correctly notes that ‘its force has been greatly weakened in recent decades by
improvements in transportation and increasing concentration of the population in urban communities.' The natural monopoly justification has continued to diminish as population growth, urbanization, and the lowering of costs and increased access to transportation have all continued well into the twenty-first century. Nevertheless, the natural monopoly justification certainly had application in the Australian historical experience as the colony of New South Wales was growing in the middle of the nineteenth century. In that historical context, legislators argued that a single government school in each sparsely populated town would be more efficient than the various churches establishing several schools to cater for each religious denomination – the existing non-government alternative. In 1844, a committee of the New South Wales Legislative Council (cited in Barcan 1980, p. 51) described the problem with the denominational system in these terms:

...Wherever one school is founded, two or three others will arise, not because they are wanted, but because it is feared that proselytes will be made; and thus a superfluous activity is produced in one place, and a total stagnation in another. It is a system impossible to be carried out in a thinly populated country.

Of course, it is difficult to tell any early Australian story without reference to sectarian concerns. However, these denominational systems competed with each other, and it was a public policy problem because these systems received public assistance from the earliest beginnings of education in Australia in the form of land grants and direct funding contributions from the government (Barcan 1980). While the natural monopoly view might have validity in the rural context, the government's financial support for the denominational system extended beyond these communities. As such, there is evidence that the government’s role in education extended beyond acting as a provider of last resort, or even the sole provider in the case of a natural monopoly. Although it is difficult to distill the stated justification for this expenditure, one possibility for this is a response to positive externalities or the “neighborhood effect” – the third principal justification that has been advanced for state intervention.

The externality or neighborhood effect view is that the societal benefits of producing or consuming a good or service, sometimes referred to as “merit goods” (e.g., Musgrave 1959; Eecke 2003), is greater than the sum of its private benefits (e.g., Pigou 1932; Buchanan and Stubblebine 1962). The argument, as applied to education, goes as follows. For individuals, the private benefits of education include
the accumulation of knowledge and skills that increase productivity and long-run earning capacity and welfare. For society, the public benefits of education include increased civic engagement and higher economic growth. However, because the producers or consumers of education are unable to capture the public or societal benefits, this leads to an under-provision of education. Therefore, some form of government intervention is required so that the socially-optimal amount of education is provided. The strength of this argument depends on the supporting empirical evidence. An unavoidable difficulty of the positive externalities justification is an underlying assumption that government can pinpoint the socially-optimal amount of education.

Hall (2006, p. 172) explains in his critique of the externalities of education, 'many researchers fail to consider the ability of government to determine and implement a solution that maximizes social welfare and thus overestimate the ability of government intervention into education markets to improve welfare.' Indeed, DeAngelis (2018) estimates that the United States has a net negative externality (c.f., Santoro 2018). Nevertheless, as Hall (2006, p. 165) notes, the externality view is 'perhaps the most commonly cited justification for government involvement in education'. To be sure, in Australia, the Productivity Commission recently cited externalities as a ‘sound efficiency and equity ground’ that justifies government funding of education and regulating compulsory school attendance (Productivity Commission 2017, p. 61).

Friedman (1955, p.1), for example, puts forward the externalities justification in preference to the moral argument for education (he dismisses the latter as being a vague paternalistic concern rather than addressing the ‘difficulty of achieving it by voluntary exchange’). Friedman (1955, p. 2) states that:

A stable and democratic society is impossible without widespread acceptance of some common set of values and without a minimum degree of literacy and knowledge on the part of most citizens. Education contributes to both. In consequence, the gain from the education of a child accrues not only to the child or to his parents but to other members of the society; the education of my child contributes to other people’s welfare by promoting a stable and democratic society. Yet it is not feasible to identify the particular individuals (or families) benefited or the money value of the benefit and so to charge for the services rendered. There is therefore a significant "neighborhood effect."
Friedman (1955, p. 2) suggests that the ‘most obvious’ way to address the neighborhood effect ‘is to require that each child receive a minimum amount of education of a specified kind’ and providing a subsidy for this minimum according to individual need. This idea continues the policy prescriptions of Smith and Mill, discussed above, although for a different reason. The significance of this is that acceptance of an externality or neighborhood effect suggests that there is an economic case for the role of the state in the provision of all general education – not just to avert the risk of parental failure or the limited case of natural monopoly.

In surveying these principal justifications, I do not seek to claim that these reasons are universally accepted – or that they are without blemish. For instance, Andrew Young and Walter Block (1999) provide a forceful attempt at refuting each of the above grounds as justification for government intervention and present the argument for withdrawing government entirely from education (see also Rothbard 2002; Hall 2006). However, even this account reinforces the point that these are the predominant reasons behind government intervention. Additionally, one cannot overlook the practicality that the government is involved in financing education – and this inquiry proceeds on the basis of that reality.

Beginning in a world of some government expenditure, the question that then arises is how the government should provide education? As will be shown later in this chapter, the institutional possibilities for the provision of public education exist along a spectrum of government control. The contribution of Friedman (1995) is to openly challenge the presumption that nationalizing the education industry is the only way to address the private expenditure gap caused by either “neighborhood effect” or “natural monopoly”. More recently, Gregório (2018) has applied Hayek and Wilhelm von Humboldt’s perspectives on liberty as the basis of her argument that respecting personal liberty requires the default role of the state in education to be limited to supervisory functions rather than one of monopoly provision in a single national education system. Yet the presumption of direct provision remains common amongst education researchers and other writers (see e.g., Meadmore 2001; Bonnor and Caro 2007; Smyth 2011; Keddie 2016a; 2016b). This perspective starts from the default position of government involvement, contending that only a government-run system will maintain integrity in the education system. Similarly, the Australian Education Union (2011, p. 9) believes that ‘there is no a priori justification for public funding to
private schools,’ with the implication that there is an a priori justification for public funding for government-run schools. In section four of this chapter, I will reconcile these competing perspectives by applying the institutional theory of regulation.

In any case, the fundamental point to be made at this stage is that in the early Australian experience there was a case made for a level of public expenditure that would provide children with a minimum level of education – in the form of government-run school for the most in need and in rural areas, and public support for the denominational or private system. Public involvement in this way has been justified by a combination of the moral case for education, natural monopoly or economies of scale, and positive externalities or the neighborhood effect. In the next section of this chapter, I will put forward the proposition that public services are necessarily a creature of regulation.

3.3 Public services as a creature of regulation

The people making decisions about public expenditure are usually not the same people as those that are tasked with implementing it. Accordingly, any government intervention requires a regulatory framework. There is, therefore, an inherent link between the rationale establishing a system of public education and the regulatory framework that is established. The implication of this is that the more extensive the scope of the system, the more complex one can expect the regulatory structure to be to cater to a diversity of interests.

In the Australian system of government, in general, public expenditure will be approved by a parliament in the form of an Appropriation Bill.³ Additionally, there will be a legislative or regulatory structure put in place to govern the application of those funds. Of course, this may be a constitutional requirement.⁴ However, even in the

³ Note that Australia’s system of government – at both the Commonwealth level and state or territory level – is based on the Westminster system, where the executive arm of government is drawn from the membership of the legislature or “parliament”. The members of the executive (referred to in Australia as “Ministers of the Crown” or simply “Ministers”) are responsible to Parliament for overseeing the various government departments. Although there is not a strict separation of powers, expenditure by the executive still requires a legislative basis.

⁴ For recent Australian cases on this issue see, e.g., Pape v Commission of Taxation (2010) 238 CLR 1; Williams v Commonwealth of Australia (2014) 252 CLR 416. Both cases considered, amongst other things, the meaning of section 83 of the Australian Constitution.
absence of constitutional necessity, there will be a strong incentive for the legislature (through legislation) or the executive (through other forms of regulation) to control how funds are used to provide accountability, certainty, and enforceability. In any case, politicians – whether from the legislative or executive branch – will be practically unable to directly supervise the expenditure and day to day management of the services, so regulation functions as a mechanism of control ensuring that the allocated funds are spent according to the intentions of the legislature or executive.

Hayek (1973, p. 126) makes a similar point, arguing that ‘the great majority of the resolutions passed by representative assemblies do not of course lay down rules of just conduct but direct measures of government.’ A consequence of this is that every condition or requirement that is put in place limits the discretionary power of the public servants charged with implementing the services.

Mises (1944, p. 41) explains the intention in the relatively straightforward context of a king and his governor.

In order to avoid [arbitrariness] the king tries to limit the governor's powers by issuing directives and instructions. Codes, decrees, and statutes tell the governors of the provinces and their subordinates what to do if such or such a problem arises. Their free discretion is now limited; their first duty is now to comply with the regulations. It is true that their arbitrariness is now restricted in so far as the regulations must be applied. But at the same time the whole character of their management changes. They are no longer eager to deal with each case to the best of their abilities; they are no longer anxious to find the most appropriate solution for every problem. Their main concern is to comply with the rules and regulations, no matter whether they are reasonable or contrary to what was intended. The first virtue of an administrator is to abide by the codes and decrees. He becomes a bureaucrat. ⁵

It is in this way that Mises (1944, p. 45) characterizes bureaucracy as ‘management bound to comply with detailed rules and regulations fixed by the authority of a superior

which provides that ‘no money shall be drawn from the Treasury of the Commonwealth except under appropriation made by law’. The High Court held that this section does not provide the Commonwealth government with a general spending power – funds must be lawfully appropriate under statute or other provisions of the constitution.

⁵ Mises goes onto state that ‘The same thing is essentially valid for democratic government’ (p. 42) – although he adds that ‘The administration, in a democratic community, is not only bound by law but by the budget’ (p. 43).
Modern regulatory scholars appear to share a similar view to Mises – executive control over the bureaucracy – but perhaps express it in more neutral terminology. For instance, Freiberg (2017) describes regulation as a tool for governments to achieve public policy objectives that underpin each area of service delivery (see also: Cope, Goodship and Holloway 2003; Windholz 2018). A parallel theme is noted by public choice and public finance scholars examining federalism and the conditions that attach to intergovernmental grants – that is regulation of one government by another (e.g., Brennan and Pincus 1990; Garzarelli and Keeton 2018).

Commonly, regulation is thought of as something governments impose on the private sector – but regulation occurs inside government too, where ‘public organizations are shaped by rules and standards emanating from arm’s-length authorities’ (Hood et al. 1999, p. 3-4). As Hood and his colleagues (1999) show, public sector regulation can be extensive. Regulation, in the public sector context, is not the actions that public servants take in providing the services but rather the frameworks governing this service delivery (Freiberg 2017).

Regulation is difficult to define precisely as lawyers, public sector administrators, economists, and other social scientists all have slightly different perspectives. As David Levi-Faur (2011, p. 3) has said, regulation ‘means different things to different people.’ This thesis will take a broad approach to the examination of regulation to encompass both “hard” and “soft” regulation. This distinction is perhaps more commonly observed in the jurisprudence of international law (see, e.g., Shaffer and Pollack 2010). However, it is also used in the context of domestic public law (see, e.g., Weeks 2016). “Hard regulation” refers to formal legislative instruments passed by a legislature (e.g., Acts), made pursuant to such legislation (e.g., Regulations), or otherwise made under some other form of delegated authority (e.g., Orders). Hard regulation has binding legal force. “Soft regulation,” on the other hand, is harder to define as its reach ‘occup[ies] a broad section of the spectrum between unstructured discretion and legislation’ (Weeks 2016, p. 17). Applying Weeks (2016, p. 18) to the public sector context, “soft regulation” will generally include ‘codes of practice, guidance, guidance notes, circulars, policy notes, development briefs, practice statements…codes of conduct, codes of ethics, and conventions.’ Parliament does not specifically authorize these types of regulations, but, as Weeks (2016) shows, this
type of regulation can still have real legal consequences enforceable through the courts and other administrative review bodies.

To date, the most comprehensive examination of the regulation of the public sector has been conducted by Christopher Hood and his colleagues at the London School of Economics (Hood et al. 1998; 1999) who investigated regulation inside the United Kingdom government. The study aimed to ‘reveal the overall scope and scale of regulation over British government’ and also how this regulation worked in practice (Hood et al. 1998, p. 61). The authors summarised their three major findings in the following terms:

- First, regulation inside UK government, when all its forms are taken together, amounts to a large enterprise, approaching, if not exceeding, the scale of regulation of private business.
- Second, internal regulation of government seems in many of its domains to have increased in formality, complexity, intensity and specialization over the past two decades.
- Third, the behaviour of regulators inside government seems to be related to how close they are to those they oversee in professional/social backgrounds. In general, we find the more distant regulators are from their clients in backgrounds, the more formally they behave. (Hood et al. 1998, p. 62).

In that study, the authors do not explicitly distinguish between “hard” and “soft” regulation. Instead, the authors propose that there are three elements to “regulation” in a public sector context: (i) that one public sector organization – i.e., a government department or statutory authority – shapes the activities of another; (ii) that the overseeing organization is functionally separate from the regulated organization; and (iii) the regulatory relationship is based on a legal mandate. This definition is illustrated in Figure 3.1, below.

This definition includes both “hard” and “soft” elements of regulation – but it should be highlighted that the regulation still has an official basis. The mandate comes from principal legislation and other legislative instruments governing service delivery – in addition to departmental policies and procedures.

Following Hood et al. (1998; 1999), the critical carve-out is that management activities within the same organization are not characterized as regulation. In this thesis, I
propose that this definition is a good starting point for thinking about public sector regulation in many contexts – but that it is too narrow in one respect. That is, the definition ought not to be confined to a relationship of mandated control between two publicly-owned bodies. Instead, the focus should be on the regulation of public services. This is because regulation can also apply to private actors and private organizations delivering public sector services (e.g., Windholz 2018). On this basis, Cope, Goodship, and Holloway (2003), building on Cope and Goodship (1999), refer to this as “regulation inside governance” rather than “regulation inside government” in conducting a mixed-methods study on the regulation of vocational education. However, I will adopt the term “regulation inside government” in order to be clear that this thesis is concerned with public sector regulation. Although, I do proceed with the caution that this thesis argues that there are ways of providing public sector services that may not involve the direct provision or management by a public sector body.

Nevertheless, these bodies are regulated to achieve public purposes. This proposition will be fleshed out in the chapters to follow.

Figure 3.1– Definition of Regulation Inside Government

In this section of the chapter, it has been argued that regulation is necessary for public sector service delivery. Further, it has been argued that public sector regulation not only exists, but it is unique and extensive. The question that remains, so far, with this argument is that there is no single institutional possibility for the provision or regulation of public education. This thesis aims to address the question of what are the different regulatory structures and how does society choose among alternatives. An analytical framework is needed in order to be able to offer an economic analysis of regulatory responses to this problem. The next section of the chapter reviews the relevant economic theories of regulation.

3.4 The economics of regulation and institutional choice

There are three economic theories of regulation that can be used to inform an economic analysis of regulatory structures (Shleifer 2005; Davidson 2013). The focus of this section is on economic theories of regulation rather than other ideological, historical, sociological, or otherwise political regulatory theories (see, e.g., Drahos 2017 and Windholz 2018 for recent discussions). Accordingly, this section of the chapter will consider the public interest and private interest theories of regulation before explaining an institutional theory of regulation that I will adopt in this thesis.

3.4.1 Public interest theory of regulation

First, the “public interest” or “helping hand” theory of regulation (Posner 1974; Shleifer 2005) postulates that governments will intervene in the public interest to correct various market failures such as monopolies, externalities, information asymmetries, or some other harm that means that the socially optimal level of production is not being delivered (Morgan and Yeung 2007; Baldwin, Cave, and Lodge 2012; Freiberg 2017; Windholz 2018). Ginosar (2014) argues that the public interest theory has undergone a resurgence in recent years. For example, Ginosar and Krispil (2016) draw on this theory to explain the development of broadcasting regulation. James (2000) highlights that the public interest theory of regulation is used to justify “regulation inside government”.
On first impressions, this theory may seem to broadly align with the earlier section of this chapter, reviewing the principal reasons that have been put forward for the state’s involvement in providing and regulating public education. That is, the reason that the government intervenes through public education is to correct the under-provision of education that would otherwise occur without state provision. However, the public interest theory does not provide an account of why specific regulatory responses have emerged. To express this idea in another way, the public interest theory provides an account of why governments intervene by regulating or providing services – although not what form that intervention should take. As this chapter has shown, scholars have proposed a range of measures to address insufficient education ranging from compulsory schooling regulations, subsidies paid to teachers, subsidies paid to parents, and direct provision of government-run schools.

The public interest theory appears to be blind to the possibility of private governance arrangements emerging to correct previous market failures (Shleifer 2005) or that courts could promote efficient outcomes by enforcing property rights under the common law rules of contract and tort (Coase 1960; Posner 1972). Of course, the nature of politics and democratic government is that there are competing visions for the public interest (Baldwin, Cave and Lodge 2012). Even discounting the difficulties in actually computing the public interest (Hayek 1945) and identifying the specific government actions that would accurately address the supposed market failure (Hall 2006), the public interest theory’s most significant shortcoming is the presumption of a benevolent government and bureaucracy. This assumption is challenged explicitly by a second theory that is typically associated with the Chicago School of Economics.

3.4.2 Private interest theory of regulation

The “special interest” or “capture” theory of regulation (e.g., Stigler 1971; Posner, 1974; Peltzman 1989) argues that rent-seeking firms demand regulation to gain an economic advantage over rival firms – regulation which is supplied by self-interested politicians seeking political support (see also Downs 1957). Djankov et al. (2002) break the private interest theory into two strands, distinguishing between Stigler’s “capture” theory that focuses on the benefits flowing to private firms that seek greater
barriers of entry and public choice’s “tollbooth” theory that focuses on the benefits that regulators derive from regulation.

As I have pointed out above, public services will be implemented by the bureaucracy rather than politicians themselves. So, in the public sector context, bureaucrats too can be treated as self-interested groups that seek to maximize their status, power, and budget within an organization (Downs 1964; Tullock 1965; Niskanen 1971). For instance, Downs (1964) distinguishes between “purely self-interested officials” and “mixed-motive officials.” The former is made up of “climbers” who seek to increase their power, income, and prestige within the bureaucracy, and “conservers” who are opposed to public sector innovation because it may disrupt the power, income, and prestige that they already hold (Downs 1964). The latter consists of “zealots”, seeking power to implement the policies they believe in, “advocates” who may be impartial inside their own agency but want to increase their agency’s powers at the expense of other public sector bodies, and “statesman” that are the archetypal public servants, but relish power, prestige, and influence (Downs 1964).

Of course, these private interests can combine forces by forming “political pressure groups” to lobby for regulatory change in their favor (Becker 1983). Although a lot of the focus of the private interest theory scholarship has been on the private sector (c.f. James 2000), some organized interest groups also have a public sector, including public sector trade unions and other non-government organizations (e.g. Principals’ associations) that are established to lobby government, among other things. Although there are constraints on the ability of self-interested groups to gain an advantage from favorable regulation (e.g., Peltzman 1976; Becker 1983), the transaction costs of regulatory change can be manipulated in the bureaucracy’s favor (Twight 1988; 1994). In addition, because bureaucrats become the experts in the government programs and regulations that they administer or enforce, there is a bias in keeping those programs and regulations in place (Niskanen 1971). Further, voter irrationality and bias mean that citizens may not be active or effective monitors of government actions even within liberal democratic countries with responsible government (e.g., Caplan 2007).
Bribery and corruption are also actions that are consistent with the private interest theory of regulation. Regulations that provide power to public officials to grant licenses, permits, contracts, and the like, create opportunities for officials to seek or accept payment in exchange for these approvals (e.g., Shleifer and Vishny 1993; Djankov et al. 2002).

One consequence of the above combination is that legislators may seek even tighter constraints over how the public service is provided, under the guise of accountability and quality control. Another consequence is that there will be a status quo bias and mission creep, leading to an expanded role for government. These arguments tend towards the same direction – predicting that, over time, there will be growth in regulatory complexity.

The private interest theory of regulation, bolstered by the insights of public choice economics, provides a powerful critique of the public interest theory in asserting that government intervention may not be able to address market failures. Worse, government failure may, in fact, result in a less efficient or misallocation of resources by distorting markets and sustaining the market failures that the regulation was initially intended to address. Despite its clear application in the public sector context, like the public interest theory, the private interest theory is limited in its ability to make comparisons between different forms of regulatory responses that are intended to achieve the same outcomes.

### 3.4.3 An institutional theory of regulation

Andrei Shleifer (2005, p. 441) praises the private interest theory as ‘one of the finest moments of twentieth-century economics’ but states that it ‘cannot be the final answer’ due to an overconfidence in private orderings, and the paradox that developed economies are more prosperous than ever before but more heavily regulated.

Shleifer and his colleagues advance a third economic theory of regulation (Djankov et al. 2003), which Shleifer refers to as the “enforcement theory of regulation” (Shleifer 2005). This is an institutional theory that considers that all ‘strategies for social control of businesses are imperfect and that optimal institutional design involves a choice among these imperfect alternatives’ (Schleifer 2005, p. 443). The theory attempts to
bridge the competing public interest and private interest theories by recognizing the cost of market failure and government failure. In doing so, there is a move from the search for allocative efficiency to the search for institutional efficiency (Davidson and Potts 2016). The institutional theory posits that ‘the two central dangers that any society faces are disorder and dictatorship’ and ‘institutions function to control these twin dangers…’ (Djankov et al. 2003, p. 598).

“Disorder” is the risk of harm inflicted by other individuals. Some examples of disorder include murder, theft, other tortious actions against person or property, breaches of agreements, breaches of trust, monopoly price gouging, or individuals subverting public institutions to avoid liability for their actions. “Dictatorship”, on the other hand, is the risk of harm being inflicted by governments or government officials exercising state power; some general examples include taxation, compulsory acquisition of property, state controls on exchange, or restrictions on competition. To paraphrase Boettke and Candela (2019), the world is in a perpetual state of predation. The regulation of public sector services designed to prevent private predation – disorder – invites the risk of state predication – dictatorship; and vice versa.

Of course, some actions will involve risks of both disorder and dictatorship. Take corruption, for example. Bribes could be paid by individuals to subvert justice and avoid liability for their actions (cost of disorder), or government officials could demand bribes in exchange for regulatory approvals (cost of dictatorship) (Djankov et al. 2003).

At this point, the concerns around institutions for public education can be recast in terms of the risk of disorder and dictatorship. As I have detailed above, classical scholars considered that state intervention for public education was justified as a society needs a common set of values to avoid society descending into chaos, as well as maintaining a productive people that can govern themselves. However, what has not been covered so far is the tension that involved in the state’s intervention in education. For classical scholars, although state intervention was justified on moral grounds, intervention would provide power to the state to impose values through government schooling or other forms of regulatory control. This concern can be conceived as a cost of dictatorship; that is, government action would potentially threaten the liberty of individuals.
Mill (1859 [2001], p. 97) writes that:

A general State education is a mere contrivance for moulding people to be exactly like one another: and as the mould in which it casts them is that which pleases the predominant power in the government, whether this be a monarch, a priesthood, an aristocracy, or the majority of the existing generation; in proportion as it is efficient and successful, it establishes a despotism over the mind, leading by natural tendency to one over the body.

Hayek (1960, p. 377) elaborates on this tension:

There is a need for certain common standards of values, and, through too great emphasis on this need may lead to very illiberal consequences, peaceful common existence would be clearly impossible without any such standards...The fact that all education must be and ought to be guided by definite values is, however, also the source of real dangers in any system of public education.

A cost of dictatorship in this context is the risk that the entire system of government education could be ‘dominated by the theories of a particular group’ and that ‘the more highly one rates the power that education can have over [people’s] minds, the more convinced one should be of the danger of placing this power in the hands of any single authority’ (Hayek 1960, p. 380). The danger may not be intentional. In a later work, Hayek (1973, p. 72) comments that the invention of legislation ‘gave into the hands of [lawmakers] an instrument of great power which they needed to achieve some good, but which they have not yet learned so to control that it may not produce great evil.’

Settling on a common set of values is a challenging task (Friedman 1955; Hayek 1960; McLaughlin 1995) and one that is often fraught with political controversy. In Australia, modern debates around the merits of a national curriculum, for example, are fundamentally a dispute about values (e.g., Berg 2010; Donnelly and Wiltshire 2014). In the United States, the Cato Institute (2019) has systematically documented almost two decades of public schooling clashes over values in America ‘pitting educational effectiveness, basic rights, moral values, or individual identities against each other’. The Cato Institute’s database plotted on a geographic “battle map,” detail hundreds of disputes in public schools over curriculum, freedom of expression,
gender equity, human origins (i.e., creationism versus evolutionary theories), moral
values, race and ethnicity, prescribed reading materials, religion, and sexuality.

The school choice literature reveals other costs of dictatorship within the public
education context centered on notions of governance and accountability. A central
claim of this literature is that government schools will not be responsible to the needs
of parents and students. For instance, where decision making and service provision
is centralized, there will be the risk of political influence and bureaucratic capture from
interest groups. In this case, ‘public officials will come under intense pressure from
social groups of all political stripes to use it’ and seek to ‘embed their policies in
protective bureaucratic arrangements’ (Chubb and Moe 1990, pp. 5-6; see also: e.g.,
Gannicott 1997; Donnelly 2015). A related issue is the use of state power to protect
monopoly control over the public education system by the so-called “education
establishment” (e.g., Arsen, Plank and Sykes 1999; Vergari 2007) although it has also
been argued that charter school providers too may use the political process to
maintain their positions (e.g., Geske, Davis and Hingle 1997).

Another fundamental premise of the school choice literature is that choice and
competition will promote innovation in public education because ‘state-administered
schools are necessarily bound by bureaucratic regulations, inhibiting innovation and
enforcing uniformity in the way that children are educated’ (Lubienski 2003a, pp. 395-
396; see also e.g. Wohlstetter, Wenning, and Briggs 1995; Arsen, Plank and Sykes
1999; Lubienski 2001; Lake 2008) – as such lack of innovation in this context can be
characterized as a cost of dictatorship. Likewise, other regulatory restrictions that limit
autonomy or restrict competition are costs of dictatorship.

In terms of the costs of disorder, a starting point is a moral justification for state
intervention in education espoused by the classical scholars – which I have detailed
above. In this view, the concern was that children would not be adequately educated
either because they had been abandoned, or because their parents did not value
education and so children would be put to manual work too early in life and would not
acquire basic literacy and numeracy skills. This concern continues in modern times
with home education, for example, where there is a risk that parents may not be able
to meet their children’s educational needs (Allen and Jackson 2010; Jackson 2017;
Victorian Department of Education and Training 2017) – and that educational
outcomes are derived from family background (Lubienski 2003b). Accordingly, parental failure is a cost of disorder for education. Similarly, one concern about other decentralized approaches to delivering public education is that market discipline will not ensure that students receive a high-quality education from providers (e.g., Geske, Davis and Hingle 1997). Indeed, for-profit involvement in education has been dismissed as being ‘antithetical to educative goals’ (Keddie 2015, p. 258) with the implication that providers will be more concerned with seeking profit than student achievement (cf., e.g., Tooley 2013).

Another major concern is discrimination in various forms, based on the view that ‘equity and access’ are ‘core values of public education’ (Keddie 2016a, p. 255; see also: Fitzgerald and Rainnie 2012). I have previously identified sectarian concerns in the early Australian experience. Along these lines, critics of school choice programs assert that there is the potential to ‘further stratify schools along racial, socioeconomic, and other class-based lines’ and “skim” predominantly white, privileged students from public schools’ (Cobb and Glass 1999, p. 2; c.f. Whitehurst, Reeves and Rodrigue 2016). Discrimination against students with a disability is a similar concern (Garda 2012). Such forms of discrimination that prevent access to public education can be characterized as costs of disorder. Although it should be noted that this discrimination could be committed by government officials in the exercise of their duties – in which case it can also be characterized as a cost of dictatorship.

As I have mentioned above, corruption and bribery could be classified as either a cost of dictatorship or a cost of disorder, depending on the context. This risk is applicable in an education context, particularly in developing countries. For example, Transparency International (2013) notes examples of corruption in the procurement process, the diversion of resources and misappropriation of funds, the payment of bribes in exchange for access to education, higher grades, or the granting of awards, staff absenteeism, and the practice of nepotism in hiring staff.

The discussion in this section of the chapter is not intended to be exhaustive. Indeed, further examples of dictatorship and disorder will emerge in the chapters that follow. Instead, this section aims to show that the major policy concerns in the public education context fit well into the institutional theory of regulation paradigm, which
states that society faces costs of dictatorship and disorder. I will now move to introduce the Institutional Possibilities Frontier, which provides a clear methodology for comparing and assessing the trade-offs involved between dictatorship and disorder among the various institutions of public education.

### 3.5 The Institutional Possibilities Frontier

There is no single institutional possibility for the provision of public education. Because of this, the institutional theory of regulation arising out of the New Comparative Economics (Djankov et al. 2003; Shleifer 2005) provides a useful framework to analyze and compare these institutional arrangements – the IPF. As I have foreshadowed, the key focus of the IPF framework is on the trade-off between dictatorship and disorder costs, in that ‘a state that has more powers to control disorder also has more for dictatorial abuse’ (Djankov et al. 2003, pp. 598-599). In other words, as state power increases to address and mitigate disorder costs, there is an associated increase in the costs of dictatorship. In this framework there is always some “equilibrium” level of disorder and dictatorship because transaction costs are assumed to be non-zero; no institutional arrangement ever completely economizes on these costs (Djankov et al. 2003).

To illustrate the application of the IPF framework, Djankov et al. (2003) use the example of social control of business. The authors propose four distinct institutional strategies (private orderings through markets; private litigation; public enforcement through regulation; and state ownership) that could be employed to reduce disorder costs of things such as ‘monopoly pricing, torts, or predatory tactics’ (Djankov et al. 2003, p. 601). Theoretically, private orderings are the default position. It does not mean that activity is unregulated; it means that conduct is regulated by the market mechanism (e.g., competitive pressure) and private collective action (e.g., industry association codes of conduct or other reputational mechanisms). However, these actions may not satisfactorily deal with the disorder problems and ‘societies may efficiently accept a higher level of government intervention to limit disorder’ (Djankov et al. 2003, p. 602).

As has been explained, various types of government intervention targeted at mitigating disorder costs exist on a spectrum of increasing public control.
No public involvement is required with competition and private orderings. Courts employ impartial judges enforcing the rules of good behavior. These rules do not even need to come from legislation; rather, they may derive from custom or from judge-made common law. Even in this case, the judge is a public agent with decision-making authority. With regulators, the state writes the rules, inspects the product before it is sold, and penalizes sellers for delivering a bad product. Both the scope of government activity and its centralization are increased relative to independent courts. Finally, with state ownership, the government takes complete control over an activity. (Djankov et al. 2003, p. 601)

The trade-off between dictatorship and disorder is shown by plotting these strategies on an IPF curve, shown in Figure 3.2. The x-axis shows the costs of dictatorship, while the y-axis shows the costs of disorder. The IPF assumes convexity with the implication that there is a cost-minimizing point shown at the intersection of the 45-degree line and the IPF curve (“total loss minimization”) – that is, an efficient point, given that there is no such thing as a perfect institutional arrangement as costs are present in all possibilities.

**Figure 3.2 - Institutional Possibilities Frontier**

![Graph showing Institutional Possibilities Frontier](image)


The distance from the origin represents the level of “civic capital”– a broad concept encompassing culture, ethnic homogeneity, natural or physical endowments or environments, history, the scale of production, the efficiency of tax extraction, and the
level of human capital (Djankov et al. 2003). Higher levels of civic capital will move the IPF closer to the origin, illustrating that greater civic capital means a higher capacity for society to form institutional possibilities at lower costs – making society better off overall. The conception of civic capital has been criticized as being both incomplete and as ‘a term so broad as to be essentially empty’ (Rosser and Rosser 2008, p. 85). Nevertheless, at a basic level, institutions emerge from human interaction and that these factors will all impact a society’s ability to form institutional possibilities.

The time frame is also important. While the IPF is fixed in the short run, over time the shape, slope, and position of the curve can change (Djankov et al. 2003). Often the factors that shift the IPF curve will be beyond our control (Boettke et al. 2005), but changes in technology can promote cooperation seemingly in favor of private orderings (Djankov et al. 2003; Boettke et al. 2005; Allen et al. 2018; Allen, Lane, and Poblet 2019).

Allen and Berg (2017) modify the IPF framework in two ways. First, the authors treat dictatorship costs and disorder costs as subjective. The value of this approach is that it recognizes that individuals will be perceptive of costs based on a range of personal factors such as political ideology, experience, or knowledge – and these might change over time and with new information or persuasion. The insight that applies in the context of this thesis is that new regulatory structures and institutional forms for alternative methods of delivering public sector services will emerge on the basis of perceived institutional efficiency. Secondly, the authors disaggregate institutional choices to the individual level where institutional choices are the result of bargaining between individuals and groups that have different subjective preferences. An example of this disaggregation is illustrated in Figure 3.3, where institutional bargaining takes places between two individuals, “Capitalist” and “Socialist.” These individuals conceive different ideal institutional arrangements, market ordering, and nationalization, respectively – and with equal bargaining power reach a compromised institutional possibility of the regulatory state. The authors term their modification of the IPF as an “Austrian subjectivist approach” as it draws on a key insight of the Austrian School of economic theory that ‘value and costs, including opportunity costs, are subjective perceptions’ (Allen and Berg 2017, p. 22; citing Buchanan and Wagner 1977; Menger 1871; Stringham 2010; Yeager 1987).
The IPF framework and the associated subjective approach has been applied in two ways in the extant literature. First, the model can be utilized as an instrument for comparative institutional analysis. For instance, Djankov et al. (2003) use their model to analyze legal origins, the phenomenon of regulation, institutions in transition, and the transplanting of institutions. Whitford and Lee (2012) investigate democracy and government effectiveness across countries. Davidson (2013) discusses enhancing productivity through greater private enforcement of public rules. Davidson and Potts (2016a; 2016b) map the institutions of innovation policy whose efforts are furthered by Allen (2017) utilizing the subjective approach in a detailed institutional analysis of the private governance of entrepreneurial discovery. Also employing the subjective framework, Berg and Davidson (2016) provide an institutional analysis of political debates about freedom of speech. In a later work, the same authors consider the high disorder costs associated with national public broadcasting (Berg and Davidson 2018). Other recent efforts in this vein have explored the effect of blockchain technology on the institutions of voting and collective decision making (Allen et al.}
2018; Allen, Berg, and Lane (2019) and methods of legal dispute resolution for smart legal contracts (Allen, Lane, and Poblet 2019) (see also: Berg, Davidson and Potts 2019).

The second way that the IPF model has been used is as a powerful tool to analyze regulation. For example, Shleifer (2005) applies the model to the regulation of financial markets; Plöciennik (2013) uses the model to analyze labor market reform in Germany; Davidson (2014) explains the costs of disorder in the context of environmental protesters; Berg and Davidson (2015) critique proposals for increased regulatory controls of the media; Berg (2016) investigates changes in Australia’s prudential regulation over time using the subjective framework; Davidson (2016) presents the institutional possibilities of tobacco control; and Berg (2018) evaluates models of privacy regulation.

The following chapters of this thesis will employ a combination of these two methods. First, the IPF framework will provide an organizing principle to detail the institutional possibilities of public education. Second, the IPF framework will provide the basis for the analysis of the regulatory framework governing each institutional possibility. The next section of the chapter expands on this approach.

### 3.6 Institutions of Public Education

In the same way that the IPF can be used to map institutions of social control over business (Djankov et al. 2003), this thesis uses the IPF to map the institutions of school education. This chapter has argued that public education is a creature of regulation, given that any state intervention to require or provide public services will necessarily require a regulatory response. In this way, regulatory structures are required in all of the institutional possibilities of public education in order to achieve public aims. However, my comparative institutional analysis will show that there is a trade-off between regulatory constraints to control costs of dictatorship and disorder, and this trade-off has consequences for public sector innovation.

In the chapters that follow, I propose that each institutional possibility exhibits a unique regulatory structure. All these possibilities can achieve public aims but do so through different combinations of dictatorship and disorder costs. For example, the state could
provide services directly through centrally-managed government schools. In Chapter 4, I will show that government schools are characterized by high dictatorship costs but exhibit low levels of disorder. Another possibility is that the state could provide services directly through government-owned schools but provide schools with a high degree of local autonomy – Independent Public Schools. In Chapter 5, I will examine a recent Australian experience of Independent Public Schools – and how this recent institutional possibility provides increased autonomy for relieving public schools of high dictatorship costs that restrict innovation. Next, in Chapter 6, I will consider separately the decentralized institutional forms of charter schools and voucher programs, where providers have a separate legal identity. In these forms, it will be argued that increased autonomy implies that costs of dictatorship costs are lower than the centralized institutional possibility, but there are higher perceived costs of dictatorship – which regulatory requirements attempt to mitigate. In Chapter 7, I will briefly discuss for-profit schools in developing countries and home education in developed countries. Although these are not public sector institutions for the provision of services, they represent options for parents to secede from the public services where perceived dictatorships of other possibilities remain too high.

