

**Innovation beyond the market? Public sector innovation and
economic development in South Australia and Western Australia**

Laura Sofia Sariego Kluge

Thesis submitted for the Degree of Doctor in Philosophy

School of Geography, Politics, and Sociology

Newcastle University

November 2019

Abstract

Approaches to territorial innovation for regional economic development have held a longstanding focus upon firms and private actors and left the roles of state actors and public sector innovation neglected and under-researched. Engaging with economic geography literature, state literature, and the often aspatial public sector innovation (PSI) research (following its increased utilisation amongst state and quasi-state actors internationally), this study aims to fill this gap and elaborate a conceptual and analytical framework for understanding the role of PSI in a context of regional economic development. The study focuses upon establishing the conceptualisation and operationalisation of PSI in the context of economic development at the subnational level and the roles of internal processes in the public sector and external forces on PSI. A comparative empirical analysis of PSI is undertaken in a context of economic development in two regions, South Australia and Western Australia. Contrasting their different relationships between public sector innovation and regional economic development, the study finds that: i) PSI has been used to articulate and justify efficiency-oriented and market-led reforms, preventing a shift from neoliberal paradigm; but also as a way of shifting toward post-NPM approaches which help engage into somewhat different approaches to regional economic development; ii) approaches to PSI have been shaped by the roles of the public sector within the State economies, levels of resources, leadership, and collaboration and interactions within the public sector and with external partners and the public; and, iii) the increased scrutiny and feedback from voters to public sector strategy, policy and delivery has exerted short-term pressures, which can be uncondusive to innovating for long-term regional economic wellbeing. The study concludes that PSI offers potentials and issues for regional economic development, shaped by the region's institutional history, economic and geographical context.

Dedication

Mamá Elizabeth Kluge Velilla y Papá Jorge Rafael Sariago Mac-Ginty esta tesis y todo el esfuerzo que conlevó estar tan lejos físicamente, va dedicada a ustedes. Gracias por su infinito amor y apoyo, los amo.

Acknowledgments

This thesis was completed with the financial support of the University of Costa Rica (UCR), and of the Newcastle University Overseas Research Scholarship (NUORS). I am deeply grateful to both organisations.

A profound thank you to my Supervisors Prof. Andy Pike and Prof. Danny MacKinnon for their invaluable encouragement, support, insight and guidance throughout my learning process.

For their hospitality and support in Australia, I would like to thank my hosts and their teams from the Centre for Regional Development at the University of Western Australia; the Regional Australia Institute in Canberra; and the Business School at the University of South Australia. I would also like to thank the Workforce Information Group at the Australian Public Service Commission for their time and help.

To the UCR, my *alma mater* -whose purpose is to facilitate formal education and conduct academic research with a profound commitment to social impact, I am thankful not only for the material support but also for the solidarity and warmth shown at a time of most need. Thank you for their unyielding support to the Escuela de Administración Pública (School of Public Administration, EAP) and to the Oficina de Asuntos Internacionales y Cooperación Externa (OAICE) (Office of International Affairs and External Cooperation).

The PhD journey has been as challenging as it has been incredibly rewarding both personally (new country, other language, different culture, personal development) and academically (learning opportunities in every stage). The journey began when I found support from the Assembly of Professors for an academic mobility scholarship conditioned to obtaining a Master's degree, a PhD degree, and returning to Costa Rica to work for the University. It took an important number of people and effort to make this happen. I am thankful and feel fortunate to have met those who offered time and support to make this experience and learning process a reality. I am looking forward to contributing back to the country I consider home.

I would like to thank, sincerely: Prof. and former Director of the EAP, Dra. Mayela Cubillo, Prof. Carlos Carranza, former Director of the EAP, Dra. Ana Sittenfeld, former OAICE Director, Dr. Leonardo Castellón, current director of the EAP; M.Sc. Wajiha Sasa;

Dra. Laura Otero, M.Sc. Doris Osterlof, Dr. Rodolfo Arce, M.Sc. John Fonseca, Dr. Juan Huaylupo, M.Sc. Max Gutierrez, M.Sc. Victor Garro and the entire Asamblea de Escuela de Administración Pública for their invaluable and sustained support over the years. Thank you for their care and help over the years to the administrative team at the EAP: Emilia Muñoz, Andrea Rodríguez, Tatiana Barboza, Diego Salazar, Ricardo Pereira, Adriana Vargas and the rest of the team. Thank you also to the administrative team at the OAICE: Vivian Madrigal, Fátima Acosta, Emanuel Hernández, Laura Aguero, Mauricio Saborío, and the rest of the team. Thank you to Jenny Dawley at the School of GPS at Newcastle University and the team for their help over the years; as well as Sue Robson and the team at Centre for Urban and Regional Development Studies (CURDS). Thank you to Jens R Hentschke, to the Centre for Latin American Studies (CLACS) and to the Society for Latin American Studies (SLAS) and their Postgraduate arm (PILAS) for the stimulating knowledge exchange spaces they continuously encouraged and provided.

A special thank you to my dear friends and supporters, Maria Jesus Quirós, Manuel Cordero, and Lic. Mayra Zamora. Thank you to Dr. Jorge Nowalski for his guidance, support, and friendship over the years, and the team in ALIARSE, and the team in ICDS and former CIDH.

Thank you for their support and encouragement to my family in Chile and in Costa Rica, including my sisters Amelia Sariego, Rafaela Sariego, Elena Sariego, and Rocío Sariego (siempre en el corazón), and my brothers Lucas Sariego and Gonzalo Sariego; my sister in law Alejandra Gómez, and to my nieces and nephews Rocio Trinidad Ramírez, Javiera Sariego, Andres Sariego and Gustavo Sariego.

Friends, people close and dear to me, in Newcastle and abroad, you have made a massive difference in my life, thank you for your support before and during my PhD in one way or another. I feel blessed to have met you Diana Morales-Arcila, Ivone Campos-Luna, Laura Pinzón-Cardona, David Suarez-Rivero, Matthew Kearns, Alessandro Boussalem, Arezu Bari, Tessa Holland, Daniel Amin, Jorge Esaú Herrera, Jessika Herrera, Katie Pollom, Viviana Tinoco, Yazmin Ross, Danielle Jean-Pierre, Adriana Figueroa, Marielos Solis Solis, Marielos Coto, M^a del Carmen Trapote, Zara Babakordi, Sonja Felder, Adrienne Attorp, Eleni Hadjigeorgiou, Emil Evenhuis, Jenny Smith, Saffaa Al Zerouni, Randolph Cardona, Shuang Liang, Maddy Thompson, Carl Thompson, and Richard Convery.

Table of Contents

Abstract	iii
Dedication	v
Acknowledgments	vii
Table of Contents	ix
List of Figures	xi
List of Tables	xiii
Acronyms and Glossary	xv
Chapter 1. Introduction	1
1.1 Why public sector innovation in a regional economic development context?	1
1.2 Defining key concepts	7
1.3 Organization of the thesis.....	7
Chapter 2. Literature Review	11
2.1 Introduction.....	11
2.2 Public sector innovation (PSI)	12
2.3 The state and the public sector	23
2.4 Geographical approaches to innovation and territorial economic development....	32
2.5 Conclusion and Analytical Framework	42
Chapter 3. Methodology	49
3.1 Introduction.....	49
3.2 A causal approach to explanation.....	49
3.3 Research design: Comparative case study	50
3.4 Case study selection.....	52
3.5 Data collection.....	60
3.6 Data analysis.....	69
3.7 Reliability and validity.....	75
3.8 Ethical considerations.....	76
3.9 Conclusions	77
Chapter 4. South Australia and Western Australia in Context	79
4.1 Introduction	79
4.2 Highly ranked institutions for economic development and high human development indicators.....	81
4.3 The economy in the States: a struggling South Australia and a consolidated Western Australia	83
4.4 Internal governance and organisational structures.....	88
4.5 Conclusions	98

Chapter 5. Conceptualization and operationalisation of public sector innovation	101
5.1 Introduction	101
5.2 PSI associated with cost reduction and increased productivity.....	103
5.3 Market-oriented PSI.....	111
5.4 Outcome-driven PSI	118
5.5 Conclusions.....	124
Chapter 6. Internal processes to the public sector and their role in shaping public sector innovation	127
6.1 Introduction	127
6.2 Diverging public sector innovation journeys.....	128
6.3 The role of leadership(s): The response to the reviews	130
6.4 Proximity between levels of the public sector, and public sector reform approaches over time	137
6.5 Conclusion: End of Journey - Rationale and evolution of public sector reforms...	155
Chapter 7. External forces and their influence in PSI and economic development	159
7.1 Introduction	159
7.2 Politics, elections, and public perception	160
7.3 Intersectoral interactions	171
7.4 Conclusions.....	186
Chapter 8. Conclusions	189
8.1 Introduction	189
8.2 Bringing the role of innovation in the state into regional economic development academic debates and literature	190
8.3 Governance and the changing roles of the state	191
8.4 Proposing a public sector innovation analytical framework by demonstrating the role of geography in PSI.....	195
8.5 Reflexions, future research, and policy lessons	202
References	209
Appendix A. Data for the Quadrant Scatterplot	235
Appendix B. List of Interviewees	239
Appendix C. Informed Consent Letter for Interviewees	243
Appendix D. Semi-Structured Interview Questions	245

List of Figures

Figure 1 Innovation Policy	28
Figure 2 Quadrant scatter graphs for case study selection – including and excluding outlier (Australian Capital Territory). Economic Development and Public Sector Innovation (above or below average in standardized in Z-scores along, 2012-2016).....	58
Figure 3 Fieldwork in Australia: Count of interviews and participants per day (Feb 1st, 2017 - April 3rd, 2017 excluding weekends)	61
Figure 4 Fieldwork in Australia: Distribution of interviewees per location and sector ...	62
Figure 5 South Australia Documents – Capture of NVivo Text Search Query (partial views of Summary and PDF side tabs)	70
Figure 6 Preliminary data analysis map with codes, themes, connections, interpretations and explanations from primary data	72
Figure 7 Research Design – Comparative Case Study Research.....	78
Figure 8 Australia in the World map and satellite vision.....	80
Figure 9 Western Australia and South Australia: Household income per capita (1990-2017 in Constant 2017 AUS \$).....	84
Figure 10 Western Australia: Divergence in household income per capita with respect to South Australia (1990-2017)	84
Figure 11 Australia, Western Australia and South Australia: Gross domestic product and gross state product: Chain volume measures - Percentage changes (1990-2017).....	85
Figure 12 Australia: Distribution of responsibilities between levels of government.....	90
Figure 13 South Australia and Western Australia: Public sector employment as a proportion of total labour force (2008-2017).....	92
Figure 14 Influence of ad hoc policy advisory bodies on policy development (2016).....	95
Figure 15 Western Australia and South Australia: Sources of revenue (State Government, 2007-08 and 2016-17)	97
Figure 16 Western Australia and South Australia: Total Revenue and Total Revenue per capita (State Government, 2007-08 and 2016-17).....	98
Figure 17 General government sector fiscal balance – percentage of gross state product (2011-12 – 2015-16).....	103
Figure 18 U-shaped relationship between PSI Potential and Budget Flexibility (as opposed to budget pressure)	110
Figure 19 Acceleration of the feedback and implementation cycle for policy prioritisation.....	163
Figure 20: Analytical framework for the study of PSI in a context of regional economic development.....	201

List of Tables

Table 1 Types of Public Sector Innovation, systematic review of the literature, 1990-2014, 181 articles from top five Public Administration journals	15
Table 2 Goals for Public Sector Innovation, systematic review of the literature, 1990-2014, 181 articles from top five Public Administration journals	16
Table 3 Innovation and improvement in different conceptions of governance and public management	30
Table 4 Summary of the dynamic process of transformation of the state.....	44
Table 5 Criteria for data measuring PSI.....	54
Table 6 Proportion of public service employees who selected ‘yes’ to the question: “In the last 12 months, has your workgroup implemented any innovations?” in the APS Employee Census (2012-2016).....	55
Table 7 Description of the variables for the quadrant scatter plot.....	56
Table 8 Interviewees’ organisational affiliation	63
Table 9 Process of finding and contacting interviewees per location.....	65
Table 10 Examples of some codes used during the analysis	73
Table 11 A comparison of the ethical codes of the Royal statistical Society and Social Research Association.....	76
Table 12 South Australia and Western Australia key economic and relevant social and demographic indicators	86
Table 13 Australia, Western Australia and South Australia: Time line depicting shifts in political party, change of premier and elections.	91
Table 14 Western Australia and South Australia: Selected minister economic development responsibilities and the selected departments (2017)	93
Table 15 Western Australia and South Australia: PSI approaches, Economic Growth and Political Party (1999-2018).....	125
Table 16 Example of SA and WA public sector complementing policy guides, projects and programmes on collaboration for change and their continuation throughout time.....	138
Table 17 Public sector roles in knowledge exchange and collaboration	179

Acronyms and Glossary

APSC	Australian Public Service Commission
ANU	Australian National University
BCEC	Bankwest Curtin Economics Centre
Business SA	International Chamber of Commerce, South Australia branch
CEDA	Committee for Economic Development of Australia (Non-Profit)
CSIRO	Commonwealth Scientific and Industrial Research Organisation
Commonwealth	Commonwealth of States of Australia
ED	Economic development
EDB	Economic Development Board
LANDCORP	Western Australian Government's land and development agency
LGASA	Local Government Association of South Australia
OPSER	Office of Public Sector Employment and Review, South Australia
PRSI	Private sector innovation
PS	Public sector
PSI	Public Sector Innovation
PSO	Public Sector Organisation
RAI	Regional Australia Institute (Non-Profit)
R&D	Research and Development
State	Political designations for Subnational States, e.g. the State of Western Australia
state	Theoretical concept
SA	South Australia
UNISA	University of South Australia
UWA	University of Western Australia
WA	Western Australia
WALGA	Western Australia Local Government Association

Chapter 1. Introduction

1.1 Why public sector innovation in a regional economic development context?

Innovation is considered central for a dynamic economy under capitalism.

“The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers’ goods, the new methods of production or transportation, the new markets, the new forms of industrial organisation that capitalist enterprise creates.” (Schumpeter, 2010 [1942], p. 73)

From improving productivity to pushing forward technological frontiers, innovation is critical for the profitability of the firm, thus critical for cutting costs, improving market share and creating new products and services. In this sense, innovation is critical for competitiveness, and critical for the region and country to increase average levels of income per capita (Grossman and Helpman, 1994). For as Schumpeter argued, the process of the new replacing or displacing the old, which he labelled ‘creative destruction’, is not only natural but necessary to overcome the ‘limits’ to growth.

Increasingly concerned with innovation, scholars from over 30 cross-disciplines published in this area seven times more in 2008 than in 1970 (Fagerberg *et al.*, 2012). Innovation has also increasingly become part of political discourse. Back in 1960, the term *innovation* was attached to five different policy domains as per the study of Hansard, the United Kingdom Parliamentary record. By 2005, in over 40 years, the proclamation of its value had extended beyond the traditional policy domains of science and technology to more than 60 domains, including public services (Perren and Sapsed, 2013). The use of ‘innovation’ in reference to the public sector, the state or the government, has been gaining importance since the late 1980s. In comparison to its use in 1960s, by 1990 its use tripled, by 1995, it quadrupled, and by the mid 2000s its use was six times greater than in the 60s (as per Google Books Ngram Viewer, a tool that shows phrases that have occurred in a corpus of English language books, see Michel *et al.*, 2011).