3.7 A Schumpeterian lens of regulatory analysis

The Schumpeterian view of innovation is a process of “creative destruction” (Schumpeter 1942). This conception of innovation has been used to advance our understanding of public sector innovation (e.g., Potts 2009; Potts and Kastelle 2010; Potts 2010; Stewart-Weeks and Kastelle 2015). The evolutionary approach of political economy recognizes that there is a dynamic process involved in formulating and executing public policy (Witt 2003). The first stage of analysis in this thesis, outlined above, applies the new comparative approach (e.g., Djankov 2003) to the regulation of public education services. The second stage of analysis involves overlaying a Schumpeterian lens for regulatory analysis. Specifically, legislative and regulatory measures will be analyzed as a policy instrument with reference to the two distinct phases of innovation – “creation” of the new, and “destruction” of the old (Schumpeter 1942; see also, e.g., Potts 2009). This type of evolutionary approach to policy analysis, in contrast to neoclassical static analysis, recognizes that the introduction of a policy measure induces learning and behavioral change (Witt 2003).
The Schumpeterian approach certainly has relevance for regulatory analysis. For instance, Bauer (1997) applies the insights of the Schumpeterian conception of innovation to the regulation of the telecommunications industry. Yandle (2002) uses creative destruction to examine property rights in the context of environmental regulation. Diamond (2014) considers several labor market policies to promote creative destruction. Perhaps more commonly, the Schumpeterian approach to competition has been referred to in the context of antitrust (otherwise referred to as “competition law”) merger analysis (see, e.g., Gilbert and Sunshine 1995). The common thread of this research is to show how regulation affects the dynamic forces of innovation.

The research approach that I have outlined in this chapter is a unique approach in the economics of public sector innovation. However, the approach does fit within the broader tradition at the intersection of institutional law and economics and evolutionary economics. Indeed, there is a long history of institutional law and economics applied to market and non-market contexts (Posner 2014). ‘Many of the founders of and present contributors to institutional economics stress the evolutionary facet of institutions’ (Medema, Mercuro and Samuels 2018, p. 423).

3.8 Conclusion

This chapter has aimed to outline the methodological approach that will be used throughout this thesis. It has been argued that public sector services require a regulatory framework in place, but the nature of that framework is a matter of institutional choice. While there are various justifications for state intervention for public education, public aims can be achieved through various institutional possibilities. Against the backdrop of public interest and private interest theories of regulation, the institutional theory of regulation – that society forms institutions to economize the costs of dictatorship and disorder – emerged as having the most relevance to the task of comparing the institutions of public education and examining regulatory constraints on public sector innovation within this context. The key analytical tool in this institutional approach is the IPF, and various institutions of public education can be mapped. In the chapters that follow, the IPF will be used as both a method of comparative and regulatory analysis – in addition to using the
Schumpeterian conception of innovation as “creative destruction” as a lens for analyzing regulatory constraints.
Chapter 4 – Regulation of government schools

4.1 Introduction

There is a range of institutional possibilities for the provision of public education. The most common arrangement in Australia, however, is via government schools. The most recent data shows that, in 2017, there were 9,444 schools operating in Australia consisting of 6,228 primary schools, 1,408 secondary schools, and 472 special schools catering for children with a disability (Productivity Commission 2019). Of these schools, state and territory governments own and operated 70.3 percent accounting for 65.5 percent of all student enrolments (Productivity Commission 2019). Accordingly, the regulatory structures governing this institutional possibility is important for considering the impact on public sector innovation in this setting.

Recent Australian research into innovation in the education field continues to concentrate on introducing new technology into the classroom (e.g., O'Rourke, Main, and Hill 2017), new pedagogical techniques (e.g., Gouldstone 2018; Halcrow 2018), and the changing design of teacher training (e.g., Knipe 2016). Indeed, continuous improvement through innovation has been a consistent focus in the education sector for decades both in Australia and around the world (Glen, Blackberry, and Kearney 2017). However, the aim of this thesis is to focus attention on the regulatory and structural elements that contribute to public sector innovation, building on the existing work that has been done in examining education markets (e.g., Chubb and Moe 1990; Arsen, Plank, and Sykes 1999; Lubienski 2003a; Dixon and Tooley 2005; DeAngelis

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6 An earlier version of sections 2 and 3 of this chapter, along with parts of Chapter 2 and Chapter 7, was published as a chapter in the edited volume: Allen, D, and Berg, C (eds) 2018, *Australia’s Red Tape Crisis: The causes and costs of over-regulation*, Brisbane: Connor Court. An earlier version of sections 4 and 5 of this chapter, along with parts of Chapter 2, has been accepted for publication with *the Journal of Evolutionary Economics* (an earlier version of which was presented at the 2018 International Joseph A. Schumpeter Society Conference in Seoul, Korea).

7 In the Australian context, as the Productivity Commission (2019) explains, “primary schools” provide education from a foundational year (referred to variously as “Kindergarten”, “Preparatory”, “Reception”, “Pre-primary”, or “Transition”, depending on the jurisdiction) to year 6 or 7 (depending on the jurisdiction); “Secondary schools” provide education from the end of primary school to year 12; and “Special Schools” cater for children with a range of special needs including disability.
Specifically, this chapter extends that work by looking at the structural elements of the regulation of non-market production.

This chapter will be set out as follows. Section 2 will provide a historical account of public education in Australia that shows that the broad institutional structures have not substantially changed over the last century. Section 3 will look at the key regulatory features of government schooling and chart the increased regulatory burden over time. Section 4 examines the link between regulatory structures and the destruction phase of public sector innovation by detailing the mechanisms for school closure in Australia. Section 5 supplements the regulatory analysis by presenting a historical case study on Victoria’s ‘Schools of the Future’ program (1992-1996). Section 5 concludes the chapter.

4.2 An Historical Account of Public Education in Australia

This chapter will show that public education in Australia consists of two institutional possibilities; centralized public schools owned and operated by state and territory governments, and non-government schools (typically referred to as “private schools” and characterized as either Catholic or “Independent”) that are assisted by the government through the provision of public funding grants. These two institutional possibilities have existed for over 150 years. This section does not attempt to provide a full history of education in Australia. Australian historian Alan Barcan has provided this in his comprehensive *A History of Australian Education* (1980) (see also, e.g., Sherington and Campbell 2007). Instead, the purpose of this section is to provide a brief historical account of these institutional structures before providing detail about the current regulatory frameworks in place for government schools.

The beginnings of a formal Australian public education system can be traced back to 1793. In that year, Lieutenant-Governor of Norfolk Island, Philip King, imposed an import duty on liquor to raise funds for education (Barcan 1980). King opened a school on the island in 1794, another in 1795, and an orphan facility which included vocation training (Barcan 1980). In 1810, having since been appointed Governor of New South Wales, King then established an orphan school in Sydney using a similar financing method of levying an import duty that was hypothecated into an education fund.
As explained in the previous chapter, the main purpose – in King’s mind – was to provide for abandoned or otherwise poor children.

In the main, however, it was the various churches that advanced the provision of education throughout the colony with the assistance of grants of land from the state. By the 1850s, state provision of education had extended to rural areas where the churches had not established schools (Barcan 1980) – perhaps supporting a natural monopoly view of state provision of education, discussed in the previous chapter. The state system was formalized in 1848 when the colony of New South Wales established two boards.

The National Board of Education established government schools (called “National Schools”) under the National Education Board Act 1848 (NSW). The Denominational School Board was also appointed by the Governor for ‘the temporal regulation and inspection of the respective Denominational Schools of the colony [of New South Wales], supported in whole, or in part, at the public expense’ (New South Wales 1848, p. 23). The two different systems operated separately but had the united purpose of creating an educated new colony. The two school systems each have distinctive combinations of the subjective costs of dictatorship and disorder. The perceptions of these costs differed around cost and tolerance on the one hand, and community and parental involvement, as well as values on the other.

Proponents of the National School System (government owned and managed) emphasized the duplication and cost involved in the state supporting multiple denominational schools and government schools in the same geographic area (Barcan 1980). The problems included poor facilities, untrained teachers, and sometimes dangerous working conditions. Another problem was poor enrolments, and the high expenses required to provide education in a sparsely populated rural colony was keenly felt by policymakers and ‘how to minimize cost became the overriding objective in state educational policy’ (Kyle 1990, p. 44). These expenses can be seen as a cost of disorder because they emanate from the choices of individuals to live in rural instead of the established urban settlements. Another highlighted cost of disorder is that uneven distribution of wealth, human and natural resources’ (Meadmore 2001, p. 116). A ‘system of central control’ by the state would

Additionally, sectarianism was a major societal problem during this early colonial period in Australia. Meadmore (2001, p. 116) remarked on this period that ‘Denominational schooling with its associated sectarian and social divisiveness was incompatible with the ideal of a unified society’. In 1850, William Duncan (cited in Sherington and Campbell 2007, p. 22) made a case for the National School System on the basis that it would breed tolerance among the students.

It will surely be admitted that young men who have been accustomed to read these admirable lessons in class together—who, notwithstanding some differences of faith, are yet united in youthful friendships—. . . such persons are in a better disposition of mind for investigating truth than those who, educated in different schools have been accustomed—as some other children I wot [sic] are accustomed—to argue with a heat that may consume rather than enlighten, and whose chief arguments, are the abominable nicknames of Papist or heretic, Puseyite or Puritan.

On the other hand, the supporters of denominational schools were sensitive to the high dictatorship costs involved with national schools. Additionally, there were concerns that a centralized system would impose particular values on the students. As one example, National Schools allowed the reading of the Bible without commentary. One Roman Catholic observer contended that this would lead to ‘the deadliest of errors, indifferentism — the frightful notion that all religious tenets are mere matters of opinion, that men have neither treasure nor responsibility in the one revealed Divine Truth’ (cited in Mayrl 2011, p. 50). Sherington and Campbell (2007, p. 16) summarise the view of Catholic historians of this period.

Rather than public education in Australia being seen as an expression of agreement among the colonial population, the “secular” acts were seen at best as a form of common Protestantism and at worst as a means of proselytizing, to turn Catholic children away from their faith. Instead of participating in the centrally administered and bureaucratic public education system with a lay teaching force, the adherents of the Catholic Church increasingly withdrew to create their own schools based on local parishes and staffed by religious orders.
Other dictatorship costs increased over time. For instance, Sherington and Campbell (2007, p. 17) explained that local community involvement declined in government schools after the 1870s and ‘came to be provided and controlled by the central state administration, with little regard to the claims of local parent and citizen groups’. Meadmore (2001, p. 117) concurred, conceding that

Although it was recognized that centralized control played an important role in ensuring that education services were relatively evenly spread for all children irrespective of their geographic location, there was significant criticism of the systems for being unresponsive to local needs.

In any case, by the 1850s, most colonies had a mixture of government-managed public schools and provided state aid for denominational schools – dual institutions in the provision of public education services. Barcan (1980, p. 74) explains:

In New South Wales four systems of Church state-aided schools [Anglican, Catholic, Presbyterian and Methodist] competed and with each other and the National Schools. In Van Diemen’s Land [now Tasmania], Anglican elementary schools dominated and, together with a few Catholic Schools, received State aid alongside the declining ‘Public schools’ based on the British and Foreign System. South Australia was distinctive in rejecting State aid for denominational schools except in the period 1847-51…In Western Australia the state supported a number of ‘Colonial Schools’ [Protestant in character, with state aid to Catholic Schools].

How can the emergence of two alternative systems be explained? It is here that Allen and Berg’s (2017) subjective political economy can be applied. Figure 4.1 shows the stylised subjective IPFs for a proponent of the National system who is relatively more sensitive to costs of disorder and relatively less sensitive to costs of dictatorship (IPF_{a1}), compared with a proponent of the Denominational system that is relatively less sensitive to costs of disorder and relatively more sensitive to costs of dictatorship (IPF_{a2}).

Given the subjective IPF curves, the model explains why separate institutional possibilities in competition with each other provide an institutionally efficient outcome rather than forcing one or the other. Figure 4.1 stylises a snapshot in time. Of course, preferences are not given but are discovered (Hayek 1945; Buchanan 1979; Allen and Berg 2017). This means that over time, it can be expected that the subjective
costs of actors will change as knowledge and information about preferences is expanded and adapted for changes in the external environment.

Figure 4.1 – Institutions of Public Education Circa 1850

The political campaigns for a secular education in the latter half of the nineteenth century and continuing into the twentieth century tended preferences towards central control of public education (Barcan 1980; Maryl 2011). From the 1850s, the number of government schools expanded, and colonies progressively withdrew public funding to non-government schools: South Australia (1851), Tasmania (1854), Victoria (1873), Queensland (1880), New South Wales (1882) and Western Australia (1895) (Wilkinson 2013). Nevertheless, in the meantime, the non-government schools led the way in secondary education and there is evidence a scholarship (voucher) program continued to exist as an institutional choice to delivery public secondary education – in addition to centralized public schools. For example, Queensland had a scholarship program that provided public funding for students to attend grammar (i.e. Church of England) schools; in 1900 regulations were amended to allow scholarships to be tenable at Catholic Secondary schools (Barcan 1980). State funding was reintroduced in the 1960s, following a long-running campaign predominately by Catholics in the wider political context of the Democratic Labor Party splitting away from the Australian Labor Party (see, e.g., Santamaria 1981). In 1961, Catholic schools represented over 80 percent of all non-government schools (Barcan 1980). Funding was introduced at a Commonwealth level (1964) and reintroduced at state level: New South Wales (1964), Western Australia (1965), South Australia
(1965), Victoria (1967), Tasmania (1967); (Queensland’s scholarships had remained but became a direct subsidy in 1967) (Barcan 1980).

The historical outline provided in this section shows that, although the balance has waxed and waned, the two institutional possibilities have dominated the provision of education services in Australia. This section shows that the two systems that emerged are not ‘driven by a laissez-faire agenda of market forces and competition’ as Meadmore (2001, p. 116) has suggested – but to cater for different perceptions of subjective disorder and dictatorship costs. The next section will outline the current regulatory structure governing service delivery and show that there has been an increase in regulatory complexity over time.

### 4.3 Regulation and Regulatory Complexity

What are the key characteristics of the regulation of government schools? Chapter 3 of this thesis advanced the argument that public sector services are creatures of regulation. In summary, it was proposed that, generally, there are two separate regulatory requirements for Australian governments to provide public services lawfully. First, Appropriation Acts by the legislature authorizing the expenditure of government funds for specific purposes – in this case school education. Second, a regulatory framework for determining how schools are managed. This section will provide greater detail about these two regulatory types, as it applies to government education. It is proposed that the latter requirement contains the key regulatory constraints of most relevance to public sector innovation.

#### 4.3.1 Funding Arrangements

The first type of regulation occurs in the context of funding arrangements. Appropriation Acts are passed each year, in each jurisdiction, authorizing the relevant Treasurer to issue money out of a consolidated revenue fund. More general financial management legislation also exists to ensure probity over public expenditure. A complicating factor is how the funding amounts are calculated, and the overlapping

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8 See e.g., Appropriation (2018-2019) Act 2018 (Vic); Appropriation Act (No.1) 2018-2019 (Cth).
9 See e.g., Financial Management Act 1994 (Vic); Public Governance, Performance and Accountability Act 2013 (Cth);
responsibilities of the state and territory governments with those of the Commonwealth government.

Historically, the provision of public education was the exclusive domain of the states and territories. State involvement in public education predated Australian federation in 1901, as discussed earlier in this chapter. Post-federation, the *Australian Constitution* makes no express mention of “education” as one of the Commonwealth’s heads of legislative power.\(^\text{10}\) In modern times, however, both the Commonwealth and state and territory governments provide funding to government and non-government schools. In 2017, state and territory governments provided 70.2 percent of total government funding (Productivity Commission 2019).

By sector, in 2017, state and territory governments provided 84.9 percent of government funding to government schools with the Commonwealth government providing the remainder (Productivity Commission 2019). The major funding source is the reverse case for the non-government sector, with the Commonwealth government providing 75.7 percent of government funding to non-government schools and the remainder provided by state and territory governments (Productivity Commission 2019).

When funding to non-government schools recommenced at a Commonwealth level in the 1960s, the funding was mainly for capital expenditure. For example, the *States Grants (Science Laboratories and Technical Training) Act* 1964 (Cth) provided grants for science laboratories. Funding for recurrent expenditure was introduced in 1970, with the *States Grants (Independent Schools) Act* 1969 (Cth) initially authorizing payments to non-government schools at the rate of $35 per primary student, and $50 per secondary student per annum (Harrington 2013, p. 3). The rate of funding was later changed to be a percentage of the government school cost (McIntosh 1994; Harrington 2013), and the report of the Interim Committee for the Australian Schools Commission (referred to as the “Karmel Report”) then proposed having differential per capita rates based on disadvantage (Karmel et al. 1973). Education policy over

\(^{10}\) Australian Constitution, section 51. However, in practice the Commonwealth relies on its powers under section 96 which provides that “the [Commonwealth] Parliament may grant financial assistance to any State on such terms and conditions as the Parliament thinks fit.” See, e.g., *Australian Education Act* 2013 (Cth); section 4.
the last few decades has continued to focus on the idea of addressing “inequality” (Kenway 2013). Major changes also occurred in 2001 and 2008 (Harrington 2013). More recently, funding mechanisms at the Commonwealth level have been the subject of two recent reviews (Gonski et al. 2011; Gonski et al. 2018).

Currently, at a state and territory level, the quantum of funding that government and non-government schools receive depends on a formula specific to each jurisdiction. The Productivity Commission (2019, p. 4.18) summarises as follows.

In general, State and Territory government schools systems are funded based on a variety of formulas to determine a school’s recurrent or base allocation, with weightings and multipliers added for students facing disadvantage. For non-government schools, State and Territory governments also provide funding for recurrent and targeted purposes, usually through per capita allocations.

The latest data published by the Australian Curriculum Assessment and Report Authority (2016-2017), extracted in Table 4.1, compares recurrent expenditure for government schools and non-government schools by Commonwealth and state and territory governments, as an average of the number of full-time equivalent students. The figures show that both levels of government provide taxpayer funding towards government and non-government schools.

**Table 4.1 – Government recurrent expenditure on schools by sector**

<table>
<thead>
<tr>
<th></th>
<th>Government schools</th>
<th>Non-government schools</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commonwealth government expenditure ($/FTE student)</td>
<td>$2,645</td>
<td>$8,053</td>
<td>$4,515</td>
</tr>
<tr>
<td>State and Territory governments expenditure ($/FTE student)</td>
<td>$14,886</td>
<td>$2,591</td>
<td>$10,634</td>
</tr>
</tbody>
</table>

**Source:** ACARA 2019.
On a per-student basis, the Commonwealth government provide a higher amount of funding to the non-government sector; while the State and Territory governments provide a higher amount of funding to government schools. The funding of non-government schools has been described as a partial or “de facto” voucher program (Donnelly 2015). That is, the number of students is one of the key metrics in the funding model – although the funding does not truly follow the individual student.\footnote{The regulation of voucher programs in the United States will be considered in Chapter 6.}

At a Commonwealth level, funding for both government and non-government schools passes through state and territory governments. As Beck (2017, p. 831) has first observed,

> The *Australian Education Act* is complex, but its general legislative scheme is relatively straightforward. The Act grants funds, calculated in accordance with various formulae set out in the Act, to the states and territories on condition that the states and territories distribute the funds in accordance with the conditions set out in the Act.

The conditions attached to Commonwealth grants include ‘requirements to comply with intergovernmental agreements on school education, and to implement nationally-agreed policy initiatives on school education’ (*Australian Education Act* 2013 (Cth), section 4). Regulation exists as a mechanism for the legislature to control the expenditure of the funds in accordance with the government’s policy objectives (Mises 1944; Cope, Goodship, and Holloway 2003; Freiberg 2017; Windholz 2018). This proposition can be extended to controlling the expenditure of funds within the bureaucracy of another jurisdiction. In this case, the *Australian Education Act* functions as a way to ensure that the Commonwealth has a legal mechanism to control the funds acquitted to an “Authorising Body” (in the language of the Act). Accordingly, this fits clearly fits within the definition of “regulation inside government” established by Hood et al. (1999) as (i) one public sector organization (the Commonwealth government) shapes the activities of another public sector organization (the state or territory government); (ii) the organizations are not in a direct chain of command (both governments are sovereign entities); and (iii) the regulatory relationship is based on a legal mandate (made under Commonwealth legislation making the funding contingent). In addition, intergovernmental grants may also be
subject to “implicit” terms where states and territories are incentivized to act in line with the Commonwealth government’s preferences (Brennan and Pincus 1990). More expensive intergovernmental regulatory constraints is predicted to provide state and territory jurisdictions with less scope for local experimentation (Garzarelli and Keeton 2018).

The latest figures from the Australian Public Service Commission show that, as of 30 June 2018, there were 1,776 employees working for the Department of Education and Training (APSC 2018). None of these departmental employees are involved in delivering front-line services. This indicates the extent of work that is required in administrating the regulatory requirements linked to the Commonwealth funding arrangements.

4.3.2 Regulatory Measures

Colonial Australia’s early system of public education became formalized in legislation in the lead up in the 1850s. For example, as has been discussed above, in New South Wales in 1848, a combination of legislation and executive orders established two boards – The National Board of Education, to provide funds for government schools and the Denominational School Board, to allocate state aid to denominational schools. Similar institutional frameworks were put in place in the other Australian colonies (Barcan 1980). ‘For over a century’, the regulatory structures ‘characterized by high levels of rigid, centralized control by the Directors General and their senior officers, remained relatively undisturbed’ (Meadmore 2001, p. 117). Today, the centralized delivery of government schooling continues.

State and territory jurisdictions have legislation regulating (or establish mechanisms such as statutory authorities to regulate) many facets of the government schooling system. In summary, this legislation covers the following areas:

- The establishment and closure of government schools;
- Control of land and buildings;
- Enrolments of students in government schools;
- School curriculum;
- The formation and powers of school councils;
• Registration and employment of teachers and principals; and
• Reporting and accountability requirements to education departments.

In applying the institutional theory of regulation (Djankov et al. 2003; Shleifer 2005; Davidson 2013), the explanation for these regulatory provisions is to achieve uniformity in service delivery to guard against potential costs of disorder. The above list shows that the key decisions about establishing (or closing) schools, hiring (or firing) staff, managing enrolments, and choosing the content that is taught, are centrally prescribed. Individual parents, principals, teachers, and schools are not given direct choice autonomy over these matters. Three examples, below, illustrate that controlling for risks of disorder comes with heightened dictatorship costs.

The first example is that many matters relating to staffing are prescribed. Mandated registration procedures mitigate against the risk of disorder that unqualified teachers are hired (out of negligence, necessity, mistake, or otherwise) to teach in government schools. However, the trade-off with dictatorship costs comes in providing state control over deciding who can teach in government schools – meaning that pre-screening decisions are made by bureaucrats rather than school principals. Another cost of dictatorship of having a single employer of teachers for government schools (i.e., a government department rather than individual schools or individual school districts) is that inflexible work practices are a defining feature of employment agreements for teachers (Stanley, Allen, and Lane 2014).

The second example is that Australia has a national curriculum enforceable through a mixture of federal and state regulatory measures. There are several risks of disorder if individual government schools choose between, or developed their own, competing curriculums and left curriculum matters up to the professional autonomy of teachers using their training and judgement. For instance, according to the Australian Curriculum, Assessment and Reporting Authority (ACARA) (2019), ‘The (Australian) national curriculum was introduced to improve the quality, equity and transparency of Australia’s education system’. In the years leading up to its introduction in 2008, typical arguments in support of a national curriculum were that there needed ‘to be greater consistency across education systems to benefit students required to transfer across State/Territory boundaries’, that overcoming duplication would promote
‘efficiencies through the sharing of scarce resources’ and that a ‘national approach will help produce a sense of national cohesion’ (Harris-Hart, 2010 p. 297, citing Reid 2005). In discussing Australia’s road to a national curriculum, Harris-Hart (2010, p. 313) concluded that

...rhetoric has systematically been utilised by successive Federal governments (of varying political complexion) to generate a perception of mistrust and crisis. This has also generated the false perception that a national curriculum will provide a panacea to a wide range of educational problems; that is the perception that a standardised national curriculum will result in greater access, equity and educational outcomes for all students.

In other words, to justify further centralization of public education, Federal actors sought to increase the perceived costs of disorder. However, setting a curriculum is a function of values and priorities (Friedman 1955; Hayek 1960; McLaughlin 1995; Tooley 1995; Berg 2010) and the trade-off with any centrally mandated curriculum is that there is a high risk of dictatorship. For Hayek (1960, p. 380), the task of setting a centralized curriculum is tantamount to central planning of any economy, arguing that ‘the more highly one rates the power that education can have over [people’s] minds, the more convinced one should be of the danger of placing this power in the hands of any single authority.’ To borrow from Hayek’s earlier work (1945, pp. 520-521), the dispute is not about whether a curriculum is needed or not; it is a dispute about whether the curriculum should be mandated centrally by one authority for the whole education system or divided among many individuals. Aside from this, there are higher dictatorship costs associated with the lack of dynamism involved in such a centralized system. The nature of regulation between different government entities is that any changes require agreement between the various state, territory, and Commonwealth governments in addition to any usual consultation conducted with other stakeholders.\(^\text{12}\)

\(^{12}\) For example, ACARA is governed by the Ministerial Education Council constituted by the relevant State, Territory, Commonwealth government ministers responsible for school education (see, Australian Curriculum Assessment and Reporting Authority Act 2008 (Cth)). See also, the ‘National School Reform Agreement’ (COAG 2018).
Take enrolments as a final example. If enrolments were open and subject to the payment of fees, the main risks of disorder in this situation are that parents (with rationally limited information) might make poor choices in deciding on a school or that the individuals that manage school intake discriminate in some way (whether on academic ability, capacity to pay, or some other personal attribute). Regulation requiring schools to provide education and no-direct cost to parents combined with allocating schools to geographic zones – and requiring schools to admit students that reside within those zones – guards against both risks. Some jurisdictions do provide a limited choice in government schooling by permitting schools to admit a student from outside the geographic zone if there is enough capacity.\textsuperscript{13} When this is not possible, a base level of “Tiebout choice” remains. Tiebout (1956) proposed the idea that optimal solutions for public goods can occur by citizens voting with their feet and moving to jurisdictions that supply more or less public goods depending on their tastes and preferences. Applied to school education, parents can relocate to the school of their choice and take advantage of the geographic enrolment guarantee. Of course, there are higher transaction costs associated with exercising this choice in either renting or purchasing a property near a school. Additionally, school distance will be only one factor among many in choosing where to live (Chubb and Moe 1990).

Enrollment regulation also causes spillover effects into other markets. For instance, there is an extensive economic literature testing the connection between higher residential property prices and desirable school zones (Davidoff and Leigh 2008 present findings on the ACT but this trend has also observed in other countries using various methodologies, see e.g., Oates 1969; Black 1999; Rosenthal 2003; Kane, Reigg, and Staiger 2006; Rehm and Filippova 2008; Ries and Somerville 2010; Dhara and Ross 2012). The more schools that exist within a particular geographic area – the more Tiebout choice that exists. Accordingly, there will generally be a relatively higher degree of Tiebout choice in metropolitan areas with more schools per square kilometre compared to country areas. The provision of schooling at no direct cost to parents causes information and other problems in the allocation of resources, as

\footnote{13 For example, in Victoria, section 2.2.14 of the \textit{Education Training and Reform Act 2006 (Vic)} provides that “a child of compulsory school age may be enrolled at a Government school that is not the child’s designated neighbourhood Government school if there is sufficient accommodation for the child at that school.”}
prices are fundamentally a mechanism for coordinating dispersed information about preferences (Hayek 1945). Mandated school zoning regulation magnifies the information problem by significantly increasing switching costs, thereby removing other non-price demand signals. Commenting on the New Zealand experience of school choice, Fiske and Ladd (2000, p. 282) reason that ‘when space is available in existing schools, building new schools is not a cost-effective way to meet student demand. Moreover, the managers of popular schools...have little incentive to expand.’ Zoning regulation requires government departments to manage the capacity issues and centrally plan the establishment and closure of schools. The implication of this for public sector innovation will be discussed in further detail with the regulatory analysis and case study presented in sections 4.4 and 4.5, below.

In summary, the reason it can be said that the institutional possibility of government schooling is characterized by high costs of dictatorship is that government schools are ultimately managed and operated by a central bureaucracy – and in some cases an overlapping hierarchy of bureaucracies. Although there has been a trend in some Australian jurisdictions towards “self-managing schools” (e.g., Caldwell and Spinks 1988; 1998; Caldwell and Hayward 1998) public sector innovation in the government school context must occur in lower-level activities operating within the centralized regulatory constraints.14 The next sub-section of the chapter will show that government schooling in Australia has been subject to increasing regulatory complexity.

4.3.3 Increasing Regulatory Complexity

The extent of regulation has built up over time. In New South Wales, the first legislation for government schooling came in the form of the National Education Board Act 1848 (Barcan 1980). Since this time, the major reforms came in the form of the following principal pieces of legislation: Public Schools Act 1866; Public Instruction Act 1880; Education Act 1961; Education Reform Act 1990 (today known as the Education Act 1990).15 In Victoria, the first principal legislation for government education was the Common Schools Act 1862 (Barcan 1980). Since then, the early

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14 School autonomy and choice programs are the focus of Chapters 4 and 5.
15 Incorporating amendments as at 8 January 2019.
reforms and consolidations came with the passage of the *Education Act* 1872, *Education Act* 1890, *Education Act* 1915, *Education Act* 1928, and the *Education Act* 1958 (Barcan 1980). The 1958 Act was regularly amended in the years that followed.\(^{16}\) The 1958 Act was replaced by the current regime – the *Education Training and Reform Act* 2006.\(^{17}\)

An analysis of the growth in the word counts of this legislation will provide a useful indication of the growth in regulatory complexity. Researchers have attempted to quantify regulatory burdens. Traditionally, this has been done by using page counts as a proxy measure to observe the growth in regulatory complexity. For instance, Lilley and Miller (1977) show the growth in the number of pages of the United States Code of Federal Regulations between 1970 and 1975 (see also, e.g., Coglianese 2002; Dawson and Seater 2013; Crews 2017). Another approach is to compare the file size of the digitized version of regulations which helps control for differences file type and formatting between jurisdictions (Mulligan and Shleifer 2005). The most robust and sophisticated approach, to date, called “RegData”, developed by researchers at the Mercatus Centre at George Mason University, counts the number of restrictive clauses within legislation (Al-Ubaydli and McLaughlin 2017). However, the RegData methodology for Australia is only in its early stages of development (McLaughlin, Potts, and Sherouse 2019) and not yet available.\(^{18}\) Page counts are a blunt measure and do not account for changes in the formatting of legislation over time. Therefore, where possible, word counts may provide a better proxy for regulatory complexity compared to page counts.

The changes in regulatory complexity will be presented in terms of word counts and page counts. The legislation for analysis was first obtained from the official sources. In New South Wales, the official versions of the Act are published on the government’s “NSW Legislation” website.\(^{19}\) Similarly, in Victoria, the legislation is published on the

\(^{16}\) However, the earliest historical consolidation of the 1958 Act that is currently available is from 1997, which is used below as a point-in-time data point. Historical consolidations of the *Education Act* 1958 (Vic) were obtained from the Victorian Legislation and Parliamentary Documents online database: <http://www.legislation.vic.gov.au> last accessed 1 March 2019.

\(^{17}\) Incorporating amendments as at 1 November 2018.

\(^{18}\) For disclosure, I note that I was a research assistant on this working paper in a joint project between the Mercatus Centre at George Mason University and RMIT University.

government’s “Legislation and Parliamentary Documents” (1996-present) and Australasian Legal Information Institute’s “Victorian Historical Acts” database (1851-1995).\(^{20}\) Page counts were obtained simply by recording the number of pages of the document, regardless of document format.

To obtain word counts a three-step process was undertaken. First, legislation was obtained in its original file type and converted into a text file in Microsoft Word (if required).\(^{21}\) Second, editing was undertaken as required. Manual editing took two forms. Random numbers and symbols and spacing between letters of the same word from the conversion process were removed. These are errors in the file conversion process and have the effect of increasing the number of words. Next, tables of contents, schedules detailing historical amendments, and various headers and footers were also removed, where applicable, because these features have changed over time and the inclusions would lead to: (i) inconsistency, particularly with the nineteenth-century legislation; and (ii) have the effect of amplifying the regulatory complexity through double counting. The third and final step was to perform a word count using Microsoft Word’s word count function.

The conversion process was more difficult (and therefore less accurate) for the legislation prior to 1990s. In particular, the conversion of the 1915 Act in Victoria could not be carried out accurately and was excluded from the word count analysis. Note that the reported figures provide an analysis of the principal legislation establishing the regulatory framework and do not include regulations made under the Act. Nevertheless, it provides a more fine-grained view of regulatory complexity than reporting page counts alone.

Figures 4.2 and 4.3 report the New South Wales legislative data by word count and page count, respectively. Figures 4.4 and 4.5 report the Victorian legislative data by word count and page count, respectively. Overall both methods show growth in regulatory complexity in both jurisdictions. Note that the data does not include sub-legislative instruments such as Regulations or Ministerial Orders made under the Act.

\(^{21}\) Legislation was in .html, .pdf, or .doc file depending on year and jurisdiction.
Figure 4.2 – NSW Principal Education Act, by word count

Figure 4.3 – NSW Principal Education Act, by page count
Figure 4.4 – Victorian Principal Education Act, by word count

Figure 4.5 – Victorian Principal Education Act, by page count
The overall historical trend is the same in both jurisdictions – an increase in regulatory complexity over time. The initial education Acts in both jurisdictions provided for the establishment of boards to oversee the government schooling system – leaving most regulatory matters to discretion – in just two pages. The current education Acts (97 pages in New South Wales and 714 pages in Victoria) provides extensive detail about the complex structural arrangements. The bulk of the increase in complexity appears to come in the last 30 years. To be sure, the government’s role in education has expanded since government schooling first began in the 1850s. Once a provider of last resort, today around two thirds of Australian primary and secondary school students are enrolled in government schools – providing both primary and secondary education (ABS 2017). But, as has been previously mentioned, the broad institutional structures are not radically different from a century ago.

However, it is a reasonable argument to make that the government schools of the 1850s cannot be compared with modern government schools. The rejoinder comes in just isolating the current legislative regimes. In New South Wales, the current Act as passed in 1990 was 79 pages or 21,231 words in length; the most recent consolidation in 2018 now spans 97 pages or 37,998 words. In Victoria, the current Act as passed in 2006 was 428 pages or 89,632 words; the most recent version in 2018 recorded 714 pages or 156,228 words. Measured by word count, the changes equate to an 80 percent increase in New South Wales over approximately 28 years and a 74.3 percent increase in Victoria over approximately 12 years.

The increasing regulatory complexity in the current legislation alone provides preliminary evidence of a “red tape” in the regulation of government schooling. That is, there is a difference between the extent of legislation required to establish the institutional frameworks to govern a baseline level of service delivery and those ‘rules, regulations, and procedures that remain in force and entail a compliance burden but [do] not advance the legitimate purposes the rules were intended to serve’ (Bozeman 2000, p. 12). This finding provides a new possible explanation for why Australian teachers have longer working hours compared to other countries in the OECD.
(Freeman, O’Malley, and Eveleigh 2014). Recent evidence from New South Wales reported increased workloads for teaching staff because of non-teaching related tasks (Fitzgerald et al. 2018). Indeed, one respondent from that New South Wales study branded the compliance burden as a ‘a tsunami of paperwork’ (Fitzgerald et al. 2018, p. 10). This suggests a school-level compliance burden that is affecting service delivery. The typical explanation has been to associate increasing school-level administrative workloads with school autonomy reforms (e.g. Gobby 2013a; 2013b). This argument carries some weight and will be discussed further in Chapter 5. However, this explanation overlooks the fact that there has also been an increased regulatory burden over time. The finding presented in this chapter is significant because it suggests that the public sector policy focus should not be to wind back school autonomy reforms that promote public sector innovation but instead to engage in a program of removing regulatory burden inside government. Measuring the burden is the first step in such a program.

There is a sizable difference in the length of the Principal Acts of New South Wales and Victoria. The most recent version of the New South Wales Act measures 37,998 words across 97 pages compared to 156,228 words across 714 pages of the most recent version of the Victorian Act. An explanation for this difference is that the data analyzed is the Principal Acts not all the Acts regulating government education. For example, prior to the repeal of Victoria’s 1958 Act in 2006, Victoria had several pieces of legislation governing school education including the Community Services (Attendance at School) Act 1970, Educational Grants Act 1973, Education (Special Developmental Schools) Act 1976, Teaching Service Act 1981, Victorian Curriculum and Assessment Authority Act 2000, Victorian Institute of Teaching Act 2001, and the Victorian Qualifications Authority Act 2000. Much of this is now incorporated into Victoria’s 2006 Act. Compare this to the current situation in New South Wales, where several Acts regulating government schooling are not consolidated into the Principal Act including the Teacher Housing Authority Act 1975, Teaching Service Act 1980, Education (School Administrative and Support Staff) Act 1987, Teacher Accreditation Act 2004, and the Education Standards Authority Act 2013.

Note that this report was based on the 2013 OECD Teaching and Learning International Survey. The survey is conducted every 5 years and the next edition is expected to be released in 2019.
Additionally, there will be other general legislation (i.e., not just applying to the provision of education) that will impact on the operation and management of government schools. These include compliance and reporting requirements imposed on all public sector bodies such as the Public Sector Management and Financial Management Acts. Another example is the general “Equal Opportunity” legislation, which will be considered further in the case study presented in section 5 this chapter.

4.4 Mechanisms for School Closure in Australia

Innovation has a destructive side. In the Schumpeterian tradition, innovation is understood as ‘Creative Destruction’ – a dynamic force driving economic development. In this conception, innovation is more than just new ideas but rather the process of how novel ways of doing things are adopted and which transform the existing landscape. In Chapter 1, I noted that existing research noted that the majority of the extant research focusses on the creation phase of public sector innovation (Potts 2010). To date, mechanisms of destruction have not been specifically identified. This section of the chapter proposes a new way forward in identifying destruction mechanisms of public sector services. In doing so, it builds on a stream of research that seeks to apply the Schumpeterian conception of innovation to a public sector context (e.g., Windrum and Garcia-Goni 2008; Potts 2009; Potts 2010; Potts and Kastelle 2010; Stewart-Weeks and Kastelle 2015).

Public sector services are a creature of regulation. On this basis, it is proposed that identifying the mechanisms for destruction in public sector services can be found by systematically reviewing the relevant legislation. Murmann (2003), in a wider comparison, has shown that the national university systems in America, Germany, and the United Kingdom coevolved alongside technological advances and industry changes – partially through the mechanisms of the opening and closing of individual universities. In a similar way, in the context of government schooling, one way that destruction manifests itself at a “firm” level is through closing schools. This may be necessary for a number of reasons, including budget consolidation, poor

23 In New South Wales, see e.g., Government Sector Employment Act 2013 (NSW) and the Government Sector Finance Act 2018 (NSW). In Victoria, see e.g., Financial Management Act 1994 (Vic) and the Public Sector Management and Employment Act 1998 (Vic). Each of the other states, territories, and the Commonwealth will have its own equivalent legislation covering these matters.
performance, or population changes – but the mechanisms for closing schools will be detailed within the relevant legislative framework. Previous sections of this chapter have focused on New South Wales and Victoria, this section of the chapter will consider all states and territories.

The legislation was obtained from the official state and territory government online databases, in force as of 30 June 2018. Each jurisdiction’s legislation was reviewed to identify the decision-maker or another administrative body that has the legal power to close a school and any conditions or restrictions on the exercise of that power. The legislative frameworks for each Australian state and territory jurisdiction are summarized in Table 4.2.

**Table 4.2 – Legislative Frameworks Governing School Closure in Australia**

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Relevant Legislation</th>
<th>Destruction Mechanism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Capital Territory</td>
<td>Education Act 2004 (ACT); Section 20.</td>
<td>Ministerial Discretion</td>
</tr>
<tr>
<td>New South Wales</td>
<td>Education Act 1990 (NSW); Section 28.</td>
<td>Ministerial Discretion</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>Education Act 2015 (NT); Division 9.</td>
<td>Ministerial Discretion</td>
</tr>
<tr>
<td>Queensland</td>
<td>Education (General Provisions) Act 2006 (QLD); Chapter 2 Part 3.</td>
<td>Ministerial Discretion</td>
</tr>
<tr>
<td>South Australia</td>
<td>Education Act 1972 (SA); Section 9, and Part 2A.</td>
<td>Ministerial Discretion</td>
</tr>
<tr>
<td>Tasmania</td>
<td>Education Act 2016 (Tas); Section 97.</td>
<td>Ministerial Discretion</td>
</tr>
<tr>
<td>Victoria</td>
<td>Education and Training Reform Act 2006 (Vic); Sections 2.2.1 and 2.2.2.</td>
<td>Ministerial Discretion</td>
</tr>
<tr>
<td>Western Australia</td>
<td>School Education Act 1999 (WA); Part 3 Division 1.</td>
<td>Ministerial Discretion</td>
</tr>
</tbody>
</table>
An examination of the legislative provisions reveals that ministerial discretion is the sole mechanism for school closure. That is, in every Australian jurisdiction it is for the relevant Education Minister (however named) to decide whether a school should be closed or amalgamated. There are, however, some differences in the restrictions on the exercise of this discretion between jurisdictions relating to notice, consultation, and reporting.

Most jurisdictions require notice periods before a school can be legally closed. In South Australia, the process takes a minimum period of three months. In Queensland, a six month notice period applies. 12 months’ notice is required in the Northern Territory and Western Australia. In the Australian Capital Territory, a 12 month notice period also applies before a decision can be made – for closure in a further six months or at the end of the school year, whichever is later. In New South Wales, the process will take approximately 18 months as the Minister must announce by June 15 for the closure of a school at the end of the following year. Ministers in some jurisdictions are required to publish the notice in the Government Gazette (or another form of public notice) or are required to provide notice in writing to the school Principal and School Council and Parents and Community Association. No specific notice requirements are provided for under Tasmanian or Victorian legislation. There are exceptions to notice requirements where special, exceptional, or emergency circumstances exist to justify the closure. Some jurisdictions provide a waiver where a majority of parents of the students at the school agree with the proposed closure.

All jurisdictions, except for Victoria, also set out a consultation procedure to be followed and specify particular interest groups that must be consulted before a final decision is made about the closure or amalgamation. Generally, this requires that the Minister consult with the school community (i.e., parents of students, and teachers), the school council, and the school association (where applicable). The legislative requirements in some jurisdictions are straightforward. For instance, legislation in the Northern Territory, Queensland, and Western Australia contains broad requirements to consult with groups including parents, staff, School Councils and Parents and Community Associations. The Tasmanian requirement is even simpler – requiring the Minister to consult with the School Association. By contrast, the legislation in the Australian Capital Territory, New South Wales, and South Australia all contain more
extensive consultation provisions requiring independent committees to be formed (the membership of which is prescribed) that will conduct a review and report back to the Minister. Ultimately, the Minister is not bound by any recommendations arising out of these consultation processes – in all jurisdictions the legal decision making power to close or amalgamate a school rests with the respective Minister. However, in New South Wales and South Australia, the Minister is required to publish reasons for their decision where it is contrary to the recommendations of the review committee.

The legislation in some jurisdictions specifies the factors that the minister is bound to consider in making a decision. These are expressed mainly in general terms – Ministers must have regard to the education, economic, and social impacts of the school. In the Australian Capital Territory the decision factors include environmental concerns. In Tasmania, there is a broad discretion for the Minister to make a decision based on any circumstances they consider appropriate.

Interestingly, the review of these legislative provisions discovered that Western Australia has a limited rule-based mechanism in addition to the general Ministerial power. Section 56(3) of the School Education Act 1999 (WA) provides that ‘if the Minister is satisfied that a government school is regularly attended by less than the prescribed number of students the Minister is to either: change the classification of the school…; or take action to amalgamate or close a school’. This requirement does not apply where the Minister determines that there are significant educational, economic or social reasons for not complying. However, it does not appear to be prescribed by the current regulations (see: School Education Regulations 2000 (WA)), and so this trigger is not currently in operation. However, it is a significant prompt in showing that the legislation in all other jurisdictions provides that the exercise of discretion is entirely based on Ministerial initiative. How then do Ministers go about the task of closing schools? The next section of this chapter will consider a historical case study.

4.5 Case Study: School Closures in Victoria’s Schools of the Future

The historical case study presented in this chapter is on the “Schools of the Future” (SOTF) reforms which took place in Victoria during the Kennett government’s first term (1992-1996). A key part of the SOTF reforms included the systematic closure
and merger of hundreds of Victorian public schools. A significant source for this case study is the published accounts of the then Victorian Education Minister Don Hayward (Caldwell and Hayward 1998; Hayward 2016). In order to limit the distortion of hindsight or personal bias, this auto-biographical material is supplemented with government reports, parliamentary debates, and published decisions from courts and tribunals. The SOTF reforms have been previously examined in the context of educational leadership and management (e.g., Caldwell 1994; Townsend 1996), professional development programs (Chadbourne and Ingvarson 1998) and federalism and school funding (Hinz 2016). In contrast, this study will be confined to one aspect of SOTF, and focus on the implications for public sector innovation. In this section of the chapter, I will consider the role that school closures played in the SOTF reforms, the mechanisms that allowed the closures to take place, and an example of regulatory restrictions on closure.

4.5.1 Schools of the Future

The “Schools of the Future” reforms in Victoria were a multifaceted suite of reforms instituted in the first term of the Victorian Kennett government designed to decentralize public education, provide greater autonomy and management responsibility to individual schools, and significantly reducing the size of the bureaucracy. SOTF comprised four key elements: a new budget framework, an accountability framework, a curriculum framework, and a “Quality Provision framework” (QPF) (Caldwell and Hayward 1998; Hinz 2016). The QPF led to the systematic closure or merger of hundreds of Victorian public schools.

There were three key economic reasons for QPF forming part of the SOTF package. First, the State’s fiscal position. In 1992, the incoming Victorian government inherited a fiscal position where government expenditure exceeded revenue by $3 billion in the financial year 1991-1992 – of which education accounted for the highest category of expenditure. In particular, the Department of Education had a $40 million operating deficit, a maintenance backlog of over $600 million, and the ‘time bomb’ of 8,000 teachers that were on unpaid leave (predominately maternity leave or extended family leave) with guaranteed jobs on their return (Caldwell and Hayward 1998; Hayward 2016). Second, public education was not being delivered efficiently. The report of the Victorian Commission of Audit (1993) showed that Victorian spent 15 percent more
than required to provide school education services. On a per-student basis, Victoria’s expenditure was 13 percent higher than New South Wales and 9 percent higher than Queensland (Victorian Commission of Audit 1993). Hayward states that senior education bureaucrats had advised that this inefficiency could be attributed to ‘cozy deals between the previous Labor government and the teacher unions’ (Hayward 2016). Third, resources needed to be consolidated to offer students a comprehensive curriculum – supporting the curriculum framework element of the SOTF reforms (Directorate of School Education 1993a). For these reasons, QPF was an essential element of the SOTF reforms.

Earlier in this chapter, I noted the two distinct phases of innovation in the Schumpeterian conception – creation, and destruction. This was undoubtedly true in Victoria’s case, with the benefits of QPF unlocking resources for use in other areas. For example, Hayward explains that:

…the question had to be asked as to whether the existing configuration of some of our schools was such as to best do that. In particular, we had the responsibility to consider whether the merger of schools would result in students being offered access to a curriculum of greater breadth and depth. Also, with a larger cohort of students, a merged school had the opportunity to build a team of teachers with a range of different skills and backgrounds. This would broaden the educational experience for students and help the school to meet the different and individual needs of each student. It would also enable a synergy to develop and grow between a group of teachers with different talents, which together could make the school a much more vibrant, creative and exciting place. (Caldwell and Hayward 1998, p. 44)

The closure of schools under the QPF meant that the resources freed up on the destruction side could now be re-employed on the creation side. This consisted of expanding curriculum and other educational programs and improving or making better use of school facilities (Directorate of School Education 1993a). For example, in September 1993 Education News reported that six new primary schools were being built, along with one replacement primary school, one new secondary college campus, and two new stages at two different secondary colleges – all funded through the QPF (Directorate of School Education 1993b). From a public sector innovation perspective, there is no reason that those resources could not have been reallocated
to innovative projects in other areas of public services. Nevertheless, Hayward explained the arrangement:

I was able to gain the agreement of the Cabinet to reinvest every dollar from the proceeds of the sale of the surplus real estate back into school improvement. This was to be in addition to our regular capital works and maintenance budget. Over a three year period we raised nearly $200 million from asset sales. With this, and money from our regular budget, we were able to reduce the ... $670 million maintenance backlog by about half. (Caldwell and Hayward 1998, p. 45)

As the above passages foreshadow, there was no automatic mechanism for releasing inefficient or unproductive resources in the Victorian public education system. Neither was there an automatic mechanism for the redeployment of those resources. In the public sector, an information and coordination problem is a barrier to a dynamic Creative Destruction process. The centralized system relies on the bureaucracy to monitor school performance, and also predict and be responsive to population and demographic changes. Even if this information is capable of being transmitted to the bureaucracy, it requires a decision-maker to act, because there is no localized mechanism for closure reflected in the governing legislation. Indeed, Hayward provides an example of the consequences of executive inaction:

Over its ten-year reign, the Labor Government failed to address the issue of demographic shifts in population, and the effect of these on school enrolments. As a consequence, in some of the older established areas there was an excessive number of unused places in schools. For example, in one inner city area alone there were more than 2000 unused secondary school places. At the same time, the Labor Government had failed to keep up with the demand in the rapidly growing outer suburbs for new schools, and for increased capacity in existing schools. (Caldwell and Hayward 1998, p. 40)

Of course, Hayward is making something of a political point. However, his observation is precisely what Potts (2010) referred to as “ossification by accumulation”. In other words, the public sector has an ‘accumulation bias’ where ‘extant programs have to be actively eliminated’ (Potts 2010, p. 240).
This information and coordination problem is compounded by the fact that in the Australian public education system, consumer substitution is slight. As previously noted, Potts observed that in the private sector ‘the destruction phase of the innovation process happens automatically by the market mechanism of consumer substitution’ (2010, p. 239). In the public sector this mechanism is weak because even in a situation where enrolments fell dramatically due to parents exercising choice to enroll their children in another public school or a private system, school-level destruction (i.e., closure) will not automatically follow. To borrow from Hess (2010, p. 45), what exists is “choice without consequence.”

As such, in the centralized institutional form of public education, the public must rely on the Minister for Education, on behalf of the government, to exercise his or her discretion to close a school. The ministerial action is the exclusive form of destruction in this institutional arrangement – as highlighted in the previous section of this charter. It is for these reasons that the SOTF reforms – including QPF – were able to take place almost exclusively by executive action rather than legislative change (Hinz 2016).

Ministerial action as the exclusive mechanism for destruction is made explicit in the Education Act 1958 (Vic)24 which governed public education at the time of the SOTF reforms. In 1992, the legislative provisions were mainly the same as are in force today – with one key development which is discussed further below.

Relevantly, section 21 of the Act provided that, subject to the Act, the Minister may from time to time:

(a) establish in such places as are desirable and extend and maintain State schools, including primary schools, special schools, higher elementary schools, high schools, central schools, central classes, girls' secondary schools, continuation classes, technical schools, and teachers' training colleges (including colleges for training kindergarten teachers for kindergarten schools receiving financial assistance from the State);
(b) declare or alter the classification of any such school;

24 As amended. Note that this Act was repealed effective 1 July 2007 and replaced with the Education Training and Reform Act 2006 (Vic).
(c) discontinue any such school.

Section 17 of the 1958 Act also provided that ‘the property connected with any State school which is discontinued may be sold or leased.’ Sections 18, 18A, 19A, 20A of the 1958 Act contained powers dealing with the ability to enter into leases, acquire property, and enter into contracts for capital works, among other things. Combined, these incidental powers facilitated the redeployment of land and capital resources.

However, ministerial action does not mean that there was no process. After all, Ministers are accountable to the parliament – and in turn the electorate (although these incentives are hardly as strong as immediate feedback provided by market-based incentives given elections only take place every three or four years, and even then voters select a candidate – not vote on individual issues). 55 schools were closed by incoming Minister Hayward on 20 November 1992 (Victoria 1993b, pp. 819-821).

Hayward explained the criteria for these initial school closures:

1. Was there a long-term declining trend in the school’s enrolment?
2. Was there an excess of student places in that area?
3. Was there convenient access to an alternative school?
4. Would students have access to a broader curriculum choice if a merger took place?

(Caldwell and Hayward 1998, p. 41)

Hayward then established “Quality Provision Task Forces” across the state, ‘consisting mainly of representatives of school communities’ (Caldwell and Hayward 1998, p. 44). Their task was to recommend to the Minister which schools could be closed or merged. The Minister would consider the task force reports, and if he proposed to make a decision contrary to the recommendations, further consultation with the task forces would occur (Hayward 1993). The effect of this appears to be twofold: granting greater ownership of the process to local communities and providing the Minister with a measure of localized information and preferences unable to be captured just through demographics and statistics. The Minister also received additional information from the bureaucracy, such as the practical implications of implementing task force recommendations (Hayward 1993). Although, as the 1958 Act made clear, the decision is one for the Minister to make. What this process shows
is that the destruction mechanism of school closure induced learning and creative responses on the part of the decision maker (Witt 2003).

For these later decisions, Hayward said that any decision to merge or close a school was made for the same three reasons:

1. Improving educational opportunities of students access to broader curriculum;
2. Redirecting resources to where they were most needed; and
3. Not investing scarce capital to upgrade schools which did not have a long term future (Caldwell and Hayward 1998, pp. 41-42).

The outcome of the QPF was ‘a large number of mergers of two or more previous schools on the site of one of the previous schools. As a consequence, [the government] were able to close more than 250 previous school sites’ (Caldwell and Hayward 1998, pp. 44-45). Early evidence at the time showed that closure, a merger of two schools, or the establishment of a multi-campus secondary college through a merger of four schools, meant increased enrolments for remaining schools allowing an expanded curriculum offering for both new and existing students (Directorate of School Education 1993a).

The wide-ranging Ministerial powers set out in the 1958 Act, outlined above, meant that the destructive mechanism was mostly unencumbered. Indeed, it is hard to conceive a more centralized process. However, the cases of Richmond and Northland Secondary Colleges show that even the most centralized destruction mechanism is not entirely free from regulatory constraint.

### 4.5.2 Richmond and Northland Secondary Colleges

In the case of Victoria’s QPF, the Minister’s decision to close two particular schools – Richmond and Northland Secondary Colleges – was challenged in the Equal Opportunity Board (EOB) under section 44 of the Equal Opportunity Act 1984 (Vic)\(^{25}\). Legal action of this type is not unprecedented.\(^{26}\) In Australia, as in other common law

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\(^{25}\) This Act was subsequently repealed by the Equal Opportunity Act 1995. The current Act is the Equal Opportunity Act 2010.

\(^{26}\) See, e.g., *Durant v Greiner* (1990) 21 NSWLR 119. In that case, the plaintiff unsuccessfully brought an application for review in the Supreme Court of New South Wales.
jurisdictions, executive action can be subject to a merits review of the decision in administrative tribunals or judicial review through the courts. The EOB is an administrative appeals body that was a precursor to the current Victorian Civil and Administrative Tribunal.

**Richmond Secondary College**

The first case involved a review of the Minister’s decision to close Richmond Secondary College (Richmond). *The Age* newspaper reported that ‘Male students at Richmond Secondary College had alleged they had been sexually discriminated against because the only department school to remain open in the suburb was a girls’ school’ (Pegler and Easterbrook 1992, p. 2). At the first hearing\(^{27}\), the EOB determined that there was ‘an arguable case’ and granted interim orders requiring the school to remain open (Pegler and Easterbrook 1992, p. 2). However, ultimately the application was not successful with the EOB finding that the closure affected both male and female students (Painter 1993).

In the meantime, protestors – with the support of the teaching unions – had occupied the school. Eventually, the protestors were forcibly evicted from Richmond by police officers in December 1993— one year after the Ministerial decision to close the school (Tobin 1993; see also: Jolly 1996; Caldwell and Hayward 1998). The saga was widely reported in the local media, and it was later alleged that the police officers involved used excessive force against the protestors (see, e.g.: McCulloch and Clayton 1996). The closure of Richmond has also been used as an example in the context of research on young people and violence (Bessant and Watts 1994).

The Richmond case provides an example of the increased transaction costs imposed by regulation even where the application for review of the Minister’s decision was unsuccessful. This is one way that regulation can constrain the destruction phase of public sector innovation. The operation of the *Equal Opportunity Act* meant that higher transaction costs were involved in the exercise of the destruction mechanism. These include legal costs, costs to maintain and secure buildings to comply with the interim

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\(^{27}\) *Sievers v State of Victoria* (1993) EOC 92-482.
orders of the EOB and the opportunity cost of having the site not in productive use for
that period. According to Hayward, the action delayed, but did not prevent, innovative
use of the resources to create Melbourne Girls College – an amalgamation of three
schools to create an autonomous government school providing a ‘high quality girls’
education’ to compete with non-government schools (Caldwell and Hayward 1998, p. 42).

**Northland Secondary College**

The second challenge to the Equal Opportunity Board involved the Minister’s decision
to close Northland Secondary College (Northland). The Department of Education had
recommended to the Minister that the school should be closed ‘because of the
oversupply of places in the area, the declining enrolments at the school, the poor
quality of education being provided and the physical condition of the school’ (Caldwell
and Hayward 1998, p. 43). The Minister acted on this recommendation, deciding that
Northland should be closed at the end of the 1992 school year.

Two students of Northland during 1992 lodged a complaint with the Equal Opportunity
Board. The complaint was that the proposed closure of Northland amounted to
discrimination on the ground of race, against the complainants and other Aboriginal
students at Northland, in breach of section 28 (relating to discrimination by an
educational authority) or section 29 (relating to discrimination in the provision of goods
and services) of the Act. The EOB agreed – and ordered the school to be re-opened.

The evidence before the EOB included the following.\(^2^8\)

- In November 1992, the Minister announced his intention to close Northland. At the time,
  about 400 students were attending the college and, of them, between 49 and 55 were
  Aboriginal.

- Northland was closed in December 1992. Throughout 1993, many of the students who
  would have attended Northland in 1993 enrolled and attended other secondary schools
  in the area. However, some 15 Aboriginal students and an unknown number of other
  students continued to attend at the college where they were taught by a handful of

\(^{2^8}\) This follow is an extract of the Board’s reasons for its decision in *Sinnapan v State of
Victoria* (No 2) 1994 EOC 92-658 reported at [77,461] - [77,462]. It has been edited for brevity.
teachers who were formerly engaged at the college and now provided their services on a voluntary basis (see further: Knight 1998).

- Northland was a school which was unique within the Victorian education system, adopting the so-called "whole school approach" to the provision and delivery of the education services it offered. The "whole school approach" was a method of teaching which involved parents, students and teachers in the whole of the school's activities and processes and was one which lent itself to the Aboriginal culture and way of life.

- After the closure of Northland, the Department of School Education had directed the establishment of a similar program at another college. However, the evidence suggested that the "whole school approach" at Northland could not easily be transferred to another school.

- Aboriginal students had an added cultural disadvantage in relation to their ability to access the public education service in Victoria which is over and above cultural disadvantage which may be suffered by other groups within the community and that, on that account, the closure of the college was of disadvantage to them.

The litigation was protracted. The case involved two interim decisions by the Equal Opportunity Board ("EOB")29 and an appeal in the Supreme Court30. The substantive matter was heard by the EOB, which ordered on 7 December 1993 for the school to be re-opened.31 The State appealed the EOB’s decision to the Supreme Court32, initially succeeding with Justice Beech setting aside the EOB’s orders and dismissed the complaint.

The complainants then appealed to the Full Court of the Supreme Court33 (as it was then known) where Justices Brooking, Phillips and Hansen determined that the orders should be set aside and remitted back to the EOB. The EOB conducted a further hearing during September and October 1994. On 2 December 199434, the EOB again decided that the school should be re-opened, with a final order made on 14 December

1994\textsuperscript{35}. The State again appealed to the Full Court of the Supreme Court\textsuperscript{36} but was not successful on the primary issue of keeping the school closed.

As Hunyor (1996, p. 102) explains, the legal implication of this case appeared to be that ‘any reduction in the provision of a [public] service will constitute a term on which that service is provided, and most likely a "requirement or condition" for the purposes of showing indirect discrimination…’ even if other public services were available. This finding severely restrained the Victorian governments ability to close public services. Indeed, the court expressly noted that its interpretation of the Act ‘must necessarily make it difficult for any service provider to reduce the benefits of the service being provided’ (cited in Hunyor 1996, p. 102). This meant that legislative action was needed to remove the constraints of anti-discrimination laws. This case study highlights the role of destruction mechanisms in generating knowledge in the public sector context (Witt 2003) and shows that legislative provisions are not static.

### 4.5.3 Subsequent Legislative Action

Following the Richmond and Northland Secondary Colleges litigation, the \textit{Education (Amendment) Bill} 1993 was introduced into the Victorian Parliament.\textsuperscript{37} Amongst other things, the Bill inserted a new section 21A to prevent the Minister for Education’s decision to close a school being challenged in any court, tribunal, or before the Ombudsman. Similarly, the Bill inserted a new section 14B to prevent councils of government schools from issuing legal proceedings against government bodies without the consent of the minister.

In the second reading speech to Parliament, Hayward (Victoria 1993a, p. 1204) made an explicit link between the Bill and the QPF.

\begin{quote}
In limiting the right to review a decision of the Minister to discontinue a State school, the power of litigants to seek interim relief and to undertake costly litigation against matters of government policy is unacceptable due to the adverse effect on the quality
\end{quote}

\textsuperscript{35} \textit{Sinnappan v State of Victoria} (1994) EOC 92-659.
\textsuperscript{37} The Bill was introduced before the Northland litigation had concluded. The Bill was not retrospective.
provision program and on the uncertainties created in the educational situations affected by the litigation.

The “privative clause” survives in the current form of the Victorian Act.\textsuperscript{38} This means that, in Victoria, there is no ability for a tribunal or court to review a minister’s decision to close a school. A similar provision operates under Western Australian legislation. The Schools of the Future case study has shown that the ability to bring an administrative or judicial review of ministerial decisions provides an \textit{ex post} check on executive power. Legal review of decisions might be important to guard against arbitrary decision making where there are no enforceable preconditions to the exercise of the ministerial discretion to close a school under the legislation. This may explain the court’s reasoning. However, this restricts the ability to close schools – constraining the sole mechanism of destruction in the government school context. In the Richmond case, closing the school allowed new services to be provided to new markets. In the Northland case, an underperforming school remained open – preventing resources from being redeployed elsewhere.

4.5.4 Discussion

Previous research on public sector innovation has observed that the public sector has weak or non-existent destruction mechanisms (Potts 2010). The conclusion that can be drawn from the case study presented in this chapter is that the generalization is more nuanced – within centralized institutional possibilities for service delivery, the public sector lacks spontaneous destruction mechanisms.

The systematic review of the broad legislative frameworks in every Australian state and territory regarding government schooling found that ministerial discretion is the sole mechanism for school closure in every Australian jurisdiction. There are, however, some differences in the restrictions on the exercise of this discretion between Australian state and territory jurisdictions. For example, most jurisdictions require notice periods. Most jurisdictions also set out a consultation procedure to be followed – and some jurisdictions require the Minister to appoint a committee to conduct a review and provide recommendations. Only one jurisdiction – Western Australia – has a limited rule-based mechanism in addition to the general Ministerial

\textsuperscript{38} See: \textit{Education and Training Reform Act 2006}; sections 2.2.2 and 2.3.31.
power but it does not appear that this has been used. Although destruction mechanisms are necessary for non-market production, ministerial discretion as the sole destruction mechanism appears to be problematic for three reasons.

The first problem with Ministerial discretion is that there is an inherent information problem with such a centralized mechanism. Knowledge about the merits of a decision to close schools will be distributed among many stakeholders and the Minister will never have perfect knowledge of a school’s circumstances. Of course, this is one of the key dictatorship costs inherent with any system of central planning (e.g., Hayek 1945). Although consultation provisions that exist in some jurisdictions provide some local information into the decision of whether or not to close a school, any formal consultation and review process will only begin on the Minister’s initiative (often in practice relying on departmental advice). Further, the legislative analysis in section 4 of this chapter shows that any recommended course of action from the consultation and review procedures will not be binding on the Minister. However, the SOFT QFP case study shows that even where consultation provisions are not formally prescribed, the Minister may nevertheless undertake local consultation despite the fact that it will be non-binding. In these cases, stakeholder consultation is a way that Ministers can lower the perceived dictatorship costs of closing schools (cf. Twight 1988; 1994).

The second problem with Ministerial discretion is that the decision to close schools will often be unpopular. For instance, the Minister may lack the political support needed within the government (i.e., the Minister’s colleagues) or the wider community to exercise this power. In a democracy, ministers will attempt to make decisions that tend towards the preferences of the median voter (Downs 1957). The problem is that these preferences will be influenced. In this regard, public sector teachers’ unions will often use their influence to maintain the operation of government schools (as the protests at Richmond show). In this environment, the sole mechanism of destruction relies on the political will of the Minister. The SOFT QFP case study shows that the mechanism of destruction will be reserved for a fiscal crisis rather than exercised as necessary. This finding is consistent with the generally observed risk-adverse culture and the increasing concern of media scrutiny feeding a lack of public sector innovation more broadly (Albury 2005; Borins 2014; Hartley 2005; Langergaard and Scheuer 2005).
2012; Mulgan 2014; Moran 2010; Bommert 2010; Potts and Kastelle, 2010; Koch et al. 2006; Mulgan and Albury 2003).

The third problem with Ministerial discretion is that there may be additional regulatory constraints on the exercise of Ministerial power in some jurisdictions. This will be the case where a Minister wants to exercise power to close a school but is overruled by an administrative appeals body or court (as the Northland case shows). The above discussion evidences that Ministerial power is a weak destruction mechanism – but there is the possibility that there is no destruction mechanism legally available.

The question that follows is how public sector regulation might further evolve in a way that would improve the dynamism of destruction mechanisms in public sector service delivery. In this regard, macroeconomists will be familiar with the rules versus discretion debate within monetary policy (see, e.g. Crockett 1994). It may be that a rules-based system would strengthen this destruction mechanism by alleviating these problems. The legislation could set criteria for when schools should be closed – relying on data – triggering an automatic review by the public sector if performance or enrolments, for example, fell below a specified threshold. The legislative provisions could also provide the Minister with a residual discretion, but a rules-based system would inject a level of spontaneity into the process. This is important because more dynamic selection mechanisms could avoid the need for wide-scale public service closures. Of course, such a rules-based system would not be static; instead, a rules-based continue to evolve over time responding to changing policy objectives.

4.6 Conclusion

This chapter provides the first attempt to detail, quantify, and analyze the regulation of government schooling in Australia. Through a historical account of public education in Australia it has been shown that the broad institutional structures for service delivery have not substantially changed over the last century. However, an analysis of the principal legislation in New South Wales and Victoria over time shows a measurable increase in regulatory complexity. Although the key regulatory characteristics of government schooling attempt to minimize costs of disorder, the
findings of this chapter suggest that the costs of dictatorship from increased regulatory complexity have been overlooked as a priority for public sector reform.

It is understood that industry and product life cycles are evolutionary processes (e.g., Klepper and Graddy 1990; Segerstrom, Anant and Dinopoulos 1990; Malerba and Orsenigo 1996; Klepper 1996). That is, ‘product markets typically undergo a life cycle of introduction, growth, maturity, and eventual decline’ (Stadler 1991, p. 293). Much is known about the industrial dynamics of the private sector, guided by market feedback selection mechanisms. Much less is known about the evolutionary processes that exist in public sector services. While previous research on public sector innovation has observed that the public sector has weak or non-existent destruction mechanisms, the specific mechanisms have not been identified (Potts 2010). Rather than proposing new artificial mechanisms (c.f. Potts 2010; Potts and Kastelle 2010), this chapter has advanced a new methodological approach for observing destruction mechanisms in public sector services. Specifically, destruction mechanisms will be built into the regulatory framework governing public sector service delivery. This is built on the previous chapter which noted the requirements for a legal framework to be established for government service delivery.

One of the defining features of the centralized nature of service delivery is the regulation of the establishment and closure of government schools. As such, a key structural way that the destruction phase of public sector manifests in public education services is the closure of schools. A review of the principal legislation of each Australian state and territory detailed the procedure to close a school lawfully. This showed that ministerial discretion was the sole mechanism of destruction in this setting. This regulatory analysis was supplemented with a case study on Victoria’s SOTF reforms – the systematic closure and merger of hundreds of Victorian public schools in the first term of the Kennett Victorian government – as an example of how ministerial discretion has been exercised in practice. Overall, this chapter has highlighted that the legislative and regulatory frameworks governing service delivery are not neutral in considering the destruction phase of public sector innovation – furthering a Schumpeterian understanding of public sector innovation. The conclusion that can be drawn from this is that that centralized service delivery lacks spontaneous destruction mechanisms. The next chapter will consider moves to improve the
creation side of innovation within a centralized institutional possibility of service delivery.
Chapter 5 – Regulation of Independent Public Schools

5.1 Introduction

There has been an increasing trend towards school autonomy or school-based management within the Australian government schooling sector over the last 40 years (e.g., Caldwell and Spinks 1988; 1998; 2013; Caldwell and Hayward 1998; Gammage 2008; Keddie 2016b). This trend has continued over the last decade. In particular, a new institutional form of government school that has emerged in recent years in Australia is the “Independent Public School” (IPS) launched in Western Australia (2009), Queensland (2012), and the Northern Territory (2015). In 2014, the Australian government announced a $70 million funding package to assist state and territory governments to introduce or support greater flexibility and school autonomy programs (Pyne 2014).

Schools operating as part of an IPS program are publicly accountable and taxpayer-funded schools that are owned and managed by state governments but are given ‘greater freedom and resourcing from centralized governance to manage their own affairs’ (Keddie, Gobby, and Wilkins 2018, p. 378). In this chapter, it will be argued that the reason that it represents a distinct type of institutional possibility for public education service delivery on an educational IPF spectrum is that an IPS is characterized as delivering a different combination of dictatorship and disorder costs as compared to a centralized government school.

Australian IPS programs have received recent attention from education policy researchers; on the Western Australian IPS program (Fitzgerald and Rainnie 2012; An earlier version of this chapter was submitted on 21 July 2017 and accepted for publication on 15 December 2017 in the Australian Journal of Public Administration (an earlier version of which was presented at the 2017 Australian Centre for Entrepreneurship Research Exchange Conference). The case study and results presented in this chapter remain as originally published. The introduction, literature review, and discussion have been updated to incorporate, amongst other things, the findings of the most recent education policy research on Independent Public Schools in Australia (e.g., Keddie 2017; Holloway and Keddie 2018; Gobby, Keddie, and Blackmore 2018; Keddie, Gobby, and Wilkins 2018; Gobby and Niesche 2019). It is also noted that a review commissioned by the Queensland government (Potential Solutions 2018) has also been released subsequent to the initial publication. At the time of submission, this chapter remains the only published study considering IPS programs to gain insight from a public sector innovation and economics of regulation perspective.
Gobby 2013a; 2013b; 2016; Gobby and Niesche 2019) and the more recent Queensland IPS program (Gobby, Keddie, and Blackmore 2018; Gobby, and Wilkins 2018; Holloway and Keddie 2018; Keddie 2016b). The first part of thesis argued that the impact of regulation on public sector innovation remains unclear within the current theoretical framework. This chapter proposes to advance this understanding by bringing the public sector innovation literature into conversation with the economic theory behind school autonomy. Specifically, this chapter aims to investigate the effect on planned innovation in schools where some of the centralized regulatory constraints are relaxed.

This chapter explores regulatory constraints on innovation in service delivery by examining Queensland’s IPS program, which was announced in 2012 and commenced operation in 2013. This program was explicitly instituted to provide schools with additional ‘autonomies focused on cutting red tape and opening up new opportunities for innovation’ (Queensland Department of Education and Training 2012a). Recall that one of the challenges in the public sector innovation field is that there is a ‘paucity of measurement’ of innovation (Demircioglu and Audretsch 2017, p. 1681; see also Arundel and Huber 2013; Potts and Kastelle 2010). Chapter 1 of this thesis argued that a specific example of regulatory change is needed because each public sector service has its own distinct regulatory and institutional frameworks and, because of this, the effect of regulation on public sector innovation will vary between services. So within the education context, how can regulatory change be measured? Two recent studies in the United States attempt to measure the effects of regulation on participation in school choice programs by randomly assigning different hypothetical (but commonly proposed) regulations and surveying private school leaders in Florida (DeAngelis, Burke, and Wolf 2018) and California and New York (DeAngelis, Burke, and Wolf 2019). In this chapter, I will advance a unique method of documentary analysis measuring the actual proposed innovative practices in Queensland government schools.

Admission to the Queensland IPS program is through an expression of interest that requires schools to specify what innovative programs or practices they would implement as an IPS (“Innovation Question”). This chapter systematically examines
responses to the Innovation Question from successful applicant school principals, showing the perceived effect on innovation as regulatory constraints are relaxed.

The remainder of this chapter is arranged in the following way. Section 2 considers the relevance of the school autonomy literature and the implications for public sector innovation. Section 3 introduces Queensland’s IPS program. Section 4 outlines the method used for the Queensland case study. Sections 5 reports the findings of the case study. Section 6 analyses the results through the prism of Schumpeter’s five forms of innovation. Section 7 reflects on the broader question of school autonomy and regulation, looking for commonalities with other recent research on the Western Australian and Queensland IPS programs. Section 8 concludes the chapter by considering the Queensland study’s implications for the broader themes of the thesis.