To understand and explain the reasons of uneven growth (Pike *et al.*, 2017), innovation as a driver of local and regional economic development disparities has been a central research object in economic geography. This thesis examines a specific realm of

innovation with the state as the unit of study rather than firms or industries. It departs from the limits to territorial innovation models (TIMs) (Moulaert and Sekia, 2003) such as how the role of state has been studied mostly in function of industry innovation, i.e. innovation policy. Research has centred on the mechanisms, determinants or driving forces for innovation in types of firms, industries and regions. Indeed, spatial scholars have come forward to show how varying types of institutional and technological changes, formal and informal institutions, social and economic characteristics among others have an effect on innovation, contributing with explanations for cross-national and cross-regional divergence in growth rates (Freeman, 1995; Moulaert and Sekia, 2003; Farole *et al.*, 2010). Unsurprisingly, given the market logic behind the concept, the study of territorial innovation has assumed away alternative uses for innovation in the territory, particularly in the economic development (ED) context. Thus, in geographical approaches to innovation, the link between innovation and economic development (in its narrow sense of growth) has the underlying assumption that ED will follow from increased capital accumulation and distributional processes.

“As to the driving forces of innovation [...] most [territorial innovation] models refer to competition and improving the competitive position. There is no reference to improving the non-(market) economic dimensions of the quality of life in local communities or territories” (Moulaert and Sekia, 2003, p. 295)

As per the quote, this is also questioned by Moulaert and Sekia (2003); and Moulaert and Nussbaumer (2005) who argue that territorial innovation should be theorised through a broader discussion that has the progress of humanity as a leading theme rather than in terms of patent-driven innovation and business productivity culture which is mainly instrumental to the neoliberal market arguments (Moulaert and Sekia, 2003, p. 289). This approach, however, carries a series of other issues about defining what is meant by human progress and for whom (Pike *et al.*, 2007). Yet, their point, about the current limitations to the study of territorial innovation lays seed to open a wider and more complex study of this phenomenon. While the aforementioned scholars stress the study of the view and role of communities and civil society in territorial innovation, this can be extended to an integral approach to territorial innovation, one that includes the study of innovation from the perspective of all agents, their interactions, roles and influence on each other.

That is, for simplification, agents can be grouped in at least four sectors which hold diverse views about their own general driving forces and goals: University, Civil Society, State, and Industry. As previously mentioned, Industry Sector Innovation (ISI) has been the focus of most territorial innovation research; other sectors are studied in function of ISI and in their role for ISI. Studying territorial innovation in the same way that ISI has been studied, but from the perspective of the other sectors (i.e. with goals different from profit) could be a way forward to a more integral understanding and explanation of innovation in the territory. Indeed, University Sector Innovation, Civil Society Sector Innovation, Public Sector Innovation, Industry Sector Innovation and their confluence. These can be considered subsystems of innovation that put together, create an integral model for territorial innovation. If territorial innovation is considered in a broader sense, the way each set of economic actors understands and operationalises innovation should be present.

One of these sectors is the state. An alternative for a pragmatic approach to territorial innovation can be to divide it into sectoral components and study these one by one. In a holistic perspective for territorial innovation, one of its subsystems would be that of private sector innovation which has been extensively covered in the literature, for productivity, economic growth and accumulation of capital. Other subsystems that would be part of a holistic approach for territorial innovation can be thought from the perspectives of the goals of other sectors in society. Innovation to achieve their own missions and values. These subsystems are all relational, connected, and thus can support and weaken each other. Sometimes their goals can overlap, but they have distinct missions to pursue. In this sense, there is scope to contribute from the perspective of a public sector innovation subsystem.

This thesis seeks to contribute to the understanding and explanation of one of these less studied sectors in territorial innovation: the state and public sector innovation. Given the roles of the state in the economy (e.g. projects for social cooperation, maintenance of property rights; administering of legal frameworks for economic co-operation (O'Neill, 1997) and its role in the knowledge economy (Mazzucato, 2013; Rodríguez-Pose and Di Cataldo, 2015)), and the concentration of resources in the state (e.g. between 25%-48%, average 43%, contribution to GDP (general government expenditure); and between 6% and 30%, average 18%, of total employment in OECD countries (OECD, 2018), PSI has an effect on economic development by directly and indirectly stimulating the accumulation

of capital, by the organisation of the distribution of capital, via other non-capital related activities which shape the economy.

'Innovation' has become an increasingly common term in relation to the public sector (De Vries *et al.*, 2016). Awards prizing public sector innovation have been running in the USA since 1985 (Bernier *et al.*, 2015) and have then spread to numerous other countries such as Canada, China (Zhao, 2012), UK, Norway France, Brazil or South Africa among others. The OECD established a Public Sector Innovation Observatory in the early 2010s; the EU has a dedicated website; the government of Australia has been running a Public Sector Innovation website for almost ten years; universities are teaching *Public Sector Innovation Management* in Peru; Chile hosts a dedicated team for PSI in a Foundation; similar to United Kingdom's NESTA which also works on PSI.

Countries in the North and South are progressively using the term innovation in their public sector reform agendas. What is understood by the term is still contested, though (De Vries *et al.*, 2016). Scholars of the term reveal that it is somewhat of an empty signifier (Perren and Sapsed, 2013) and that it is increasingly associated with positive themes, such as important, useful, crucial, or essential (Perren and Sapsed, 2013); and with 'magical' properties (Pollitt and Hupe, 2011) to solve complex socio-economic and environmental problems (Monteiro-Brandao and Bruno-Faria, 2013). The drive to encourage PSI is also justified by shifts in the role and position of the state as a result of societal, technological, environmental, cultural and economic changes; and changes in how actors in society identify themselves with the multiple shifting roles and functions of the state. Thereby, expectations, demands, and pressure from societal actors are rising, while resources and funds are increasingly limited to meet them thus opening a gap for innovation (Bekkers *et al.*, 2011a; Valkama *et al.*, 2013). Pluri-national bodies such as the OECD have also promoted public sector innovation as 'the solution' for 'wicked problems' such as slow growth, fragile public finances, high unemployment, and low trust (Gerson, 2014), which resonates with neoliberal and market logic type of innovation.

As a result, PSI effects are often assumed to be desirable outcomes. Thinking about innovation as a normative good is not surprising, least because it requires creativity, entails something new, and it has been so successful for the private sector. Yet, these assumptions can be questioned (Osborne and Brown, 2011). The state is not a uniform entity (Painter, 2000); if the state is understood as a social arena through which groups

pursue their own distinctive goals and, in turn, through their actions influence the behaviours of other groups (Cerny 1990 in O'Neill, 1997), the state is not a centralised, totalised entity with a unified mission. Necessarily, this affects the understanding of public sector innovation.

Thus, given the move by public sectors around the world towards PSI (OECD, 2017), and the normative underlying assumptions around the term, this study sought to uncover how PSI is understood both conceptually and on the ground in a context of economic development, and thus moving away from normative positions.

In order to do this, a process of selection for case studies ended with the identification of the Commonwealth of Australia, a Federation of States, for its adequacy to conduct subnational comparative research on this topic. Not only had the country been exploring and promoting PSI for over a decade (and had been recognised internationally for this), but it had also measured PSI consistently since 2012, and had collected useful data at the regional level. Moreover, a Federation allows holding constant some broader institutional factors that otherwise may have an effect on how PSI is understood and operationalised in a context of economic development (See Chapter 3). Subnational States hold enough legal power and resources to shape public sector internal processes and react to forces external to the public sector in relation to innovation and economic development. Moreover, States also hold the subnational grounds for different actors to pursue their own interests. Therefore, institutional differences can emerge, differences that may influence PSI and economic development in different ways; and that makes the selection of two Australian States adequate cases to contrast and produce greater insight about the PSI phenomenon (See Ch 3 for detailed explanation).

Further, while environmental antecedents to PSI have been recognised important in PSI literature (Walker, 2014; Bernier *et al.*, 2015; Korac *et al.*, 2017), overall little attention has been given in the literature to space nor scale. Therefore, this thesis seeks to contribute to the understanding and explanations of PSI in an economic development context through a regional perspective.

Informed by knowledge and perceptions of different economic development agents about internal interactions and processes of the public sector with different levels of government, and external forces to and external interactions of the public sector with

other actors within the regions, a better understanding of the dynamics that underpin the scope and approaches to PSI is put forward.

A combination of formal and informal institutions, political economy, the economic structure and its trajectory, and accelerated demands for responsiveness; as well as agency through specific types of leadership, and collaboration play a role in shaping PSI and how it is employed and its scope in a context of economic development. Particularly, as this thesis shows how the factors above drive, in part, the concerted efforts for innovation, thereby effectively shaping PSI outcomes in both scope and type. This thesis argues that the potential for PSI in terms of scope and outcomes has been partially but fundamentally shaped by public sector internal processes and external forces, leaving, in part, little room for 'solutions' that may be transformative in outcome, or revolutionary in nature.

In sum, the aim is to develop a fuller understanding and explanation of public sector innovation in the context of regional economic development. To do this, three research questions are answered:

1. How is public sector innovation conceptualised and operationalised in the public sector?
2. How do internal processes within the state shape public sector innovation?
3. In what ways do external forces outside the state influence public sector innovation?

PSI is important especially for its potential to open alternative paths of economic development that may be framed outside a neoliberal paradigm (Peck and Tickell, 2002) i.e. beyond the narrow focus of economic growth and competitiveness. Ultimately, by studying PSI, this thesis seeks to contribute to the understanding if and how PSI can offer alternatives or contribute to economic growth; or offer options for different forms of growth as a process for economic development.

1.2 Defining key concepts

The OECD defines the public sector as ‘the general government sector at the national, regional and local levels plus all public corporations including the central bank’ (OECD, 2014b). For research purposes, the public sector can be subdivided at least into five categories: public administration; public service providers (e.g. education, health, police, research); quasi-autonomous organizations; publicly-owned commercial corporations; and public–private partnerships (Arundel and Huber, 2013).

To operationalise the public sector, this thesis departs from the definition above, but its scope is limited to public administration. Moreover, here this includes elected government officials and the civil service, but excludes public corporations and the central bank.

Public sector innovation in turn, is generally understood in the literature as ‘a new or significantly improved service, communication method, or process or organisational method’ which includes ‘incremental innovations through to major disruptive innovations’ (Behn, 1997; Mulgan and Albury, 2003; Windrum and Koch, 2008; Arundel *et al.*, 2015). Other general understandings on PSI consider its potential scope, such as: ‘new ways of doing things, new processes, new policies, new ways of organising government, or taking new directions for economic development in the State’. These definitions, however, emerge from what it should be rather than how the public sector is interpreting it. The qualitative nature of this research and the tensions between the formal/normative definitions, and the definitions on the ground require an open approach to uncover how PSI is understood and operationalised in the region.

Finally, the term ‘region’, in the operational sense, is meant to represent the subnational unit of a ‘State’ rather than how it is usually employed in Australia, which is to represent the peripheral regions within each State (See Ch 4 for a brief commentary).

1.3 Organization of the thesis

Chapter 2 departs with the literature review to shows gaps in the study of territorial innovation and the state. It shows how public sector innovation literature has studied

mostly the organisational level rather than the territorial level; and identifies areas for extension, such as the study of spatial differences in PSI. It also identifies the key elements involved in the most common definitions of PSI in order to contrast them with the findings of this thesis. Second, it examines the state and theories of the state and public administration to shed light into the workings of the state and its evolution as context for PSI. Third, by reviewing the literature on territorial innovation models, the Chapter identifies and criticises how the leading focus of the research has been around industry innovation and economic growth. Finally, it closes by developing an analytical framework to study public sector innovation at the territorial level in an economic development context.

Chapter 3 explains the Methodology used to conduct the research for this thesis, based on the discussion in Chapter 2. It begins by briefly discussing the Research Approach, via three elements: a causal approach to explanation informed by critical realism, and the justification for a comparative case study. The second section of the chapter develops the research design. Specifically, the elements and quantitative process for the case study selection are briefly discussed. The State of South Australia and the State of Western Australia share a national context, yet, given their sufficient independence from the Federal Government, they have substantial authority to shape their own development paths. Considering their differences in PSI scores, shared national institutions helps to keep some things equal in the contrasting analysis. The data collection and research techniques are described and justified, including qualitative data analysis and how to ensure its validity and reliability. Finally, the chapter closes with the ethical considerations for conducting interviews, using and preserving the data.

Chapter 4 illustrates the context of the comparison between the two regions selected for the comparative case study: South Australia and Western Australia. The first section of the chapter offers the national context, that is, key institutional similarities. The next section discusses differences between the States, particularly in respect to their economies. The third section discusses how the public sector is organised within and between geographic levels of government. Finally, the Chapter concludes by pointing out the key similarities and differences between the case studies that form the basis for the analyses to come.

Chapter 5 seeks to examine the understandings of PSI both conceptually and operationally. Three themes were identified to illustrate the different understandings

and operationalisation of PSI: the first is PSI for costs reduction and increased productivity in the public sector; the second is Market-oriented PSI, and the third is Outcome-driven PSI (outcome here is taken as its definition by the public sector: “Purpose-oriented descriptions of results, which take a broad and long term perspective. They are potentially inspirational and motivational and sufficiently broad to incorporate contributions from a number of organizations.” (Norman, 2007, p. 538)). The differences in approaches to PSI between the regions is partially explained by their immediate political economy hand-in-hand with the regions’ economic conditions. Other factors emerged as part of the explanation for these differences as well: internal public sector processes (Chapter 6) and external forces (Chapter 7).

Chapter 6, therefore, seeks to understand and explain differences between processes internal to the public sector by contrasting the regions’ innovation journeys through public sector reform. Differences in forms of territorial leadership emerged, as well as differences in the regions’ capacity to strengthen their collaboration, coordination and cooperation between levels of government and at the regional level. Institutional thickness is a useful concept to explain the contrasting dynamics between the regions. Coupled with organisational and cognitive proximity in the realm of knowledge exchanges and innovation, the explanation of the role of the quality of interactions becomes clearer.

Chapter 7 on the other hand, examines how external forces influence PSI: First, the chapter examines the inter-relationship between politics, elections, and public perception in function to PSI to uncover an accelerated responsiveness cycle and its implications, particularly around short-termism. Second, drawing on the Qualitative State approach and the Strategic Relational state notions, the Chapter then turns to examining intersectoral interactions within the region, to then identify roles the public sector takes in creating institutional and organisational mechanisms through which different groups in society can pursue their interests. Institutional thickness is also drawn upon to help explain the space/time contingent dynamics.

Finally, Chapter 8 concludes the Thesis by drawing together the key empirical and conceptual findings of this research in relation to the three research questions and discusses how the findings relate and contribute to broader academic debates both in economic geography literature, particularly in relation to the interactive dimension of institutional thickness and bringing the role of the state in economic geography; a

second key finding about governance and the changing role of the State; and proposing an analytical framework for the study of PSI by demonstrating the role of geography in PSI. The chapter concludes with reflexions about the study, avenues of future research, and policy lessons.