5.2 Theory of School Autonomy

However, there is no single model of school autonomy. There are institutional arrangements that can free up constraints on the demand or the supply side of public education services (Witte and Rigdon 1993; Mintrom and Vergari 1997). However, “Charter Schools” are the most pervasive in the United States and are considered extensively in the literature. This institutional form of service delivery – and its theoretical underpinnings – will be explored in greater detail in Chapter 6. For now, it suffices to state that charter schools are ‘non-sectarian, publicly funded schools of choice’ that ‘operate in parallel with—and often in competition with—traditional public schools’ (Allen and Mintrom, 2010, p. 457). In theory, charter schools should be free from many of the regulations that apply to other public schools in order to foster innovation (Chubb and Moe 1990; Wohlstetter, Wenning, and Briggs 1995; Lubienski 2003a; Preston et al. 2012). Indeed, stimulating innovation is an explicit intent of some charter school legislation (Steedman, Cummins, and Ricciardelli, 2014). The empirical evidence of the link between charter schools and innovation is mixed (e.g., Lubienski 2003a; Bulkley and Fisler 2003; Lake 2008; Preston et al. 2012).40 Nevertheless, Preston et al. (2012) argues that two key theoretical perspectives

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40 Charter school regulation and the implications for innovation are the focus of Chapter 6.
underpinning the charter school literature are helpful to explain innovation in that setting.

First, “market theory” argues that competition between schools will create the incentives needed for a diverse range of offerings and motivate schools to be more responsive and innovative to cater for students’ needs (Preston et al. 2012). This perspective is analogous to the existing public-private model comparison approach of public sector innovation.41 Perhaps one way of achieving this is by having local governments compete for the provision of public goods (Tiebout 1956). Although some have argued that Australian IPS programs lead schools to rely on “market solutions” to be successful (Holloway and Keddie 2018) it is essential to note that no Australian jurisdiction provides schools with complete autonomy (Gobby 2016). As such, the market theory perspective is of limited value in the present context because government schools – with school-based management autonomy or not – remain owned and operated by state and territory governments with enrolment restrictions. However, the market theory does have significance for voucher programs and for-profit schools which will be addressed in the next chapter.

Second, “autonomy theory” holds that, if charter schools are free from centralized bureaucracy, schools will enjoy greater autonomy to ‘experiment with new organizational and instructional strategies’ (Preston et al. 2012, p. 319). Although the characteristics of charter schools can differ depending on state laws as some jurisdictions are more permissive than others (Mintrom and Vergari 1997; Finnigan 2007).

The two perspectives first developed in the school choice literature can be extended to other school autonomy programs such as IPS, to gain insight into public sector innovation. For instance, Keddie, Gobby, and Wilkins (2018, p. 380) note that there is

…an expectation that school autonomy will remove the supposed inefficiencies and constraints on personal freedom associated with bureaucratic governance in ways

41 This perspective holds that the way to incentivize innovation in the public sector is by making the public sector function more like private markets and private enterprises. See Chapter 1 for further discussion.
that will improve the innovation and economic efficiency of the public education system more broadly.

The autonomy perspective provides a path beyond the current public-private model by reframing the question; instead of making a comparison between the public sector and the private sector, this perspective calls for an examination of the regulatory frameworks that impact public sector service delivery – and their effect on innovation. For instance, Caldwell and Spinks (2013) identify that command-and-control approaches are one reason that there is a lack of disruptive innovation in schools. This is an important finding because it means that decentralized service delivery may be being implemented without full regard to regulatory constraints, which may be undermining innovation – one of the key justifications for undertaking decentralization.

In Australia, the most recent wave of school autonomy reforms has come in the form of IPS programs. The first example of this is Western Australia’s IPS program that was introduced in 2009. This was a program specifically designed to reduce bureaucracy by devolving decision making power to the local level while cutting ‘unnecessary red tape that currently inhibits principals from being innovative’ (Liberal Party Western Australia Division 2008, p. 3). By 2016, 445 schools had commenced as independent public schools, covering 70 percent of students and teaching staff (Education and Health Standing Committee 2016). According to the WA Department of Education (n.d.), ‘Principals of Independent Public Schools have more freedom to make decisions about important matters that impact students’ education such as student support, staff recruitment, financial management, governance and accountability.’ The University of Melbourne’s Centre for Program Evaluation was commissioned by the WA Department of Education to a review of the IPS program in 2013 and found that while the overall results have been positive, ‘some schools have traveled further along the path to autonomy than others’ (2013, p. 74).

The previous chapter provided evidence of this by examining Victoria’s Schools of the Future reforms, showing that entrenched regulatory barriers mean that the public sector lacks spontaneous destruction mechanisms. This chapter turns to the effect of school autonomy reforms on innovation. The remaining sections of this chapter will examine the effect on innovation of Queensland’s attempt to move to a more decentralized model of service delivery in public education.
5.3 Queensland’s Independent Public Schools Program

In Queensland, public education is managed through a centralized government agency – the Department of Education and Training. The organizational structure provides that operations, governance, schooling policy, and teacher employment are managed centrally, with individual school principals reporting to this bureaucracy through seven regional directors (Queensland Department of Education and Training 2012b).

In the lead-up to the 2012 state election, the Liberal National Party (‘LNP’) announced its Preparing Our Children for Future Success policy (Liberal National Party 2012). This policy document outlined a proposal to introduce an Independent Public Schools program that would allow school principals and school councils to have greater control and ownership over the operation of their school. That is, local schools would be given greater autonomy to make local decisions. The policy was opposed by the incumbent Labor government and the Queensland Teachers’ Union (Hurst 2011).

After the LNP’s successful election, the newly appointed Education Minister set about implementing the IPS initiative. The prospectus (Queensland Department of Education and Training 2012a) explained that schools had a range of “autonomies” already available, which included the ability to:

- drive the implementation of the Australian and Queensland Curriculum;
- adopt a range of curricula;
- plan the school’s learning program including setting flexible school hours;
- offer differentiated learning programs;
- determine the timing of their student free days;
- determine their staffing with the endorsement from local workplace committees;
- recruit non-teaching staff;
- select their own deputy principals and heads of department when vacancies occur;
- select casual and temporary teachers through departmental processes;
- manage minor maintenance, and minor capital works projects up to $100,000;
- manage school utilities and retain savings;
- expend the school bank account to a maximum of $250,000; and
• sign or vary contracts with procurement approval and dispose of plant and equipment up to the expenditure delegation.

However, an IPS would have additional autonomies to ‘embrace enhanced innovation’ in order to ‘better respond to the unique potential of their students and communities’ (Queensland Department of Education and Training 2012a, p. 6). Queensland Premier Campbell Newman claimed the initiative would ‘cut red tape’ and ‘remove layers of management’ (Queensland Department of Education and Training 2012a, p. 2). The IPS program was a regulatory change. The prospectus (Queensland Department of Education and Training 2012a) specified that additional autonomies would include:

• the freedom to directly recruit staff and to build a team that is fit-for-purpose to drive innovation;
• more autonomy to manage and utilize infrastructure, financial resources, and human resources;
• more autonomy to work in new ways with local businesses, industry and other community organizations;
• an option to pursue creative models of sponsorship, industry partnerships, and infrastructure partnerships;
• increased flexibility to shape curriculum offerings; and
• the freedom to shape and deliver innovative educational practices.

In addition to increased autonomy, schools accepted into the IPS program each received a $50,000 establishment grant, and $50,000 per annum designed to compensate the school for administrative functions previously undertaken by the Department (Queensland Department of Education and Training 2012a). It has been previously documented that increased school autonomy comes with a higher administrative burden for individual schools to manage (e.g., Whitty, Power and Halpin 1998; Gobby 2013a; Gobby, Keddie, and Blackmore 2018). Funding to offset this burden is also a feature of the Western Australian IPS program, where schools received between $20,000 and $40,000 in transition funding depending on their size (Centre for Program Evaluation 2013). Case study evidence from the WA program suggests that the one-off grants left schools without the necessary financial resources
in future years and this limited the school principal’s ability to innovate (Gobby 2013a). Accordingly, the intention of the permanent level of funding in the Queensland program appears to be aimed at enabling schools to take full advantage of their increased autonomy.

In 2012, expressions of interest (‘EOI’) were sought from schools wanting to become an IPS for the following year. Of the applicants, 26 schools were accepted for 2013. A further 54 schools were added in 2014, along with a further 47 commencing in 2015 – a combined total of 127.42

5.4 Method

This chapter presents a qualitative analysis of publicly available secondary data originally collected by the Queensland government as part of its EOI process. The analysis involves a content analysis to identify proposed innovative practices and coding based on an adaption of Schumpeter’s five forms of innovation.

The EOI process required a written application. Amongst other things, the application required individual schools to outline the ‘innovative educational programs or practices that the school will implement’ if it is accepted as an IPS (“Innovation Question”) (Queensland Department of Education and Training 2012a, p. 10). The EOI process in 2014 and 2015 also required a response to the same question. The author obtained access to the Innovation Question responses for the applications rounds in 2013, 2014, and 2015 from the Queensland Department of Education and Training under the Right to Information Act 2009 (QLD).43 In total, the responses to this question for EOI applications were examined for 127 schools.

The data identifies individual schools. This enabled categorizing the school as a primary school (“State School”), a secondary school (“State High School”), a P-12 college (“State College”), or a special school (“Special School/Other”) – which then allows a comparison between those categories. The school principal was the

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42 At the time of submission, 250 schools have now commenced as Independent Public Schools.
43 Disclosure number 340/5/3744. This legislation provides a right to apply for access to documents held by government agencies and Ministers. In other jurisdictions this is known as “Freedom of Information”.
signatory on each EOI. Drawing on the discussion of school autonomy in section 2 of this chapter, the school principal is best placed to provide details about perceived innovations because they have decision-making autonomy under the IPS policy, and the school principal will be leading the implementation of innovative practices at the school level. In reporting the data, the names of the principals and the names of the individual schools have been omitted. It is expected that principals’ responses to the Innovation Question to provide detail about the innovative practices that schools plan to implement as an IPS and provide insight into the constraints of the current centralized service delivery framework. Academic research and policy evaluations of the Western Australian IPS program used surveys or interviews on a small number of respondents after the program had been implemented (Centre for Program Evaluation 2013; Gobby 2013a; 2013b; 2016; Gobby and Niesche 2019). The same can be said of the scholarly research into the Queensland IPS program (Gobby, Keddie, and Blackmore 2018; Keddie, Gobby and Wilkins 2018; Holloway and Keddie 2018; Keddie 2016b). The policy review commissioned by the Queensland Department of Education used a combination of interviews and focus groups (Potential Solutions 2018). Surveys of school principals have also been used to gain insights in comparing innovativeness between charter schools and traditional public schools (e.g., Mintrom 2001). By contrast, the data used in this study is unique in two respects. First, the data captures the entire cohort of accepted applications. Second, the data provides insight into the perceptions of school principals about the contemporary constraints on innovation operating within a centralized government school, prior to the IPS system being implemented in that school.

The data calls for a textual analysis to be conducted. Based on the conceptualization of innovation in the public sector context, the documents were examined asking: whether the applicant school identified any innovative programs or practices that it would implement that it is not currently implementing; if so, what are these programs or practices; and how does the IPS program remove barriers to innovation experienced in the current centralized system. An innovative practice was observed if the principal identified something that was not currently being undertaken – or was being expanded to offer to a different category of students. An innovative practice was

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44 See Chapter 1, Section 2, for the discussion of the conception of innovation in the public sector.
not observed if the principal identified something that would simply be continued under the IPS initiative.

Following Stewart-Weeks and Kastelle (2015), a manual content analysis of the data was conducted using a system of coding based on an adaption of Schumpeter’s five forms of innovation (Schumpeter 1934). Innovation practices identified were organized into the following broad categories: (1) new programs; (2) new methods (practices) of delivering programs; (3) new sources of supply; (4) new markets; and (5) new ways to organize service delivery. Subcategories were developed based on a preliminary examination of the data. This is a distinct attempt – noting our conception of innovation, and our ultimate interest in public sector innovation – on similar processes taken by Mintrom (2001) who arranged the data into five broad categories (school administration and management, curriculum, instructional techniques, use of technology, and the promotion of parental involvement), Preston et al. (2012) who categorise their data into four categories (staffing policies, academic support services, school organisational structures, and governance) and Lubienski (2003a, p. 404-718) who distinguishes between “educational” changes (‘practices regarding curricular content and instructional strategies with immediate impact at the classroom-level’), and “administrative” changes (‘organisation-level practices and structural designs that do not directly affect classroom techniques or content’).

New programs encompass both professional development programs for staff, academic programs for students – including literacy and numeracy, recovery and extension, extra-curricular activities such as sport and music, languages other than English, or vocational or employment pathways. A new method refers to new curriculum developments or using ICT. New sources of supply include partnerships with business, industry, research institutes or universities, or other schools. New markets are, for example, programs for parents or other community groups – rather than existing students, using marketing programs to target new enrolments, and leasing or licensing out the school’s facilities to other community groups. Finally, new ways to organize service delivery include measures around staffing flexibility such as restructuring, reallocating or recruiting staff, the employment of support staff, school timetabling, instituting a multi-campus, and actions around the school’s buildings, maintenance or infrastructure.
5.5 Results

Overall the results show that Queensland’s IPS initiative will foster innovation, according to principal’s perceptions about the innovative practices they will be able to implement as an IPS. The textual analysis conducted, based on Schumpeter’s five forms of innovative practices, is presented here in two ways and supplemented by drawing directly from the text of the EOI applications.

First, Table 5.1 reports the average number of innovative practices observed. The results are broken down into the form of innovative practice, commencement year, and school type.

<table>
<thead>
<tr>
<th>School Type</th>
<th>New programs</th>
<th>New methods</th>
<th>New supply</th>
<th>New markets</th>
<th>New organization</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2013</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State School (9)</td>
<td>2.00</td>
<td>1.11</td>
<td>1.22</td>
<td>0.33</td>
<td>1.55</td>
<td>6.22</td>
</tr>
<tr>
<td>State High School (13)</td>
<td>2.23</td>
<td>1.00</td>
<td>2.54</td>
<td>0.54</td>
<td>1.77</td>
<td>8.08</td>
</tr>
<tr>
<td>State College (2)</td>
<td>1.50</td>
<td>0.50</td>
<td>1.50</td>
<td>1.00</td>
<td>2.00</td>
<td>6.50</td>
</tr>
<tr>
<td>Special/Other (2)</td>
<td>1.50</td>
<td>1.00</td>
<td>2.50</td>
<td>0.00</td>
<td>1.50</td>
<td>6.50</td>
</tr>
<tr>
<td>All types</td>
<td><strong>2.04</strong></td>
<td><strong>1.00</strong></td>
<td><strong>2.00</strong></td>
<td><strong>0.46</strong></td>
<td><strong>1.69</strong></td>
<td><strong>7.19</strong></td>
</tr>
<tr>
<td><strong>2014</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State School (31)</td>
<td>2.29</td>
<td>0.68</td>
<td>1.68</td>
<td>0.55</td>
<td>1.35</td>
<td>6.55</td>
</tr>
<tr>
<td>State High School (17)</td>
<td>2.88</td>
<td>0.35</td>
<td>2.24</td>
<td>0.29</td>
<td>1.53</td>
<td>7.29</td>
</tr>
<tr>
<td>State College (5)</td>
<td>2.80</td>
<td>0.80</td>
<td>1.60</td>
<td>0.00</td>
<td>1.20</td>
<td>6.4</td>
</tr>
<tr>
<td>Special/Other (1)</td>
<td>1.00</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td>0.00</td>
<td>2.00</td>
</tr>
<tr>
<td>All types</td>
<td><strong>2.50</strong></td>
<td><strong>0.57</strong></td>
<td><strong>1.81</strong></td>
<td><strong>0.43</strong></td>
<td><strong>1.37</strong></td>
<td><strong>6.69</strong></td>
</tr>
<tr>
<td><strong>2015</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State School (37)</td>
<td>2.84</td>
<td>0.92</td>
<td>2.3</td>
<td>0.51</td>
<td>1.62</td>
<td>8.19</td>
</tr>
<tr>
<td>State High School (7)</td>
<td>2.86</td>
<td>0.29</td>
<td>2.14</td>
<td>0.29</td>
<td>1.14</td>
<td>6.71</td>
</tr>
<tr>
<td>State College (1)</td>
<td>3.00</td>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Special/Other (2)</td>
<td>0.50</td>
<td>0.50</td>
<td>2.00</td>
<td>0.00</td>
<td>1.00</td>
<td>4.00</td>
</tr>
<tr>
<td>All types</td>
<td><strong>2.74</strong></td>
<td><strong>0.85</strong></td>
<td><strong>2.21</strong></td>
<td><strong>0.45</strong></td>
<td><strong>1.49</strong></td>
<td><strong>7.74</strong></td>
</tr>
</tbody>
</table>

Table 5.1 shows that proposed innovative practices were mostly observed in the new programs and new sources of supply categories, although there are slight variations in the observations over the three years – and this was true of all school types except for Special/Other. However, the number of proposed innovation practices does vary with school type over three years. For instance, there is a
reduction over time in the average number of proposed innovative practices in State High Schools from 8.08 in 2013, to 7.29 in 2014, and 6.71 in 2013. Meanwhile, State Schools increased from an average of 6.22 in 2013, to 6.55 in 2014, and 8.19 in 2015.

Table 5.1 also shows that for State Schools and State High Schools more innovative practices were proposed for the new programs category, followed by new methods of supply, new organization, and new methods of delivering services, with new markets being the least common.

The second way that the textual analysis is presented is by providing further detail on the type of the proposed innovative practices. The breadth of these practices falling within each category was summarised in the previous section. Table 5.2 shows the frequency of schools proposing a particular type of practice in its written application (expressed as a percentage of the count). As an example of how to interpret this data, innovative practices relating to extra-curricular activities were proposed in 19 percent of all successful 2013 applications.

<table>
<thead>
<tr>
<th>Proposed Innovative Practice</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New Programs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Support Services - Disadvantaged/Underachieving</td>
<td>12%</td>
<td>19%</td>
<td>15%</td>
</tr>
<tr>
<td>Academic Support Services - High Achieving/Extension</td>
<td>19%</td>
<td>26%</td>
<td>26%</td>
</tr>
<tr>
<td>Academic Support Services - Literacy and numeracy</td>
<td>15%</td>
<td>9%</td>
<td>28%</td>
</tr>
<tr>
<td>Academic Support Services - Others</td>
<td>15%</td>
<td>20%</td>
<td>23%</td>
</tr>
<tr>
<td>Extra-Curricular (incl. sport, music, others)</td>
<td>19%</td>
<td>19%</td>
<td>26%</td>
</tr>
<tr>
<td>Language Immersion</td>
<td>8%</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>LOTE program</td>
<td>8%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>Professional Development - ICT</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Professional Development - Mentoring/coaching</td>
<td>12%</td>
<td>22%</td>
<td>36%</td>
</tr>
<tr>
<td>Professional Development - Other</td>
<td>23%</td>
<td>44%</td>
<td>55%</td>
</tr>
<tr>
<td>Professional Development - Subject specific</td>
<td>12%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Vocational Education/Employment Pathways</td>
<td>27%</td>
<td>19%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>New Methods</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum</td>
<td>62%</td>
<td>20%</td>
<td>34%</td>
</tr>
<tr>
<td>ICT</td>
<td>27%</td>
<td>35%</td>
<td>40%</td>
</tr>
<tr>
<td><strong>New Supply</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business/Industry Partnership</td>
<td>38%</td>
<td>28%</td>
<td>26%</td>
</tr>
<tr>
<td>Community Partnership</td>
<td>54%</td>
<td>44%</td>
<td>45%</td>
</tr>
</tbody>
</table>
Research/University Partnership 38% 43% 36%
School Partnership (incl. international) 38% 46% 60%

**New Markets**

External Accreditation 0% 2% 4%
Lease/License of School's Facilities 15% 17% 4%
Marketing/Parent Engagement 23% 24% 26%
Outside Hours School Care 4% 0% 0%

**New Organisation**

Buildings/Maintenance/Infrastructure 35% 19% 11%
Employment of Support Staff 35% 24% 45%
Hours of school 8% 7% 13%
Multi-campus 12% 2% 2%
Teaching staffing flexibility (incl. restructure, reallocation, recruitment) 46% 67% 60%
Timetabling 8% 7% 2%

5.5.1 New programs

The data shows that the IPS program encourages schools to propose new programs that are responsive to the needs of their students. Table 5.1 indicates that schools propose to adopt an average of between 2.04 and 2.74 new programs over the three years where data was examined. The data revealed eight distinct categories of proposed programs for students, and four distinct categories of professional development programs – detailed in Table 5.2.

The applications reveal a strong link between staffing flexibility and the ability to create new academic programs. For instance, a State High School in Brisbane stated that it was currently exploring becoming a pilot school for a new history program, and noted that ‘due to the specialist nature of the course content, staffing flexibility would greatly benefit and support this innovative program’ (2013 application). Similarly, a State High School in Brisbane’s outer suburbs indicated that full-time-equivalent flexibilities would enable it to ‘initiate a tutorial model for students in identified areas of need’ (2014 application). A strong connection between partnerships and new programs can also be observed – discussed further below.

There is also evidence of a similar link between staffing flexibility and the ability to provide innovative professional development programs. For example, the Principal of a State School in Brisbane’s outer suburbs stated that:
…a ‘one size fits all’ model of professional learning is out-dated and largely ineffectual. Our plan is to design a differential program of professional learning...To do this we require resource flexibility and enhancement. IPS will free us up to allow this to happen. (2014 application)

An interesting observation from another Brisbane State School was that it proposed a program that would replace an existing program (2015 application). This is the only example of the destruction phase of innovation manifesting itself in the Queensland IPS setting. As considered in previous chapters, the public sector has weak or non-existent mechanisms of destruction (Potts 2010) and regulatory constraints on these mechanisms are not well understood.

The applications did not reveal any instance of a school being prohibited from implementing a new program due to any specific regulatory constraint. This finding is expected, given the existing autonomies that the schools had under the centralized system applicable to the schools at the time of the applications. However, the lack of innovation in programming was more than merely having to make trade-offs. It appears that staffing inflexibility – policies and procedures imposed on schools from central government departments – are restraining schools’ ability to offer additional programs. The regulation experienced by schools is “soft” regulation inside government (Hood et al. 1999) rather than “hard” regulatory provisions that was the focus of Chapter 4. This point is expanded under the discussion of new organization.

5.5.2 New methods

Next, I will examine new methods of delivering existing programs. On average schools proposed to implement one innovative practice (2013) or less (2014, 2015) from this category. Curriculum development and the use of Information Communications and Technology (ICT) were the two forms of proposed innovation practices observed. Curriculum innovations were present in 62 percent of applications in 2013, but dropped to 20 percent and 34 percent in 2014 and 2015, respectively. The proposed use of ICT increased, from 27 percent of applications in 2014 to 35 percent and 40 percent in 2014 and 2015, respectively.
The ability to hire specific staff with specific skills and experiences − rather than relying on the central system − was a key driver of proposed innovative practices in this category. For example, the use of the International Baccalaureate (IB) program was something that presented in several applications. The use of this alternative curriculum is not prohibited through regulation, but there would be transaction costs in changing curriculum or offering it as an alternative − which is mitigated if schools can recruit appropriate staff. The Principal of a State School in South-East Queensland stated, ‘as an IPS school, [the school] could attract and retain staff with IB teaching experiences to strengthen the workforce capability and improve student learning outcomes by implementing an inquiry approach to learning’ (2015 application). The Principal of a State High School in Brisbane’s inner suburbs noted that it was already offering the IB curriculum, but increased staffing flexibility meant that it would be able to extend the program to its middle years (2014 application).

The use of ICT was found to enhance partnerships and academic programs. For example, a State School on the Gold Coast proposed video-conferencing with its sister school in Japan (2015 application) while a State School in suburban Brisbane proposed extension opportunities for gifted students through a video link to a local State High School (2015 application).

### 5.5.3 New supply

Forming new partnerships were a major feature of many applications. This finding is expected, given the emphasis placed on such partnerships in the IPS prospectus. On average, the applications indicated that schools would form more than one partnership. Of these, partnerships with other schools were the most popular, followed by community groups, universities, and business/industry.

Partnerships provide schools with access to specialized knowledge, skills, and resources that it would otherwise not have. The partnerships mean that programs such as ‘specialist programs to maximise safety and enhance wellbeing for children and young people with disabilities’ (2013 application), ‘Early Childhood Transition Program between local Kindergartens and the school’ (State School, 2014 application), and sporting programs like a ‘Centre of Excellence in Golf’ are able to be established (State School, 2013 application). One State College noted that increased
autonomy would allow it to take up an offer from a university to expand an existing program into chemistry, biology, and environmental/marine sciences (2014 application).

These partnerships may provide schools with future revenue streams when combined with innovations around buildings and facilities. For instance, a State School in Brisbane’s outer suburbs proposes to construct an Aquatic Centre to service the school and the local community, and plans to approach other community groups to use the school’s performing arts center in return for student scholarships and training (2014 application).

The applications reveal that existing regulation and bureaucratic decision making are preventing schools from establishing innovative partnerships. For example, the Principal of a State School on the Gold Coast explained the transaction costs: ‘currently, we are limited in being able to pursue a higher level of community involvement as this requires time to seek, negotiate, develop and sustain’ (2015 application). A Brisbane State School principal stated, similarly, that as an IPS it would be able to establish partnerships ‘…without the current level of red tape and approval by Education Queensland’ (2014 application).

5.5.4 New markets

Schools identified opportunities that would expand services to new and different consumer groups. On average, less than one innovative practice was observed per school each year, although approximately one-quarter of schools identified marketing and parent engagement opportunities throughout the application period.

In relation to parental engagement, one proposed innovative practice was providing courses to parents to address their educational needs to enable them to better assist in their children’s education. For example, a Gold Coast State High School proposed literacy and numeracy short courses (2013 application), and a nearby State School proposed making the school’s ICT training program available to ‘up skill parents in the applications necessary for students to access on-line (sic) learning’ (2015 application). These proposals were assisted by the flexibility around school hours and staffing. Other applications focused on IPS branding, which itself would make the
school more attractive to parents with children in the private-education market segment. The Principal of a Brisbane State School commented that ‘Similar to our main competitors in the independent school arena, there will be an increased ability and perception within the community that we have a status that makes us even more desirable as the choice of the child’s primary school education provider’ (2015 application).

The other commonly observed form of proposed innovative practice under this category was leasing or licensing the School’s facilities. Fifteen percent of schools nominated this in the 2013 applications and 17 percent of schools in 2014 – however, this dropped to 4 percent in the 2015 round. On the face of the applications, it was unclear why this had dropped – particularly as the IPS prospectus noted that schools would have greater autonomy over facilities. One possibility is that schools are leasing out their facilities already. For example, the Principal of an outer Brisbane State School noted that ‘our facilities are used extensively by short and long-term Hirers’ (2014 application). Similarly, another outer Brisbane State School indicated that it already had shared facility agreements in place (2014 application), a State High School in Townsville leases its swimming pool to the local municipality (2014 application) and a State Secondary College had a public-private partnership in place for facilities management which it was able to do because it was a new school (2013 application).

Nevertheless, there is evidence that increased autonomy will enable schools to realize this possibility by lowering the transaction costs of dealing with the government department. One example is a State High School on the Gold Coast, whose principal stated that the school ‘currently provides extensive facility access to external

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45 Marketing innovations were also found in New Zealand. The removal of zoning regulations and the introduction of school choice reforms saw marketing become a function of school councils and principals as a way to ‘convinces potential students and their parents that their offerings were preferable to those of the school down the road’ (Fiske and Ladd 2000, p. 212). In a recent article, Holloway and Keddie (2018, p. 10) question the value of marketing innovations within IPS schools on the basis that this allocates resources away from ‘education matters’. I would address this criticism by referring to Hayek (1945); an individual’s preferences are not given but are discovered. Of course, some advertising may be misleading, but competitive advertising acts as a discourse increasing the amount of knowledge about education services.
organizations but has been limited. IPS will provide greater flexibility to negotiate long term and facilities development agreements with these partners’ (2013 application).

5.5.5 New organization

New forms of organization presented as the third-most observed proposed innovative practice, with schools nominating between one and two practices (1.37-1.69) on average that they would undertake if admitted to the IPS program. It is significant because this category includes staffing flexibility – of which 46 percent of applicants in 2013, 67 percent in 2014 and 60 percent in 2015, indicated that they would be able to utilize as an IPS.

There is a link between staffing flexibility and new academic support programs, staff development programs, and the ability to recruit specialized staff. A key submission from schools was that staffing flexibility would allow for educational staff to spend more time on student-focused activities. For instance, the Principal of a regional State School contended that ‘by becoming an IPS, we will have the autonomy to create a [Business Service Manager] position, which is currently not allocated for in our staffing model. This will enable the [Principal], [Head of Special Education Services] and curriculum leaders to focus on the priority of improving student outcomes with the BSM taking on management of the school's business, facilities and HR’ (2013 application). Between 24 and 45 percent of schools, depending on the year, noted that as an IPS they proposed hiring of support staff to supplement the teaching staff. A Brisbane State School proposed hiring a ‘data coach’ (2013 application) as just one example. This is significant because the prospectus notes schools already had the ability to recruit non-teaching staff (Queensland Department of Education and Training 2012a). The autonomy to do this may be limited in practice as the evidence of the applications is that recruiting of non-teaching staff is constrained under the existing centralized model of service delivery. For instance, the Principal of a Gold Coast State School observes that:

As a non-IPS school we have been hindered by 'red-tape' during our attempts to appoint quality staff to fill roles such as Coach, Head of Curriculum/Curriculum Coordinator and G&T Coordinator...Being an IPS will enable us more strategically and creatively model our staffing structure to meet student needs. (2015 application)
Likewise, an outer suburban State School Principal lamented that ‘unfortunately, traditional models of governance have previously meant that innovation is dependent on fluctuating staffing allocation and point in time funding’. They went on to explain that, in 2013, this leads to the loss of a staff member that ran a new reading program due to insufficient flexible staffing hours and funding (2015 application). The same school cited staffing flexibility as a limitation on the ability to provide staff with adequate professional development opportunities. A Brisbane State High School principal provided an example in 2013 where ‘an experienced [Information Processes and Technology] teacher retired mid-year and could not be replaced through existing mechanisms’ (2014 application). The Principal of a State High School in Townsville also noted the costs, stating ‘the current uncertainty and red tape surrounding teaching appointments would be removed when we are able to make direct applications and appointments ourselves…’ (2013 application). The Principal of a State High School in South-east Queensland warned of the ‘drift of the most effective teachers to the non-government sector’ (2013 application) unless processes were streamlined.

Consistent with autonomy theory, there is evidence that increased flexibility allows innovative practices for school organizational structure. For example, a Brisbane State School proposed introducing middle-management in the form of year-level coordinators (2013 application). Innovation of this type is already taking place. For example, a regional State High School had already created Head of Department positions and reallocated administrative work, but its application highlighted a potential roadblock for this happening in other schools under the centralized system. The school noted that these changes required the approval of its Local Consultation Committee – which exists as part of the enterprise bargaining framework (see: Department of Education, Training and Employment State School Teachers’ Certified Agreement 2012, discussed in Stanley, Allen and Lane 2014). Other school’s committees may not be open to these changes, which may explain why this innovation

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46 Note: The 2012 collective agreement was replaced by the Department of Education and Training State School Teachers’ Certified Agreement 2016 on 5 October 2016. The consultation provisions discussed here remain.
has been constrained in the past. This requirement may also explain why flexibility around school hours did not feature heavily in applications.

Flexibility does not necessarily mean increased teaching loads. Indeed, a State School on the Gold Coast envisaged that ‘additional [non-contact time] will be provided to teachers’ (2015 application) – in that case, to allow teachers to engage in assessment task design and moderation processes with other schools in the area to ‘enhance the transition to junior secondary’ (2015 application).

Let us now turn to buildings, facilities, and maintenance. These forms of proposed innovative practices within the new organization category were evident in 35 percent of applications in 2013, before falling to 19 percent and 11 percent in 2014 and 2015, respectively. The evidence is that autonomy will yield efficiency dividends. A Brisbane State High School complained that a submission had been sitting with Education Queensland facilities for some time (2013 application). The Principal of a regional State High School noted that buildings and facilities development was occurring in an ‘ad hoc’ fashion, that ‘capital works requests currently take too long to be actioned’, and under the IPS model this school would be able to move much more effectively on those proposals (2013 application). In summary, the IPS will enable ‘direct transparent resourcing to the school without regional interference…’ according to the Principal of another Brisbane State High School (2014 application).

A final theme is a link between hours of the school and other program offerings. As the Principal of a Brisbane High School explains, ‘early starts and later finishes [allow] for greater access to curriculum programs and flexible programs for vocational programs and parent engagement... The school will provide additional sporting options for students outside of school hours. Currently no interschool sport is organised or played on a regular basis for students in year 11-12.’ (2014 application).

5.5.6 Conclusion of the Queensland case study

The examination of the EOI applications for the first three years (2013-2015) of the Queensland IPS program has shown that the initiative will foster innovation in public education service delivery, according to the perceptions of individual school principals.
The study observed a range of proposed innovative practices, categorized according to an adaption of Schumpeter’s five forms of innovation (Schumpeter 1934). The study revealed that staffing flexibility and autonomy around recruitment were integral to fostering a range of innovative practices beyond the category of new forms of organization itself. The study provides evidence that the current centralized service delivery model is constraining innovation, not only with respect to staffing flexibility, but in schools forming partnerships, in leasing and licensing out its facilities, and in managing its buildings, facilities, and infrastructure. In this regard, the chapter's findings are consistent with the theory of school autonomy (e.g., Chubb and Moe 1990; Wohlstetter, Wenning, and Briggs 1995; Lubienski 2003a; Preston et al. 2012). The regulatory constraints of the service delivery observed in this chapter appear to fall within the ‘red tape’ category, and higher transactions costs that undermined principals’ capacity to implement innovative ideas were observed rather than direct legislative prohibitions.

It has been claimed that ‘IPS is practically and logistically more difficult to carry out in primary schools than in larger and better resourced secondary schools’ (Gobby, Keddie, and Blackmore 2018, p. 169). The results of the Queensland case study presented in this chapter does not make findings of the ease of implementation. However, the findings do indicate that, on average, state school principals proposed more innovative practices than high school principals in the 2015 EOI round. The results show that there is capacity for innovative practices to be adopted, regardless of school type, which would otherwise be constrained if these schools continued to operate under the ordinary regulations applying to government schools in Queensland.

5.6 Discussion

At this point, the results of the Queensland IPS program case study can be brought back into conversation with the school autonomy literature and the emerging scholarship on Australian IPS programs. The first part of this section will offer supporting evidence to the claim in this chapter that the Queensland IPS program fosters planned innovations. The second part of this section deals with some researcher’s objections to IPS programs – applying the institutional theory of regulation, these education researchers are identifying costs of disorder. The third
part of this section will focus on the criticism that school autonomy programs are a “re-regulation” of government education rather than deregulation.

5.6.1 Increasing autonomy, increasing innovation

There have been some recent studies on the Queensland and Western Australia IPS programs. Although it was not the specific focus of these studies, many confirm that removing regulation and allowing greater local school autonomy fosters innovation. In the main, these studies involved interviewing principals, other schools leaders, and in one case the state government minister and senior departmental bureaucrats, after the IPS programs had commenced.

For instance, one Queensland principal was positive about his school being been converted from a government school to an IPS. The principal noted that ‘…now they’re cutting red tape, they’re giving us the ability to staff our schools and make resource allocations and make strategic directions about the purpose of the school and the nature of running of the school…’ (Keddie, Gobby, and Wilkins 2018, pp. 385-386). One of the dictatorship costs involved in public education is enforced uniformity across the system. One example of soft regulation previously used by the department was ‘berating’ principals into compliance in the event schools went outside the core curriculum and offered subjects like dance (Keddie, Gobby, and Wilkins 2018). Under the IPS program, the principal was given the autonomy to cater to the preferences of his school community. Similarly, two other WA principals ‘believed that the [Department of Education] was inflexible, inefficient, and unresponsive to their schools’ needs’, limiting innovative local approaches (Gobby 2013b, p. 278). Another deputy principal with experience in private schools attributed the success of those private schools to a higher degree of autonomy (Gobby 2016).

The recent stream of research identified several specific innovative practices. These included extra-curricular activities (Keddie, Gobby, and Wilkins 2018), external auditing and accreditation for quality control and differentiation (Gobby, Keddie, and Blackmore 2018), engaging in marketing and social media to promote the school’s brand and potentially earn new revenue streams (Holloway and Keddie 2018), as well as structural changes to outsource ‘the school’s uniform shop, the school’s Information Technology supply and maintenance and the school’s café.’ (Gobby
Other principals sought to use their autonomy towards socially-orientated goals, ‘finding creative solutions to reducing disadvantage, deprivation and social exclusion (Holloway and Keddie 2018, p. 390).

These examples – along with the five forms of innovation observed in this chapter’s study – are also supported by an earlier evaluation of the WA program undertaken by the Centre for Program Evaluation at the University of Melbourne. One principal interviewed for this evaluation said that the ‘frustration with bureaucracy is far less’ (Centre for Program Evaluation 2013, p. 32). In another review of the WA IPS program in 2015 (again commissioned by the Education Department), teachers reported that ‘things happen much more quickly; things get fixed more quickly; things get approved more quickly; excursions are easier and less bureaucratic; red tape is less’ (Hamilton Associates 2015, p. 33). Accordingly, there is evidence that IPS programs have reduced the regulatory burden.

The Centre for Program Evaluation found that increased principal accountability and autonomy encouraged ‘a stronger sense of entrepreneurship and engagement as school leaders’ (2013, p. 7). In 2018, the Queensland Department of Education commissioned an evaluation of the IPS program. The finding concerning innovation is as follows.

One of the key features of IPS is that they have the capacity to, and are expected to innovate, trial and share good practice across the state school system. IPS principals note that the ability to make local decisions, find new ways of operating, to choose their own staff in a timely way, have brought confidence to innovate and make a significant difference for students over time. Of the respondents from IPS in the survey, 95.7% agree that innovative practices and programs have been implemented in their school (Potential Solutions 2018, p. 18).

None of the above is to say that innovation does not occur in centralized government schools. To be sure, the Queensland evaluation noted that ‘90.3% of non-IPS principals agree that innovative practices and programs have been implemented in their school’ (Potential Solutions 2018, p. 18). This does not detract from the point that greater autonomy in the IPS program has increased the scope for innovation. Indeed, the study presented in this chapter reports the planned innovations that the
principals stated they were not able to currently achieve without the greater autonomy provided by the IPS program. That is, centralized regulation constrains innovation in this setting. The evaluation did note that ‘non-IPS principals and the majority of key stakeholders report they do not have visibility of these innovations [that are occurring in IPS schools]’ so there is need to promote greater innovation diffusion (Potential Solutions 2018, p. 6).

Another relevant finding of the Queensland evaluation was that IPS principals formed an association to enable ‘new thought, ideas, reflections, and created a platform for conversation, sharing of improvements and innovation’ (Potential Solutions, 2018, p. 5). There is a long history of research on the question of innovation diffusion (e.g., Rogers 1995) including in the public sector context (e.g., Walker 1969; Moranto and Wolf 2013; De Vries, Bekkers, and Tummers 2018a). Recent research by Potts and his colleagues at RMIT University highlight the positive economic function that industry associations play in coordinating and diffusing knowledge in the form of information sharing and learning, amongst other things, as opposed to self-interested lobbying and rent-seeking (Thomas and Potts 2018; Berg et al. 2018 c.f., e.g., Tullock 1967; Krueger 1974). While the specifics of innovation diffusion is beyond the scope of this thesis, it is noted that there is greater scope in this regard as non-IPS principals claim that they are excluded from the benefits of this knowledge generation (Potential Solutions, 2018; c.f. Holloway and Keddie 2018).

In sum, the study presented in this chapter, combined with the other recent research, sharpens our understanding of how innovation occurs in schools by thinking of school principals as entrepreneurs employing new combinations of productive factors at their disposal (Schumpeter 1934; Gobby 2013b; Keddie, Gobby, and Wilkins 2018). This is true even if some principals might personally resist the label of an entrepreneur (Gobby 2013a). Indeed, other principals are explicit in seeking to run their school ‘like a business’ (Gobby 2013b, p. 282).

### 5.6.2 Institutional trade-offs

The institutional theory of regulation (Djankov et al. 2003; Shleifer 2005; Davidson 2013) assists in further exploring the link between increasing autonomy and increasing innovation. Namely, it can be shown that the regulation of an IPS has a
different combination of dictatorship and disorder costs as compared to the regulation of a centralized government school. The upshot of this chapter is that one of the costs of a centralized system of education service delivery is that regulation of the departmental bureaucracy constrains principals from implementing innovative practices at the school level. The constraints on innovation are conceptualized as a cost of dictatorship.

Consequently, it can be said that there are lower costs of disorder associated with IPS as compared to centralized government schools. As has been previously explained, the perception of the costs of disorder is subjective in the minds of the principals (Allen and Berg 2017). Those perceptions have already been noted earlier in this discussion section. Moreover, for the overwhelming majority of principals that have expressed satisfaction with their new-found freedom following the acceptance into the IPS program, the perceived costs of dictatorship under the centralized system may now be higher than they first thought at the time of their EOI applications.

Nevertheless, there is a trade-off. In light of the institutional theory, providing schools with a greater level of autonomy to stimulate innovation increases the costs of disorder. In the context of the IPS program, there are several concerns that have been identified in recent school autonomy literature. The concerns include: the benefits of innovation will not be evenly shared amongst the government education system; some schools will be more successful at than others, disadvantaged or high-needs students will not receive adequate resourcing and support, and specialization will result in schools adopting exclusionary admissions practices that will harm those students excluded – segregating them into schools of ‘known losers’ (Gobby, Keddie, and Blackmore 2018, p. 165; see also: Jacobs et al. 2016; Keddie 2017). The reason that these outcomes can be characterized as costs of disorder is that the concerns flow from the autonomous actions or omissions of individual school principals – acting in conjunction with school councils and other senior educators – rather than potential actions or omissions of the centralized government department (as regulator).

To provide one example of the perceptions of disorder costs, Keddie (2016b) reported that one teacher was worried that an English as a Second Language program was ‘vulnerable’ to being cut – although it is noted that the program had not actually been
affected. This teacher expressed the perceived disorder cost well in remarking that principal autonomy ‘makes a lot of assumptions – that all principals are ethical, that all principals are fair and just’ and these assumptions may not be correct (Keddie 2016b, p. 720). Likewise, another recent study concluded – with concern – that IPS programs could pave the way for external vendors to involve themselves in service delivery and argued that the central bureaucracy is better placed to solve quality and equity concerns (Holloway and Keddie 2018). A Parliamentary Inquiry into the Western Australian program expressed similar sentiments about inequality and a two-tier system, although no concrete examples are provided (Jacobs et al. 2016). While there is no doubt that these concerns are legitimately held, they tend to reflect perceptions of possible disorder costs rather than that based on actual evidence. The fundamental point, for the purposes of this thesis, is that potential failures of individual principals and schools in exercising their autonomy need to be weighed against the potential failures of the bureaucracy in constraining innovation.

Of course, it is possible that the perception of the disorder costs can be manipulated.47 For example, in analysing the Western Australian program, Gobby (2016, p. 26) reports that in the announcements to introduce greater school autonomy ‘the [Department of Education] and politicians sought to allay [fears of inequality and a two-tier education system] by reinforcing the value and support of the system for all schools’ and ‘also promoted the potential benefits of IPS for low SES areas’. More recently, a Parliamentary Inquiry into the Western Australian program found that the state government had selected the highest performing schools for admission to the IPS program to ‘increase the likelihood that the initiative would achieve its objectives’ (Jacobs et al. 2016, p. 4). The inquiry also noted that the government’s efforts in promoting the IPS program have ‘exacerbated the perceived differences’ between IPS and non-IPS schools (Jacobs et al. 2016, p. 50). In highlighting the benefits of the IPS program, the government can be seen here as trying to lower the perceived costs of disorder and amplify the relative costs of dictatorship.

47 As indicated previously, there is an analogy here with the public choice economics of Twight (1988; 1994) who discusses a manipulation of transaction costs. It is also reminiscent of Hayek’s (1960) complaint about public sector “public relations” that seek to manipulate public opinion in favour of government programs.
In any case, Keddie (2016b) finds that the five staff interviewed across two IPS schools were all conscious about equity concerns, and one principal claimed that ‘a more direct allocation of funding to the school under IPS supports greater equity for Indigenous students’ (p. 719). Similarly, in another study, a deputy principal was cognisant of equity concerns in considering the possibility of promoting her school as having an ‘elite status’ (Gobby, Keddie, and Blackmore 2018, p. 165). Therefore, the evidence from recent interview studies suggests that principals are mindful of potential costs and take appropriate action (i.e., self-regulation) to limit these costs, meaning that the costs of disorder are lower than commonly assumed. Accordingly, the rhetoric that school autonomy somehow “dismantles public schooling” should be moderated (Gobby, Keddie, and Blackmore 2018; Smyth 2011).

5.6.3 School autonomy and regulation

As Djankov et al. (2003, p. 600) states, ‘no institution fully eliminates the transaction costs of dictatorship and disorder.’ Although it is not the focus of the scholarship, the recent research into school autonomy in Australia shows that IPS programs are still a centralized institutional possibility characterized by high dictatorship costs in contrast to other arrangements. As such, centralized regulations may continue to constrain innovative practices undermining the intent of school autonomy programs.

It must be remembered that the institutional arrangement of the IPS program still retains all of the “hard” regulation applicable to government schooling. Indeed, a consistent theme with school autonomy programs in Australia is that they have been implemented administratively rather than through any legislative change. To put it another way, the executive arm of government has attempted to create a new institutional form – IPS schools, as distinct from centralized government schools – without undertaking regulatory reform. This means that although there are different “soft” regulations for this new institutional possibility, many of the centralized regulatory barriers are still in place, limiting the ability of schools to operate autonomously. As the review of the WA program notes, the term “Independent Public Schools” ‘describes schools with greater autonomy set firmly within system

48 The increasing regulatory complexity in New South Wales and Victoria was shown in Chapter 3. In the case of Victoria, it was shown that there has been a sizable increase in regulatory complexity after school autonomy reforms were introduced.
requirements and constraints’ (Hamilton Associates, p. 41). Similarly, the Queensland evaluation confirms that Independent Public Schools ‘are required to operate in line with the same legislation, industrial instruments, directives, whole of government policy and national agreements as all other state schools’ (Potential Solutions 2018, p. 8).

A brief review of the primary Queensland legislation, starting from the period immediately prior to the first IPS EOI applications in 2012, confirms this point.⁴⁹ A legislative word and page count comparison shows that between 1 January 2012 (reprint number 3B current to 28 June 2012) and 1 May 2018 the principal legislation increased by 585 words or 8 pages.⁵⁰ Further, there is no mention of Independent Public Schools under the Act. As such, the IPS reforms appear to be more about limiting the central bureaucracy – removing soft forms of regulation inside government – rather than tackling the broader problem of hard forms of overregulation in public sector services. This is not necessarily negative – this chapter has shown that the removal of red tape and other soft regulation gives principals the ability to innovate in ways they said could not occur under the status quo. However, the failure to tackle regulatory complexity at the legislative level has several consequences for the future of school autonomy and public sector innovation more broadly.

The first consequence of not undertaking legislative-level regulatory reform is that the administrative and compliance burden may merely shift from the department level to the school level. Has overregulation in the system been reduced, or has the burden merely shifted from one location to another? Is this a case of “re-regulation” (Gobby 2013b; see also, e.g., Fiske and Ladd 2000), where schools are given greater autonomy on the one hand, but subject to new forms of control on the other? The answers to these questions are relevant because the school principal’s role could change from being primarily about managing front-line service delivery to being concerned about complying with regulations previously managed by the central bureaucracy (e.g., Gobby, Keddie and Blackmore 2018). It is for this reason that one

⁵⁰ Note: word and page estimates exclude headers, footers, tables of contents, and endnotes.
researcher has described school autonomy programs in the United Kingdom as ‘simultaneous centralisation and decentralisation’ (Higham and Earley 2013). Others speak of freedom exercised within centralized systems of compliance (Keddie, Gobby, and Wilkins 2018, p. 381). The previous chapter has identified a growing complexity in the regulation of public education services. Without regulatory reform at the legislative level, there is a compliance burden that needs to be met somewhere within the system. This may be one reason that principals have observed an increase in the administrative burden under the IPS programs in Queensland and Western Australia (Gobby 2013a; 2013b).

The second consequence is that the efficacy of school autonomy programs will continue to be limited by the prevailing legislative and regulatory structures. This question extends beyond the principal legislation detailed in Chapter 3. Take staffing flexibility, for example, which is a crucial aspect of the IPS reforms. Research from the Institute of Public Affairs shows that government schools are subject to centralized employment regimes governed by state-wide awards or enterprise bargaining agreements (Stanley, Allen, and Lane 2014; see also Gobby 2016). Pay and conditions are standardized across the entire system, removing the ability for individual schools to use financial incentives to attract staff or to reward improved performance. The various awards or agreements also contain provisions that limit the ability of school principals to make changes in workplace practices by prescribing matters like school hours, the number of days in a school year, student-teacher ratios, and face-to-face-teacher hours. Surely, fixing these matters limits the scope for innovation. For other matters, principals must comply with union consultation provisions which significantly increase the transaction costs of negotiating and implementing changes in work practices. A possible alternative would be to borrow from American charter school laws, where public schools are established as separate legal entities – where staff are employees of individual schools rather than centralized government departments.

The third consequence is that there is a risk that a future administration can unwind any action. To be sure, any legislative changes could be reversed as well – but there are higher transaction costs associated with this type of change. Additionally, in states with an upper house, the government will not necessarily control both houses of the
An example of this risk has been realized recently in WA. Shortly after the state election in 2017, *The Australian* newspaper reported that the incoming Labor government announced that schools operating as an IPS would be required to consider hiring employees within the Department’s pool of excess staff whenever they have a vacancy (Burrell 2017). Although the government has stated its commitment to keeping the IPS program, these moves may be the first steps towards re-centralizing service delivery.

### 5.7 Conclusion

It is difficult to measure public sector innovation (Potts and Kastelle, 2010; Arundel and Huber 2013; Demircioglu and Audretsch 2017). Even when confined to the education context, there are difficulties measuring the effect of regulatory change (DeAngelis, Burke, and Wolf 2018; 2019). By advancing a unique method, this chapter provides a future ability to track perceived and planned innovations in the education sector and investigate whether these have been implemented. In making an empirical contribution, this chapter examines a dataset which enables tracking of specific public sector innovation activity over time – mitigating against measurement issues generally associated with this area of research.

This chapter has shown that school autonomy initiatives such as Queensland’s IPS program are fostering innovative approaches to improve outcomes in the delivery of public education in Australia. The IPS program was regulatory change – removing constraints and oversight from the department. This is significant because the results presented in this chapter provide evidence of a correlation between deregulation and public sector innovation. That is, higher levels of public sector innovation may be observed where individual service units (in this case schools) are given greater autonomy to be responsive to the needs of their consumers (in this case parents and guardians, and students), and where the dynamic process of developing new combinations of resources is less constrained. The discussion about institutional trade-offs suggests that this new institutional form may represent a more efficient

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51 In the Westminster system, the government will generally have a majority in the lower house. However, note that there is only one house in the legislatures of the Australian Capital Territory, Queensland, and the Northern Territory.
institutional possibility of undertaking public education services compared to government schooling as it economizes a number of the costs of dictatorship without radically increasing the costs of disorder.

The conclusion that can be drawn from this chapter is that removal of departmental regulatory constraints was the impetus for planned public sector innovation within the school context. However, the discussion in this chapter noted that because IPS programs have been introduced without underlying legislative-level regulatory reform, school autonomy has not addressed the problem of increasing regulatory complexity at the legislative level detailed in the previous chapter. Unless this problem is addressed, the provision of public education services may suffer under the weight of overregulation – and will ultimately undermine the benefits of these autonomy programs. The findings of this chapter suggest that IPS reforms have been driven by education policy rather than an understanding of the economics of regulation (Pincus 2014). The IPS program is still a highly centralized form of service delivery. The next chapter will look to the United States’ school choice programs to examine the regulatory features of two other decentralized institutional possibilities – charter schools and voucher programs.
Chapter 6 – Regulation of School Choice Programs

6.1 Introduction

The history of school choice programs in the United States has been well chronicled elsewhere from a variety of perspectives (e.g., Nathan 1996; Bulkley and Fisler 2003; Forman 2005; Raywid 2006; Hess 2010; Wohlstedter, Smith, and Farrell 2013; Stewart and Wolf 2014; DeAngelis and Erickson 2018). The movement for school choice reform in the United States intensified at the end of the 1980s and the early 1990s, with policy reports calling for the structural reform of public education to break up the monopoly of government schooling (e.g., Budde 1988; Kolderie 1990). The first charter school laws were introduced in the state of Minnesota in 1991 (referred to in that legislation as “outcome-based schools”).\(^{52}\) Although politically controversial, school choice proposals have long received support from both Democratic and Republican lawmakers and administrations at the federal, state, and local levels (Vergari 2003). Of course, the idea of separating the functions of funding and managing schools has a much longer history in the mainline of economic thought (Mitchell and Boettke 2017) on the public provision of education (Smith 1776; Mill 1859; Friedman 1955; Hayek 1960). Indeed, voucher programs have existed in the United States since the 19th century (DeAngelis and Erickson 2018). The purpose of this chapter is not to examine the history of school choice reforms in any great detail. Instead, the purpose is to use the regulation of school choice programs as a case study to gain insights for public sector innovation more broadly.

That one of the aims of school choice laws is to encourage innovation in public education is something of a cliché in the academic literature. Friedman (1955) is often cited for this proposition, despite making only a passing reference to local service delivery encouraging experimentation in schooling. The link between charter schools and innovation is cited far more than it is actually studied, although there are several notable exceptions (e.g., Lake 2008; Lubienski 2001; 2003a; 2009; Mintrom 2001; Preston et al. 2012).\(^{53}\)

\(^{52}\) Minnesota Session Laws 1991; Chapter 265, Article 9, Section 3.

\(^{53}\) This research is summarised in sections 4 and 5 of this chapter.
Instead, the focus of much of the economic scholarship has been to compare the academic performance of students in charter schools or voucher programs compared to traditional government schools (e.g., Betts and Tang 2011; Cheng et al. 2017; Jeynes 2012; Shakeel, Anderson, and Wolf 2016). Other economic research has studied school choice programs from a cost-efficiency perspective as compared to traditional government schools (Gronberg, Jansen, and Taylor 2012; 2017). Only recently, one team of researchers, associated with the Department of Education Reform at the University of Arkansas, have started to seriously examine the effects of regulation on participation in voucher programs (DeAngelis and Burke 2017; DeAngelis, Burke, and Wolf 2018; 2019; Sude, DeAngelis, and Wolf 2018). Although school choice programs have also been a topic explored by legal scholars, few lawyers have ventured into conducting a legislative analysis of school choice laws (Grady 2012; Kasuboski 2018).54

The argument advanced in this thesis is that there are a variety of ways that public sector services can be regulated – trading-off disorder and dictatorship costs – and that this fact has implications for public sector innovation. Innovation will occur within the constraints of the regulatory structures that mandate service delivery. Public education provides an excellent example to observe a variety of institutional forms in which schooling can take place. So far, chapters 3 and 4 of this thesis have considered institutional possibilities within Australia, including government schools and Independent Public Schools. This chapter extends the analysis by examining the legislative frameworks of two decentralized institutional possibilities in the United States – charter schools and voucher programs – that sit alongside centrally-managed government schools.

Accordingly, the remainder of this chapter is arranged as follows. Section two serves to set out the historical and theoretical background of school choice reforms in the United States. Section three explains the methodology behind selecting Washington, D.C., as a case study. Sections four and five provide a Schumpeterian legislative analysis of charter school laws and voucher program laws, respectively. The legislative analysis in these sections will be explained through the prism of the

54 Both of these studies investigate charter schools. This research is summarised in Section 4 of this chapter.
institutional theory of regulation. Additionally, the implications for public sector innovation will be discussed within these sections. Section six concludes the chapter.

6.2 School choice reforms, from theory to practice

The purpose of this section is to provide an in-depth review of the theoretical claims of school choice programs. Just as there is no single way that public services can be delivered, there is no single model of school choice program. The two institutional possibilities studied in this chapter – Charter Schools and Voucher Programs – aim to fulfill the same goal in different ways. That is, the legislative framework governing service delivery provides parents and guardians seeking to educate their children in the education system with a choice of school. That parents and guardians have better information about the needs of their children than the state – and stronger incentives to fulfill them – is a straightforward proposition, recalling that knowledge is dispersed (Hayek 1945; 2002). However, constructing a system that decentralizes decision making power has been politically controversial (Vergari 2007). As noted above and in previous chapters, encouraging innovation in the way educational services are provided is a claim that is often put forward by proponents of school choice programs.

What is the impact of regulatory structures on the provision of public education? Traditionally, the economic analysis of school choice has been based on a neoclassical price or market theory, introduced in the previous chapter, which distinguishes between demand-side and supply-side changes. For instance, on the demand side, voucher programs give parents access to public funding to educate their children in a private school; charter schools give parents the option of sending their children to a public school run by an independent board of trustees, and which is independently regulated. On the supply side, voucher programs build capacity by outsourcing services to the private sector; charter schools introduce mechanisms for public schools to be established on the initiative of individuals without relying on the state. In this way, both vouchers and charters are institutional possibilities that the literature speaks of as “quasi-market” systems (e.g., Le Grand and Bartlett 1993; Whitty 1997; Forman 2007; Lubienski 2009). The approach that is taken in this chapter, however, is to analyze the legislation, applying the institutional theory of regulation (Djankov et al. 2003; Shleifer 2005; Davidson 2010; 2013). Borrowing from Allen (2006), the approach taken here is not an exercise in advocacy but one of
“exegesis” of the legislative text and critical analysis to identifying the perceived costs of disorder and dictatorship of different regulatory approaches.

In the previous chapter, it was pointed out that the claim that school choice fosters innovation at the school level rests on the theoretical basis of the “market” and “autonomy” theories. That is, introducing market mechanisms that put schools in competition with each other means schools will have incentives to introduce innovative practices; and providing local schools with autonomy will allow schools to use local knowledge to come up with and implement innovative practices to meet the needs of local students best. However, the theoretical basis for the link between school choice programs and innovation is more profound and more complex than this.

This is not to say that these theories do not hold any explanatory power. However, both of these perspectives presuppose institutional and structural change. For public services, structural changes require a regulatory change of some kind. For example, the study on Queensland’s Independent Public Schools presented in Chapter 4 showed the effect on the creation phase of innovation in the government schooling sector that would occur if school principals are subject to less departmental regulation (soft regulation), while the same legislative frameworks applicable to centralized government schools remain in place (hard regulation). Regulatory changes will be required to implement school choice programs. As Wohlstetter, Wenning, and Briggs (1995, p. 345) explain, ‘a key assumption underlying the charter school movement is that district and state regulations stymie innovation, and so for schools to become high performance organizations, they need to be deregulated.’ Similarly, Hess (2001, p. 143) argues that ‘the key thread defining the charter school movement is the desire to free schools from bureaucratic constraints that allow them to operate as close-knit communities dedicated to a shared vision.’

An appreciation for the institutional settings governing public sector services was explicitly evident in the work of early proponents of charter schools. For instance, Chubb and Moe, in their seminal Politics, Markets, and America’s Schools (1990), noted that schools in the private sector and schools in the public sector had different institutional features. They note that ‘society does not control them directly through democratic politics, and society does control them – through the marketplace’ (Chubb and Moe 1990, p. 27). In describing the bureaucratization of public education, three
passages are particularly instructive in constructing a more comprehensive regulatory constraint theory of public sector innovation.

All public authorities, in seeking to impose higher-order values on schools – values that many in society, including many in the schools, may not embrace – face serious control problems that are endemic to the larger democratic “organization” in which they are forced to operate. They cannot solve these problems by granting the schools lots discretion. Discretion is the very source of their problems. The best means of ensuring that their values get implemented is to engineer the schools’ behaviour through formal constraints – to bureaucratize. (p. 41)

…
Policy proponents can specify precisely what they want the schools to do and build these specifications explicitly into legislative mandates and administrative regulations. In this way they can formally enshrine not only the goals schools are required to pursue, but also the criteria and standards they are to employ, the procedures and methods they are to follow, the types of personnel they are to hire, and virtually anything else of relevance to the implementation of policy. The dangers of political subversion are therefore vastly reduced, because there is little or no discretion left to subvert. (p. 43)

…
To put this most generally: schools and their personnel are granted a measure of discretion by technical necessity, but detailed formal specifications in legislative mandates and administrative regulations are voluminously imposed on all concerned, so that the schools’ scope for discretionary action is sharply narrowed – and the discretion that remains is then insulated from political control through extensive reliance on civil service, tenure, (nominal) professionalism, and other structural means. (p. 45)

The purpose, according to Chubb and Moe, of the extensive – and excessive – bureaucratic regulation of education was twofold: (i) to facilitate the central control of service delivery; and (ii) further the interests of education bureaucrats, education professionals, and other special interests rather than further the purpose of a government education system. The characterization of regulation restricting the schools’ discretion strongly echoes Mises’ (1944) explanation of the purpose of public sector regulation.55 As to the second point, it seems that Chubb and Moe (1990) have

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55 See full discussion of this point in Chapter 2, Section 3.
been influenced by the private interest theory of regulation and the wider public choice and institutional economics (e.g., Coase 1937; 1960; Downs 1967; Tullock 1965; Stigler 1971; Niskanen 1971; Posner 1974; Williamson 1985). The significance of Chubb and Moe’s theory of school choice being grounded in this way is that it takes us away from an analysis of schools as a black box (taking inputs of land, labor, and capital resources, and optimally producing educated students), and recognizes them as the product of individuals operating in an institutional environment. This takes us closer towards economics based on individual action.

However, while the private interest theory of regulation provides a powerful critique of the self-interested reasons that the regulatory framework has been put in place and remains in force, the institutional theory of regulation (Djankov et al. 2003; Shleifer 2005; Davidson 2013) helps understand the trade-offs involved when comparing one regulatory framework to another. Indeed, Chubb and Moe (1990) are explicit in advancing an institutional critique – better institutional arrangements will lead to better schools. An appreciation of the institutional approach is the essential background to the “autonomy” and “competition” perspectives previously canvassed.

In the context of my inquiry, Chubb and Moe’s above observations can be reframed as a trade-off between control of service delivery and innovation. School choice programs are not merely designed to change the economic incentives to innovate – they are about removing hard regulatory constraints. However, the institutional theory predicts that structural reforms to promote innovation will come with the cost of disorder. How have school choice laws been designed to facilitate greater innovation? How do school choice laws mitigate against the predicted increase in disorder costs? Because public sector services are creatures of regulation, these questions can be answered by exploring the legislative characteristics of school choice programs.

56 Some of these works are directly cited by the authors. See also, e.g., earlier work from Moe (1984) skilfully summarizing the “new economics of organization” and its application to public bureaucracy.

57 This is the “methodological individualism” of the mainline of economic thinking (Mitchell and Boettke 2017). Note that Chubb and Moe (1990), in the extracted passages I cite in this chapter, speak of “schools” providing a firm level analysis. Which is why I have claimed that they bring us closer to that type of analysis. Further consideration of the question “what is a school?” (Coase 1937) is discussed in Chapter 7.
6.3 Selecting a jurisdiction for legislative analysis

The United States, like Australia, is a federation of states. States are (and semi-autonomous federal districts like Washington, D.C.), in the main, responsible for school education. This means that laws governing school choice programs will differ from one jurisdiction to another (e.g., Mintrom and Vergari 1997; Finnigan 2007; Grady 2012).

This chapter will use the school choice legislation of one jurisdiction as a case study for detailed legislative analysis. The purpose of this chapter is not to provide a detailed comparison of the legislation governing school choice programs in every US jurisdiction. Instead, the purpose of this chapter is to show that the features of the institutional possibilities of charter schools and voucher programs are written into the legislation. For this task, therefore, it suffices to identify a jurisdiction that (i) has both charter school laws and voucher programs; and (ii) has been objectively assessed as being a leading example of school choice laws. It is on this basis that, Washington, D.C. has been selected for legislative analysis.

In relation to charters schools, the Centre for Education Reform (CER) publishes an annual scorecard and ranking for each US jurisdiction’s charter school laws. The methodology of the rankings is based on four categories: the existence of independent and multiple authorizers; the extent to which regulatory policies limit the growth of charter schools; the extent to which charter schools have operational and fiscal autonomy; and funding equity between charter schools and traditional government schools (Candal 2018). In 2018, the CER ranked Washington D.C.’s laws as number one out of 45 US jurisdictions (Candal 2018).

Further, Washington D.C. is one of only 16 US jurisdictions that have voucher programs. The Fordham Institute publishes a ranking that takes into account a suite of school choice programs including charter schools, voucher programs, education tax credits, and academic savings accounts. In 2015, Washington, D.C. ranked in the top ten cities, second to only New Orleans, Louisiana (Wohlstetter, Zeehandelaar, and Griffith 2015). However, this assessment ranks cities rather than jurisdictions. The CER ranked Louisiana 18 out of 45 jurisdictions explaining that ‘although charter schools have thrived in areas such as New Orleans, charters state-wide are
overregulated and underfunded. Moreover, state interference has prevented effective operators from opening schools’ (Candal 2018, p. 38). As such, Washington D.C.’s legislative code has been chosen for the study outlined the sections to follow.

The legislation analysis presented in this chapter uses the Schumpeterian conception of innovation as “creative destruction” (Schumpeter 1934; 1942) as a framework – showing how regulation affects the dynamic forces of innovation. As has been advanced in previous chapters, this chapter adds to literatures using the Schumpeterian conception of innovation for insights into public sector innovation (Windrum and Garcia-Goni 2008; Potts 2009; Potts 2010; Potts and Kastelle 2010; Mazzucato 2013; Stewart-Weeks and Kastelle 2015) and as a framework for regulatory analysis (e.g. Bauer 1997; Yandle 2002; Diamond 2014). In the sections to follow, the regulatory constraints impacting on the creation and destruction phases will be examined for charter schools and voucher programs in Washington, D.C.

6.4 Charter schools

Charter schools are public schools. The difference between the institutional possibilities of charter schools and government schools is that charter schools are independent organizations that are given a “charter” from a public authorizing body and are not managed or regulated by the central government department. This institutional possibility still fits within the definition of “regulation inside government” proposed by Hood et al. (1998; 1999), because the charter school is a public body at arm’s length from the public authorizing body, and the authorizing body has an official mandate to oversee the activities of the charter school.

Allen and Mintrom (2010, p. 457) offer a typical description of charters schools as follows.

Charter schools are non-sectarian, publicly funded schools of choice that operate with freedom from many of the regulations that pertain to traditional public schools. They operate in parallel with—and often in competition with—traditional public schools. Charter schools enjoy a high degree of autonomy concerning how they are governed and operate. In return for this autonomy, they are required to be closely accountable to public officials and attract sufficient student numbers to remain viable. If they do not meet
appropriate standards of educational quality and financial management, charter schools may forfeit some of their autonomy or be compelled to close.

Charter schools are an increasingly popular institutional possibility for the public provision of education. According to the National Center for Education Statistics (2016), at a school level, and between 2000-01 and 2015-16, ‘the percentage of all public schools that were charter schools increased from 2 to 7 percent, and the total number of charter schools increased from 2,000 to 6,900’. During this same 15-year period, charter school enrolment increased from 400,000 students ‘in fall 2000 to 2.8 million students in fall 2015, an overall increase of 2.4 million students’ (NCES 2016). This section of the chapter will examine the key regulatory features of charter schools, using Washington, D.C. as a case study, and then provide a review of the empirical evidence for the proposition that charter schools foster innovation.

6.4.1 Charter school law in Washington, D.C.

The institutional possibility of charter schools in Washington, D.C. (DC) exists in the Code of the District of Columbia (DC Code). The District of Columbia School Reform Act of 1995, was originally enacted as part of the Omnibus Consolidated Rescissions and Appropriations Act of 1996 and signed into law by US President Bill Clinton on 26 April 1996. It is currently codified in Title 38, Subtitle IV, Chapter 18, of the DC Code. This primary legislation was obtained from the official DC Law Library online database, in force as of 22 March 2019. Additionally, other health and safety regulations apply. An exposition of the legislation reveals regulation of the creation phase and destruction phase that is more dynamic than centralized government schools.

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59 Note that the subsidiary District of Columbia Municipal Regulations contain provisions regulating charter schools’ eligibility and receipt of grant funding for land, buildings, and capital equipment. However, charter schools are otherwise exempt from regulations established for the District of Columbia public schools (§ 38–1802.04 DC Code). For this reason, the subsidiary regulations have not been specifically considered in this case study.
60<https://code.dccouncil.us/dc/council/code/> (last accessed 28 March 2019)
**Creation Phase**

One of the defining features of charter schools as an institutional possibility is that charters can be created independently of the decisions of a central government department or ministerial discretion. In Washington, D.C., charter schools are established by an eligible applicant filing an application (called a “petition”) with an eligible chartering authority (§ 38–1802.01(c)).

Alternatively, an existing government, private or independent school can apply to be converted to a charter school, with the same requirements that would otherwise apply to a new applicant (§ 38–1802.01). In this case, the creation of a new charter school directly displaces the existing school – providing an evolutionary mechanism when a charter school becomes a more preferable institutional possibility compared to private schools (increased regulation and state support) or government schools (decreased regulation and increased autonomy), recognizing that the trade-off between the costs of dictatorship and disorder are not static over time (Djankov et al. 2003). One example of this is the practice of “turnaround”, where poorly performing government schools are converted to charter schools (e.g., DeGory 2016).

It is worthwhile detailing, at some length, the requirements of a petition. Specifically, section 38–1802.02 of the DC code requires that a petition must include a statement addressing the following matters:

- The mission and goals of the proposed school;
- The manner in which the school will conduct district wide assessments;
- The need for the proposed school in the geographic area of the school site;
- The proposed instructional goals and methods for the proposed school – including self-motivation, classroom instruction and learning; the scope and size of the proposed school’s program;
- The plan for evaluating student academic achievement – and proposed remedial actions if a student falls below expectations;

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61 Note that eligible applicant is broadly defined, meaning “a person, including a private, public, or quasi-public entity, or an institution of higher education”.

62 Although it is noted that this practice is not exclusive to using charter school structures, it was a key structure in President Obama’s ‘Race to the Top’ 2009 Federal funding initiative. See, e.g., Corbett (2015).
An analysis of the application process through the prism of the institutional theory of regulation is revealing in that provisions are aiming to guard against risks of both costs of dictatorship costs and costs of disorder. An obvious risk in a regulatory system allowing independent applicants to start public schools is analogous to the precautionary principle. That is, individuals may not be adequately prepared or qualified for the task of setting one up and may fail in their endeavors, potentially wasting a significant amount of taxpayer's funds (recalling that the grant of a charter will unlock public funding). The regulatory framework, therefore, puts an onus on the applicant to prove these matters to evidence capacity. Predictably, however, there is an associated dictatorship cost. Not only are there positive transaction costs

63 Note: parts of this section have been summarised or paraphrased for brevity.
associated with regulatory compliance, but the approval power must be given to some public authority to determine whether the conditions have been met.

Section 38–1802.03(d) of the DC Code requires the chartering authority to approve the petition if it determines that:

- The petition satisfies the legislative requirements (and, if applicable, the applicant agrees to satisfy any lawful condition or requirement provided by the chartering authority);
- The public charter school has the ability to meet the educational objectives outlined in the petition;
- The approval will not cause the chartering authority to exceed the specified limit under the Code (each eligible chartering authority cannot approve more than 10 petitions to establish a public charter school per year).

Many of the factors required in the initial petition are objective in that the applicant will provide the documentation, or they will not (although foreseeably, charter authorizers may request further information where initial documentation is thought to be insufficient).

Additionally, on a plain and ordinary reading of the statute, there does not appear to be overriding discretion for the authorizer to reject the application. However, there are several subjective matters, including the need for the proposed school and the proposed school’s ability to meet the educational objectives. This is the crux of the dictatorship costs associated with establishing charter schools. An authorizer will need to be persuaded of the merits of the application. There is a risk that an authorizer may be prone to capture (e.g., Stigler 1971) other forms of public corruption (e.g., Djankov et al. 2003) or otherwise capricious conduct. What is interesting is that several sections appear to be designed to temper these risks of dictatorship.

For instance, following the receipt of an application, section 38–1802.03(b) of the DC Code requires that the chartering authority to hold a public hearing in order to ‘gather the information that is necessary for the eligible chartering authority to make the decision to approve or deny the petition.’ The chartering authority must publicly advertise this (§ 38–1802.03(c)). In addition to transparency and accountability,

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64 Note: parts of this section have been summarised or paraphrased for brevity.
holding public hearings provides the applicant with an opportunity to address any objections raised. Further, a decision to deny the charter petition shall be subject to judicial review by a court or administrative review by the Office of the State Superintendent of Education (§ 38–1802.03(j)(2)). The purpose of these procedural rules is to limit error on the part of the administrative decision-maker (e.g., Posner 2014; Wendel 1993).

Another example is section 38–1802.03(j)(1) that states that ‘no governmental entity, elected official, or employee of the District of Columbia shall make, participate in making, or intervene in the making of, the decision to approve or deny such a petition.’ This requirement guards against the perceived dictatorship costs of bias or capture – the risk that politicians, bureaucrats in the boards of education, or traditional government school district officials may view charter schools in competition to state public schools and will oppose or otherwise hamper an application on that basis (e.g., Vergari 2001; 2007).

Who can authorize a charter? The relevant chartering authority in DC is the Public Charter School Board (PCSB) – a public body, but independent of executive government and therefore separate from the Board of Education that operates other government schools. School choice proponents perceive several costs of dictatorship in highlighting the need for independent authorizers. These include that the administrators of the traditional government schooling system may be skeptical or openly hostile to charters, seek to impose unreasonable conditions on charters, and may be subject to political pressure (Vergari 2001).