Chapter 2. Literature Review

2.1 Introduction

To develop a fuller understanding and explanation of public sector innovation in a context of economic development, three key objectives emerged for the literature review.

First, to examine how PSI has been studied so far and to identify relevant general PSI conceptualisations and empirical findings about PSI at a sectoral level; debates and gaps signalled by researchers. Specifically, the study of the spatial differences in the understanding and explanation of PSI, either between geographical scales and over time, are identified as an important gap in this body of research. Results from the revision of the literature in this block lead to the second and third objectives for the review of the literature.

The second objective, developed in the second section, is to situate the state and the public sector in the literature and identify key characteristics to understand the particularities of this sector, and to examine theories that explain the relation between the state and the economy, and evolution of public administration and management approaches. This literature offers useful tools to understand and explain different approaches to PSI.

The third section develops the last objective for the literature review, which is to examine how geographical approaches to innovation studies have explained innovation. The focus of this research has been on the firm and industries; the study of role of the public sector has been mostly in relation to its auxiliary possibilities in fostering innovation in the foresaid economic actors; and economic development is continuously associated with economic growth and competitiveness, rather than with human development. Yet, explanations about innovation in the region may be instrumental to help explain public sector innovation in a context of economic development, therefore special attention is paid at the key insights from these models that may be applicable to the public sector.

Finally, this Chapter concludes by drawing the main aspects from all sections to help shape the research questions for this thesis and develops the analytical framework used to analyse the research.

2.2 Public sector innovation (PSI)

This section discusses how innovation has been studied in the past: definitions, areas of study, conceptual and empirical issues, and gaps in the literature based mostly in Public Administration and Government Studies. Overall, some authors claim there is already too much conceptual work, and that more empirical data is necessary (Lewis *et al.*, 2017); others, that studies do not tend to link with existing theories (De Vries *et al.*, 2016); and, finally, that research on PSI appears fragmented (OECD, 2010). Yet, all the above might be a result of a lack of adequate theory about PSI mechanisms (Arundel and Huber, 2013) and about needing to explore the nature of innovation within the public sector (Walker, 2008), for authors also call for a general framework of analysis (Bloch and Bugge, 2013). In addition, some scholars recognise that PSI literature had been biased towards successful innovations and best practices (Potts and Kastle, 2010). Finally, an abundance of prescriptive material available with a ‘consultancy report flavour’ (cf. Borins, 2001; Potts and Kastle, 2010, p. 128) prioritises normative modelling over analytical theory. In sum, PSI literature points to how little scholars know about PSI “To understand and criticize the innovation journeys in which governments have embarked” (De Vries *et al.*, 2016, p. 164), particularly in the context of economic development where minimal academic scholarship has been produced.

Analytical distinctions in PSI Literature include: First, those conceptual studies that explore the nature of government and governance to question, for example, whether the public should innovate at all, potential (dis)incentives and then identify factors that may promote or hinder PSI by using both deductive (e.g. using the logic of appropriateness and of consequence (March and Olsen 1989 in Bekkers *et al.*, 2011a)) and inductive mechanisms (e.g. based on PSI award winners). The literature also explores different stages and transversal factors that have an effect in the process of innovating within the public sector e.g. sources of ideas, planning, implementation, evaluation; in addition to the determinants of the rate and success of public sector innovations.

These insights and discussions refer to three different levels of the object of study: individual, organisational, and environmental (Daglio *et al.*, 2015; Bekkers and Tummers, 2017); and in different sectors e.g. general public sector or the water sector for example (Wagner and Fain, 2017).

Finally, there is an increasingly populated block of grey literature, normative and prescriptive in form addressed to policy makers and practitioners from consultancy firms (e.g. The Gallup Organization, 2011), some governments (e.g. Mulgan and Albury, 2003 in the UK) and some Universities that market their research toward practitioners and policy makers, such as the Harvard Kennedy School (E.g. Eggers and Singh, 2009).

The section is structured as follows: Section 2.2.1 offers a general approach to the definitions around public sector innovation and ongoing issues in terms of their analytical value to then continue in the following section, to identify conceptual and practical general issues and debates about PSI (Section 2.2.2). Section 2.2.3 engages with relevant research on a range of factors shaping PSI, including those which are environmental.

2.2.1 Defining PSI: A critique

There is no consensus on a definition for PSI within the literature. One tendency that emerges in both scholarly literature e.g. (e.g. Borins, 1998; Borins, 2014; Arundel *et al.*, 2015) and governmental documents or reports (National Audit Office, 2006; Bugge *et al.*, 2011) is the use of a definition derived from one for innovation in the market realm found in the Oslo Manual, published by the OECD since 1992 updated to its third ed. in 2005. Following this precedent, several public sector innovation surveys adapted and redefined it for PSI as ‘a new or significantly improved service, communication method, or process/organisational method’ which includes ‘incremental innovations through to major disruptive innovations’ (Arundel *et al.*, 2015, p. 1272). Yet, about a third of the sample articles of a systematic review by De Vries *et al.* (2016) do not include a definition of public sector innovation, and when they do it tends to be based on Rogers (2003) who defines innovation as “an idea, practice, or object that is perceived as new by an individual or other unit of adoption” (p. 12). Another definition emphasizes the intentional development of new ideas that produce public value (Sorensen, 2017).

Thus, PSI definitions tend to be neutral or normative in the literature (Kattel, 2015). The neutral type will mostly address the novel aspect of the change (e.g. Rogers 2003, above). Normative definitions instead, will emphasise an 'improvement' or a 'positive' change to be labelled as innovation, by using phrases such as 'significantly improved' (see supra, (Arundel *et al.*, 2015)). Its normative attractiveness has rendered it a 'magical' concept (Pollitt and Hupe, 2011) for its overwhelming positive connotation while being a vaguely defined concept. The problem with normative definitions is that the framework of reference about what improvement means is relative. Thus, authors such De Vries *et al.* (2016) argue for a need to examine goals and effects of PSI (Hartley, 2005; Brown and Osborne, 2013).

More radically, some scholars argue that innovation should be considered only if it is "original, disruptive, and fundamental transformation of an organization's core tasks. Innovation changes deep structures and changes them permanently" (Lynn in Behn and Altshuler, 1997, p. 7). Conversely, others claim that rather than radical, PSI is evolutionary (Walker, 2008). Scholars also consider a range of categories: incremental, radical, or systemic (Mulgan and Albury, 2003). Behn and Altshuler (1997) argue however, the definition of innovation will depend upon its analytical purpose (e.g. whether to include disruptive changes vs. those that do not require altering routines). For example, in the case of public services, innovation may lead to providing new services to new users; or existing services to new users; or increasing the quality of the services to users (Osborne, 1998; Walker *et al.*, 2002).

Some authors have identified types of innovations to establish consistent results in quantitative empirical research. Most authors agree that public sector innovation is inclusive of diverse levels and objects of change and have identified similar typologies and examples to categorise them. For example, Windrum (2008) considers that a conceptual innovation would be:

"The development of new world views that challenge assumptions which underpin existing service products, processes and organizational forms. (...) [it] may involve introduction of new missions, world views, objectives, strategies and rationales. (and) [They] establish links between social economic objectives of a public organization and its operational rationale" (Windrum, 2008, p. 9).

An example of such conceptual innovation would be the ‘minimalist state’. Policy innovation would be the development of new policy concepts, for example, the re-evaluation of existing policy values, as these “[c]hange the thoughts or behavioural intentions associated with a policy belief system” (Windrum, 2008, p. 10). Systemic innovation “involves new or improved ways of interacting with other organizations and knowledge bases” (Windrum, 2008, p. 10), such is the case of privatization and contracting-out of public services during the 1990s in the EU agenda. There is also the example of the Internet which is considered a product innovation given that its invention by public bodies: CERN, the European Organization for Nuclear Research: research organization that operates the largest particle physics laboratory in the world; and DARPA: Defence Advanced Research Projects Agency (DARPA) is an agency of the U.S (Mazzucato, 2013). See Table 1 below for an overview.

Type	Number
Process innovation	105 (47%)
Administrative process innovation	89 (40%)
Technological process innovation	16 (7%)
Product or service innovation	49 (22%)
Governance innovation	29 (13%)
Conceptual innovation	4 (2%)
Other	35 (16%)
Total N=222 (100%) – some studies included more than one type.	

Table 1 Types of Public Sector Innovation, systematic review of the literature, 1990-2014, 181 articles from top five Public Administration journals
Source: De Vries et al. (2016, p. 154)

Another way of analysing the object of public sector innovation is separating that innovation which is *internal* to the workings of the public sector as opposed to innovation that is made *through* the public sector. *Internal* innovations are those meant to enhance or control the state’s own strategic and administrative capacities. These can include processes and measures for increased efficiency and efficacy, processes for policy making, policy implementation (e.g. early waves of privatisation), strategy drafting, evaluation, and other managerial processes such as organisational configurations, public communication, and human resources management (Hartley, 2005; Bekkers *et al.*, 2011b; European Commission, 2013; Parna, 2014; Walker, 2014). Innovation *through* the public sector in terms of the policies implemented that directly

or indirectly promote or minimize challenges for innovation in firms and industries (Hollanders *et al.*, 2013).

This is a useful distinction up to the point that in terms of effects, an internal innovation may have indirect repercussions for other groups in society and an innovation through the public sector which may, in turn, lead to innovative changes in public sector's internal workings. Thus, the latter should not be another side of the public sector innovation coin, but a subset of public innovations. The rationale for putting them at the same level is that the two dimensions are profoundly connected: the public sector's capacity to effectively engage with society and legitimate the system is partly a function of its capacity to innovate in relation in its internal aspects (Bekkers *et al.*, 2011a; Morgan, 2016). Nevertheless, conceptually, public sector innovation should be about its internal mechanisms to innovate, for which formulating and implementing innovation policy for the business sector could be one of the numerous areas in which the state may innovate.

In the review conducted by De Vries et al. (2016), PSI goals were identified from over 180 studies (See

Table 2), yet over third of the studies did not include the goals of PSI in their research. The authors justified this by their focus on the process of innovation (Idem). Yet, the implication is that normative assumptions about PSI might have been made. Moreover, the nuances of these goals are less explored.

Goal	Number
Increasing effectiveness	47 (18%)
Increasing efficiency	41 (15%)
Tackling societal problems (e.g. addressing unemployment, overweight)	28 (10%)
Increasing customer satisfaction	19 (7%)
Involving citizens	15 (6%)
Involving private partners	6 (2%)
Other	19 (7%)
No goals mentioned	92 (35%)

Total N = 267 (100%) – some studies included more than one goal.

Table 2 Goals for Public Sector Innovation, systematic review of the literature, 1990-2014, 181 articles from top five Public Administration journals
Source: De Vries et al. (2016, p. 154)

2.2.2 Issues and debates

This subsection identifies relevant academic issues that contribute to the debates around public sector innovation. Overall, characterisations of the state's nature in relation to innovation have been the following: the public sector lacks competition as incentive for innovation (Bekkers et al., 2011a); it functions through standardization, formalisation, and the Rule of Law to ensure stability and predictability, which make it slow and inflexible (Schumpeter 1942:207 in Bekkers et al., 2011a); democratic governments' culture is one of making compromises and reaching consensus having few natural incentives for taking risks (accountability to tax payers) (Sorensen, 2017); short term politics prevent long-term planning (Sorensen, 2017); and variety can be perceived as threat (Bekkers et al., 2011a).

As mentioned before, and in the introduction, public sector innovation is often considered by governments as a 'magic' solution to allow the continuous improvement of public services while simultaneously reducing their costs: "academics should always be somewhat suspicious of such seemingly magical concepts, especially when they seem to be so difficult to measure and pin down" (Pollitt and Hupe, 2011, p. 36).

Innovations require risk and learning from mistakes. In the public sector, no politician nor manager or citizen would accept the costs of failures (Behn, 1997; Morgan, 2016). This is in line with the guiding logic of consequence (LC) of the public sector (in which administrations have a perspective of consequence in addition to preferences and expectations preceding them (Bekkers et al., 2011a), potential failure and learning from mistakes is deemed too costly.

In a similar line, PSI sceptics have drawn attention to citizens' fear for innovation. While this may be expected of newly elected officials, who then are rewarded by votes, voters may not welcome civil servants innovating (Altshuler and Zegans, 1997). Bureaucratic augmentations, civil liberty abuses, minority discriminations, and corruption are feared by society and political leaders fear having to face the failure (as they are the face to blame) or the civil servant's success (as they may feel a personal threat to their careers) of these innovations (Behn, 1997; Lynn, 1997). Moreover, damage control, is a larger concern for government official or leaders than innovation (Altshuler and Zegans, 1997). News agencies prefer to report failures over successes, which is against the interests of political leaders (Behn, 1997). Nevertheless, Altshuler (in Behn, 1997), catalogued a

collection of 'meta-innovations' that elected chief executives use as umbrella strategies that are publicly accepted and that do not address specific problems, such as citizen participation, customer focus, consumer choice, performance benchmarking, among others. This aligns with the view that the term innovation *per se* "becomes a multi-purpose political tool" (Perren & Sapsed, 2013, p. 1823).

From the discussion above, Behn (1997) identifies a *Trust dilemma* for PSI innovation and (Bekkers *et al.*, 2011a) develops it farther. Trust may be necessary for restoring public faith in public services delivery, but, before society views with positive eyes public innovation, it has to know that these agencies will be able to deliver.

The dilemma of *routines and standardisation* confronts the need of responsiveness to needs of people in particular situations and adapting to changing circumstances (Altshuler in Behn and Altshuler, 1997). The need to emphasize consistency, contradicts efforts to encourage innovation (Behn, 1997). Yet, Alternative theories, such as practice-based theories have emerged in supporting views in which learning and knowledge are embedded in daily routines (Ferguson *et al.*, 2013).

An issue of *magnitude* is identified by Behn and Altshuler (1997), which refers to how significant a change would have to be to be considered an innovation (OECD, 2010). For example, incremental, radical, or systemic (Mulgan and Albury, 2003), evolutionary or revolutionary (McDaniel 2002 in Bekkers *et al.*, 2011a). Magnitude becomes critical when it affects the possibility of adopting a better innovation, or when it is part of a track of small innovations which together will deliver greater impact, or preclude a larger innovation (Moore *et al.*, 1997). Yet, innovative programs or administrative systems that are a perfect fit with a policy's strategy may become an anchor (or produce a lock-in) preventing a structural change from taking place (Behn, 1997). However, intuitively, organisations lagging further behind may not always need such structural changes, but maybe incremental innovations might result of greater impact.

The *paradigm dilemma* (or what is similar to lock-in in an institutional level), as Behn (1997) explains how innovations within a particular paradigm, such as education, may not advance tangible improvement in pupil's knowledge and analytical skills if the education paradigms' basis, such as "teacher-centred instruction, textbook-driven content and compartmentalized knowledge" (Elmore in Behn and Altshuler, 1997) are not allowed (as a result of internal and external forces) to be challenged. Political

structures of public education in this case, create 'powerful forces for stability' (or lock in, again) (Elmore in Behn and Altshuler, 1997). Stone in Behn and Altshuler (1997) points out that in health policy, many innovations also perpetuate the "institutions, rules, and practices of the current system", as they are framed within the paradigm of the health insurance scheme (in the case of the USA), which reinforces practices of high costs and low access medical services. As a result, challenging paradigms requires disruptive innovations (Behn, 1997).

In sum, critique about the question of why should government innovate is answered with reserves by sceptics such as Behn and Altshuler (1997), who argue that the need for innovation to improve performance in government is more a judgement than a fact. For example, Behn (1997) argues, perverse incentives of PSI are observed by increased rate of ephemeral initiatives and the randomness role in long term success of innovations in particular cases of the USA (Lynn, 1997). Also, Governmental performance through innovation is not as straightforward. For example, the field of education is full of experiments and ideas but little has been translated into actual improvement in schools' or students' performance (Elmore in Behn and Altshuler, 1997). Moreover, observes Behn (1997), scholars tend to have a pro-innovation bias (Zegans in Behn and Altshuler, 1997), and there is an urge to question and test the value of innovation in improving public services (Elmore in Behn and Altshuler, 1997).

2.2.3 Factors shaping PSI

Relevant conceptual and empirical insights on PSI have included research around:

- experimentation and innovation labs (Potts and Kastle, 2010; Tönurist *et al.*, 2017);
- leadership, entrepreneurship, and mediators (Borins, 2000; Luke *et al.*, 2010; Luke *et al.*, 2011; Agostino *et al.*, 2013; Korac *et al.*, 2017; Ricard *et al.*, 2017);
- multi-actor collaboration and trust (Bommert, 2010; Sorensen and Torfing, 2011; Luna-Reyes, 2013);
- collaboration in the form of 'joined-up' government, across agencies, and adapting innovations from other agencies, i.e. lateral innovations (Hartley, 2005);
- managing change and innovation (Osborne and Brown, 2005; Veenswijk, 2005; Damanpour and Schneider, 2009; Luna-Reyes, 2013);

- dissemination or diffusion and adoption of public sector innovations (Rogers, 2003; Franzel, 2008; Fernandez and Wise, 2010; Korac *et al.*, 2017; Mergel, 2018);
- development of public sector innovations (Parna and von Tunzelmann, 2007);
- organisational performance (Damanpour *et al.*, 2009; Uyarra *et al.*, 2014);
- risk governance (Brown and Osborne, 2013; Flemig *et al.*, 2016);
- sustainability of innovations (Ferrarezi *et al.*, 2014);
- decentralisation and PSI (Strumpf, 2002; Asaduzzaman, 2011).

Empirical studies have tended to focus on the conditions for the adoption of innovations in public sector organisations, the rate of innovations, and factors that enhance their success (Osborne and Brown, 2011; Monteiro-Brandao and Bruno-Faria, 2013; Walker, 2014; Bernier *et al.*, 2015; De Vries *et al.*, 2016); with less attention paid to the sector as a unit of study and its environmental antecedents. Public services in general have been studied (Walker 2008), also particular sectors of the public arena such as health, education, and public finance management have also been explored both theoretically and in practical terms (OECD 2014; OECD 2006; OECD/IDB 2014). While PSI in the context of economic development has been studied (See Morgan, 2010), it has been about innovation in local economic development policy by local governments. De Vries *et al.* (2016) found that most studies have been conducted at the local government level (e.g. Ihrke *et al.*, 2003), and others at the central government (e.g. Vigoda-Gadot *et al.*, 2008). Finally, there is scope for regional, multi-scalar, comparative research in the field of PSI studies.

In terms of research methods, often studies have sought to identify conditions, antecedents or determinants, and barriers of (successful) innovations through small and large scale surveys (Damanpour and Schneider, 2006; Morgan, 2010; Arundel *et al.*, 2015), in depth interviews and case studies. Some have been object based (on specific innovations); others based on innovation awards (Borins, 1998; Monteiro-Brandao and Bruno-Faria, 2013; Bernier *et al.*, 2015). And others have followed business practice studies methods (asking whether innovations had been introduced) (Arundel *et al.*, 2015).

Organisational and sectoral openness and variety for the transfer of knowledge.

Some authors have considered that openness is important for public sector innovation (Bekkers et al 2011). It is justified in relation to having access to a free flow of information, experience, knowledge, or ideas; which is related to having access to different perspectives, and having access to informal spaces and networks that are not too restrictive to develop creative ideas, for innovation often occurs in the grey or informal area between formal organizations (Noteboom 2006 in Bekkers). At a territorial level, regional innovation diffusion models emphasize the influence of other states through the assumption that regions borrow policy solutions from their neighbours (Berry and Berry 1990 in Zhang 2012) and thereby, the degree of openness of regions may influence innovation (Zhang 2012).

Conceptually, a strategic cooperative approach between the public and private sectors has been highlighted to encourage public sector innovation (Morgan, 2016). This can be justified by the fact that neither sector can have 'all the knowledge' and that knowledge deficit can be counterbalanced by having a process in place to help sectors work together to identify areas of desirable intervention to facilitate structural change, particularly regarding industrial policy (Rodrik, 2004; Morgan, 2016). Yet, the type of feedback received can be shaded by an array of factors such as power, fear, personal interests, or ambition (Morgan, 2016). Related to this is the concept of 'variety' that Bekkers applies in the PSI context, regarding the number and intensity of relational ties between organizations, based on Granovetter's (1973) work on the 'strength of weak ties' for sourcing innovative ideas. Edelenbos and Klijn (2006 in Bekkers et al. 2011) find that creating these weak ties needs boundary spanning activities and active management.

These ideas are borrowed from economic theory, in relation to sources of regional knowledge spillovers in the form of unrelated variety (knowledge exchanges between different industrial sectors), which economic geographers have conceptually and empirically discussed extensively in a context of regional growth (See Frenken *et al.*, 2007).

In this sense, an example is a study that identified three different approaches 3699 European public agencies from different levels (municipal, regional or national) may use to innovate and how these relate with income per capita: A 'bottom-up' approach (active

support for PSI within the organisation), a 'knowledge-scanning' approach (imitating others' innovations using external knowledge sources), and 'policy-dependent triggers' approach (innovating in response to political mandates, top-down scheme) (Arundel et al., 2015). Differences in governance, cultural factors, and the discretionary power given to managers between and within countries justify the expected heterogeneity in the agencies' innovative activities (Arundel et al., 2015). The authors found a difference on innovation outcomes (e.g. novelty and benefits) in relation to the approach used, as 'bottom-up' and 'knowledge-scanning' methods are correlated with better outcomes than 'policy-dependent' approach across European countries (Arundel et al., 2015). Specifically, 'Bottom-up' and 'knowledge-scanning' approaches have a positive correlation with higher national per capita incomes than the 'policy-dependent triggers' approach (Arundel et al., 2015). This shows how both an open culture to innovation in the organisation ('bottom-up') and an openness to engaging with other organisations/sectors ('knowledge-scanning') have an influence in the outcomes of innovations.

Openness is also related with having an open and safe culture within the public sector itself towards trialling new options and failing in the process of getting it right, for which formal institutions become necessary (Edelenbos 2005 in Bekkers et al 2011). Moreover, this would mean a state that is willing to experiment, fail, and learn from this, which is challenging given that voters' expectations do not include failure (Behn, 1997).

Therefore, this openness would imply an institutional context conducive to learning (Rogers 2003; Osborn and Brown 2005; Veenswijk 2006 in Bekkers et al 2011); to the encouragement of multi-actor collaboration in networks, partnerships and inter-organizational teams (Sørensen and Torfing (2011) Pollitt and Bouckart 2000 in Bekkers et al 2011); and conducive to supporting leaders (Parna and Tunzelmann 2007; Damanpur and Schneider 2006; Damanpur and Schneider 2009; Van den Ven, Angle and Poole 2000; Fernandez and Wise 2010; Hansen 2010; Borins 2001a; Monteiro-Brandao and Bruno-Faria 2011; OECD 2010a).

2.3 The state and the public sector

This section aims to explore theories that are useful to understand the state to help situate public sector innovation here. First, definitions of state and the public sector are briefly discussed; then the strategic relational approach, the qualitative state approach and the concept of governance; the third sub-section discusses post-Fordism, neoliberalism, the economy and the role of the state; and, finally, the section closes with the shifts in public administration and views of the roles of the state.

2.3.1 Defining the state and the public sector

Defining the state has proven problematic, to the point that some scholars have even recommended to avoid trying altogether (Easton 1981 in Jessop, 1990). If attempted to define, several issues incite debates, for example, is it best defined by its legal form, its institutional composition and boundaries, its internal operations, its declared aims, or by its functions for the broader society? Broader debates around the state include, for example, the nature of its composition (e.g. thing, subject, social relation, or political construct); the relationship between the state and other institutions (e.g. the law, civil society, the business sector, and power); whether it can be studied by its own or as part of a political system; and whether it is autonomous, its sources and its limits (Jessop, 1990). An important characteristic of the state is its continual transformation and restless in so far it is a political project of never-ending ‘processes of formation, deformation, and reformation’ (Painter, 2000, p. 361).

Analytically the state can be understood as a political system constituted by the a diversity of actors and sectors from different geographical scales that influence the public sector (Jessop, 1990). Operationally for research purposes, the state can be understood as a dynamic set of public institutions that exercise authority over a particular territory via the coordination, control and application of a wide range and varying forms of policies and regulations (Painter, 2000; MacKinnon and Cumbers, 2015). The latter definition of the state aligns with the one the OECD uses to define the public sector: ‘the general government sector at the national, regional and local levels plus all public corporations including the central bank’ (OECD, 2014b). In this sense, the public sector can be subdivided at least into five categories: public administration; public service providers (e.g. education, health, police, research); quasi-autonomous organizations; publicly-owned commercial corporations; and public-private

partnerships (Arundel and Huber, 2013). The scope of this thesis is limited to central public administration, including elected government officials and civil service, but excluding the central bank, specifically those organisations closely linked with economic development activities.

2.3.2 Strategic-relational approach, the qualitative state, and governance

This subsection explains three complementary ways that are useful to understand the state for its role in the economy, and which can be used later to explain the role innovation can take in the public sector.

The strategic relational approach views the state as a social relation rather than as a fixed entity (Jessop 1990, 2007 in MacKinnon 2012). The emphasis is on the efforts of different sectors in society to promote their interests and their interactions with state structures. This approach views the state as powerless, for it is the social forces that act in and through the state that hold the power (MacKinnon, 2012). In particular, it explores the relationships between human agency and institutions, and their articulation in the form and function of the state and its strategic realm (economic growth models and institutional arrangements) (Jones, 1997) and implies that institutions are inherently spatiotemporal (Jessop, 2001a).

Moreover, the state is not naturally united, its different components must be actively aligned behind a more or less coherent line of action through 'state projects' that mobilise these components or apparatuses of the state (MacKinnon, 2012). The concept of strategy refers to the approach social groups take to the inbuilt biases of state formation that make resources and capabilities of the state more accessible to some groups in society over others (MacKinnon 2012). Under this view, public servants and the government are not only managing the resources and capabilities of the state, but also are active actors promoting their interests in and through the state and who can act for the interests of other groups.

In a similar line, the qualitative state approach also involves accepting that the state is not a homogeneous unit but a domain that is continuously contested, yet, this approach still views the state as an entity that interacts with society (O'Neill 1997). It focuses on the relationship between the state and the economy.

The complex and intertwined market-state relationship is stressed (Polanyi, 1944; Block 1994 in O'Neill, 1997) as this approach views the state's roles as dynamic in nature and shifting in terms of processes, practices, values and strategies; rather than expanding or contracting in degrees of intervention within the economy, as states are inherently part of the economy (Block and Evans, 2005). Thus, the qualitative state approach also acknowledges an ongoing transformation and reorganization of the institutionalization of the state (MacKinnon, 2012).

Evidence for the state-market relationship is in the state's economic role in, for example, the maintenance of property rights and governance frameworks, control of macro-economic trends, governance of product and financial markets, provision of basic infrastructure, production and reproduction of labour, maintenance of public health, among other legitimation activities (O'Neill, 1997).

In addition to what the state does, the qualitative approach also considers the structures and mechanisms which enable performing the fore-mentioned roles (O'Neill, 1997). Rather than assuming a hierarchical and centralized character of the state (Cerny, 1990), valuable insights may be obtained from the processes by which the state relates with capitalism (Offe, 1984 in O'Neill 1997). For example, political resistance and social unrest are both internal to the state and threats to the accumulation of capital and the function of legitimacy result in the state not being a regulator nor an arbiter but part of its contradictions (Held, 2013).

The state apparatus functions by supporting market transactions and being the arena for the political negotiations of accumulation and distributional pathways (Cerny 1990 in O'Neill, 1997). That is, the qualitative state considers the state to be constituted by diverse administrative, bureaucratic, legal and coercive systems that build relationships between the state and other groups, which in turn also deeply influence relationships within and between these groups (Stepan, 1978 referred to in Skocpol 1985, O'Neill, 1997). As a result, O'Neill (1997) stresses that the differences in power between states resides in their capacity to strengthen their organizations, to employ sufficient and apt personnel, to co-opt political support, and to facilitate social programmes (Skocpol 1985 in O'Neill, 1997). These capacities in turn, arise and are sustained by 'prevailing and historical structures and conditions influencing the state's apparatus' (O'Neill, 2008 [1997], p. 265), from which a notion of path dependency may follow.

Finally, linking these roles with the strategic relational approach would mean identifying the groups and the strategies used to shape these state roles and those that are not participating in the political arena.

Both approaches to understanding and explaining the state emphasize social relations in the pursuit of their own (and others) interests. In this sense, Rhodes (1997) has explained the increase in importance by the 1990s of formal and informal relations between public sector organisations and non-public sector organisation in terms of both policy making and administration by the means of horizontal partnerships and the conformation of networks, in addition to market or user relations (Painter, 2000). This shift is sometimes referred as going from government to 'governance' (Rhodes, 1997) and empirically suggests a definition of state that rejects a unified and centralised entity to give way to a continual process of interactions among societal actors (MacKinnon and Cumbers, 2015).

Governance is a theoretical concept describing this interactive process between other sectors shaping the state and vice versa: "Governance is seen as a collective process of policy and strategy formation involving different public and private and quasi-public sectors" (Painter, 2000, p. 361; See Vázquez-Barquero, 2002). Success is about the mobilisation of resources and actors beyond those of government (Painter, 2000, p. 372) and the ability of the government to bring together formal entities and interest groups in society (O'Neill, 1997). Yet, questions still remain in relation to which actors actually have the means to influence decisions in this new 'governance' paradigm (Jessop, 2014).

The active involvement of other actors in public administration processes is recognised as part of a global shift of accumulation regime Fordism to Post-Fordism and Neoliberalism.

2.3.3 Post-Fordism, neoliberalism, the economy and the role of the state

A 'regime' or 'strategy' of accumulation is about the set of political and economic actions, institutions and paths pursued by states to ensure the reproduction of a particular economic growth model (Jessop 1983 and Jessop et al 1988 in Jones, 1997). For example, the accumulation regime of 'Fordism' in high income countries began after the Second World War and characterised states up to the decade of the 1970s as centralised, having a top-down approach towards policy, and emphasizing regulation. The relative

social and economic stability is considered to be result of the combination of, on the one hand, a firm/industry nurturing or 'nanny' state (O'Neill 1997) to alleviate crisis and support production through Keynesian macroeconomics as a function of capital accumulation; and, on the other hand, as a result of welfare state policies that served for legitimisation purposes (McMichael, 2012; MacKinnon and Cumbers, 2015). Simultaneously, the cold war, the space and arms race triggered research and development investments directly by states.