Although this chapter primarily uses DC as a model law, it is worth noting that other states have multiple authorizing authorities. These include a combination of local school boards, tertiary institutions, non-profit organizations, and state departments (Wohlstetter et al. 2015; Vergari 2001). In an analysis of ten years of data from

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65 An exception to this includes employees of a public school which is the subject of a conversion (§ 38–1802.03(j)(1)).
66 Technically § 38–1800.02 provides that “eligible chartering authority” also includes the Board of Education and any entity designated as an eligible chartering authority by enactment of a bill by the District of Columbia Council after April 26, 1996. However, the Board of Education has transferred all charter school authorizing power over to the Public Charter School Board and there have been no other authorities created at the time of submission.
Minnesota, Carlson, Lavery, and Witte (2012, p. 265) found that ‘the type of institution that authorizes a charter school has no statistically significant relationship with mean levels of student achievement.’ Although, less is known about the effect of multiple authorizers more generally (Carlson, Lavery, and Witte 2012; Wohlstetter et al. 2015). Proponents of stronger school choice claim that states with multiple chartering authorities have almost three and a half times more charter schools than states that only allow local school board approval (Center for Education Reform, 2011).

The Center for Education Reform (2011, p. 1) explains why multiple authorizers are important to mitigate perceived dictatorship costs.

States that do not have multiple authorizers create hostile environments for charters because school boards often view charter schools as competition and reject applications not based on merit, but on politics. Without objective oversight from multiple authorizers, charter schools have no alternatives for approval, and quality growth in a state is severely stunted. School board hostility has prevented certain states, such as Maryland, Tennessee, and Rhode Island from meeting growing demand for school choice.

For this reason, on the dimensions of “strong” charter laws is that ‘a charter school must be allowed to seek sponsorship from a public entity other than a local school board and/or be allowed to appeal a school board decision to another body’ (Hess and Davis 2000, p. 17 citing Bierlein 1997; see also Vergari 2003). DC’s laws meet this test as it can appeal the decision, noted above. Also, despite having a single authorizing body, the CER (2001, p. 3) commended DC’s charter laws stating that the PCSB is ‘a model to the nation for its effective oversight and performance management tools that hold schools accountable and the DC PCSB schools consistently outpace conventional public school achievement.’

The fact that any person can file an application, and the existence of an independent authorizing body with grounds to review a decision, provides evidence that there are more spontaneous creation mechanisms built into the regulatory framework as compared to centralized government schools. Although there is a limit to this dynamism, because, as detailed above, the DC charter laws have an annual cap on

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67 In Minnesota, charter school laws permit local school boards, postsecondary institutions, nonprofit organizations, and the Minnesota Department of Education to act as authorizers.
the number of approvals that the PCSB can issue (§ 38–1802.03(i)). This has the effect of weakening charter laws (Vergari 2003) by limiting the dynamism of the creation mechanism.

A recent law review article has highlighted some of the perceived disorder costs associated with having independent authorizers for charter schools. Kasuboski (2018) provides a legislative analysis of the state of Ohio’s charter school laws and highlighted two examples of the risks presented by opportunistic companies.

In the first example, a charter authorizer contracted out its supervision to a for-profit corporation which acted with an apparent conflict of interest. Kasuboski (2018, p. 8) explained that together, they were the responsible sponsors in the scandal-laden case of Olympus Charter Schools, a group of eight charter schools that were managed by a for-profit corporation and only operated for a month before they "collapsed.". At the time that the schools closed, the eight schools were serving a total of 128 students, even though the state had been paying for 700 students. [The for-profit contractor] was to serve as the treasurer for Olympus Charter Schools and as its sponsor’s "financial watchdog," which a spokesperson from the company believed "was not a conflict of interest."68

In the second example, Kasuboski (2018, p. 8) is more explicit and alleges ‘corruption’ on the part of the authorizer.

Kids Count was the authorizer tasked with overseeing Richard Allen Schools. The Institute of Charter School Management Resources (a for-profit company) provided consulting for and collected lease payments from Richard Allen Schools. The Institute of Management Resources (a non-profit group) managed the financial resources for Richard Allen Schools. Jeanette Harris founded Kids Count; Jeanette Harris served as the CEO and President of Richard Allen Schools; Jeanette Harris ran the Institute of Charter School Management Resources; Jeanette Harris founded the Institute of Management Resources. This web meant that the schools were essentially overseen by themselves, and that one group was able to cycle taxpayer dollars into personal income.69

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68 Footnotes omitted.
69 Footnotes omitted.
On this basis, Kasuboski (2018, p. 14) calls for stricter regulation of authorizers proposing that ‘the state should establish greater independence between those who authorize and monitor charter schools, and those who have a vested interest in their success.’ This is a sensible recommendation for Ohio. Regulating for independence would mitigate costs of disorder mentioned above without necessarily increasing dictatorship costs as the independence from the central government department or the political process is maintained. Accordingly, such proposals would represent an institutional efficiency gain.

How do the provisions of the DC Code guard against risks such as these? In 2016, the Public Charter School Fiscal Transparency Amendment Act of 2015 was signed into law effective 8 October 2016. The effect of these amendments is to (i) require directors of charter schools to disclose conflicts of interest and establish governance rules for approving contracts or transactions; (ii) require greater transparency and reporting when charter schools contract out to other school management organizations; and (iii) establish that a failure to comply with conflict of interest obligations constitute financial mismanagement – risking revocation of a charter.

Washington, D.C. has been affected by cases of financial mismanagement predating these amendments. In a joint report, the Center for Popular Democracy and the Alliance to Reclaim Our Schools (2015) highlighted three specific cases of financial mismanagement. However, the DC code has mechanisms of destruction which operated in all cases to manage the risk. Effectively, mechanisms of destruction provide for ex post enforcement of isolated cases of actual mismanagement as opposed to increasing the amount of ex ante regulation. Those mechanisms of destruction will now be discussed.

**Destruction phase**

The public sector suffers from weak or non-existent mechanisms of destruction (Potts 2010). However, a key feature of charter schools is that decentralized mechanisms for destruction are built into the legislative framework. Similarly to the creation phase, charter authorizers have the power to revoke a charter. This is why some have

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70 D.C. Law 21-153.
described charters as a “contract” that can be revoked if certain conditions are breached (e.g., Grady 2012). Applying the bargain theory of contract (e.g., Cooter and Ulen 2007), it can be seen that part of the “bargain” of gaining access to the institutional features of a charter school is that the matters provided by the applicant in the petition (the “terms of the contract”) can be enforced.

Of course, a charter is not a contract in the common law sense, but the legislative framework borrows from this conception. In Hayekian jurisprudence (see Hayek 1973) there is a distinction between “nomos” (those rules or laws applying within the social order – discovered law) and “thesis” (those rules or laws applying within an organization – made law). For Hayek’s purposes, among other things, this distinction serves as a philosophical basis for the separation of powers. For our purposes, it serves as another way of looking at the function of legislation. Hayek (1973, p. 127) explains that ‘a statute (thesis) passed by a legislature may have all the attributes of a nomos, and is likely to have them if deliberately modeled after the nomos. But it need not, and in most of the cases where legislation is wanted it cannot have this character’. Applied to the laws passed to provide public services such as education, in most cases, the legislation has the character of rules applying within an organization – directing how services are to be provided. Under Hayek’s characterization, restrictive regulation is the default setting; however, legislation can have the attributes of the nomos if it is designed that way. There is something to be said about this here, where an independent chartering authority is forming an enforceable agreement with another independent organization seeking to provide public services.

Specifically, under section 38-1802.13 of the DC Code, a chartering authority has the power to revoke a charter where the authority determines that the school:

- committed a violation of applicable law;
- materially violated the conditions, terms, standards, or procedures set forth in the charter;
- failed to meet the goals and student academic achievement expectations set forth in the charter;
• engaged in a pattern of non-adherence to generally accepted accounting principles;
• engaged in a pattern of fiscal mismanagement; or
• is no longer financially viable.\(^71\)

For the first three cases, the authority has discretion about whether or not the charter school is revoked (“may”). For the latter three cases, the authority is required to revoke the charter (“shall”). Of course, all of these matters are findings of fact for the authority’s determination and are potentially reviewable. The two key differences under the institutional possibility of charter schools as compared to government schools are that the decision-maker is the independent authorizer rather than a Minister (or another executive actor) and that there is a rule-based mechanism to trigger the action.\(^72\)

Where the chartering authority decides to revoke a charter for one of the above reasons, the Board of Trustees of the relevant charter school can request an informal hearing to persuade the chartering authority otherwise (DC Code § 38-1802.13(c)(2)). If the chartering authority maintains the decision, the Board of Trustees could then seek judicial review (DC Code § 38-1802.13(c)(6)(a)).\(^73\) Although parallels can be drawn between these procedural requirements and the problems that have been identified earlier in this thesis with the restrictions on the exercise of the destruction mechanisms in Victoria, it can be distinguished on the basis that there is a rule-based mechanism and does not rely on the complete discretion of a single Minister. Additionally, school closure in the Quality Provision Framework (QPF) was fundamentally for enrolment reasons rather than poor performance (Caldwell & Hayward 1998).\(^74\)

How have these powers been exercised in practice? The data shows that between 1996 and 2016, 108 charters were approved in DC (PCSB 2016). Of these, six were approved but did not open (PCSB 2016). Of the 101 schools that did open, 37

\(^71\) Note: parts of this section have been summarised or paraphrased for brevity.
\(^72\) See Chapter 3 for the examination of closure of Australian government schools.
\(^73\) The DC Code specifies that the chartering authority’s decision to revoke a charter shall be upheld unless the court finds that the decision was ‘arbitrary and capricious or clearly erroneous’ (§ 38–1802.13(c)(6)(b)).
\(^74\) See Chapter 4.
subsequently closed, including seven which merged with or were acquired by other operators (PCSB 2016). The reasons for the closures varied. 16 schools were closed citing academic deficiencies (of which two also had governance deficiencies, one also had financial and government deficiencies and one also had financial and management deficiencies); 11 schools closed following financial and/or management deficiencies; two schools suffered from fiscal mismanagement; and five schools closed after low enrolments that subsequently led to financial deficiencies – with no reasons recorded for the remaining three schools (PCSB 2016). The method of closure also varied: eighteen charter schools had their charter revoked; 16 charter schools voluntarily relinquished their charter; and three charter schools were not renewed at the 15-year mark (PCSB 2016).

A few case studies emerge from the joint report by the Center for Popular Democracy (CPD) and the Alliance to Reclaim Our Schools (AROS), which would all be included in the above figures. First, the School for Arts and Learning (SAIL) was a charter set up to cater for students with special needs (PCSB 2011). It was alleged that SAIL was using public grants to fund the private expenditure of the founder and his wife (CPD and AROS 2015). The school was closed in 2011 after it voluntarily relinquished its charter, stating that it did not have the financial resources to keep operating (PCSB 2011). This followed an investigation by the Federal Bureau of Investigation (Anderson 2010). Second, the Nia Public Charter School’s founder and former director was sentenced to imprisonment after being found guilty of embezzling (CPD and AROS 2015). This school was subsequently closed for poor academic performance (CPD and AROS 2015). Third, the founder of the Dorothy I. Height Community Academy Public Charter School was alleged to have received $2 million in kickbacks from a private management company (CPD and AROS 2015). The PCSB voted to revoke the school’s charter on the grounds of fiscal mismanagement (PCSB 2015). What is striking about all of these cases is that they serve as an example of the perceived costs of disorder within this institutional possibility but show that the destruction mechanism built into the regulatory framework empowered the PCSB to take appropriate action.

The public sector innovation literature has highlighted the risk-averse nature of the bureaucracy – fearing wastage and negative media (e.g., Mulgan and Albury 2003;
Albury 2005; Koch et al. 2006; Bommert 2010; Potts and Kastelle 2010; Mulgan 2014; c.f., Torugsa and Arundel 2017). Given the weak destruction mechanisms that exist within centralized institutional possibilities, active regulatory measures are needed inside government to prevent wastage. The problem is that preventing bad wastage (e.g., financial mismanagement) also constrains good wastage (e.g., unsuccessful innovation) (Potts 2009). Decentralized systems such as charter schools manage the perceived disorder costs differently. When bad wastage occurs at a school level, mechanisms kick in leading to the potential closure of services. Nevertheless, it should be acknowledged that any closure will displace students, and there is not much research into these effects (Vergari 2007).

Another in-built mechanism of destruction is that a charter is not granted indefinitely. The DC code provides that ‘a charter granted to a public charter school shall remain in force for a 15-year period’ and can be renewed for further periods of 15 years (§ 38–1802.12(a)). Further, the DC code requires chartering authorities to conduct a review of the charter school ‘at least once every 5 years to determine whether the charter should be revoked’ (§ 38–1802.12(a)). This provides a rule-based mechanism for revocation because the chartering authority is required to close the school on certain grounds, as discussed above. This introduces some dynamism into government expenditure in contrast to a centralized institutional possibility where funding is typically granted ad infinitum. However, the level of dynamism should not be overstated – particularly compared to voucher programs considered later in this chapter. The review mechanism can be seen as charter laws giving effect to the compromise between completely decentralizing the provision of public education and government schooling (Vergari 2003; Heise 2012) in that their establishment and closure are not determined by the operation of market forces but not by a central government department either.

The last matter to consider in this sub-section of the chapter is what happens when a school is closed. Under the DC Code, once a school has had its charter revoked, not

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75 For a recent exception to this see, e.g., Carlson and Lavertu (2016) who consider the link between the closures of charter schools and student achievement in Ohio.

76 One Australian lawmaker has called for putting “sunset clauses” on new government expenditure within the authorizing legislation (Paterson 2019).
renewed, or has voluntarily relinquished its charter, the land and capital resources of the school are redirected through mandatory dissolution provisions (§ 38–1802.13).

Specifically, section 38-1802.13(d) the DC Code requires the non-profit corporation operating the charter school to dissolve and, after debts are discharged and any other creditors’ claims fulfilled, any remaining assets remaining will be:

- Transferred or conveyed to the District of Columbia, to be controlled by and subject to the disposition instructions of the Office of the State Superintendent of Education and used solely for educational or similar purposes; or
- Transferred to another charter school in a transaction overseen by the chartering authority if the acquiring school agrees to enroll the closing school's students at the start of the following school year.\(^{77}\)

The closure mechanism completes the evolutionary process. However, it is noted that the charter laws constrain the way that the District of Columbia or the chartering authority can deal with these public resources. For instance, it does not allow the government to use the assets to fund or provide public services in areas other than education. This is a similar arrangement to the QPF in Victoria (Caldwell and Hayward 1988), presented in Chapter 4, where assets from closed schools were used to fund other education projects. Although recall that the distribution process in Victoria was an exercise of Ministerial discretion (approved by Cabinet) making a political decision (Caldwell and Hayward 1988), whereas the DC charter laws provide for a rule-based mechanism. Again, this provides evidence that the institutional possibility of charter schools has emerged as a compromise between voucher programs and centralized government schools (Vergari 2003).

### 6.4.2 Decentralizing features

Our legislative analysis continues in this sub-section, considering several important decentralizing features that flow from the regulation of creation and destruction considered above. The features further distinguish the institutional structure of charter schools from government schools or Independent Public Schools. The key

\(^{77}\) Note: parts of this section have been summarised or paraphrased for brevity.
decentralizing features include the concept of the charter school as a separate legal identity, school autonomy over policies and procedures, giving schools the choice of an accreditation body, and uncoupling enrolments from geographic regions.

First, charter schools are non-profit entities that are individual bodies corporate. The legal concept of separate legal entity is well established in the United States (e.g., Blumberg 1990) as it is in other common law jurisdictions. The effect of incorporation is that the law will treat the corporation as legally separate from its board members (directors or trustees), management (principals, teachers, and other administrative staff), funders (government) or regulators (authorizers). A corporation’s powers flow from the incorporating statute and its internal rules. Under the DC code, charter schools’ powers include the ability to adopt a name and corporate seal, to acquire real property, to make contracts and leases, to receive and disperse funds, to incur debts, and to sue and be sued (§ 38–1802.04(b)). The fact of separate legal entity has several implications.

For instance, teachers are employees of the charter school – rather than the education department. This is made clear by the DC Code (§ 38-1802.07(c)) which states that ‘an employee of a public charter school shall not be considered to be an employee of the District of Columbia Government.’ This means that individual schools can determine the number of staff they will employ and set their own pay and conditions. One early study of California charter schools discussed the limiting role of teachers’ unions in the public school system, in general, claiming that charter schools are ‘less constrained by union contracts’ (Corwin, 1996, p. 25). One example of employment innovation is the use of merit pay that is not found in either state public schools or independent public schools (Anderson and Marsh 1998; Podgursky and Ballou 2001; Preston et al. 2012). Another example is the non-use of tenure, and teachers and parents influencing new staff hiring (Preston et al. 2012). As has been shown in previous chapters, enhanced bargaining over these conditions at an individual school level provides the flexibility for other innovative practices to be introduced.

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78 § 38–1802.04 requires charter schools to be non-profit; and have benefit of name and corporate seal only if the name includes the words “public charter school”. However, this is not the case in every jurisdiction, as noted by Thompson and Martin (2000).
Separate corporate personality also means that individual schools will have a legal interest in their own buildings and facilities (whether freehold, leasehold, or license). A core idea from the mainline of economic thought (Mitchell and Boettke 2017) is the importance of property rights for economic exchange and development. This supports innovative practices such as the leasing and licensing out of school property for other uses. In practice, separate legal identity is a crucial requirement to allow entrepreneurs to establish schools in response to market opportunities. The boards of trustees of charter schools will consist of parents, community leaders, and so on. These individuals are embedded in their local communities. Accordingly, they will have higher incentives to be more responsive to local preferences than centralized bureaucrats – and better local knowledge and connections to discover those preferences.

Another implication flowing from a separate legal entity is the ability to enter into contracts with third parties, without requiring the permission or oversight of a centralized government department. This leads to the potential to have innovative sources of supply and new forms of organization emerge. For example, under the DC Code, a public charter school is required to be non-profit (§ 38–1802.04) – but charter schools are able to contract out service delivery to for-profit entities known as “Education Management Companies” (EMC) or “Education Management Organizations” (EMO) (e.g., Lubienski 2003a; 2009; Vergari 2003; 2007; Wohlstetter, Smith, and Farrell 2015). Another option is “Charter Management Organizations” (CMO), where charter schools are operated within an organizational hierarchy. CMOs ‘[manage] multiple charter schools with a common mission, instructional design, and home office management team that offers ongoing support to schools’ (Wohlsetter, Smith, and Farrell 2015, p. 122). The emergence of CMOs and EMOs has been described as an “unintended consequence” of charter school laws (Wohlsetter, Smith, and Farrell 2013; 2015). As Witt (2003, p. 85) notes, some policy measures ‘induce learning because they create incentives to search for a creative response.’ What are these incentives? The insight of transaction cost economics is that organizational forms allow elements of scale depending on transaction costs – choosing between governments, firms and hierarchies, and markets (e.g., Williamson 1985). The institutional possibilities framework (Djankov et al. 2003; Shleifer 2005; Davidson 2010; 2013) adds to this understanding in that decentralized regulatory approaches
like charter schools with separate legal entities enables new forms of private governance to emerge – seeking to manage social costs. As such, the decentralized regulatory framework will encourage learning and experimentation with new sources of supply and new organizational forms.

Second, individual schools will tailor policies and procedures in line with their charter. As has been discussed, a vital aspect of the charter school model is that schools are free from many of the regulatory constraints usually applicable to public schools (e.g., Chubb and Moe 1990; Vergari 1999; Hess 2001). Although in some jurisdictions there may be a mismatch between autonomy in charter school theory and practice in the expression of the charter school laws (Finnigan 2007), Washington D.C. charter schools enjoy a high degree of autonomy. Relevantly, section 38-1802.04(c)(3) of the DC Code states, amongst other things, that charter schools:

(A) Shall exercise exclusive control over its expenditures, administration, personnel, and instructional methods, within the limitations imposed in this subchapter; and

(B) Shall be exempt from District of Columbia statutes, policies, rules, and regulations established for the District of Columbia public schools by the Superintendent, Board of Education, Mayor, District of Columbia Council, or Authority, except as otherwise provided in the school’s charter or this subchapter (relating to health and safety, and civil rights).

The significance of school autonomy being entrenched in the legislative framework is that the executive branch of government cannot unwind it – evidencing a lower perceived cost of dictatorship in this institutional possibility as compared to government schools.

Note that the ability to tailor educational offerings is also facilitated through the (quasi) market that comes as a consequence of school choice. As previously discussed, the market theory holds that ‘diverse individual preferences that are neglected in necessarily uniform public provision, because public schools are shielded from market discipline and are not accountable to their consumers’ (Walberg 2000 cited in Lubienski 2003a, p. 398). But the order is essential. The state of nature for public services is a high degree of regulatory control over service delivery (e.g., Mises 1944, Hayek 1973). The opposite case is true of the regulation of business where private
orderings are the default position (Djankov et al. 2003). Therefore, for public services, it is the decentralized legal framework that allows for competition by facilitating a more-spontaneous entry and exit (mechanisms of creation and destruction) so that schools that can operate within the same geographic location as other schools.79 Indeed some charter schools have no geographic boundary at all – running wholly online (e.g., Woodworth et al. 2015). Further, because decision making is made locally rather than by the central bureaucracy, services are subject to a lower risk of government failures such as regulatory capture and rent-seeking behavior (e.g., Stigler 1971).

A separate but related issue is the freedom given to charter schools to set their own curriculum. Recall that one of the significant perceived costs of dictatorship with any system of public education is the imposition of values (Mill 1859; Friedman 1955; Hayek 1960; McLaughlin 1995). One of the reasons that it can be said that charter schools are characterized by a lower cost of dictatorship than traditional government schools is that providing schools (and therefore parents) with a choice of curriculum program means that values cannot be imposed on students by the state. In other words, the ability for schools to choose a curriculum forms part of the ‘freedom from government influence’ granted to charter schools (Verven 2017, p. 977). It is important to note, however, that the freedom to choose is not unconstrained – as curriculum and other learning and teaching standards will be something that is assessed by the accreditation bodies.80

Third, charter schools are given options for accreditation. While this is a form of public control to limit costs of disorder, schools are given a choice about which body best suits its mission and charter. This is quite distinct from requirements under the laws in Australian jurisdictions which are regulated by a single government agency.81 As noted above, the DC Code requires charter schools to ‘seek, obtain and maintain’ accreditation from at least one educational accreditation body as part of its petition – forming part of its charter (§38–1802.02(16)). Charter schools are given a range of

79 The effect of competition will be expanded further in Section 5 of this chapter.
80 Note that Washington, D.C. has adopted the Common Core initiative (akin to a national curriculum). See, generally, § 38–1803.11 of the DC Code.
81E.g. In Victoria it is the Victorian Department of Education and Training, on behalf of the Victorian Registrations & Qualifications Authority.
options that can be pursued, or the ability to come to another agreement with the chartering authority. Specifically, section 38–1802.02(16) lists:

- The Middle States Association of Colleges and Schools;
- The Association of Independent Maryland Schools;
- The Southern Association of Colleges and Schools;
- The Virginia Association of Independent Schools;
- American Montessori Internationale;
- The American Montessori Society;
- The National Academy of Early Childhood Programs; or
- Any other accrediting body deemed appropriate by the eligible chartering authority that granted the charter to the school.

All of these bodies have their own requirements, policies, and standards that a charter school will need to meet in order to be accredited. These requirements have legal force in that a charter school is required to maintain its accreditation (§38–1802.02(16)). Again, this evidences that charter schools are not without regulatory constraints – with regulatory mandates given to both charter authorizers and other accreditation bodies.

Fourth, charter school enrolments are not limited by geographic area (§ 38–1802.06(a)). Of course, one of the fundamental ideas behind school choice: empowering parents to make decisions about where their children are educated, rather than this decision being planned by the state. However, a lack of price signals means that demand for some charter schools may exceed capacity. Under a system of complete enrolment freedom without prices, the risk of the state making an arbitrary or adverse decision is traded-off against an increased risk of social harm through schools using other clearing mechanisms such as discrimination. The D.C. code mitigates against this possibility by providing that a charter school may limit enrolment to ‘specific grade levels’ but may not limit enrolments on the basis of ‘race, color, religion, national origin, language spoken, intellectual or athletic ability, measures of achievement or aptitude, or status as a student with special needs’ (§38–1802.06(b)). Instead, the charter laws introduce a random lottery mechanism to deal with any over-enrolments (§ 38–1802.06(c)).
Overall, the decentralizing features combine, resulting in less state control over the delivery of services compared to traditional government schools – a reduction in the costs of dictatorship. Having observed decreased dictatorship costs, the institutional possibilities frontier model (Djankov et al. 2003) predicts that there will be an increase in the perceived costs of disorder. Of course, that the trade-off is institutionally efficient is a subjective judgment (Allen and Berg 2017). Advocates on both sides of the school choice debate will be assisted in their efforts by empirical research into the effects (educational and non-education) of charter schools compared to traditional government schools (Vergari 2007). One recent study has shown that that charter schools in Washington, D.C., are 68 percent more cost-effective than traditional government schools and represent an 86 percent higher return on investment (DeAngelis et al. 2019). Therefore, despite the criticism that charters divert funding away from traditional government schools (e.g., Lehnen 2016), recent evidence appears to show that charters are a more cost-efficient institutional arrangement for the delivery of public education services. This helps explain the increased popularity of charter schools – the positive outcomes cause a shift in the perceived trade-off, with parents and guardians being relatively less sensitive to the perceived costs of disorder and relatively more sensitive to the costs of dictatorship.

So far, by examining the DC code, this section of the chapter has shown that charter schools have a lower perceived cost of dictatorship, although they are still subject to regulatory constraints. This predicts that charter schools will have greater innovative potential over traditional government schools. The next section considers this prediction in light of the empirical evidence.

6.4.3 Charter schools and innovation, reviewing the evidence

This legislative analysis of charter schools provided in this chapter underscores the fact that charters create a more dynamic environment compared to traditional government schools and Independent Public Schools. Finnigan (2007, p. 504) notes that ‘the theory of charter schools assumes that this combination of autonomy and accountability will allow educators to implement innovative ideas and practices.’ Similarly, Bulkley and Fisler (2003, p. 319) state that one of the rationales for charter schools is that ‘the interplay of autonomy and market forces would make charter schools more innovative and of higher quality than traditional public schools in such
areas as instruction and curriculum; school organization and governance; and, in some cases, teacher qualifications and union involvement in schools.’

In the model proposed by Bulkley and Fisler (2003), adapted in Figure 6.1 below, innovation in charter schools is a function of creation of new charter schools (or allowing traditional government schools to convert to charter schools), charter schools having greater autonomy to manage service delivery at a local level, and schools being held accountable to both the market (i.e., parents) and the government (i.e., through authorizers). Importantly, these characteristics are a function of the charter school laws. The contribution of this chapter is to show the fundamental importance of charter school legislation in creating these conditions.

**Figure 6.1 – Rationale for Charter Schools**

![Diagram showing the rationale for charter schools]

**Source:** Adapted from Bulkley and Fisler, p. 319.

However, the empirical evidence of the link between charter schools and innovation is mixed (see, e.g., Lubienski 2003a; Preston et al. 2012; Wohlstetter, Smith, and Farrell 2013) notwithstanding the fact that innovation is ‘specified as a policy goal in approximately three-quarters of the [charter school] laws, with virtually all of them explicitly seeking innovations in instructional practice such as “teaching methods”’ (Lubienski 2003a, p. 399).\(^8\) Four reviews of the literature are particularly helpful in digesting the empirical evidence.

First, Lubienski (2003a) reviewed 56 empirical studies, which remains the most comprehensive meta-analysis on charter school innovation. The author classified innovations as “educational” changes (practices regarding curricular content and

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\(^8\) The DC Code does not list innovation as a specific policy objective, but refers to the ability to disseminate “innovative practices” as a requirement for corporations to receive funding (§ 38–1806.03).
instructional strategies with an immediate impact at the classroom-level), and “administrative” changes (organization-level practices and structural designs that do not directly affect classroom techniques or content). Broadly, the study found that organizational innovations were present in some charter schools (e.g., class sizes, discipline codes, parental involvement, marking techniques, merit pay, school uniforms), as were educational innovations (e.g., new curriculum programs, individual education planning or instruction, use of technology). However, it was noted that many of the educational practices listed as innovative were already evident in traditional government schools – but may be new in the local context. One of the reasons for mixed evidence may be the tension in defining innovation (Arsen, Plank and Sykes 1999; Lubienski 2003a)\(^\text{83}\).

Second, Bulkley and Fisler (2003) reviewed a handful of studies and arranged the evidence of innovation in three categories – governance and management, school organization, and teaching and learning – following the framework of Arsen, Plank, and Sykes (1999). In the governance and management category, it was noted that charter schools made much heavier use of contracting out functions to Education Management Organizations and that there was a lesser degree of involvement of teaching unions, as compared to traditional government schools. In school organization, reported innovations included ‘school and class sizes, grade configurations, staffing patterns, and use of staff time,’ total school size, and less use of state teacher certifications (Bulkley and Fisler 2003, p. 325). Under the category of teaching and learning, it was noted that many charter schools had a “unifying focus” in terms of specialist extra-curricular activities or a philosophical approach to education (Bulkley and Fisler 2003). The review noted a need for further research.

Third, Lake (2008, p. 121) considers that ‘innovation is fundamentally in the eye of the beholder’. On this basis, Lake (2008) offers a cascading definition of innovation: innovation as something never before seen or done in public education (e.g., new governance arrangements and virtual schools); innovation as something new to a community or student population (e.g., introducing new educational philosophies and methodologies, such as Montessori, and specialised programs for gifted or special-

\(^{83}\) This is also a feature of the public sector innovation literature, as Chapter 1 of this thesis has shown.
needs students); or innovation as something that responds to family needs and preferences (e.g., enhanced school safety, or a focus of the school’s curriculum around a specialized theme). Lake (2008) also mentions a study that found greater adoption of innovative practices in charter schools compared to traditional government schools.

Fourth, Preston et al. (2012) used the 2007-08 Schools and Staffing Survey – a nationally representative sample capturing 203 charter schools and 739 state public schools across 36 states of the US. Overall, the study found that charter schools were not more innovative than state public schools – but this headline overlooks some of the key findings when the local context is considered. After all, it is the local context that matters. As Wohlstetter, Smith, and Farrell (2013; 2015) suggest, charter schools sought to fill niches in the public education market where traditional public schools had not performed well, for example with student cohorts of at-risk or low-achieving minorities. In considering local context, Preston et al. (2012) found evidence of innovation in academic support services (e.g., voluntary tutoring, language immersion, internships, distance learning programs), staffing policies (e.g. tenure and merit pay), organisational structures (e.g., looping, use of houses, mixed-age or multi-grade classrooms, block scheduling, year-round scheduling), and governance (teachers and parents have an influence on new staff hiring).

There is also evidence that the state public school system is innovating in response to the competition of charter schools. For example, a Massachusetts study (Steedman, Cummins and Ricciardelli 2014) found that state public schools introduced administrative innovations (e.g., marketing).

6.4.4 Conclusion of charter school law analysis

Once a policy innovation, charter schools are now established as a ‘permanent reform that will be tinkered with but that likely will not disappear’ (Wohlstetter, Smith, and Farrell 2013, p. 1). In this legislative analysis on charter schools, it has been shown that charter school laws in Washington, D.C, provide for more dynamic delivery of public services by facilitating the organic establishment of charter schools and the revocation of those charters where operators have breached the conditions of the “bargain”. It would be a fair assessment to say that charter schools had not lived up
to the hype of being ‘laboratories of innovation’ as US President Barack Obama has referred to them (as cited in Lubienski 2009). This may be the language of political rhetoric rather than considered research. It may also be that charter schools do not have the autonomy in practice that the theory assumes, as research has shown charters in jurisdictions outside Washington, D.C. must negotiate exceptions from state laws and do not have authority over key decisions (Finnigan 2007). As is demonstrated in this section, charter schools are still subject to extensive regulatory constraints. However, just because charter schools have not been as innovative as school choice advocates might suggest, there is nevertheless a strong foundation of evidence to show that there is an increased capacity for innovation compared to traditional government schools with a tighter degree of central government regulation. This section of the chapter has furthered that research by examining the legislative framework in detail – showing that charter schools have a more spontaneous mechanism for the “creation” and “destruction” of public services compared to centralized government schooling considered in previous chapters. The next section of the chapter considers the other major school choice program – voucher programs.

6.5 Voucher Programs

Voucher programs are a form of private school choice. As has been detailed in this chapter, charter schools operate independently of the central government department but are still public schools. In contrast, voucher programs are a distinct institutional possibility that provides parents and guardians with taxpayer funding to use towards private school tuition for their children.84

As mentioned previously, there is nothing new about this concept. School voucher programs have existed in the United States for well over a century (DeAngelis and Erickson 2018). In modern times, Friedman is frequently cited for giving voucher programs an economic analysis. Friedman’s (1955, p. 77-78) contention was to separate the roles of the state in funding education and directly managing schools.

84 In Chapter 3 it was noted that Australia has a partial or “de facto” voucher program (Donnelly 2015) – although it is not usually referred to in these terms – where a percentage of the cost of education at a government school is provided to private schools.
Governments could require a minimum level of education which they could finance by giving parents vouchers redeemable for a specified maximum sum per child per year if spent on "approved" educational services. Parents would then be free to spend this sum and any additional sum on purchasing educational services from an "approved" institution of their own choice. The educational services could be rendered by private enterprises operated for profit, or by non-profit institutions of various kinds. The role of the government would be limited to assuring that the schools met certain minimum standards such as the inclusion of a minimum common content in their programs, much as it now inspects restaurants to assure that they maintain minimum sanitary standards.\textsuperscript{85}

Just as charter school laws differ from one jurisdiction to another, so do voucher program laws. Proponents of voucher programs (e.g. Novak 2009) distinguish between universal voucher programs (where all students receive the same level of funding), differential voucher programs (where all students receive a voucher, adjusted for low-income, special needs, etc.), and targeted voucher programs (where only some students receive vouchers based on low-income, special needs, poor academic performance, etc.). For this reason, there is a diversity of voucher programs even within jurisdictions. For instance, EdChoice (2019) reports that ‘there are 26 operating voucher programs in 15 states—Arkansas, Florida, Georgia, Indiana, Louisiana (2), Maine, Maryland, Mississippi (2), New Hampshire, North Carolina (2), Ohio (5), Oklahoma, Utah, Vermont, Wisconsin (4)—and Washington, D.C.’

By student numbers, voucher programs are not the most pervasive institutional possibility for the provision of public education services. In discussing the origins of the education system in the United States, Raemdonck and Maranto (2018) use the concept of institutional path decency to explain why the United States historically had state-controlled monopoly provision of education rather than publicly funded market-based providers. Nevertheless, the popularity of voucher programs has increased in recent decades following the legislative change. The growth of the popularity of voucher programs is illustrated in Figure 6.2. In total, there are an estimated 188,424 students using voucher programs in the United States in 2019 – more than a doubling over the course of a decade (EdChoice 2019). Because participating in voucher programs are voluntary, the trend indicates that each year an increasing number of

\textsuperscript{85} See further discussion in Chapter 2.
parents and guardians are choosing the private sector over charter schools or traditional government schools. Indeed, Congress found that the voucher program in Washington, D.C. has been oversubscribed since its inception (§ 38–1853.02 DC Code).

**Figure 6.2 – Number of students using school vouchers, United States, 1991-2019**

![Graph showing number of students using school vouchers, United States, 1991-2019]

**Source**: EdChoice 2019.

In the same way as the previous section, this section of the chapter will examine the key regulatory features of voucher programs, using Washington, D.C. as a case study. The connection between voucher programs and innovation will follow the legislative analysis.

### 6.5.1 Opportunity Scholarship Program in Washington, D.C.

The voucher program in Washington, D.C. – called the ‘Opportunity Scholarship Program’ – commenced in 2004. This program is codified in the DC code. In its current form, the *Scholarships for Opportunity and Results Act* (SOAR) is contained in Title
38, Subtitle IV, Chapter 18N, of the DC Code.\footnote{It was first established by the US Congress in 2003 – \textit{D.C. School Choice Incentive Act} 2003 (Public Law 108-199; 118 Stat. 126).} Similarly to the previous section, the legislation was obtained from the official DC Law Library online database, in force as of 22 March 2019.\footnote{<https://code.dccouncil.us/dc/council/code/> (last accessed 28 March 2019).} The theory of school choice suggests that voucher programs will regulate the creation and destruction mechanisms of service provision in a way that is more dynamic than charter schools. However, an examination of the DC code reveals that there are major limitations on this generalization for the DC program.

In general terms, a voucher program is relatively straightforward. First, public funds are granted to an administrator of the program. Second, the administrator passes funding on to eligible students to use as payment (or partial payment) of fees at a private school. Accordingly, there is less regulatory complexity as compared to the charter school laws analyzed in the previous section. However, the DC Code regulates how the funds are distributed, restricts the eligibility of students, and puts requirements on schools accepting vouchers. I will consider these regulatory features in turn.

### 6.5.2 Voucher administrators and student eligibility

The SOAR Act provides that the Secretary of Education may approve grants to an ‘eligible entity’ on a competitive basis (DC Code § 38–1853.04). The entity must be a non-profit organization, or a group of non-profit organizations, and must have a governing board consisting of a majority of DC residents (§ 38–1853.13(2); § 38–1853.05). There is nothing in the statutory provisions that prevent the Secretary from awarding grants to multiple organizations – although, to date, there has only been one at any point in time. The program is currently administered by the not-for-profit Serving Our Children.\footnote{Serving Our Children <https://servingourchildrendc.org> (last accessed 28 March 2019).} An independent administrator is significant for the same reasons as independent charter school authorizers, explained above, accepting some duplication.

The administrator’s primary function under the DC Code is to ‘…provide eligible students with scholarships to pay the tuition, fees, and transportation expenses, if
any, to enable the eligible students to attend the District of Columbia private elementary school or secondary school of their choice. (§ 38–1853.07(a)). The administrator has other subsidiary functions under the DC Code to support the operation of the program, including seeking out parents of eligible students and encouraging private schools to participate in the program (§ 38–1853.05).

The targeted program’s purpose is to provide low-income parents with expanded opportunities for enrolling their children in private schools in the District of Columbia, particularly those whose children attend schools identified for improvement or targeted support (DC Code § 38–1853.03). An “eligible student” is one who comes from a household in receipt of food stamps or ‘whose income does not exceed 185 percent of the poverty line (DC Code § 38–1853.13(4)). The administrator may make scholarships of varying amounts on the basis of need, although the maximum individual scholarship awards for the 2018-19 school year are $13,287 for high school students and up to $8,857 for elementary and middle school students (Serving Our Children 2019; DC Code § 38–1853.07(a)(3)(B)). As such, voucher programs are more restricted in their operation compared to DC Charter Schools that have open enrolment (DC Code § 38–1802.06).

The law makes clear that the intention was for a tripartite funding arrangement and voucher programs ‘would not lead to a reduction in funding for the District of Columbia public and charter schools.’ (DC Code § 38–1853.02). As Hess (2010) suggests, this can be seen as an institutional compromise between the power of school choice proponents and the power of entrenched interests in the government schooling sector – each having separate perceptions of the institutional costs of dictatorship and disorder (Berg and Davidson 2016; Allen and Berg 2017).

… there was no risk of monetary loss to the school district if students departed for private schools. Indeed, the compromise that allowed the voucher-program legislation to pass required that D.C. public schools receive additional funding, even as they would no longer bear the expense of educating the voucher students. (Hess 2010, p. 45)

However, on another level, it is a significant limitation on promoting innovation within centralized public sector services such as government schools. This legislative
feature leads to what Hess (2010, p. 45) describes as ‘choice without consequence.’ That is, one of the valuable aspects of voucher programs as an institutional possibility is that it requires schools to compete for enrolments. This is the market theory underlying school choice (e.g., Lubienski 2003a). If funding does not follow the student, market incentives for innovation are removed.

Funding does follow the student in the institutional possibility of voucher programs. As DeAngelis and Flanders (2019, p. 2) correctly observe, ‘…private schools lose 100% of the revenues associated with voucher students when families choose other schools or when government officials determine their schools should not be able to participate in a voucher program’. This is meaningful because the DC Code does not explicitly regulate the establishment or closure of private schools. Instead, the code regulates the provision of taxpayer funding – discussed further below. The consequence of this is that it is up to parents and guardians of eligible students to make use of this funding.

There are perceived costs of disorder associated with voucher programs generally associated with exercising this parental choice. For instance, Egalite and Wolf (2016, p. 444) highlight two such costs.

... [school choice] critics worry that parents will choose poorly when selecting a school for their child (Lauder & Hughes, 1999) and hypothesize about what will happen to those students who remain in neighborhood traditional public schools. [Also], opponents of school choice have claimed that such a policy undermines the democratic goals of education (Gutmann, 1987).

Another perceived cost of disorder is that taxpayer funding will be wasted on public school programs (Flanders 2018; DeAngelis and Flanders 2019). However, as Chapter 4 of this thesis has shown, school closure is a mechanism of destruction that can be observed in centralized government schools too. As two recent studies on the American state of Milwaukee show, academic results are a predictor of private school closures, so the “churn” of school closures may be ‘emblematic of a functional marketplace’ (Flanders 2018, p. 254; DeAngelis and Flanders 2019). As such, there are not necessarily additional disorder costs with recurrent expenditure to private schools on this basis, including the cost of maintaining capital stock. However, it may
be more problematic where taxpayer funds are used to fund capital works specifically – but these are outside of the scope of the voucher program.

An examination of the legislation reveals that there are regulations imposed on authorizers that appear to be designed in a way that limits the perceived costs of disorder in engaging the private sector to provide public services. For example, the administrator of the voucher program must ‘ensure that the amount of any tuition or fees charged by a school participating [in the voucher program] to an eligible student… does not exceed the amount of tuition or fees that the school charges to students who do not participate in the program’ (§ 38–1853.07(a)). This removes the risk that schools could expropriate the voucher by adding additional fees on top of its ordinary school fees – undermining the purpose of the voucher program by shutting out low-income households. Recent studies, discussed further in Section 6.5.3, suggest that regulation of this type does not affect private schools’ participation in voucher programs (DeAngelis, Burke, and Wolf 2018; 2019). Another example is that the DC Code provides that administrators may use not more than three percent of the amount provided under the grant each year for the administrative expenses of carrying out its program (§ 38–1853.07(b)). This guards against the risk that independent administrators will expropriate funds for their own purposes rather than the public purpose of the voucher program.

6.5.3 Regulation on schools accepting vouchers

The DC Code also regulates schools that accept taxpayer funding from the voucher program. Although, the regulation of public schools is limited compared to charter schools. Technically, the legislation places the obligations on the voucher administrator – meaning that the regulation inside government, in this case, is between the Secretary for Education and the voucher administrator. In practice, schools will not be able to participate in voucher programs unless they agree to these regulatory provisions.

Specifically, section 38–1853.07(a)(4) of the DC Code requires that a student may use no vouchers unless the participating school:

- Maintains a valid certificate of occupancy issued by the District of Columbia;
• Provides information to all prospective students’ information on its school accreditation;
• For schools that have been operating for 5 years or less, submits proof of adequate financial sustainability of the school and the school’s ability to be in operation through the school year;
• Agrees to submit to site visits by the administrator;
• Has financial systems, controls, policies, and procedures to ensure that funds are used for the proper purpose;
• Ensures that for core academic subjects, students are taught by a teacher who has a baccalaureate degree or equivalent degree;
• Is accredited by a national or regional accrediting agency;
• Conducts criminal background checks on school employees; and
• Agrees to data and information reporting requirements, including about academic growth and achievement, high school graduation and college admission rates, and parental satisfaction.89

These regulatory provisions are in addition to the regulations ordinarily governing private schools in Washington, D.C.90 It can be seen that the regulatory provisions are less extensive than those previously considered for a charter school petition and operation. Additionally, there is no cap on the number of participating schools enhancing competition (although there is a cap on eligibility and funding). In this way, voucher programs are subject to less central control and therefore a lower perceived cost of dictatorship. This is enhanced by the fact that schools are subject to the additional regulatory requirements of voucher programs on an opt-in basis. Private schools can continue to operate lawfully without participating in voucher programs.

Perceiving higher disorder costs, some researchers have called for greater regulation of voucher programs – particularly in the area of discrimination. Discriminatory practices can be characterized as either costs or dictatorship or costs of disorder, depending on the actor and institutional context (Djankov et al. 2003). In the context

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89 Note: parts of this section have been summarised or paraphrased for brevity.
of voucher programs, regulation aiming to control discriminatory practices seeks to limit perceived disorder costs but have the consequence of increasing the perception of dictatorship costs.

For instance, it has been claimed that voucher programs result in greater racial and socioeconomic segregation (e.g., Nelson 2017). This is a form of indirect discrimination as a consequence of the operation of school choice programs themselves. That is, schools do not discriminate as such – and segregation does not occur through force – but, as the argument goes, greater choice allows parents to discriminate and move enrolments away from government schools (Friedman 1955). Theoretically, the reason this can be characterized as a perceived cost of disorder is that it could damage social harmony and potentially lead to violence against one group over another. However, the relationship between school choice and increased racial segregation is weak for both charter schools (Garcia 2008) and voucher programs (Green and Winters 2007; Egalite and Wolf 2016; DeAngelis 2017; Swanson 2017).

Another example is more direct discrimination based on personal attributes through the operation of school enrolment policies or teaching practices. Mengler (2018, p. 1261) contends that because ‘private schools have broad discretion to operate as they wish, many [people] fear that the schools have the ability to discriminate against disfavoured groups, such as LGBT students or racial and religious minorities.’

Mengler (2018) goes on to cite anecdotal evidence of voucher-accepting private schools with “anti-LGBT” policies in the American states of Colorado, Indiana, Georgia, and North Carolina. Imposing greater regulation on voucher programs, as Mengler (2018), suggests may be well-intentioned. However, the upshot of the new comparative approach developed in this thesis is that any proposals must be weighed against the trade-off with increased dictatorship costs. Where discriminatory practices go to the maintaining the religious ethos of private schools, regulatory measures will increase the perception of one of the central criticisms typically directed at

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91 Note that Mengler (2018, p. 1252) explains that although other inclusive acronyms (such as LGBTQIA+) are often used in political discourse, Mengler employs “LGBT” throughout the paper ‘as an umbrella term to encompass the full spectrum of sexual and gender minorities affected by voucher discrimination’. Given the author’s explanation, I adopt that usage here.
government intervention in school education – the state controlling values (e.g., Mill 1859; Hayek 1960).  

Imposing regulatory constraints to deal with these perceived disorder costs is likely to constrain the dynamism of public sector service delivery by limiting participation in voucher programs. In the latter case, three recent studies have explicitly considered this link between the regulation of voucher programs and schools’ participation in voucher programs.

First, DeAngelis and Burke (2017) examine private schools in Washington, D.C., Indiana, and Louisiana using data from the Private School Universe Survey from school years 1999-2000 and 2013-14. In relation to DC private schools, the authors of the study reported that ‘private schools in D.C. have around a 10-percentage point lower likelihood of describing themselves as providing an alternative or non-traditional education after switching into the voucher environment’ (DeAngelis and Burke 2017, p. 321). Therefore, the authors suggest that there is a correlation between private schools that subject themselves to voucher program regulation and homogenization of program offerings (DeAngelis and Burke 2017).

The same states were the subject of another study conducted by Sude, DeAngelis, and Wolf (2018). The focus of that study was on the effects of regulation on the likelihood of private schools participating in voucher programs. The study used the Private School Universe Survey in conjunction with the Great Schools Review scores. In summary, the study found that higher-quality private schools (characterized by higher tuition fees and larger enrollments) were less likely to participate in voucher programs. However, this study did not go into the content of the regulatory provisions.

The final two studies, currently published as two separate working papers by DeAngelis, Burke, and Wolf (2018; 2019), examine the effects of voucher regulation on private schools in Florida, and in California and New York, respectively. Previous literature noted that in empirical research into the effect of regulation and voucher

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92 There is a separate academic literature and legal case law, beyond the scope of this thesis, considering whether providing taxpayer dollars to religious schools through voucher programs violates the “Establishment clause” of the United States Constitution and similar provisions in various other American state constitutions. See, e.g., Gibbs (2010); Eberle-Peay (2012); Mead (2015); O’Connor (2015); Wilhelmsen (2016); Black (2018).
programs it was difficult to prove causation rather than correlation (DeAngelis and Burke 2017). These two studies overcame that difficulty by using an experimental methodology of random assignment – using surveys to randomly assign different hypothetical regulations to school leaders to test how willing they would be to participate in the voucher program. After asking demographic questions about the respondent and details of the school’s profile, the survey contained a question asking “If your state launched a new school choice program next academic year, with a value of $6,000 per student, per year, how likely is it that your school would participate in the program?” (2019, p. 36). In the 2018 study, there were four versions of the survey (control group, plus three treatment groups). In the 2019 study, there were five versions of the survey (control group, plus four treatment groups). The only difference was a note explaining the regulatory component that the private school would be subject to – as indicated in Table 6.1.

**Table 6.1 – Surveys of Private School Leaders**

<table>
<thead>
<tr>
<th>Control Group</th>
<th>“This program would not require any changes in school operations or additional government regulations”.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Group One</td>
<td>“The only requirement would be that every student would have to take the state standardized tests each year.”</td>
</tr>
<tr>
<td>Treatment Group Two</td>
<td>“The only requirement would be that your school would have to accept all students who applied (and you would be required to use random lottery for admissions in the case of oversubscription).”</td>
</tr>
<tr>
<td>Treatment Group Three</td>
<td>“The only requirement would be that your school would have to accept the voucher amount ($6,000) as full payment for voucher students.”</td>
</tr>
<tr>
<td>Treatment Group Four (2019 study only)</td>
<td>“The only requirement would be that every student would have to take nationally norm-referenced standardized tests each year.”</td>
</tr>
</tbody>
</table>

**Source:** DeAngelis, Burke, and Wolf (2018; 2019)

Studies of this kind have some limitations as the authors acknowledge in some detail. Nevertheless, the results are telling. For the Florida study (DeAngelis, Burke, and Wolf 2018, p. 1) it was found that:
Relative to no regulations...open-enrollment mandates reduce the likelihood that private schools are certain to participate by about 17 percentage points, or 70 percent. State standardized testing requirements reduce the likelihood that private schools are certain to participate by 11 percentage points, or 44 percent. We find no evidence to suggest that the prohibition of copayment affects program participation overall.

Similarly, for California and New York (DeAngelis, Burke, and Wolf 2019, p. 2) it was found that:

Relative to no regulations...open-enrollment mandates reduce the likelihood that private school leaders are certain to participate in a hypothetical choice program by about 19 percentage points, or 60 percent. State standardized testing requirements reduce the likelihood that private school leaders are certain to participate by 9 percentage points, or 29 percent. We find no evidence to suggest that the prohibition of copayment or nationally norm-referenced testing requirements affect the overall willingness to participate in a school choice program.

In sum, this is important for the context of my inquiry as it highlights the operation of the perceived dictatorship costs of the regulation of public services – enforced uniformity, and less responsiveness to individual needs and local contexts. The voucher program relies on private schools participating in these programs. In addition, the above stream of research underscores the importance of the economic analysis of legislation to examine the detail of actual – rather than hypothetical – regulatory provisions imposed on the eligibility, operation, and participation in voucher programs.

6.5.4 Voucher programs and innovation, evidence and theory

The contribution of this section of the chapter has been to show how voucher programs offer a more dynamic environment for service delivery, with fewer regulatory provisions as compared with charter schools. This finding suggests an increased scope for innovative practices to be developed within private schools participating in voucher programs. Yet the research on the link between voucher programs and innovation is extremely limited. The principal focus of innovation and school choice research has been on charter schools rather than vouchers programs (e.g., Lubenski 2009). The current research agenda on American voucher programs is focussed on
academic achievement (e.g., Chingos and Peterson 2015; Egalite and Wolf 2016). There is an empirical gap that needs to be addressed by future research in this area. In the meantime, there is another theoretical reason, supporting the legislative analysis in this chapter, that sustains the proposition that a more dynamic environment for service delivery will promote innovation. That is, innovation results from dynamic competitive processes – not because there is a profit incentive (that may have limited relevance in a public sector context), but because the process of competition itself is one of discovery (Hayek 2002).

To date, the underlying theoretical links between voucher programs and innovation are largely the same as previously discussed in relation to charter schools. That is, a combination of school autonomy, market competition, public choice, and institutional theories support the contention that voucher programs will foster greater innovation than state public schools and be more responsive to their local needs as compared to more centralized institutional possibilities. I will not rehearse that line of argument. Instead, I will make an additional contribution to the theory of school choice and innovation by pointing to the role of prices and competition in knowledge generation and preference discovery.

The regulatory constraint theory of public sector innovation developed in this thesis predicts that the private schools participating in a voucher program will be afforded greater autonomy than charter schools, and greater dynamism predicts an even greater level of competition. The school autonomy and school choice literature focus on the increased economic incentives for schools to innovate, and for schools to be responsive to local need. The purpose of this chapter was to show that these economic incentives will be a function of the regulatory framework – and, in turn, the regulatory framework is developed in an attempt to control competing costs of dictatorship and disorder. But there is something more than the economic incentives of school communities to remain open. This is particularly so where organizations are

93 Outside of the United States, Parry (1997a) examines voucher programs in Chile, finding that public schools were more likely to offer innovative programs – although this was largely linked to specific funding. Additionally, in separate paper, Parry (1997b, p. 129) contends that ‘a history of centralization combined with the military government's preoccupation with control hindered the development of initiative and innovation in the education sector and discouraged effective participation’
predominately not-for-profit – or legally required to be non-profit. That something more is knowledge and preference discovery.

Hayek (1945) established that the market system was a way of coordinating knowledge dispersed throughout the community. In this regard, voucher programs introduce a mechanism not seen in other institutional possibilities for service delivery in school education – prices. What is important about prices is not profit motive as such, but the powerful information that is generated about what services are valued and what needs should be fulfilled over others. In a centralized system, bureaucrats make these decisions. In a decentralized system of charter schools, individual school organizations make these decisions in negotiation with public charter authorizers. Under a voucher program, these decisions are made by parents and individual schools with prices attached.

Preferences are not given; instead, knowledge has to be discovered (Hayek 1945; 2002). Therefore, competition not only provides economic incentives for schools to innovate – but provides the mechanism for discovering needs and values as compared to centralized service delivery (Hayek 2002).

In this regard, Hayek (2002, p. 14) makes two salient points for public sector innovation.

First, as far as the management decisions of a genuine economy or of any other organization are concerned, it is only the knowledge of the organizers or managers alone that can have any impact. Second, all members of such a genuine economy—conceived of as a consciously managed organization—must serve the uniform hierarchy of objectives in all their actions. Contrast this with the two advantages of a spontaneous market order or catallaxy: it can use the knowledge of all participants, and the objectives it serves are the particular objectives of all its participants in all their diversity and polarity.

Therefore, the more that public services are legislated to reflect the “nomos” (Hayek 1973), the more people that are necessarily recruited to the task of knowledge generation and innovation – and the more innovation that will be fostered in the context of public sector services. Secondly, an institutional-level preference for competition in public sector services allows for a diversity in service provision.
guarding avoiding high dictatorship costs. However, as has been shown in this chapter, even decentralized institutional possibilities will never fully replicate the “nomos” as there will always be some constraints on public sector innovation embedded into the regulatory framework.

Friedman (1997, p. 343) stated that ‘vouchers are not an end in themselves, they are a means to make a transition from a government to a market system.’ Friedman argued (1997, p. 344) that ‘for this image to be realised it is essential that no conditions be attached to the acceptance of vouchers that interfere with the freedom of private enterprises to experiment, to explore and to innovate.’ This chapter has shown there are indeed conditions be attached to the acceptance of vouchers designed to mitigate the costs of disorder of this institutional possibility. The constraint on public sector innovation is, therefore, a cost of dictatorship.

Looking past innovation, Hess (2010, p. 41) summarises that school voucher programs – such as the one found in Washington D.C. – have succeeded if the ultimate goal of these programs is ‘is to get low-income children out of terrible urban school systems and into high-quality private schools where they can learn safely and increase their odds of getting high-school diplomas.’

6.5.5 Conclusion of voucher program law analysis

In summary, the legislative analysis of school voucher programs has shown that the creation and destruction mechanism for vouchers is constrained by (i) approval by the voucher administrator; and then (ii) the interaction between consumer substitution (i.e., parents of eligible students) and private school participation. This process is, therefore, more analogous to the “nomos” or the private orderings of the market (Hayek 1973; Djankov et al. 2003) as compared to charter schools and centralized government schools. The implication of this is that the regulatory features that restrict participation in the program, or the quantum of the voucher, will act as constraints on the operation of the (relatively more) spontaneous creation and destruction mechanisms – and will, therefore, limit the scope for public sector innovation in this setting.
6.6 Conclusion

The focus of this chapter was to provide a legislative analysis of two popular school choice programs in the United States – charter schools and voucher programs – using the legislative provisions of Washington, D.C. as a case study for exposition and critical analysis. In comparing institutional possibilities, Vergari (2003, p. 512) contends that ‘charter schools can be viewed as a policy compromise between those who would maintain the traditional public education system and those who would like to see it completely overhauled via the adoption of a voucher system of education’ (see also Hess 2010; Heise 2012). The analysis presented in this chapter is consistent with this view.

The results of the legislative analysis confirm that charter schools provide a more dynamic institutional possibility for public education – through more spontaneous mechanisms of creation and destruction. Although charter schools remain highly regulated, the inherent decentralizing features mean that the perceived costs of dictatorship are lower than traditional public schools. This appears to be correlated with the evidence that charter schools foster innovation – although perhaps do not live up to the bold claims of school choice advocates. The review of the legislative provisions of the Opportunity Scholarship program shows that voucher programs are an even more decentralized institutional possibility, characterized by lower regulatory constraints. Recently, other research has confirmed that the regulatory provisions of voucher programs is important for uptake in voucher programs and may discourage specialization. These findings have implications for innovation in this public sector context.

Overall, the results of the legislative analysis presented in this chapter reinforce the central argument of this thesis. Namely, that barriers to creation and destruction in public sector services can be found by analyzing the legislative structures governing service delivery – and more dynamic processes will foster innovation.
Chapter 7 – Summary and conclusion

7.1 Introduction

This thesis has developed a new comparative approach to research in public sector innovation – focusing on the regulatory constraints governing service delivery in a public sector context. School education services has been taken as an exemplar to show that there is no single way that public services are provided. Instead, a range of institutional possibilities can be observed with different regulatory structures to manage the competing social costs of dictatorship and disorder. This thesis has mapped several institutional possibilities through a series of detailed case studies on government schools, independent public schools, charter schools and voucher programs. In summary, it has been shown that each institutional possibility has a distinct regulatory framework governing service delivery resulting in different constraints on public sector innovation.

The purpose of this chapter is to provide a summary and conclusion to the thesis. This chapter will proceed as follows. Section two will draw together a summary of the findings and contributions that I have made in this thesis. Section three will discuss the implications of these contributions, the wider significance of the new comparative approach to regulatory approach for public sector innovation that I have developed, and avenues for future research. Section four deals with the limitations of the research findings. Lastly, in section five, I will conclude the thesis.

7.2 Summary of the thesis findings and contributions

This thesis is comprised of three parts. The first part of the thesis (Chapters 2 and 3) developed a theoretical and methodological approach. The second part of the thesis applied the new comparative approach to public sector innovation to four distinct institutional possibilities for providing public school education services being government schools in Australia (Chapter 4), Independent Public Schools in Queensland (Chapter 5), and American charter schools and voucher programs as enshrined in the Washington, D.C. code (Chapter 6). The third part of the thesis considers the implications arising from the above, as detailed in this chapter.
7.2.1 A new comparative approach to public sector innovation

In the first part of the thesis, I developed the theoretical and methodological framework in response to the following research question:

- **Question one – what is a new comparative approach to public sector innovation?**

The first part of the thesis commenced by undertaking a critical synthesis and evaluation of the public sector innovation literature (Chapter 2). Following this, I developed a new comparative approach to public sector innovation research, focusing on comparing legislative and regulatory structures – along with a Schumpeterian lens for legislative and regulatory analysis based on conceptualizing innovation as the dynamic and evolutionary process of “creative destruction” (Schumpeter 1942) (Chapter 3). A new comparative approach to public sector innovation applies the institutional theory of regulation to facilitate a comparison between different institutional possibilities for regulating public sector service provision, based on new comparative economics and the associated IPF framework (e.g., Djankov et al. 2003; Shleifer 2005).

The motivation for public sector innovation research derives from the considerable size of the public sector, the reliance that individuals place on public sector services, the unique complexity of public sector service delivery, and the place that public sector innovation plays within the context of wider national innovation systems. The public sector innovation literature questions why there is a lack of innovation in the public sector. Specifically, there is an underlying assumption that the public sector suffers from a lack of innovation as compared to the public sector. In applying the Schumpeterian conception of innovation as “creative destruction” (Schumpeter 1942) to the public sector, barriers to the creation phase and destruction phase of innovation have been observed. In critically analyzing and synthesizing the extant public sector innovation literature through the prism of creative destruction, I have shown that the relationship between regulation and public sector innovation is unclear – and this important connection is understudied. An overarching contribution of this thesis is that this lacuna has been addressed in a systematic way.
In investigating the link between regulation and innovation in the public sector context, the standard approach to research in this field would indicate a comparison between the regulation of public sector services and the regulation of private sector services. However, the problem with that approach is public sector services, unlike the private sector, cannot be legally provided without a legislative or regulatory framework governing service delivery. The default institutional setting for private sector services is private market exchange. While the common law and equity have evolved over time to govern contractual disputes, and statutory provisions may impose additional obligations and requirements, the organization and performance of private sector services is governed by mutually beneficial exchange. In this setting, innovation will be adopted and diffused through entrepreneurial action guided by market feedback mechanisms. By contrast, constitutional and democratic governments operating under the rule of law must establish legal frameworks to govern the delivery of public services. The legal frameworks will include the legislative or executive approval for the lawful appropriation of public funds, and legislative and regulatory instruments to govern that expenditure. Such legislative and regulatory measures ensure accountability, certainty, and enforceability in the provision of public sector services.

This proposition builds on existing regulatory theory that holds that regulation is a mechanism for government to control the performance of the public sector in achieving the government’s public policy objectives (Mises 1944; Freiberg 2017; Windholz 2018). Having now rehearsed my argument that public sector services are “creatures” of regulation, the fundamental insight that was developed in the first part of the thesis is that, in public sector innovation research, the regulation of public sector services should not be compared to the regulation of unrelated private sector services. Instead, a new comparative approach to public sector innovation holds that, in comparing the dynamic force of innovation, the performance of public sector entities should be compared with alternative institutional possibilities for delivering the same type of public sector service. Therefore, a new approach is needed for exploring the connection between regulation and public sector innovation.

A framework is required for a comparison between different methods of providing public sector services. The institutional theory of regulation, from new comparative economics holds that ‘the two central dangers that any society faces are disorder and dictatorship’ and ‘institutions function to control these twin dangers…’ (Djankov et al.
The institutional theory of regulation was developed to explain the institutional possibilities and trade-offs involved in the “social control of business” (Djankov et al. 2003; Shleifer 2005). That is, perceived market failures in the commercial context can be solved through institutions such as market competition and other forms of private governance, private enforcement of the law through public courts, public enforcement of the law by public regulatory bodies, or state ownership. The IPF maps the relative costs of dictatorship and disorder of institutional possibilities and this model has been used as a tool for comparative institutional analysis and to critique regulation. In this thesis, I have made a theoretical contribution by extending the institutional theory of regulation and the IPF model to explain the “social control of public sector services” – explaining a lack of innovation as a cost of dictatorship. This theoretical contribution provides the grounding for the empirical findings that I have developed in part two of this thesis.

In summary, the new comparative approach to public sector innovation that I have developed holds that:

- There is no single method of delivering public sector services. In any area of public sector services there is a range of institutional possibilities for service delivery that can be observed (either examining a single jurisdiction or by comparing different jurisdictions) to economize the perceived costs of dictatorship and disorder in different ways.
- In public sector services, each institutional possibility will be grounded in legislative and regulatory structures that have distinct constraints on the dynamism of how public sector services are first adopted, transformed, and ultimately come to an end.

The new comparative approach to public sector innovation predicts that:

- Centralized institutional possibilities will feature regulatory characteristics that, by design, provide central government agencies with the legal power to exercise direct control over service delivery. By contrast, decentralized institutional possibilities will feature regulatory characteristics that separate the oversight and management functions of public service delivery.
• The performance of centralized public sector services will exhibit a relatively greater uniformity in service delivery with less duplication compared to decentralized institutional possibilities (relatively lower disorder costs). However, the regulation of centralized public sector services results in relatively less dynamism in public sector services (relatively higher dictatorship costs). The opposite will be observed for decentralized public sector services.

7.2.2 A regulatory research agenda for public sector innovation

The theoretical and methodological framework that I have developed in the first part of this thesis allowed the following research question to be addressed:

• Question two – how can mechanisms of the creation and destruction phases of innovation be observed within public sector services?

The Schumpeterian view of innovation as “creative destruction” was originally conceptualized to explain the dynamics of private sector activity. In this thesis, the Schumpeterian conception has been applied to non-market production. In the private sector, prices and consumer substitution operate as mechanisms of both creation and destruction. The mechanisms in the public sector are less clear – particularly mechanisms of destruction. Indeed, the review of the public sector innovation literature (Chapter 2) has confirmed Potts’ (2010) earlier contention that researchers have focussed exclusively on the creation phase of public sector innovation. The extant public sector innovation literature either has not considered regulatory frameworks governing public service delivery in a detailed way.

The new comparative approach to public sector innovation calls for regulatory constraints on the delivery of public sector services to be a specific focus of analysis. The method involves sourcing the relevant legislative and regulatory provisions, undertaking a textual analysis to observe creation and destruction mechanisms that are embedded in the regulatory framework, and comparing with other institutional possibilities. This methodology is distinguished from others that seek to construct new artificial mechanisms of creation or destruction (c.f., Potts 2010; Potts and Kastelle 2010).
A contribution of this thesis has been to answer the elusive question of how mechanisms of creation and – particularly – destruction can be observed within a public sector context. It is clear that mechanisms of creation and destruction mechanisms must exist in the public sector, otherwise public sector services or programs could never lawfully be established or come to an end. Specifically, this thesis has shown that the creation and destruction mechanisms will be built into the regulatory framework governing public sector service delivery. Part two of this thesis focussed on applying the new comparative approach to public sector innovation to public school education. The establishment and closure of schools are key creation and destruction mechanisms at a “firm” level. This thesis explored this across three institutional possibilities.

In chapter four, the application section of the thesis began by examining the legislative provisions governing centralized government schools in Australia. The relevant findings of this chapter include:

- A review of the primary legislation in every Australian state and territory regarding government schooling found that ministerial discretion is the sole mechanism for school closure in every Australian jurisdiction.
- One jurisdiction – Western Australia – has the possibility of a rule-based mechanism in legislation (in addition to the general Ministerial power) but this has not been provided for under the relevant regulations.
- The mechanism of ministerial discretion is problematic because of information problems, political economy reasons, and administrative law constraints on the exercise of this power.

In chapter six, the application section of the thesis continued by considering charter schools in Washington, D.C. The review of charter school legislation showed that:

- Charter schools are created by an applicant filing an application to be approved by a chartering authority that is independent of the centralized government school system.
- A chartering authority can revoke charters, in a number of defined circumstances, including where there has been a breach of the terms of the charter, charter school
administrators have engaged unlawful conduct or financial mismanagement, or the charter school is no longer financially viable. Additionally, charter school administrators can voluntarily relinquish its charter. Further, a charter will expire but can be renewed by the chartering authority – a rule-based mechanism for closure.

Finally, also in chapter six, the thesis explored the regulatory framework of the Opportunity Scholarship Program operating in Washington, D.C. A review of the governing legislation revealed that:

- At a “firm” level, schools are established independently of government. As a corollary of this, the public sector leverages from the creation and destruction mechanisms that exist in the private sector.
- Voucher programs provide government funding to eligible students that attend participating schools. Therefore, at a “consumer” level, voucher program laws have the effect of introducing price and consumer substitution mechanisms.

Therefore, the theoretical and application parts of the thesis have combined to show that mechanisms of creation and destruction are governed by the relevant legislative frameworks. One implication of the new comparative approach to public sector innovation is that regulatory constraints on the delivery of public sector services should be a preliminary point for analysis. However, a deeper implication is that regulatory constraints should become the unit of analysis. This will open up new research possibilities to overcome the ‘paucity of measurement’ that has been previously diagnosed in the public sector innovation literature (Demircioglu and Audretsch 2017a, p. 1681).

The implication of the answer to the second research question is that, in observing a lack of public sector innovation, researchers and policymakers should look first to the legislative and regulatory framework governing service delivery and conduct. The review of the public sector innovation literature presented in this thesis (Chapter 2) has shown that these important primary sources have been overlooked in favor of analyzing other research methods such as surveys and interviews. It may be that researchers in public sector administration are familiar with these methods and unfamiliar with statutory interpretation and doctrinal analysis. To be sure, there is
knowledge gained from obtaining and analyzing the usual data sources in the public sector context. However, the assumptions behind the analysis must account for the reality that (i) each public sector organization will have its own legislative mandate for how its public sector services are established, provided, and come to an end; and (ii) the regulatory structures governing service delivery are likely to differ across other state, federal, and international jurisdictions. The implication of the regulatory research agenda is therefore significant for the design of future public sector innovation research – even for research not specifically focussed on the effect of regulation.

Finally, it is important to note that the new comparative approach that I have developed and applied in this thesis cautions against analyzing legislative and regulatory frameworks in isolation from the regulation of other alternative forms of service delivery. Indeed, this is at the heart of the new comparative approach as no institutional arrangement will ever completely economize on the perceived costs of dictatorship and disorder (Djankov et al. 2003).

7.2.3 Institutions of public school education

The second part of the thesis applied the new comparative approach to public sector innovation to four institutions possibilities for the provision of public school education. There are at least three reasons that this context was chosen for application and analysis. First, from a methodological standpoint, it was necessary to select a single type of public sector service to allow a comparison between institutional possibilities of the same service – and there is no single method of providing school education. Second, from a theoretical perspective, the distinct literature of school autonomy and school choice could be brought into conversation with the public sector innovation literature. Third, from a public policy perspective, school education currently accounts for over a quarter of combined Australian state, territory, and federal government expenditure on public services.

The application section of the thesis answered the following research question:
• Question three – what are some examples of the institutional possibilities that can be observed for the provision of public school education services, and what are the key legislative or regulatory characteristics of these possibilities?

In addressing this research question, I presented a series of case studies examining the regulatory frameworks governing service delivery on centralized government schools in Australia (Chapter 4), Independent Public Schools in Queensland (Chapter 5), and American charter schools and voucher programs (Chapter 6). In applying the new comparative approach, and the IPF model, I have shown that these are distinct institutional responses with different combinations of perceived costs of dictatorship and disorder. I will now address this research question in more detail, dealing with each institutional possibility in turn.

Centralized government schools

The first case study focused on centralized government schools in Australia (Chapter 4). In section 4.2, I provided a historical account of public education in Australia. The emergence of two distinct education systems can be explained through the subjective IPF framework. Publicly-funded denominational schools were an institutional response to the perception of high dictatorship costs such as the state imposing values on students while national schools (centralized government schools) were an institutional response to the perception of high disorder costs emanating from duplication, unequal access to services, sectarian and social divisiveness. In section 4.3, I showed that despite the institutional possibilities remaining constant over time there had been a measurable increase in regulatory complexity. This finding was based on an analysis of the historical and current primary legislative provisions governing school education in two Australian state jurisdictions – New South Wales and Victoria – measured in page counts and word counts. A contribution of this chapter is that it provides the first attempt to detail, quantify, and analyze the regulation of government schooling in Australia.

The key regulatory characteristics of centralized government schools are:

• Ministerial power for establishing and closing schools;
• Public ownership and control of land and buildings;
• Restricted geographic enrolment zones;
• Centralized registration and employment of teachers, principals, and other staff;
• Mandated curriculum; and
• Reporting and accountability requirements to education departments.

**Independent Public Schools**

The second case study focused on Independent Public Schools (Chapter 5), exploring regulatory constraints on innovation in the school context by examining Queensland’s IPS program. In section 5.2, I considered the relevance of the school autonomy literature to gain insight into public sector innovation. The school autonomy literature suggests that if schools are under less regulatory constraints from the centralized bureaucracy, schools will enjoy greater autonomy to innovate. This perspective has relevance for public sector innovation because it calls for an examination of the public sector regulatory frameworks. Therefore, I found school autonomy theory is consistent with, and reinforces, the new comparative approach that I had developed earlier in the thesis. Australian IPS programs have received recent attention from education policy researchers, and this chapter engaged with recent studies. However, a conceptual contribution of this case study was analyzing the Queensland IPS program from an economic perspective and bring the school autonomy literature into conversation with public sector innovation literature.

In section 5.3, I introduced the Queensland IPS program. This section explained that the key regulatory characteristics are the same as centralized government schools as there is no legislative distinction between a government school and an IPS under the legislative regime. There is, however, a difference in sub-legislative regulation inside government, as schools accepted into the IPS program are given comparatively greater autonomy to enhance innovation and subject to comparatively less departmental oversight. Accordingly, Independent Public Schools are characterized by relatively lower perceived dictatorship costs, and relatively higher perceived disorder costs.

The key regulatory differences between centralized government schools and Independent Public Schools can be summarized as follows:
- IPS have ability to directly recruit staff and locally manage human resources;
- IPS have greater autonomy to manage infrastructure and financial resources;
- IPS have greater autonomy to partner with industry and other community organizations; and
- IPS have increased flexibility over curriculum offerings and educational practices.

**Charter schools**

The third case study focused on charter schools (Chapter 6). This institutional possibility was born out of the school choice movement in the United States. By intention and design, charter schools are independent organizations that are given a “charter” from a public authorizing body to run a public school with public funding. Charter schools are not directly managed or regulated by a central government department or school board. Instead, charter schools are overseen by the chartering authority – a public body that is independent of the executive government and the education bureaucracy.