Even though Keynesian production function and theory did not explicitly discuss the role of innovation in the economy, it became a tool to support the accumulation function of the state. Science policies focused on the production of scientific knowledge through instruments such as public research funds, public or semi-public research institutes, tax incentives to firms, and pursuing public research and development activities (Lundvall and Borrás, 2005). Technology policies intended to advance and commercialise sectoral technical knowledge through instruments such as public procurement, public aid to strategic sectors, bridging institutions such as universities and firms; delivered labour force training and improvement of technical skills, benchmarked industrial sectors, among others (Idem).

As a response to what turned out to be a highly rigid production system that was too dependent on external shocks such as increased oil prices, a Post-Fordist, or a neoliberal 'regime of flexible accumulation' emerged from the late 1970s and 1980s economic crisis to correct market and state failures (Storper and Scott, 1988; Martin and Sunley, 2014 [1997]). Industries began to shift towards producing small specialised batches with higher quality control and less inventory stocks to develop just-in-time logistics; in addition to trying to take full advantage of the flexibility that a knowledgeable and well rewarded labour force can give to get ahead in the market and overcoming situations of crisis (Harvey, 1990 [1989]). The state's strategy was around explicit encouragement of innovation and international competitiveness, privileging economic policy aims favoured the rise of the 'New Right', which sought to subordinate the role of the state to the market (Pike *et al.*, 2006). In general, the state was considered slow, bureaucratic, and in the way of markets. Hence the privatisations of collective services, the transfer of power and/or resources to supranational and/or subnational levels, and the promotion of interregional competition and the de-regularization and liberalization of markets encouraged wider participation from the business sector, and followed the emergence of

an 'entrepreneurial state' by the 1990s (Harvey, 1990 [1989]; McMichael, 2012). There was a "shift in state expenditures towards the maximization of economic outcomes rather than the maximization of social welfare; and the adoption of enterprise cultures which promote innovation and competition, including in the public sector" (O'Neill, 1997, p. 267).

The shift in accumulation strategy also meant moving from the Keynesian Welfare state of heightened social security to a Schumpeterian *Workfare Regime* (Peck, 2001), through which governments focused on stimulating international competitiveness by supplying activities, such as provision of skills to support entrepreneurial activity, that would encourage innovation. Innovation policies to increase the overall innovative and competitive performance of the economy emerged in relation to improving social capital for regional development, improving access to information, and improving organizational performance and learning (Lundvall and Borrás, 2005), see **Figure 1** for policy examples.

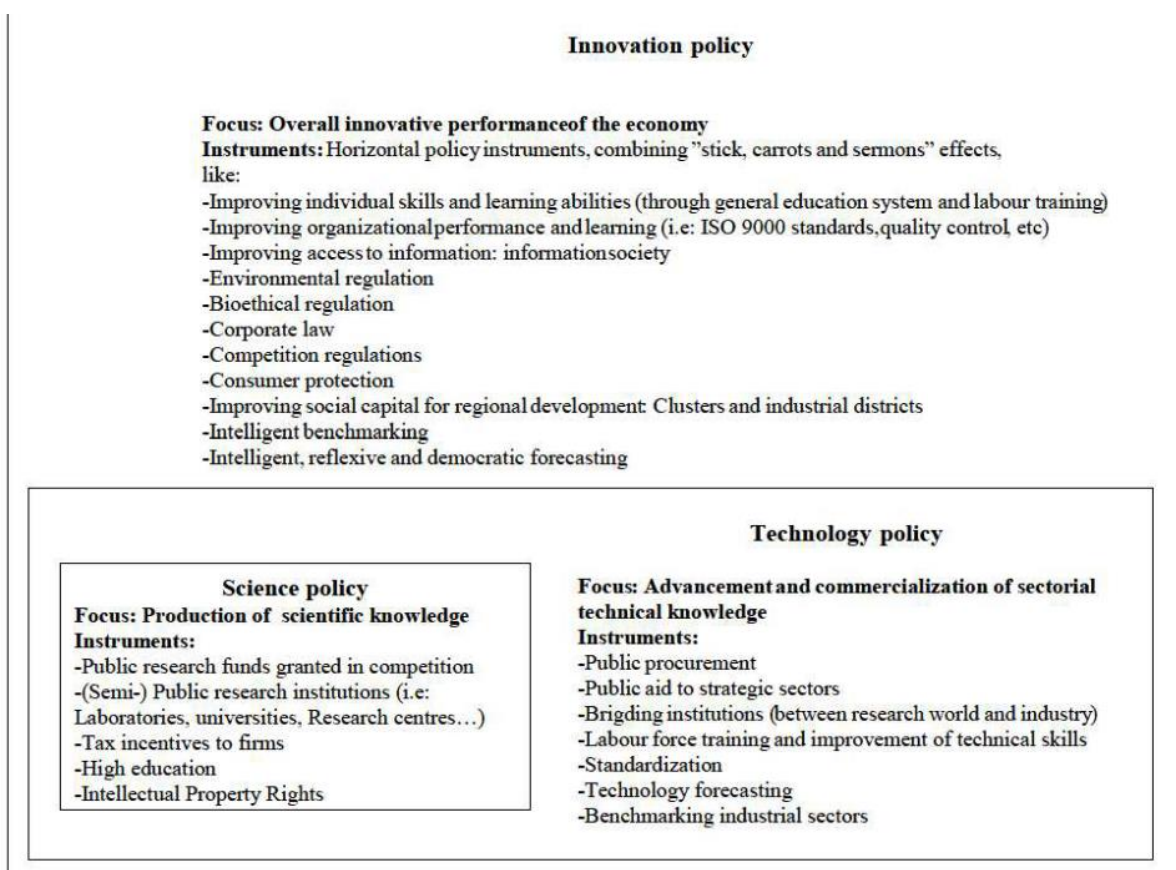


Figure 1 Innovation Policy

Source: (Lundvall and Borrás, 2005, p. 615)

2.3.4 Shifts in the administration and role of the state

In line with changes on the view of the role of the state, public administration, management and governance have experienced three broad shifts in paradigms. These have been characterised as conducive to particular types of public sector innovations (Benington and Hartley (2001) in Hartley, 2005). First, up to the 1970s, the traditional 'public administration approach' is based on "legislative, bureaucratic, and rule-based approach to public service provision" (Hartley, 2005, p. 29). This approach includes top-down identification of needs and development of large-scale solutions while considering a fairly homogenous population (Hartley, 2005). The provision of welfare and regulatory services is assumed to be a role for the state, and politicians at the national and the local levels have a central role in policy innovation and innovating to build the necessary support from diverse agents for policy to materialise into new regulations (Hartley, 2005) (See Table 3).

One example is the establishment of the National Health Service in the United Kingdom in 1948. Another is the case of the programs for structural reforms (PSRs) devised for Latin America by the International Monetary Fund and the World Bank, which prescribed governments to set up PSRs –which included far-reaching reductions of state expenditure, the elimination of subsidies, and the opening of markets- in exchange for financial aid (Raventós, 2003). Because of the large scale of changes and the amount of resources deployed within this paradigm, innovations are evident to a number of stakeholders; nevertheless, it also makes it difficult to adapt and to improve continuously (Hartley, 2005). Public managers act as 'clerks' (impassive, implementing political will) or 'martyrs' (holding private ideas about action but having no space act upon them) (Hartley, 2005).

	<i>'Traditional' public administration</i>	<i>'New' Public Management</i>	<i>Networked governance</i>
<i>Innovation</i>	Some large-scale, national and universal innovations	Innovations in organizational form more than content	Innovation at both central and local levels
<i>Improvement</i>	Large step-change improvements initially, but less capability for continuous improvement	Improvements in managerial processes and systems. Customer focus produces quality improvements in some services	Aiming for both transformational and continuous improvement in front-line services
<i>Role of policy-makers</i>	Commanders	Announcers/commissioners	Leaders and interpreters
<i>Role of public managers</i>	'Clerks and martyrs'	Efficiency and market maximizers	'Explorers'
<i>Role of the population</i>	Clients	Customers	Co-producers

Table 3: Innovation and improvement in different conceptions of governance and public management

Source: (Hartley, 2005, p. 29)

Underpinned by neoliberal theories advocating for a reduction of state size, a second approach to innovation emerged in late 1970s through to the 1990s, mostly in high income countries (Hartley, 2005). The 'New public management' (NPM) paradigm sought to make governments more efficient by implementing market like principles to public processes and services. NPM organisational principles seek to implement private sector managerial strategies by emphasizing the idea that successful concepts used in the business sector must also be successful in the public sector (MacKinnon and Cumbers, 2015). Some examples are de-regularisation, privatisation, market-based competition, the use of performance indicators, customer or client responsiveness, and others that would allow the civil servant more flexibility to do things differently (or to innovate), as well as less anonymity (increased accountability); and politicians less scope to interfere in administrative matters (Hood, 1991; Hall and Holt, 2008).

Innovations arising from NPM focused on organizational forms and processes (such as executive agencies in central government in the UK) to represent a competitive state which prefers strategies that are market and consumer or client oriented, and efficiency maximizers (Hartley, 2005).

To which extent innovations are 'necessarily functional' (i.e. led to improvements) is questioned in this approach. In cases where individual consumers have a greater voice these have been useful, but this approach weakens the essence of more collective

relationships (Hartley, 2005). Moreover, the *means* becomes the *goal* for NPM: e.g. to create a business-like public sector (Lawton 2005 in Bekkers *et al.*, 2011a), rather than it being about a particular outcome, “it’s more about organizational form than content” (Hartley 2005 p.29). NPM embodies a shift of values in the state, from equity and universalism towards individualism (OECD 2005 in Bekkers *et al.*, 2011a).

The fragmentation of the public sector as an unintended consequence of previous public sector reforms (Bevir, 2013); and recognising a continuously varying, rich, complex and risky context, the third paradigm is the networked governance approach to innovation (Hartley, 2005), or what some other authors have also called ‘New Public Governance’ (Osborne, 2006; Sorensen and Torfing, 2015) or ‘Self-Governance’ (Sorensen and Triantafillou, 2009) or post-NPM (Bevir, 2011; Pollitt and Bouckaert, 2017). Moving away from controlling through hierarchies or letting the market be, the role of the state is more about steering action and civil society, shaped by governance through networks and partnerships (Newman 2001 in Hartley, 2005); ‘articulation and management of institutional settings engendering self-governing capacities of public and private agencies’ (Sorensen and Triantafillou, 2009, p. 2). Innovation then, is considered to create public value from a combination of top down initiatives e.g. devolution of powers towards regions in the UK, and bottom up approaches when resources are assigned for experimentation and collaboration on public innovation (e.g. pilot programs); thus, the population can have an important role in the process of innovation (Hartley, 2005).

Public value management is less about competition and more about relationships, goals are multiple and broad, including responding to the preferences of citizens and renewing trust through the quality of services rather than a managerial focus on performance targets (O’Flynn, 2007). The delivery of services has been shifting to different alternatives selected pragmatically rather than trying to have the private sector and deliver as much as possible (O’Flynn, 2007).

The goal for economic development would be then to create conditions for successful cooperation between societal actors and to develop network-like arrangements (Bekkers *et al.*, 2011a; Bevir, 2011), which becomes a larger version of the state. From this perspective, problems are solved by co-production, the inclusion of users, stakeholders and other civil society actors, and enlightened leadership; and public sector innovation just becomes an argument for governance and management reforms rather than the actual object of study (Bekkers *et al.*, 2011a).

Critiques have also emerged about this paradigm as some consider there is a different form of fragmentation of the public sector; and the erosion of central control beyond the traditional public sector, to include pressure groups from industries and civil society (Bevir, 2011). Mazzucato (2013) would argue that the state should not lose its imperative to act without asking for permission or reaching consensus (in relation to innovative investments for example); and Jessop (2014) would argue that this is a 'façade' to perpetuate state power through class oppression in capitalism.

2.4 Geographical approaches to innovation and territorial economic development

This section examines the way innovation has been studied in the territory from a geographical perspective in a context of economic development, and the roles that are attributed to the state. Geographical approaches conceptualise innovation as social and spatial processes that occur in a range of institutional settings which also differ geographically (Gertler and Wolfe, 2002a). These approaches to innovation have searched for the distinctive, local assets and economic capabilities for competitiveness and economic development, and have proposed how institutional arrangements, formal and informal (such as networks and trust) may explain innovation differences between countries and local territories (Pike, Rodriguez-Pose, & Tomaney, 2006, p. 91). Scholars have also explored the relationship between a diversity of actors such as universities and government; and include the dynamism and complexity of 'place' as determinant for economic change, growth and development (MacKinnon and Cumbers, 2015) as a way to further the analysis of uneven development. These models consider 'space' in their causal explanations of innovation, and emphasize how "economic development is the result of unique, context-driven, place-specific combinations of forces" (Storper, 2011, p. 341).

The section includes: National system of innovation, regional innovation systems and related models; *Milieu innovateur*, industrial districts and new industrial spaces literature; Institutional thickness; Triple helix approaches and its derivations, and the 'social region' model.

2.4.1 National systems of innovation, Regional Innovation Systems and related innovation approaches in the territory

National Systems of Innovation (NSI) models explain how innovation and competitiveness depend on the configurations and interdependencies among diverse actors in the system (Fagerberg, 1994), by interpreting innovation in the Schumpeterian sense of the introduction of new or improved processes, products, organisational routines, and marketing strategies (Asheim *et al.*, 2015). The national systems of innovation approach (Nelson and Winter, 1982) considered complex interdependencies between actors that lead to interactive learning processes behind technological development, where feedback loops between diverse agents in diverse stages (design, development, productive and end-user) are in constant motion (Pike *et al.*, 2017). The notion of non-market relationships emphasize elements of loyalty, power and trust for the transmission of qualitative or tacit information and knowledge going into the feedback loops (Lundvall and Maskell, 2000). This tacit knowledge is the result of diverse learning processes summed up in 'learning by doing', which include trial and error (e.g. searching, imitating, and using) (Howells, 2002). As a result, tacit knowledge becomes more difficult to transfer, and becomes partially localised and context-specific (Howells, 2002).

Empirically, Balzat and Hanusch (2004) identified the most commonly measured elements in NSI systems: innovative firms; public and private research and development institutions, as well as those that support and promote knowledge diffusion and innovation in general; education and training systems; and financial systems (Freeman, 1995). NSI research has shown that different national contexts offer dissimilar interactive learning interdependencies and non-market relationships (Lundvall and Maskell, 2000).

In the interest of economic development, the public sector plays a role in facilitating a NSI via the coordination and implementation of long term industrial and economic policies in support of innovation (Freeman, 1995). For example, by the exemption of tariffs on imports of industrial equipment or providing technical advice and assistance. Yet, the configurations and interdependencies among diverse actors are used to explain national innovation capacity for the market; and the role of the public sector is to support the development of the system for increased innovativeness and national competitiveness in the productive realm.