In section 6.2, I considered the historical and theoretical context of school choice reforms in the United States. In this section, I noted that the foundational research on school choice (e.g., Chubb and Moe 1990) was influenced by institutional economics and the private interest theory of regulation in critiquing centralized public schools. Proponents of the charter school movement do not argue for reforming the regulation of central public schools; they seek a new institutional possibility. Therefore, the beginnings of a comparative approach are evident in school choice scholarship, although this approach has not been applied in an integrated way. Instead, economic analysis of education has tended to focus on the demand-side and supply-side effects of school choice on the education market. Consequently, the critical analysis applying new comparative economics to school choice laws that is presented in Chapter 6 is a novel contribution of this thesis that adds to the school choice literature in addition to providing insight for public sector innovation. In section 6.3, I explained the methodology behind selecting the charter school laws of Washington, D.C. as a case study. In section 6.4, I set out the legislative analysis of the charter school laws. This section explained that the key regulatory characteristics that distinguish charter schools from centralized government schools.
The key regulatory differences between centralized government schools and charter schools are as follows:

- Not-for-profit applicant organizations (with corporate personality or separate legal identity) can petition to establish a charter school in the appropriate form;
- There is a single chartering authority – the DC Public Charter School Board;
- The chartering authority decides whether to approve the petition, assessed against the legislative criteria, and has the power to revoke a charter on certain grounds (a mixture of rules and discretion);
- There is a legislative cap limits the number of charter schools that can be approved by a chartering authority in any year. Enrolments are based on applications and a random selection lottery for oversubscriptions;
- Principals, teachers, and staff are employees of the charter school;
- The charter school organization holds the legal interest in land and buildings;
- The charter school organization has the legal capacity to enter into contracts with third parties; and
- The choice of curriculum and accreditation body is enshrined in legislation or by agreement with the chartering authority;

**Voucher programs**

The fourth and final case study that was presented in this thesis focused on voucher programs that provide public funding to support enrolments in private schools (Chapter 6). Voucher programs are a dominant form of "school choice" in the US, second to charter schools. Although not the focus of the legislative analysis in Chapter 6, it is noted that Australia also has a de-facto voucher program (the subject of some discussion in Chapter 4) so the findings of the chapter are likely to have implications in the Australian policy context. The Washington, D.C. voucher program - Opportunity Scholarship Program – operates by an independent entity providing funds to schools for eligible students. The schools are private and established independently of the voucher program. The distinction between charter schools and voucher programs is important: charter schools cannot operate without public authorization, whereas private schools may continue to operate but cannot receive taxpayer funding without public authorization.
There was a degree of overlap in presenting the case studies on voucher programs and charter schools. That is, the history of voucher programs was also detailed in section 6.2 and the rationale for selecting the voucher program laws of Washington, D.C. was also covered in section 6.3. Following the case study on charter schools in section 6.4, the legislative expression of the Opportunity Scholarship Program was analyzed in section 6.5.

The key regulatory differences between voucher programs and charter schools are as follows:

- Schools are established and closed independently of public decision-makers;
- The Secretary of Education provides public grants to an ‘eligible entity’ (currently the not-for-profit organization Serving Our Children), that subsequently provides eligible students’ with scholarships to pay tuition, fees, and transportation expenses;
- An “eligible student” is one whose household is in receipt of food stamps or whose income is lower than or equal to 185 percent of the poverty line;
- Participating schools are subject to legislative conditions on accepting vouchers on an opt-in basis, on various matters including financial probity, teacher qualifications, accreditation requirements, data and reporting requirements, and subject to site visits.

**Summary**

The conclusion that can be drawn from this summary discussion is that there is no single way to regulate the public provision of school education services. Instead, the institutional possibilities canvassed evidence that there is a spectrum of regulatory control in seven key areas (ownership, management, governance, staffing, enrolment, curriculum, and accreditation). Table 7.1, below, provides a stylised summary of the regulatory characteristics for each institutional possibility. Recall that the IPF model shows the trade-offs of dictatorship and disorder associated with the spectrum of institutional possibilities. Abstracting the four institutional possibilities, Figure 7.1, below, plots the possibilities on an IPF curve.
Starting at the lower bottom left portion of the IPF, the perceived social costs of government schools that have been previously observed involve the imposition of values through the curriculum by the state, the lack of responsiveness to individual student needs, and the possibility of regulatory capture – or worse forms of corruption. This thesis added to this list by discussing the social costs of increasing regulatory burdens (Chapter 4), the lack of destruction mechanisms (Chapter 4), and the constraints on school-based management in this institutional setting (Chapter 5). These are costs of disorder because it emanates from the exercise of state power.

Moving along the IPF to Independent Public Schools, schools and principals are provided with greater decision-making autonomy in a range of areas described in Table 7.1, below. However, with greater autonomy comes a perceived increase in the costs of disorder – emanating from the exercise of private decision-making. These include the risk that costs and benefits of innovation will not be evenly distributed, concerns that disadvantaged students will not receive adequate support, an apprehension that greater specialization may lead to selective entry practices, and a perception that school staff may devote too much time and expenditure to non-educational functions.

**Table 7.1 – Institutions of public school education, regulatory characteristics**

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<tr>
<th></th>
<th>Decentralized</th>
<th>Centralized</th>
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<tbody>
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<td><strong>Voucher Programs</strong></td>
<td>Private</td>
<td>Government</td>
</tr>
<tr>
<td><strong>Charter Schools</strong></td>
<td>Not-for-profit organization</td>
<td>Limited school-based</td>
</tr>
<tr>
<td><strong>Independent Public Schools</strong></td>
<td>Government</td>
<td>Department</td>
</tr>
<tr>
<td><strong>Government Schools</strong></td>
<td>Government</td>
<td>Department</td>
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<tr>
<td><strong>Ownership</strong></td>
<td>Private</td>
<td>Government</td>
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<tr>
<td><strong>Management</strong></td>
<td>Not specified</td>
<td>School-based autonomy</td>
</tr>
<tr>
<td><strong>Governance</strong></td>
<td>Voucher Program Entity</td>
<td>Charter Authorizer</td>
</tr>
<tr>
<td><strong>Staffing</strong></td>
<td>Not specified</td>
<td>Organization employees</td>
</tr>
<tr>
<td><strong>Enrolment</strong></td>
<td>Eligibility criteria</td>
<td>Lottery</td>
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<tr>
<td><strong>Curriculum</strong></td>
<td>Limited school-based</td>
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<td><strong>Accreditation</strong></td>
<td>School-based autonomy</td>
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Moving further along the IPF, charter schools are characterized by lower perceived costs of dictatorship because charter schools have legislated autonomy in terms of ownership, management, staffing, and accreditation – featuring independent regulatory oversight and decentralized spontaneous mechanisms of creation (e.g., voluntary application) and destruction (e.g., financial viability). Charter schools are characterized by higher perceived costs of dictatorship comes in greater opportunism, and agency problems such as conflicts of interest with for-profit companies. Regulation of charter schools mitigates these costs through rule-based destruction mechanisms, oversight by a single charter authorizer, regulatory compliance and financial management requirements, and enrolment controls – although this means that dictatorship costs are not entirely economized.

Finally, moving to the upper right portion of the IPF, voucher programs exhibit comparatively perceived costs of dictatorship – with opt-in regulation and narrower regulatory coverage and compliance obligations. However, voucher programs the greater potential for discriminatory practices loom as an increased disorder cost.
7.2.4 Regulating for an innovative public sector

The four case studies that have been developed in the second part of the thesis also allow the following research question to be addressed:

- Question four – does the potential for the dynamism of innovation change if regulatory constraints change?

The theoretical approach that I have developed in the first part of this thesis would answer this question in the affirmative. Under the new comparative approach to public sector innovation, regulatory constraints are characterized as costs of dictatorship. That is, centralized regulation of public services is imposed by governments to control perceived disorder costs; however, autonomy, discretion and spontaneity in the delivery of public services is necessarily constrained. Therefore, the IPF model depicted in Figure 7.1, above, predicts that decentralized institutional arrangements will be more favorable to innovation as compared to centralized institutional possibilities. The empirical findings that I presented in the second part of this thesis support this theoretical prediction – affirming the explanatory power of the new comparative approach.

Chapter 5 presented a case study on the Queensland IPS program, gaining insight into the connection between regulation on public sector innovation. The Queensland IPS program removed regulatory constraints on the principals of government schools, providing greater local autonomy over service delivery. The EOI application required principals to nominate innovative practices that they would not be able to implement without such autonomy. In this setting, principals can be seen described as entrepreneurs empowered to employing new combinations of productive factors to develop proposals for new products, new methods of production, new sources of supply, the exploitation of new markets and new ways to organize business (Schumpeter 1934). By providing a textual analysis of successful applications, this chapter made an empirical contribution, identifying specifically planned innovations in the school context that resulted from the removal of departmental regulatory constraints (“soft regulation”).
Overall, the Queensland case study in Chapter 5 found that the regulation of centralized government school is constraining innovation in the areas of staffing flexibility, in schools forming partnerships, in leasing and licensing out facilities, and in managing building, facilities, and infrastructure. However, because the Queensland IPS program was introduced without legislative reform (“hard regulation”), the problem of increasing regulatory complexity remains. Nevertheless, the results presented in this chapter are significant because they demonstrate that there is a correlation between the removal of regulatory constraints and increasing innovative potential in a public sector context.

Chapter 6 presented a legislative analysis of two forms of American school choice programs – charter schools and voucher programs. In reviewing the school choice literature, I observed that school choice laws were introduced to remove the “hard” regulatory constraints that exist within centralized institutional possibilities. Using the code for the District of Columbia as the model law for legislative analysis, this chapter makes an empirical contribution by demonstrating that the features of the institutional possibilities of charter schools and voucher programs are written into the legislation.94

The legislative analysis demonstrated that school choice programs charters create a more dynamic environment as compared with traditional government schools and Independent Public Schools, with spontaneous mechanisms for the “creation” and “destruction” of public school education services. In turn, voucher program laws establish an even more dynamic environment for service delivery compared to charter schools, with opt-in regulatory provisions and narrow regulatory coverage. These findings demonstrate that there is a correlation between regulatory structures and dynamism in a public sector context – curbing perceived costs of dictatorship with the trade-off of increased perceived costs of disorder. The results of the legislative analysis are reinforced by a review of the empirical evidence of charter schools and innovation and through surveying an emerging stream of experimental studies on the regulation of voucher programs. The implications of these findings will be discussed in the next section of the chapter.

94 The regulatory features of charter schools and voucher programs are summarized in sections 7.2.2 and 7.2.3, above.
7.3 Implications of the research findings

The final research question posed for this thesis is as follows:

- Question five – given the new comparative approach that has been developed, and the research findings, what are the implications for future research exploring the relationship between regulation and public sector innovation?

This section of the chapter draws together a number of the broader implications for public sector innovation. I will now consider the need for regulatory reduction in the public sector, the application of the new comparative approaches to other types of public sector services, and the possibility of secession from public sector services.

7.3.1 A focus on regulatory reduction in the public sector

This thesis begins to provide an account of overregulation in Australian public sector services. The findings suggest that a focus on regulation reduction in the public sector regulatory reduction is needed to remove constraints on innovation. This thesis has provided a ground-breaking attempt to analyze “regulation inside government” (Hood et al. 1999) using public school education as the context for this exploratory study. The findings in this thesis suggest that decentralized institutional arrangements, characterized by fewer regulatory constraints, will be conducive to a comparatively more innovative public sector environment. A question for future research is whether the same trends can be observed in other areas of public sector services.

The first step in investigating overregulation is measuring the extent of the problem. A practical problem for Australian public sector research is that the official repositories of legislation and regulation cannot be downloaded as a single compilation. Additionally, there is no readily available way to ascertain which statutory provisions will apply in a particular public sector context. However, in order to do progress this research agenda, more accurate and efficient tools for collating and analyzing legislation and regulation need to be developed.

In this regard, “RegData” is the state-of-the-art regulatory measurement tool developed in the United States that machine-learning and artificial intelligence to collate the number of restrictive clauses ("shall," "must," "should," "prohibited") and
then identify the relevance of the regulations to various industries (Al-Ubaydli and McLaughlin 2017). The database is used to support an open-source website to crowd-source research insights (https://quantgov.org). RegData shows great promise for application in Australia, although that extension of the project remains in its infancy (McLaughlin, Potts, and Sherouse 2019). Overall, it is proposed that better measurement and monitoring of regulation will have implications for the political economy of regulation. Specifically, drawing attention to the quantity and extent of public sector regulation in an open, transparent, and methodological way impacts the political economy of public sector regulation by affecting the perception of costs of dictatorship caused by overregulation (Allen and Berg 2017) that provides an impetus for legislative and regulatory change.

How could regulatory reduction be achieved? Australian governments already have adopted several institutional responses to regulatory reduction. Allen (2018) charts the history of regulatory reform in Australia. Two approaches can be distinguished. First, “backward-looking” targeted regulatory reduction that focuses on specific sections of the economy, such as trade liberalization, or parliamentary sitting days focussed on repealing regulation after taking stock (Allen 2018). A second, by complementary, approach involves forward-looking process-orientated measures, such as requiring Regulatory Impact Statements for new regulations, regulatory budgets for government departments, and “one-in-n-out” rules (Allen 2018). As an example at the Commonwealth level, the Australian Government’s “Regulatory Burden Measurement Framework” provides that ‘all new regulations or changes to existing regulations need to have the regulatory costs imposed on businesses, community organisations and individuals quantified’ and regulators must then consider appropriate measures to offset those costs (Australian Government 2016, p. 1). The findings presented in this thesis suggest that those regulation units should extend their purview to measuring the cost of new regulations on the public sector also.

Other institutional responses to reducing overregulation include the allocating responsibility for regulatory reduction to a specific government minister (e.g., New South Wales has a Minister for Better Regulation and Innovation), appointing independent commissioners (e.g., Victoria has a dual Better Regulation
Commissioner and Red Tape Commissioner), forming advisory or consultation groups to report to government (e.g., Queensland’s Better Regulation Task Force), or giving this responsibility for public servants embedded within departments with central leadership and coordination (e.g. Office of Best Practice Regulation in the Department of the Prime Minister and Cabinet)\textsuperscript{95}.

Another approach to reducing the regulatory burden in the public sector that has been suggested is to create a regulatory “sandbox” where public sector entities could seek waivers from specific regulatory constraints in order to promote innovation (e.g., Bason 2018). Regulatory sandboxes are used, for example, as a regulatory model used in several jurisdictions for experimental financial technology to allow businesses to test innovative practices and business models without removing regulation on the traditional financial sector (e.g., Bromberg, Godwin, and Ramsay 2017; Zetzsche et al. 2017). Such a proposal may appear to be an attractive method to achieve a public sector parallel of the “permissionless innovation” approach that is advocated for the private sector (Thierer 2014). The caution is that the “sandbox” would need to be embedded in the legislative and regulatory framework, otherwise sandboxes would be limited to “soft” regulation and the problems with this scenario have been discussed at length in the context of the Independent Public Schools program (Chapter 5). The findings of this thesis suggest that public sector regulatory reform should move in the direction of introducing stock-taking institutional processes to identify discretion-based regulation and then developing rules-based mechanisms as a replacement.

There is a need for future research on the comparative effectiveness of all of these institutional responses. Nevertheless, while Australian efforts on regulatory reduction have principally focused on cutting red tape and overregulation in the private sector,

such examples provide models for how public sector regulatory reduction could be achieved.

### 7.3.2 Choice and competition in public sector services

The new comparative approach to public sector innovation shows that there is no single method of delivering public sector services. In some institutional possibilities, the roles of funding, management, and delivery are fused. In other institutional possibilities, these roles are separated in different ways. While this thesis has focussed on school education services, it is proposed that this theoretical framework can be applied to public sector services more broadly. It has been shown that one advantage of choice and competition in decentralized institutional possibilities is that competition is a discovery process for knowledge generation (Hayek 2002). The greater dynamism that exists on the face of legislative and regulatory frameworks, the greater the innovative potential – ultimately promoting an evolutionary public policy as knowledge continues to unfold over time (Witt 2003). This insight has practical implications for contemporary Australian public policy developments concerning competition in public sector services.

The Harper Competition Policy Review was established to provide a “root and branch” review of Australia’s Competition Law and Policy Framework (Bilson 2014). The terms of reference directed the panel to review, amongst other things, ‘government involvement in markets through government business enterprises, direct ownership of assets and the competitive neutrality policy, with a view to reducing government involvement where there is no longer a clear public interest need’ (Harper et al. 2015, p. 526). In its final report, the panel recommended that that Australian governments place ‘user choice at the heart of service delivery’ (Harper et al. 2015, p. 36). User choice was also relevant to the panel’s broader recommendation that ‘innovation in service provision should be stimulated, while ensuring minimum standards of quality and access in human services’ (Harper et al. 2015, p. 8). However, the panel did not provide a framework for how this would be implemented or provide a detailed examination of the current regulatory barriers in place in the public sector context. The Commonwealth government supported the panel’s recommendations in principle.
but deferred a detailed consideration of the matter to the Productivity Commission (Australian Government 2015).

The Productivity Commission took a two-stage approach to further the recommendations of the Harper Competition Policy Review in 2016 (Productivity Commission 2016a). The Productivity Commission’s first study report nominated social housing, public hospital services, end-of-life care, public dental services, human services in remote Indigenous communities, and family and community services, as the priority areas user choice and competition reform in the public sector (Productivity Commission 2016b). Strikingly, in the context of this thesis, school education was omitted from this list. The Productivity Commission did consider primary and secondary schooling, but determined that school education was an area of service delivery where ‘improved outcomes…could be better delivered by reforms other than greater competition, contestability or user choice’ (Productivity Commission 2016b, p. 13) (own emphasis). This is a significant exclusion because one of the key purposes of the Productivity Commission’s work included examining ‘how best to promote innovation and improvements in the quality, range and funding of human services’ (Productivity Commission 2017, p. xi). The theoretical framework and empirical findings in this thesis suggest that decentralized institutional possibilities – where choice and competition are embedded in the legislative and regulatory frameworks – will foster innovation in the school education context. Accordingly, the question of how to apply competition into the school education should be revisited.

The second stage of the Productivity Commission’s inquiry involved investigating and then making specific recommendations to governments about how to implement “choice, competition and contestability” in the previously nominated priority areas (Productivity Commission 2017). In the course of its inquiry, the Productivity Commission (2016b; 2017) received evidence that prescriptive contract terms mandating how services are provided inhibit service-providers from implementing innovative responses that may be more effective, short-term contracts cause uncertainty which constrains innovation, and regulatory approaches due to the government’s risk aversion increase the cost of providing services. These findings reinforce the implication that governments need to undertaking a stock-taking review.
of regulation governing public sector services, discussed in the previous subsection of this chapter.

The Productivity Commission’s analysis features a limited examination of the mechanisms for the creation and destruction phases of innovation – which will be embedded into regulatory frameworks. Specifically, the Productivity Commission did recognize that contestability ‘means that a provider of human services faces a credible threat of replacement if it underperforms’ and the need to develop ‘mechanisms to replace underperforming providers’ (Productivity Commission 2017, p. 65). However, the inquiry did not consider these mechanisms in any detail. This is problematic because these processes are central to the operation user choice. While previous research on contestability in human services has focussed on the regulation of entry (e.g., Davidson 2011), the implication of the new comparative approach developed in this thesis is that it is important for policymakers to consider both creation and destruction mechanisms in approaching regulatory reform and be particularly cognizant of how these are embedded into the regulatory frameworks. Moreover, it is important to consider not only the prospect of “market failure” but the competing reality of “government failure”. Accordingly, specific legislative and regulatory changes will be needed to foster innovation in public sector services – and the new comparative approach developed in this thesis could provide policymakers with a powerful framework to more closely analyze regulatory frameworks governing public sector services to create a more dynamic public sector.

It may be necessary for the legislature to undertake more general reform to ensure competition in public sector services, in the effort to foster greater public sector innovation, as it is unlikely that the current competition law and policy framework would apply to public sector services. In Australia, the Competition and Consumer Act 2010 regulates a variety of anti-competitive conduct. Historically, Australian public sector services have not been subject to competition law that would otherwise prevent governments from running centralized monopoly services or otherwise engage in anti-competitive conduct. This situation flows from a legal presumption that the Crown (whether manifested in the Commonwealth, a State, or a Territory government) is not bound by statutory law unless the statute expressly or implicitly provides otherwise (e.g., Sawer 1958; Taylor 2000; Gray 2009; 2010) – with the consequence that
centralized government provision of services is put on an ‘uneven playing field’ compared to other institutional possibilities (Sneddon 1998, p. 467). In the new comparative framework, this risk is a perceived cost of dictatorship – in that the government is using its legal position to suppress other types of service delivery and manipulate transaction costs in its favor (e.g., Downs 1964; Tullock 1965; Niskanen 1971; Chubb and Moe 1990). The previous major review into Australian competition law and policy, the Hilmer report, recommended that government business entities should be made subject to competition law and policy (Hilmer, Rayner, and Taperell 1993). That recommendation led to legislative change meaning that governments are now subject to the competition law and policy insofar as the Commonwealth government, a state or territory government, or a local government “carries on a business”.

The definition of carrying on of a business has been held to apply in a number of cases including telecommunication services, postal services, broadcasting services, printing services, and ambulance services at sporting events (Duke 2018). However, tenders for goods and services related to wholly governmental activities, the provision of immigration detention centres, providing pharmaceutical, medical and dental services under Medicare, operating a public hospital, managing a national park, and police and corrective services have all been determined to fall outside the definition (Duke 2018). The Harper Competition Policy Review recommended extending the definition to encompass any activity in “trade or commerce” (Harper et al. 2015). Although the Commonwealth government gave its in-principle support to this recommendation (Australian Government 2015) it was not legislated as part of the government’s competition reform bills that passed the Commonwealth Parliament in 2017. It follows that more general legislative changes may be required to expand the applicability of competition law frameworks beyond government “businesses” but to public sector services more broadly. Accordingly, the new comparative approach provides a framework for future research on competition in public sector services to consider the trade-offs involved in different institutional possibilities.

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96 See: *Competition and Consumer Act* 2010 (Cth); sections 2A, 2BA, and 2C.
7.3.3 Seceding from public services

The high dictatorship costs associated with centralized government services may have longer-term consequences. This thesis has shown that decentralized school choice institutional possibilities, such as charter schools and voucher programs, are characterized by lower dictatorship costs than centralized institutional possibilities, such as traditional government schools and independent public schools. If lawmakers do not introduce more dynamic institutional possibilities and allow individuals to self-manage the competing costs of disorder and dictatorship through their own choices, then there is the possibility that perception of dictatorship costs in any of the existing public institutional possibilities may remain too high for some individuals. Public sector services will not necessarily be immune to competition external to the institutional possibilities for public service delivery within a particular jurisdiction.

In the public school education context, the implication is that parents will secede from public sector services to private institutional possibilities. This is because there is the possibility of seceding exists where the government’s regulatory capacity means that there is a difference between regulation “on paper” and regulation “in practice” (Dixon and Tooley 2005) or where the government has specifically legislated for an alternative external possibility to comply with compulsory education requirements. Examples of these two possibilities will now be discussed.

The first kind of secession can be seen through for-profit schools that exist externally to the provision of public services. Those that are critical of school choice programs will continue to highlight the perceived disorder costs associated with the “commercialization” of education in the public sector context (e.g., Molnar 2018). However, the research of James Tooley and Pauline Dixon, along with their various colleagues, has highlighted the value of for-profit schools in the context of developing countries (Dixon and Tooley 2005; Dixon 2012; Tooley 2013; Tooley and Dixon 2005; 2007; Tooley, Dixon, and Amuah 2007; Tooley, Dixon, and Olaniyan 2005; Tooley, Dixon, and Stanfield 2008). In summary, this stream of research provides a wealth of observational evidence that many (and in some studies, a majority) poor parents living in the city slums or the remote villages of developing countries prefer to pay to send their children to for-profit schools operating outside formal education systems –
despite the existence of free government schools or regulated and other publicly-supported non-government schools. The reasons for the success of these schools varied, adapted to the particularities of each local context. Although, in summary, Dixon (2012, p. 192) observes some broad themes of this research.

Private schools often have more dedicated teachers, smaller class sizes, and better facilities, even while incurring a fraction of the government schools' teacher costs. And children in low-cost private schools seem to be outperforming those in government schools even after controlling for socioeconomic factors and selection bias.

A more recent effort in this literature has shown that ‘onerous market entry regulations offer constraints on the growth of official private education markets’ and lead entrepreneurs outside of the state-sanctioned education system (e.g., Baum, Cooper, and Lusk-Stover 2018, p. 100). There is a link here to the problem of regulatory complexity previously highlighted in this thesis. The implication for not solving regulatory complexity is not only will it act as a constraint on public sector innovation but it may have the effect of diverting resources and talent away from the public sector. The low-cost for-profit private schools in developing countries – unregistered or unrecognized – are not an institutional possibility of public service delivery as they are operating outside of the scope of “regulation inside of government” (Hood et al. 1999). Instead, parents and entrepreneurial teachers and school proprietors are deliberately seceding from public sector services.

The low-cost private school research speaks to a systemic failure of the public sector in these countries (often aided by foreign governments and non-government organizations) to provide the levels of service demanded by its citizens (Dixon 2012). The research also provides evidence that the regulation of schools may be different ‘on paper’ compared to ‘in practice’ – as school operators can pay bribes to public officials in lieu of regulatory compliance (e.g., Dixon and Tooley 2005, p. 32). The implication of this is that the way to improve public sector services through greater innovation does not come in banning private endeavor or otherwise coercing unregistered or unrecognized schools to come within the orbit of public sector regulation and bureaucratic processes. Such moves would limit positive exchanges occurring in this setting and negatively distort the preference discovery process occurring in this setting (Dixon and Tooley 2005). Instead, Dixon and Tooley (2005)
propose a system of self-regulation – where regulatory processes are decentralized – to accommodate those seceding from public sector institutional possibilities. Further, those authors argue that the study of regulation is important because ‘regulations have the capacity to stimulate or stifle the market for private education, as well as affect the quality of education provision’ (Dixon and Tooley 2005, p. 31).

Secession of a different kind is occurring in developed countries. Through “home schooling” or “home education”, parents make a deliberate choice to educate their children in the home rather than in a school-based setting. This is a form of school choice often overlooked (Houston and Toma 2003). By exercising this freedom, parents are withdrawing from the reach of the public education system altogether. Expressed another way, Lubienski (2003b, p. 175) states that home education as a ‘…form of governance is the essence of the incapacity of state-funded education systems to educate their children.’ A review of the home education literature by Jackson (2017, p. 334) notes that parents’ reasons for exercising this choice included the failure of schools to cater to the individual needs of students ‘values expected by parents not upheld by conventional schools’. Of course, the imposition of values has been a clear dictatorship cost of government intervention in education for time immemorial (e.g., Mill 1859; Friedman 1955; Hayek 1960; Chubb and Moe 1990).

Although home education is not the provision of public services, governments do recognize it as a legitimate way of educating children. In Australia, all state and territory jurisdictions have legislative provisions contemplating secession from government or non-government schools (Lindsay 2003; Harding and Farrell 2003; Allan and Jackson 2010; Jackson 2017). These regulations require parents to register their students in order to comply with compulsory schooling laws (e.g., Allan and Jackson 2010; Jackson 2017).

Recent Australian data suggests that the number of students registered for home education has increased substantially over the last decade – albeit from a low base. For example, in Victoria, the number of students registered in home education doubled over the last decade – from 1564 students from 859 households in 2008 to 5333 students from 3214 households in 2018 (Victorian Registration and Qualifications Authority 2008; 2018). While the number of students equates to less than one percent of all Victorian system (Victorian Department of Education and
Training 2019), it evidences that increasing number of parents are seceding from institutional of public school education. An implication of the framework developed in this thesis is that an increase in the number of home education registrations suggests that parents seeking to coordinate education perceive the dictatorship costs associated with existing institutional possibilities as too high.

This insight has interesting implications for political economy. In recent years, two Australian states have considered regulatory burdens for home education. In 2014, the Legislative Council of New South Wales formed a select committee to inquire into home schooling. Ultimately, the committee’s report recommended bolstering regulatory provisions (NSW 2014) but this was not supported by the government (NSW 2015). Regulatory change did occur in Victoria following a review of the Education and Training Reform Regulations 2007 (Vic). These actions suggest that the increase in home education numbers are not trivial. Applying the framework developed in this thesis, increasing regulatory constraints can be understood as government actors attempting to manipulate the perceived costs of disorder in favor of centralized government schools (Twight 1988; 1994). American research has shown that stricter regulatory constraints discourage home education registrations (Houston and Toma 2003). Although the utility of greater regulation of home education is questionable on a practical level; without strong enforcement as research suggests that many parents choose not to register their children in home education in any case (e.g., Townsend 2012; Gray and Riley 2013).

The framework and findings developed in this thesis suggest that legislating alternative institutional possibilities may be more desirable than increasing regulatory requirements on home educators. That is, through decentralized institutional possibilities of voucher programs and charter schools, as examples, the state can have greater control over educational outcomes to limit perceived costs of disorder and at the same time provide greater freedom for schools to innovate and cater for individual preferences thereby limiting costs of dictatorship as compared to traditional government schools. Recent American research tends to confirm this theory, suggesting that there is a decline in the number of children in home education after

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98 Note that the prompt for the review of these regulations was that it was scheduled to expire in 2017 due to a sunset clause.
the introduction of charter school laws (DeAngelis and Dills 2019). Whether recent action by New South Wales and Victoria stem the flow out of the formal education systems in Australia remains to be seen – but another question is what the impact is on public sector innovation. These questions could be a focus of future research efforts using the new comparative approach.

7.4 Limitations

This thesis has some important limitations that should be noted. First, this thesis has utilized public education services to examine the dynamics of public sector innovation. It has advanced a new comparative model to compare regulation of public sector services and the impact on the process of innovation in this context. It has not presented a comparative analysis of education outcomes. Whether or not increased dynamism in regulatory structures and innovative practices developed in the public school education context translates to improved education outcomes is a question that goes beyond the scope of this thesis. However, the Schumpeterian conception of innovation (Schumpeter 1934; 1942) cautions that innovation is a process of transformational change and the forms of innovation are not limited to new products and new methods – but also include new markets, new sources of supply, and new organizational forms that are valuable but may not have a direct bearing on the educational outcome.

Second, this thesis has analyzed four separate institutional possibilities for public school education service delivery. In this respect it is noted that centralized government schools, Independent Public Schools, charter schools, and voucher programs do not represent an exhaustive list of institutional possibilities. The list of could be extended – and therefore this thesis should be seen as a significant and original contribution to the comparative examination of regulatory structures rather than the final word. For instance, in Australia, denominational and other private systems of education have been discussed but the modern legislative and regulatory provisions have not been a core focus of the legislative and regulatory analysis that has been presented. In America, “magnet schools” are a distinct institutional possibility where transportation is provided to students along with a ‘special focus, such as visual and performing arts, Montessori methods, gifted and talented, or math,
science, and technology’ that become a “magnet” for students, supporting efforts at racial integration (Rossell 2009, p. 380). Similarly, in the United Kingdom, the most common institutional possibilities are “community schools”, “foundation schools and voluntary schools”, “academies”, and “grammar schools” all of which have different governance arrangements (United Kingdom Government 2019). In New Zealand, as a final example, there are different combinations of institutional possibilities including “Kura kaupapa Māori” where teaching is based on the Māori language and culture, “partnership schools” that integrate business and community groups, and “State-integrated schools” that are located on privately owned land and usually have a religious character (New Zealand Ministry of Education 2019). Further research could gain new insights by applying the theory and methodology developed in this thesis to other institutional possibilities.

In the presentation of the spectrum of institutional possibilities for service delivery it is noted that there is a level of abstraction involved in the presentation of the institutions of public sector education. There are different institutional differences in national and sub-national jurisdictions and other external factors that may impact the trade-off between the costs of dictatorship and the costs of disorder. Likewise, there will be different levels of “civic capital” that impacts position of the IPF curve between jurisdictions, over time, and other changes that are beyond control (Djankov et al. 2003; Boettke et al. 2005). Of course, a level of abstraction is inherent in any comparative analysis.

Third, this thesis has engaged with arguments in the literature that supports greater public sector expenditure for innovation and research and development (e.g., Mazzucato 2013; c.f., Potts 2015). However, this thesis does not make any explicit findings regarding the relationship between public expenditure and innovation. Indeed, the research agenda explored in this thesis contrasts with contemporary political debates in Australia that are preoccupied with the size of the public funding pool that is available, and the formula that is used to allocate it. In any case, it is noted that just as there are several institutional possibilities for public school education services, so too are there several institutional possibilities for public support of innovation (Davidson and Potts 2016a; 2016b).
Fourth, this thesis has not directly examined political entrepreneurship. The focus of this thesis was the regulatory structures governing service delivery, not the lawmaking process as such. However, it is observed that the case studies presented on the SOTF program (Chapter 4) and Queensland’s IPS program (Chapter 5) originated from the policy agenda of incoming governments following change in the party of executive government. As such, there are broader political economy questions to be explored in this regard. For example, future research in this area may question the extent to which changes in government foster new waves of public sector innovation – as the observation here suggests that evolutionary forces in the political environment interact with evolutionary structures embedded in public sector services.

Fifth, this thesis has not directly considered the impact of new and emerging technologies in the provision of public sector services. This is an issue for public sector innovation as governments seek to engage in digital innovation using technology and data analytics (e.g., Mcloughlin et al. 2019). In separate work, authored with my colleagues at RMIT University, applying economic theory, it has been theorized that the introduction of new technology may economize the perception of both dictatorship and disorder costs, providing the space for new institutional possibilities to emerge (Allen et al. 2018; Allen, Lane, and Berg 2019; Allen, Lane, and Poblet 2018). There are many questions here that are beyond the scope of the research questions posed for this thesis. For example, what is the impact of artificial intelligence and machine learning on the provision of public sector services? What is the impact of blockchain technology for the public sector’s record-keeping, regulation, and compliance? And how might further advances in ICT change the delivery of public services, and does this require a re-think of regulatory frameworks? There are many fruitful questions along these lines for future research on technology and the governance of public sector services that could utilize a new comparative approach to public sector innovation.


100 A limited discussion can be found in Section 5.5.
7.5 Conclusion

This thesis has developed a novel approach to address the problem of a lack of public sector innovation. In applying an economic framework, this thesis has analyzed the regulatory constraints on public sector innovation, providing insight to trade-offs that exist and offering a critical analysis of the regulation of service provision in the school education sector.

The approach that has been developed sits in contrast to the current trend within the broader public sector innovation research field that has tended to focus on importing management or leadership practices from the private sector such as “open innovation”, “collaborative innovation”, “innovation labs”, or “e-government” that are intended to solve the generally accepted problem of a lack of innovation in the public sector (e.g. Bommert 2010; Lee, Hwang, and Choi 2012; Mergel and Desouza 2013; Torfing 2016; 2019; McGann et al. 2018; De Vries, Bekkers, and Tummers 2016; 2018a). Instead, this thesis develops and applies economic theory to address the deeper question of why there is a lack of innovation in the public sector and why the idea of public sector innovation seems oxymoronic (Bommert 2010; Torfing 2019; Vigoda-Gadot et al. 2005). This thesis found that public sector is not regulated in the same way as the private sector, and there are various institutional possibilities for delivering public services that have different regulatory characteristics. The thesis found that regulatory structures governing service delivery are where mechanisms of creation and destruction can be observed and then analyzed, concluding that the potential for public sector innovation will change if these regulatory constraints change. It is appropriate to make a final caveat: this thesis does not assume that the outcome of innovative changes implemented in the public sector context will always be beneficial. Instead, this thesis has sought to better understand the process of public sector innovation. The analysis that has been presented here is an attempt at exegesis and systematic comparative analysis rather than advocacy of any one particular institutional setting.

Ultimately, this thesis is an effort in a wider research program on the economics of regulation. As Richard Posner (2014) explains, the “old” law and economics focussed exclusively on applying economic insights to antitrust or competition law, whereas the
“new” law and economics involved applying economic reasoning right across the legal system (see also: Trebilcock 1997). This thesis continues in the emerging third wave of scholarship in this broad tradition – a “new comparative” law and economics (e.g., Djankov et al. 2003; Djankov et al. 2003b; Glaeser and Shleifer 2003; Shleifer 2005; Płóciennik 2013; Davidson 2014; 2016; Berg 2016; 2018; Allen, Lane, and Poblet 2019) – by adopting an evolutionary approach to understand innovation (e.g., Schumper 1934; 1942; Bauer 1997; Witt 2003; Dopfer, Foster, and Potts 2004; Windrum and Garcia-Goni 2008; Potts 2009; 2010; Potts and Kastelle 2010; Kastelle, Potts, and Dodgson 2014; Kastelle and Stewart-Weeks 2015) as a critical lens for legislative and regulatory analysis (e.g., Gilbert and Sunshine 1995; Yandle 2002; Diamond 2014). Of course, this thesis is not intended to be the last word on the connection between regulation and innovation in public sector services. Overall, however, it can be concluded that legislative and regulatory frameworks are not neutral for public sector innovation – rather, it is the starting point for coherent economic analysis.
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