In **regional innovation systems** (RIS), firms and competitiveness continue to be the unit of research and goal respectively of academic enquiry. RIS encompass all factors that affect innovation in firms (Asheim *et al.*, 2015, p. 4). Similar to national systems of innovation above, RIS derive its explanatory power from principles of socio-economic and institutional dynamics which stem from evolutionary theory of technical change (Moulaert and Sekia, 2003; see Iammarino, 2005 for different ways of interpreting RIS). The interest lies on the uneven geography of innovation and the factors shaping the region's capacities to generate knowledge and innovation (Pike *et al.*, 2006; Asheim *et al.*, 2015). RIS is a localised interacting network of actors (holding public and private interests) and formal institutions whose activities and relationships are conducive to the generation, use, alteration and dissemination of knowledge and new technologies within and outside the region (Doloreux and Parto, 2005; Iammarino, 2005).

“The basic argument is that such a set of actors produces pervasive and systemic effects that encourage firms within the region to (...) reinforce regional innovative capability and competitiveness.” (Doloreux and Parto, 2005, p. 135)

Here the role of cooperation for collective learning is emphasized, stressing the non-linear and dynamic properties of the process innovation, which is considered a creative process that is organisational and technological (with the first often determining the latter (Moulaert and Sekia, 2003)), rather than a result of a research activity. The region, in terms of regional development, is viewed as ‘a system of learning by interacting and by steering regulation’ (Moulaert and Sekia, 2003, p. 294).

Recent contributions to the RIS literature offer relevant critiques. For example, the lack of consideration in RIS research to the tensions between government levels in regional innovation policy (Pugh, 2015); that is, the issue of whether regional and national needs and priorities can comfortably co-exist.

The ‘**Learning Region**’ is another geographical approach to territorial innovation that also attempts to explain regional competitiveness through social and institutional conditions (Doloreux and Parto, 2005), emphasising the role of the region as a determinant for economic, political and social change (Pike *et al.*, 2006). It combines the role of knowledge as a strategic resource, learning processes (Morgan, 1997; Lundvall, 2002 [1998]) and institutional evolutionary economics (Moulaert and Sekia, 2003) for the analyses of innovation dynamics.

Learning is also understood as a collective process that is conducive to change, in an organisation's capability or understanding (Cooke and Morgan, 1998). In line with *Milieu innovateur* literature, learning is considered critical for innovation processes and thus, being able to maintain or gain the sought competitive advantage (Gertler and Wolfe, 2002b). Localities and regions that are more self-aware or reflexive -in operational terms, those which take on systematic evaluation processes- are more likely to adapt to economic change by recognizing and discarding routines and practices that are no longer useful to meet their competitive aims (Cooke and Morgan, 1998).

Several key factors have been identified for their role in diverse parts of the learning process for innovation within firms, extensive to regions. For example, the role of physical proximity in affecting learning from knowledge spillovers between complementary firms in the same industry (E.g. Boschma and Iammarino, 2009) or between firms in different industries (unrelated variety) (E.g. Frenken *et al.*, 2007). Beyond spatial proximity, discussions over how and to what extent institutional, cognitive, social and organizational proximities may have an effect in interactive learning and innovation (Boschma, 2005) have also been explored. In a similar vein, there is a role for non-market interrelations among firms (where formally nothing is being contractually, formally exchanged -'untraded interdependencies'-), leading to the formation of networks of trust (Storper, 1997). These networks facilitate tacit knowledge exchanges which in turn, create and reproduce conventions and allow the coordination of relations for learning and innovation, found in particular contexts of regions or localities (Storper, 1997). Also relevant to innovation here are the dynamic extra-local relations extending to the national and international levels (MacKinnon *et al.*, 2002; Vale, 2011) to connect with specific technological and sectoral systems that allow the inflows of new knowledge for innovation (Fitjar and Rodriguez-Pose, 2011).

2.4.2 *Milieu innovateur, industrial districts, and new industrial spaces*

To deliver dynamic innovative firms, leading to growth and development at the regional or local level, *milieu innovateur*, industrial districts, and local production systems literature, focus on the role of endogenous institutional potential -for example, human capital, infrastructure, and learning-(Fratesi and Senn, 2009). In the case of the *milieu innovateur*, the environment surrounding the firm (including other firms), the *milieu*, acts as a type of 'functional support space' in terms of the organization of production factors and the having competent and strategic relations with stakeholders such as

suppliers, clients, partners, competitors, etc. This functional support space determines the association between innovation in the firm and spatial development (Ratti 1992 in Moulaert and Sekia, 2003; Fratesi and Senn, 2009). Further evolution of this school of thought stresses how learning capacity of the diverse members of the milieu is key to perceive changes and adapt accordingly.

Industrial districts literature recognizes the capacities to innovate of small and medium firms belonging to the same industry in a local space, interacting within a defined division of labour specialised in diverse stages of the production and distribution cycle of the industry (Scott, 1988). Within the market formal relations and informal relations are usual amongst local communities and firms, hence, trust and reciprocity are key characteristics that result into a distinct and quite useful combination of competitive and cooperative scenarios (Idem.), as it allows for risky transactions that would not otherwise follow (Dei Ottati 1994 in Moulaert and Sekia, 2003). Both the innovative milieu and industrial districts stress the role of the cooperative culture of socio-economic communities, including the collaboration of governments (Pike *et al.*, 2017).

New industrial spaces are explained as flexible production systems of localised, vertically and horizontally disintegrated, and agglomerated production systems. The result is specialist supplier availability, technological knowledge spill-overs and labour market pooling (Marshallian-type of economic externalities) (Storper and Scott, 1988). These spaces are characterised by a special dexterity for quick adaptation (such as shifting production or process configurations) to changing circumstances (such as changes in product requirements in terms of quantity or qualities) without negative impacts in efficiency (Storper and Scott, 1988; Moulaert and Sekia, 2003).

Flexibility stems from diverse sources, such as regulatory systems that allow for an increasingly flexible the employment of labour force in business activities; and local labour pools, deepening divisions of labour, and trust within agglomerations which also result in easier coordination and organisation among firms and between firms and diverse local actors (Scott, 1988). This flexibility also contributes to the persistence of efficiency and to minimizing transaction costs.

2.4.3 Institutional Thickness

The concept of institutional thickness was developed by Amin and Thrift (1994) in the context of agglomeration studies and innovation. In particular, the authors emphasize the search of the local characteristics that prime within the globe. That is, in the context of “growth poles” how economic factors, combined with socio cultural factors produce local embeddedness. They argue that the latter may be conceptualized in the form of institutional thickness. Before describing the factors that define this concept, it might be useful to make a distinction separating institutions from organizations.

Organizations are “the means and mechanisms by which institutions, that is, regulations norms and values, are enacted and further reinforced” (Zukauskaite *et al.*, 2017, p. 329). The number of organisations may represent the dominant institutions in the region, yet others may exist to or by opposing, challenging dominant institutional frameworks (Zukauskaite *et al.*, 2017). Moreover, informal institutions, norms, may support collective learning and associations and knowledge exchanges without having formal linkages or organizations to support and promote these activities (Zukauskaite *et al.*, 2017). Such norms may follow democratic values that regions often display (Amin and Thrift 1995 in Zukauskaite *et al.*, 2017). The crux, thereby, is if the development of regions may be an outcome of missing organizations or “missing, inappropriate or contradicting institutions?” (Zukauskaite *et al.*, 2017, p. 330).

After this parentheses to clarify the difference between organizations and institutions, these are the four factors Amin and Thrift (1994) considered in their institutional thickness concept.

- i) **Strong organizational presence** A plethora of organizations representing all sorts of sectors and collective interests from firms, to unions, universities, and government bodies;
- ii) **High levels of interaction** amongst these organizations, that is, involving formal and informal cooperation and information and knowledge exchanges, “often embedded in place-specific rules, norms and conventions” (Zukauskaite *et al.*, 2017, p. 327);

- iii) **Structure of domination** “defined structures of domination or patterns of coalitions resulting in the collective representation of what are normally sectional and individual interests and serving to socialize costs or to control rogue behaviour” (Amin and Thrift, 1994, p. 14). This is a result of those high levels of interaction and is understood by Zukauskaite et al as the organisations’ relative power influenced by their resources or access to them, which is itself determined by the structure of domination (Zukauskaite *et al.*, 2017, p. 327).
- iv) **Common agenda** - The development amongst the actors or sectors in the region of a notion of a mutual awareness that they are involved in or that they share a common agenda.

These factors may produce six outcomes: reproduction of local institutions (institutional persistence); production of an archive of common knowledge; organizational flexibility (ability to learn and change); a region with high innovative capacity; ability to offer trust and reciprocity; widely held common project, inclusiveness, for a speedy mobilization of the region (Amin and Thrift, 1994). Institutional thickness can also be an expression of a trajectory the proves difficult to change in the light of transforming economic basis, thus, institutional thickness does not necessarily lead to local and regional development (Amin and Thrift, 1994).

In addition to the differences between organizations and institutions Zukauskaite *et al.* (2017) offered an useful analytical extension to the concept above by identifying strategies to refine the four factors of institutional thickness:

First, they distinguished a *dynamic and static dimension* of institutional thickness. This concerns how institutional thickness changes over time or evolves which makes its analysis difficult. For example, the circular arguments that emerge when institutions are measured by their outcomes as well, while some authors argue that performing regions have a well-functioning institutional structure and vice versa (Maskell and Marlberg 2002 in Zukauskaite *et al.*, 2017). In this sense, institutions and economic growth co-evolve: improvements in governance contribute to furthering economic activity, and the development of the economy improves governance and capacity building (Farole *et al.*, 2010). Analysing which, when and how institutions influence various social phenomena is worth studying to gain a better understanding of institutional development (Farole et al. in Zukauskaite *et al.*, 2017). A dynamic view of institutional thickness according to Zukauskaite *et al.* (2017) would entail a better understanding of institutional and organizational change.

Six types of institutional change that consider that institutions develop gradually are: displacement (removing rules and introducing others instead), layering (new rules in addition to existing ones), drift (impact of rules changes from environmental shifts), and conversion (strategic deployment changes the application of rules) (Mahoni and Thelen 2010 in Zukauskaitė *et al.*, 2017), bricolage (new combinations of institutions that were already in place) Campbell (2006, in Zukauskaitė *et al.*, 2017), and translation (the institutions brought from elsewhere and adapted to fit the local framework) Zukauskaitė *et al.* (2017). Particular types of institutional change may be more likely to be observed in some regions over others (Zukauskaitė *et al.*, 2017). For example layering and translation could be expected to be common in thinner regions; while displacement and conversion in regions that have thicker but obstructing institutions. The ways agency (through individuals or organizations) develops to influence changes in institutional thickness over time is also an important consideration for research (Zukauskaitė *et al.*, 2017).

Second, a *spatial dimension*, which is about the multiscale property of institutional thickness. Individuals and organizations seek knowledge and resources from other geographical scales; and Zukauskaitė *et al.* (2017) ask how do these support organizational thickness in the region? Examining how institutions relate to each other at different scales, for example, in complementary, reinforcing, or contradictory ways through the incentives they create (Zukauskaitė 2015 in Zukauskaitė *et al.*, 2017). The mandates and locations of organizations that would have a say in the development of a region should also be addressed from a multilevel perspective. Empirically not all organisations and institutions have the same importance for innovation and development (MacLeod and Goodwin, 1999), a feasible strategy might be to select those which are most influential claim the authors. Yet, this could also inadvertently leave out those organizations trying to swim against the current.

Third, a *dimension of thickness or thinness* poses challenges in terms of how much of each of the factors about a region are necessary to qualify as thick, thus Zukauskaitė *et al.* (2017) argue that the empirical analysis will depend on the specific research question. For example, thick organizational and institutional structures that support innovation and regional development on the one hand and in the other thin structures measured by missing organizations and institutions, little interactions and absence of a common project; or thick structures with inappropriate organizations and institutions that hinder economic development and innovation (for example dominance of power, closed networks of interactions and an unchanging joint vision) (Zukauskaitė *et al.*, 2017).

While assessing institutional thickness is difficult, scholars have proposed at least two ways. From a top-down perspective regions with democratic traditions, high quality of governance, well-developed intellectual property rights, and a common agenda, could be considered institutionally thick in the opposite for those considered thin (Sotarauta and Heinonen, 2016). From a bottom-up perspective the focus could be on the perceptions of economic agents of the region about their institutional environment; particularly their perceptions about it being favourable or not for innovation activities (Sotarauta and Heinonen, 2016). Finally, because institutional thickness is contingent to space and time (Jessop, 2001a) thickness should be determined by using comparative research to identify differences in relative terms, either by studying several regions at the same time, or the same location at different moments in time (Zukauskaite *et al.*, 2017).

2.4.4 Triple Helix approaches to regional innovation, and the 'social region' or social innovation

Another approach to regional innovation is the triple-helix (T-H) model of innovation collaboration between actors in university, industry and government spheres. In the T-H model universities and public research institutes are the centre in research and development (R&D) production and industry and the public sector take a commercialisation and supporting roles respectively in the innovation model; it is top-down innovation model based on R&D collaborations (Etzkowitz and Leydesdorff, 2000; e.g. Owen-Smith *et al.*, 2002; Asheim, 2009). In particular, economic performance well above the national average in regions is credited to the existence and interaction of key actors in the region – usually one or more internationally renowned University, an engaged and regionally involved government and innovative corporations (Tewdwr-Jones and Lord, 2009).

An approach combining RIS and the T-H model has emerged as the 'triple helix systems of innovation' (Ranga and Etzkowitz, 2013) which claims to offer a framework for the systemic interaction between T-H actors, the circulation of knowledge flows and resources (Ranga, 2018). Nevertheless, like in RIS, the focus of both types of models continues to be around encouraging innovation for economic growth and increased productivity in the firm and industry.

In an attempt to expand the triple helix innovation model to include community members and civil society, and the natural environment, Quadruple and Quintuple Helix models for knowledge creation and innovation have been proposed (Carayannis *et al.*, 2012; Carayannis and Grigoroudis, 2014; Grundel and Dahlström, 2016; Kriz *et al.*, 2017). Quadruple helix approaches seek the input from additional actors in the region for their contextual knowledge and expertise, ideas, and their natural interests in influencing and developing innovative economic projects; thus, there is dual goal of democratic decision making and increased economic growth (Grundel and Dahlström, 2016). This approach resonates with post-NPM public administration approaches outlined in section 2.4.

The Quintuple helix model, rather than adding another actor, conceives each of the helixes as a circuit of subsystems (education, economy, natural environment, the media and culture based public, and the political system) through which knowledge travels (Carayannis *et al.*, 2012; Grundel and Dahlström, 2016). This model addresses a socio-ecological transition which is considered necessary in the 21st century and understands that “the natural environments of society and the economy [...] should be seen as drivers for knowledge production and innovation, therefore defining opportunities for the knowledge economy (...) therefore the Quintuple Helix is ecologically sensitive” (Carayannis *et al.*, 2012, p. 1). Fundamentally, the Quintuple Helix model attempts to incorporate the natural environment into an analysis of innovation for sustainable development.

The quadruple and quintuple helix approaches offer an interesting approach for understanding innovation and knowledge from a perspective different from that of the motor of capitalism, yet, these models provide a normative perspective about how knowledge and innovation should be pursued rather than explaining innovation dynamics in territories.

Finally, an alternative approach for territorial innovation models that emerged as a critique to the pluralism of interpretations around innovation in the territory (innovation dynamics and their theoretical aspirations), and the centrality of an economic growth, market-competition-led paradigm, is one put forward by Moulaert and Sekia (2003, p. 299) and developed by Moulaert and Nussbaumer (2005) and Jessop *et al.* (2013). Labelled ‘The social region’ or ‘Social Innovation’, this approach is about the need to broaden the discussion of innovation onto a more holistic approach to

territorial development. It seeks to understand innovation processes multidimensionally, centred around a human development ontology, and using *social innovation* to create an 'integrated area development' model (Moulaert *et al.*, 2007). This includes innovation in satisfaction of basic needs and innovation in governance dynamics which are led by communities. At its heart lies the politico-ideological significance of *social innovation* as a mobilizing power for communities (Moulaert and Mehmood, 2011).

While the move away from a market-competition-led paradigm to one of human development importantly shifts the centre of the analysis of territorial innovation, a few problems emerge with this approach. Similar to community-focused economic development initiatives from the 1960s and 1970s, this model can be limited by internal constraints such as local levels of disposable income and poor access to education and skills (Pike *et al.*, 2017). The implications are that capacities for self-organisation and political capacity and coordination necessary for coming up with a collective vision or common project about the future and strategic change, its implementation and evaluation may be lacking. Moreover, while the authors propose an integrated area development, their model does not contemplate each sector's contribution to innovation towards their own goals and towards other actors' or sectors' goals.

In sum, an integral territorial innovation model would include innovation from all sectors according to their own goals how all sectors contribute to each other's innovativeness. Understanding innovation dynamics in the territory would include the perspectives of all actors engaging with innovation.

2.5 Conclusion and Analytical Framework

In sum, an integral territorial innovation model would include understanding innovation dynamics from the perspectives of all actors engaging with innovation, and how all sectors contribute to each other's innovativeness. The first section on PSI showed that while there is some literature theorizing public sector innovation, there is scope for contributing to its definition and frameworks of understanding, particularly from a spatial perspective. Moreover, most empirical and theoretical research on PSI departs from the organization as a unit of analysis and while research has often included more

than one organisation, regional comparative studies are not common, nor studies that include shifts over time. Studying spatial differences in PSI could extend the explanation of environmental antecedents identified in the public administration literature and further the study of the role that context in the region may have on PSI. Moreover, the role of inter-scalar relations and changes over time can contribute to integral conceptualisation of innovation in the territory. Finally, below are some key insights from the PSI research that are useful for the formulation for the research questions and the analytical framework.

- No consensus over framework of understanding for PSI nor over a definition; some tend to be normative.
- Concepts such as PSI should be treated with suspicion; PSI is often used as a multi-purpose political tool
- Issues and debates include: risk, accountability, the magnitude of the innovation, and organizational diversity.
- Multi-scalar approach has not been researched in PSI. Most studies in have been conducted at the local government level, and others at the central government.
- A dynamic component of shifts over time or comparative approaches has been missing from most PSI research.
- PSI should involve innovation internal to the public sector and through the public sector.
- PSI goals are often not stated in research, and nuances about general categories and implications for PSI would benefit from expansion.
- Openness and variety within the sector and with other sectors is conducive to innovation.
- Little has been produced on PSI in a context of economic development.

The section on the state and the public sector shows how the role of the state in economic development has been shifting for the past forty years. Understanding the state may help understand territorial innovation by contributing to the understanding of public sector innovation. Below is a summary of the key characteristics and shifts of the state:

- The role of the state in the economy is dynamic and shifting in terms of processes, practices, values and strategies (see summary

- **Table 4** below). These derive in a dynamic process of contestation and transformation of the state giving rise to a polymorphous vision for the state.
- State is a social relation, analytically.
 - Power is held by the actors or social groups, their strategies and resources to pursuit their own interests within and through the state.
- Prevailing and historical conditions influence the state (of the diverse administrative, bureaucratic, legal and coercive systems that build relationships and influence relationships between groups in society).
- State power can reside in its capacity to strengthen their organisations, to employ apt personnel, get political support, to facilitate social programmes.

	Before 1970s	1970s - 1990s	2000s onwards
Regime of accumulation	Keynesian State	Regime of flexible accumulation, Neoliberalism	Same as previous.
Role of the State	Welfare state	Entrepreneurial state	Competitive state
Public administration	Public Administration approach, large bureaucracies	New Public Management, fragmented public sector, governance	Post NPM, 'networked' governance
Strategy for economic development	Public spending, e.g. Science and technology policies	Explicit support for innovation.	Same as previous.
Type of innovations	Large-scale innovations	Organizational innovations based on efficiency	Both step and transformational innovations in front line services

Table 4 Summary of the dynamic process of transformation of the state

Source: Author, based on Hartley 2005; O'Neill 1997; Lundvall and Borrás 2005; Pike et al 2006

Finally, from the section of geographical approaches to innovation and territorial economic development, it can be appreciated that the firm and industries have been the focus of the study of innovation and innovation dynamics in economic geography; and thus, innovation is associated to sustained regional competitiveness. Excluding the role innovation may play in actors other than the corporate sector, i.e. the state, limits the understanding of the role the innovation may play in economic development.

Innovation studied as a process in key geographical approaches to innovation offers some insights and concepts that might also be useful to explain public sector innovation. Some critical points are:

- The role of the region is a determinant for economic, political and social change as a result of specific relational assets in the form of untraded interdependencies; and
- Institutions and institutional dynamics between actors and organisations, formal and informal, play a substantial role for innovation at the local level; and
- Therefore, the region plays a key role in innovation.
- Past decisions and practices play a role in institutional dynamics.
- Social and spatial processes between actors and organisations (from the industry sector and from other sectors) shape innovation both locally and extra-locally, e.g. varying types of proximity for the transfer of knowledge or interactions between organisations.
- Institutional thickness offers a sound conceptual framework to understand and explain organisational and institutional dynamics in the region in a context of economic development.

The following section gives shape to the research questions and the analytical framework for this thesis.

2.5.1 An analytical framework for investigating PSI in a context of economic development at the subnational level

The aim of this research is to develop a fuller understanding and explanation of public sector innovation in the context of economic development at the subnational level. Informed by the three different distinct sets of literature, geographical approaches to innovation, state theory and public sector innovation, this section develops the analytical framework for the study of PSI in the region in an economic development context.

Literature on PSI has focused on the organisation as the unit of study. As per the literature review, part of the explanation around innovation comes from the context where organisations operate. A geographical approach to public sector innovation may enhance the explanation and understanding of this phenomenon, especially at the

regional level. By making the region the unit of study, new areas of understanding about PSI can emerge. Moreover, territorial innovation models also have the potential to benefit from understanding an approach to innovation from the perspective of another actor in a context of economic development in the region.

The literature review has served to frame three key topics about public sector innovation that give rise to three research questions. The topics are: i) Innovation in the state; ii) The internal workings of the state and innovation; and iii) The state as a social relation between different sets of actors *and* as a set of semi-bound organisations and institutions.

i) Innovation in the state.

Public sector innovation is increasingly permeating into governments around the globe. Scholars of geographical approaches to innovation and economic development have focused on the study of innovation in the territory from the perspective of the firm. An integral understanding of innovation in the territory would include the perspective of other sectors, such as the state. Public sector innovation, used here as proxy for the state, has been studied in the literature of administrative sciences. While an important body of scholarly research has emerged here, there is scope to further the understanding of public sector innovation (the phenomenon) in the territory to go beyond the environmental antecedents considered from an organisational/agency perspective. Both in terms of definitions of PSI and in terms of what has been a normative approach in the literature as a result of an underlying value judgment.

Research question 1: How is public sector innovation conceptualised and operationalised in the public sector?

This question aims for the core research topic, public sector innovation. It emphasises the potential variety of conceptualisations and practices in the context of economic development associated with public sector innovation and the possibility of these being associated with varying of scopes for change or transformation. Indeed, this question has the purpose of interrogating the specific ways in which PSI is conceptualised and operationalised within the spatial-temporal context of each region and contribute to an extension of a framework of understanding of PSI and innovation in the territory in general.

ii) The internal workings of the state and innovation.

A number of processes internal to the public sector have the potential to influence and shape PSI in a context of economic development and vice-versa. For example, states can show differences in their capacity to strengthen their organisations, to employ apt personnel, to co-opt political support, and to facilitate social programmes. These differences can be a result of contextual, regional differences, such as those identified in economic geography studies about territorial innovation or antecedents to PSI from public sector innovation literature.

Particularly, social and spatial processes between actors and organisations both locally and extra-locally within the public sector may influence innovation. For example, different types of proximity for knowledge exchange, interactions, and collaboration are identified as important for innovation in both sets of literature. Examining multi-scalar and intra-regional dynamics of internal public sector processes could help extend our understanding about how these can influence public sector innovation in a context of economic development. And a number of the issues identified in the literature such as risk would emerge in a study of these internal processes. Therefore, the second research question is:

Research Question 2: How do internal processes with the state shape public sector innovation?

This question seeks to identify nuances from these internal public sector processes that can shed light into a fuller understanding on the role of socio-spatial relations in the public sector for PSI in an economic development context.

iii) The state as a social relation between different sets of actors and as a set of semi-bound organisations and institutions.

For some theorists of the state, the state is a social relation whose power lies in the actors or social groups and the strategies they use and resources they have available to interact and shape those interactions in the pursuit of their own interests. Thus, this interaction is not homogenous and thereby is continuously contested generating a dynamic process of transformation. The characteristic of the state of transformation can be particularly important for public sector innovation. The outcomes of that transformation could be understood as a result of different actors and sectors, and external forces shaping projects. Thus, an emphasis is on the societal sectors or groups and their interactions. If we consider the operational

definition of the state, then this would mean the interrelation between the public sector and external actors.

In terms of innovation, from the geographical approaches to territorial innovation different concepts and models also emphasise the importance of inter-sectoral interactions for knowledge transfer and creation. Also in PSI literature, *openness*, in regards to collecting knowledge, collaborating, cooperating and engaging with other sectors, both formally and informally, has emerged as a key factor for innovation.

Moreover, these relations occur within institutional contexts that mediate these interactions, such as the dominating vision around the role of the state, and the prevailing historic conditions of the particular territory. Aspects of the concept of institutional thickness are useful to understand these dynamics.

To capture both interactions and other forces that may be playing a role in public sector innovation, the third research question is as follows:

Research question 3: In what ways do external forces outside the state influence public sector innovation?

The market-state relationship in terms of PSI, involves understanding the mechanisms participation and voice by diverse groups in society in each subnational territory. These mechanisms are related to the capacity of creating and strengthening mechanisms that decrease the manipulation of the region/states' organizational characteristics by particular groups and increase general participation. In sum, this thesis aims: 'To develop a fuller understanding and explanation of public sector innovation in the context of regional economic development' Three research questions guided the accomplishment of the research aim:

1. How is public sector innovation conceptualised and operationalised in the public sector?
2. How do internal processes within the state shape public sector innovation?
3. In what ways do external forces outside the state influence public sector innovation?

These questions are answered throughout the thesis and highlighted in the Conclusions chapter. Next is Chapter 3, which discusses the methodology followed to offer an answer for these questions in light of the research aim.

Chapter 3. Methodology

3.1 Introduction

This chapter discusses the methodology employed to answer the research questions and meet the aim posed in the introduction to this thesis. To develop a fuller understanding and explanation of public sector innovation in the context of economic development at the subnational level. Based on the discussion of the previous chapter, sections 3.2 and 3.3 discuss the justifications for the methodological choices, including a concise reflection about the philosophical grounding surrounding causal explanations, and the general advantages and issues emanating from the selected research design of comparative case study; section 3.4 through to 3.7 give details about the case study selection process, the data collection strategy and process, the analysis, and validation; section 3.8 specifies the ethical issues that were considered; and finally, section 3.9 concludes the chapter with some limitations of this methodology.

3.2 A causal approach to explanation

A substantive part of the aim of this thesis is to understand and explain public sector innovation. In terms of explanation, Sayer (1992) reflected how determining an adequate form of explanation begins by asking two questions, first, what kind of social process is under research, and second, what about it does the researcher want to explain (Cloke *et al.*, 2004). The latter in turn, is connected with how the researcher conceives the relationship between empirical research and more abstract theoretical or conceptual issues (Cloke *et al.*, 2004). Thus, a good explanation depends on both the object that needs explaining and the researcher's consideration on what components constitute a good explanation.

The object that needs explaining in this thesis is PSI, particularly, how and why the concept of PSI is interpreted by the diversity of actors in economic development in the region, and how and why PSI, as a contextually determined concept (Pollitt, 2011), is associated with specific sets of actions. A critical realist causal approach to explanation is one that seeks the causes of an event by discovering relations between phenomena and the a mechanism that connects them (Sayer, 1992). It seeks to uncover underlying

causal relations and processes that help explain particular and contingent developments in certain contexts (Pike *et al.*, 2016) through iterative processes of abstraction from the concrete event to the abstract concepts or theories (Yeung, 1997). That is, combining deductive analysis (applying existing theories to the specific phenomena) and inductive analysis (using empirical evidence to inform concepts and theories) to research.

Beyond uncovering events, a critical realist ontology also acknowledges that subjective constructions play a role in transforming reality (an interpretive view of the nature of knowledge) (Edwards *et al.*, 2014). Thus, an important aspect of researching phenomena under critical realism is also about understanding. That is, acknowledging the human condition of having an interior realm that carry opinions, ideologies, worldviews by interpretation of 'meanings' (Cloke *et al.*, 2004), or reasons which may have causal powers in relation to a particular phenomenon (Sayer, 1992). Thus, informed by epistemological and ontological commitments of critical realism, this thesis implemented a methodological approach which considers the nature of reality as both concrete and interpretive, which is arguably favourable for an in depth understanding and causal explanation of the object of study (Sayer, 2000; O'Mahoney and Vincent, 2014).

3.3 Research design: Comparative case study

This thesis employed a comparative, explanatory case study research design to answer the research questions set in the introduction and based on the research approach described in the section above and the literature review. The goal is to maximize what can be learned by refining and deepening understanding about the interaction of particular factors in a given context.

Explanatory case studies are useful to answer 'how' and 'why' research questions, particularly when the phenomenon is contemporary, and boundaries between the phenomenon and its context are not evident (Yin, 2014). Through intensive research and primarily qualitative methods for data collection an analysis, an explanatory type of case study can be conducive to the identification and contrast of causal relations and connections structured in particular cases and to understand how causal processes work out, thus providing a more in-depth understanding of phenomena (Sayer, 1992; Cloke *et al.*, 2004; Mills, 2012).

Issues with the use of this research design include case selection and the debate regarding causality (Mills, 2012). Regarding case selection, some scholars argue that a 'constructed' population of a case study, i.e. selected by the researcher informed by theory, is more likely to be open to favouring the findings of specific research questions (Mills, 2012). This position implies that only by using quantitative analysis on a large sample of a population case study selection can be 'unbiased'. Yet, a quantitative researcher could bias its results, for example, by including potentially irrelevant cases (Mills, 2012) or excluding relevant ones. Moreover, in an informed oriented case study selection, cases are selected according to expectations about the information they can provide (Flyvbjerg, 2006) rather than how representative they are or not of a population.

This connects with the debate regarding causality. Appropriate sampling to the population is crucial if the purpose of the research is to be able to generalise the findings to that population. Yet, the purpose of case studies is to generalise theoretical propositions (Yin, 2014), i.e. causal mechanisms, rather than generalise findings about a given population. Case study research, framed by the approach discussed in the section above, seeks to provide the best explanation that is most consistent with the data (Easton, 2010). If a causal explanation is produced and is defensible in one case, then the components of that explanation provide a grounding for developing or refining concepts and theory past the specific case(s) (Easton, 2010).

This research employed a mixed strategy for case study selection, which combined an informed oriented case study to select a country; and a quantitative technique to determine which regions to contrast within the country regarding their differences in PSI, and in economic contexts (see section below).

Thus, to produce a defensible causal explanation, the comparative element of this case study research design was crucial. Particularly because of the contingent role that space and time play in the shaping of regions (Jessop, 2001a) which makes comparative research a good choice to identify differences in relative terms via the contrast of different regions or the same region over time. Contrasting relatively similar regions with different PSI levels and different economic contexts, but shared national institutions, allowed the production of broader insights about public sector innovation. Emerging differences in the answers to the each of the research questions provided the basis to seek causal explanations of these differences.

Actors were selected for the study given their characteristics and relations they have to each other, such as holding a position of authority; or the properties they possess, such as working in the public sector or being an industry representative in this case (Cloke *et al.*, 2004). The comparative element allowed the identification of consistencies of unanticipated as well as expected relations, and understanding multiple views about the public sector innovation in an economic development context (Sayer, 1992; Stake, 1995).

Moreover, thought tools such as deduction and induction were valuable. The former, working from the general (existing concepts and theories on innovation) to the particular (public sector innovation) (Walford 1995 in Cloke *et al.*, 2004) was useful for the case study selection and suggestions about the mechanisms that could be at play in public sector innovation (Yin, 2014). And inductive reasoning, by working from the particular to the general (Walford 1995 in Cloke *et al.*, 2004), was useful to carefully examine the data collected and allowing it to 'speak for itself' rather than attempt to fit it in pre-determined categories (Gould 1981 in Cloke *et al.*, 2004) and identify factors that show a particular empirical reality which may produce generalisable causal explanations.

3.4 Case study selection

The rationale to study the region for its role in economic, political and social change came from the literature. The selection of the regions for the comparative case study involved pre-determining an important set of analytical and practical criteria. First given that the analytical level had to be regional, the regions had to belong to the same country. This is because sharing national institutions such as general norms, regulations, type of government, and language limits the scope of variability between the regions. These shared factors can be assumed 'constant' for the selection of the case study, which provide grounding for the comparison. Second, the country had to be a Federation, for this gives sufficient flexibility and independence for each of the regions to express their contextual differences in relation to PSI. Third, interviewing participants from different government jurisdictions (federal, regional and local) had to be plausible in practical

terms. And fourth, measurements of PSI had to be available to be able to pick contrasting case studies expressing this phenomenon. Thus, the criteria was set as follows:

1. *Geographical level*: that it referred to subnational territories (or allowed for its calculation);
2. *Frequency*: that it included measurement for at least two years to allow for comparison;
3. *Temporality*: recent, i.e. the last measurement being within the past 5 years;
4. *Representative sample*: representative of public sector service population;
5. *Availability*: and that it was easily available for research.

In general, a database of PSI measurements that fit the criteria was difficult to find (See

Table 5. For example, the European Commission (2010b) conducted a survey specifically on innovation in the public sector (the Flash 305 Euro-Barometer Survey) including organizations that served the regional level. Nevertheless, it was impossible to identify which regions in the European Union to which the survey answers referred. Thus, answers about innovation could not be contrasted with regional characteristics. Moreover, it was only a one-time survey. Below is a table that compares potential data sources referred by the literature with the set criteria from above.

The table below pointed to the selection of the data from the Australian Public Service Commission (APSC), which runs an annual Public Service Employee Census since the 2012 (APSC, 2015c). For each year of application, the APSC census received more than 90,000 responses from federal Public Officers who are distributed between the different States and territories in Australia. Australia is a Federation of States and Territories that share English as a common language, a Commonwealth of Australia Constitution Act, an Australian identity, and a parliamentary constitutional monarchy type of government; and it seemed that interviewing members from the federal public service employees could be feasible given the contacts my supervisors had in Australia. Moreover, in spite of sharing a national context, differences between regions are still relevant in Australia:

“[E]ach State and Territory largely shapes its own institutional architecture for regional development, and consequently there is ‘fragmentation’ and ‘no uniformity’ across the nation” (Beer 2007, p. 120 in Paül and Haslam McKenzie, 2015, p. 364).

<i>Data/Source</i>	<i>Temporality (1pt)</i>	<i>Frequency (1pt)</i>	<i>Geographic level (1pt)</i>	<i>Sample (1pt)</i>	<i>Availability (1pt)</i>	<i>Score</i>
EU-27, Inno-barometer on the public sector (European Commission, 2010a)	2010	No	No	2,305 respondents	Yes	2/5
Norway and Flanders in Belgium (Laegreid <i>et al.</i> , 2011)	2002-2004	No	Unsure	121 head managers	Unsure	2/5
England (National Audit Office, 2006); (Damanpour and Schneider, 2009)	2006 2001-2004	Yes	Unsure	274 Head managers CEOs & Managers for 428 Local authorities	Unsure	3/5
England (Hughes <i>et al.</i> , 2011)	2010	No	Pilot study	175 Head managers; health and local government authorities	Unsure	2.5/5
Denmark, Finland, Iceland, Norway, Sweden (Bugge <i>et al.</i> , 2011)	2008-2009	No	Unsure	2,013 managers	Unsure	2.5/5
Australia (APSC, 2016a)	2016	Yes, yearly from 2012	Yes	+90,000 (census)	More or less	4.5/5

Table 5 Criteria for data measuring PSI

*Source: Author. Some of the surveys were identified from Arundel and Huber (2013)
Marks: 'Unsure' scored 0.5.*

Therefore, it was the best choice from which to select the regions to compare. The first step to select them was to determine their scores on public sector innovation. The question referring specifically to PSI read:

In the last 12 months, has your workgroup implemented any innovations?

- 1 *Yes*
- 2 *No*
- 3 *Not sure*

(APSC, 2012b, p. 32; APSC, 2013b, p. 36; APSC, 2014c, p. 31; APSC, 2015b, p. 32; APSC, 2016a, p. 34)

Table 6 below shows the answers to this question aggregated per State: New South Wales (NSW), Victoria (VIC), Queensland (QLD), South Australia (SA), Western Australia (WA), Tasmania (TAS), Northern Territory (NT), Australian Capital Territory (ACT). Note that over the years, respondents have consistently self-scored higher in South Australia than in Western Australia.

	2012	2013	2014	2015	2016
NSW	46.200	46.300	43.700	43.500	40.600
VIC	47.300	47.600	45.100	46.200	43.300
QLD	49.400	49.500	46.300	46.600	43.000
SA	50.000	48.400	45.600	47.300	45.800
WA	45.900	46.400	41.200	41.800	38.200
TAS	49.100	48.800	43.700	43.400	43.600
NT	42.600	43.700	40.700	41.300	38.100
ACT	50.400	52.000	48.100	49.500	49.700
Mean	47.613				42.788
Std Dev	2.48				3.63

Table 6 Proportion of public service employees who selected ‘yes’ to the question: “In the last 12 months, has your workgroup implemented any innovations?” in the APS Employee Census (2012-2016)

Source: (APSC, 2012a; APSC, 2013a; APSC, 2014a; APSC, 2014b; APSC, 2015a; APSC, 2017)

Note: These proportions exclude selected answers of ‘not sure’ and ‘no’

The second step was to identify those regions that had opposing scores in public sector innovation. Converting the PSI proportions into ‘Z-scores’ allowed to locate in a graph, where, in respect to the average, would fall each of the Australian regions. A Z-score “quantifies the original score in terms of the number of standard deviations that that score is from the mean of the distribution” (Price, 2000, p. NA). Its formula is the score minus the mean, divided by the standard deviation of the sample scores:

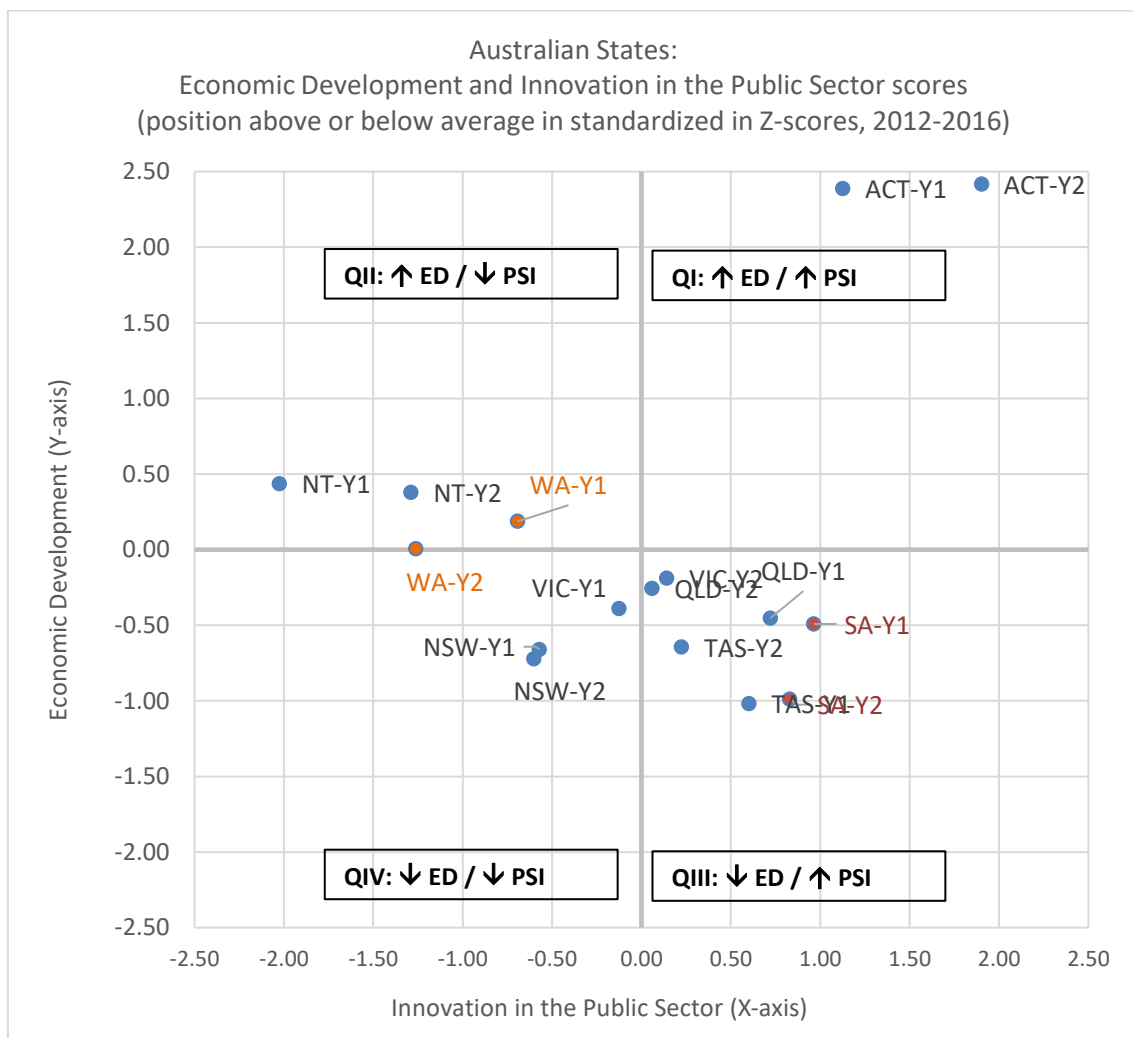
$$Z = \frac{\text{score} - \text{mean}}{\text{std.deviation}}$$

Given that the aim of this thesis delimits PSI to an economic development scope, before graphing the proportions of positive PSI responses for these regions, an economic development variable was calculated to graph side by side with PSI and thus select the cases also considering the region’s economic context.

This called for the creation of an economic development composite variable made up of three variables from the OECD economic Regional Wellbeing Framework: Household disposable income per capita, Long term unemployment rate, Access to services (OECD, 2014a) and an additional one to represent income inequality (the Palma Ratio) (See Table 7).

Variable	Definition	Source
Economic Wellbeing	Composite variable made from the sum of subnational Z-scores for the four indicators below	This is an adaptation from the indicators used in the OECD Regional Wellbeing report and data (OECD, 2014a; OECD, 2015)
Household disposable income per capita	Household disposable income per capita, for years 2010-2011 & 2015-2016	Australian Bureau of Statistics, Catalogue Number 5220.0 Australian National Accounts: State Accounts, Household Income Account and Per Capita tables (ABS, 2018b)
Long term unemployment rate	Long-term unemployment (proportion of persons seeking for work for more than 52 weeks, out of the labour force), for years 2010-2011 & 2015-2016	Australian Bureau of Statistics, Catalogue number 6291.0.55.001 - UM2 - Unemployed persons by Duration of job search, State and Territory (ABS, 2017a)
Access to services	Household internet access as percentage of the population, for years 2011 & 2014-2015	Australian Bureau of Statistics, Household internet access in Catalogue Number 8146.0 Household Use of Information Technology, Australia, 2014-15 (ABS, 2018e)
Palma Ratio	Gross national income (GNI) capture of the richest 10% of the population divided by that of the poorest 40% (Cobham <i>et al.</i> , 2016), for years 2012 & 2016.	Own calculations based on data from the Australian Bureau of Statistics; Table 6523.0 - Household Income and Wealth (ABS, 2018d)
Public sector innovation	Proportion of individual 'YES' responses by public sector federal servants per State to the question: "In the last 12 months, has your workgroup implemented any innovations?" for the years 2012 and 2016.	Question 56a of the APSC Employee Census 2012 (APSC, 2012b) Question 73 of the APSC Employee Census 2016 (APSC, 2016a)
Table 7 Description of the variables for the quadrant scatter plot		
Source: Author		

To allow for comparable scales between otherwise dissimilar units of measurement (Abdi, 2007) the scores of the selected indicators were also calculated into z-scores: “Standardisation (or Z-scores) converts indicators to a common scale with a mean of zero and standard deviation of one” (p. 28), as per a recommendation by the European Commission and the OECD for the normalization of data (OECD and EC, 2008). Having the Z-scores for each indicator permitted the creation of a composite variable for Economic Development (ED) via an arithmetic addition (making sure the sign was reversed for inverse indicators i.e. long-term unemployment and the inequality measure, the Palma ratio). As a result, the selection of the regions for the comparative case study followed the construction of a quadrant scatter plot graph using Excel with the PSI and ED variables (see Appendix A for the data and calculations).



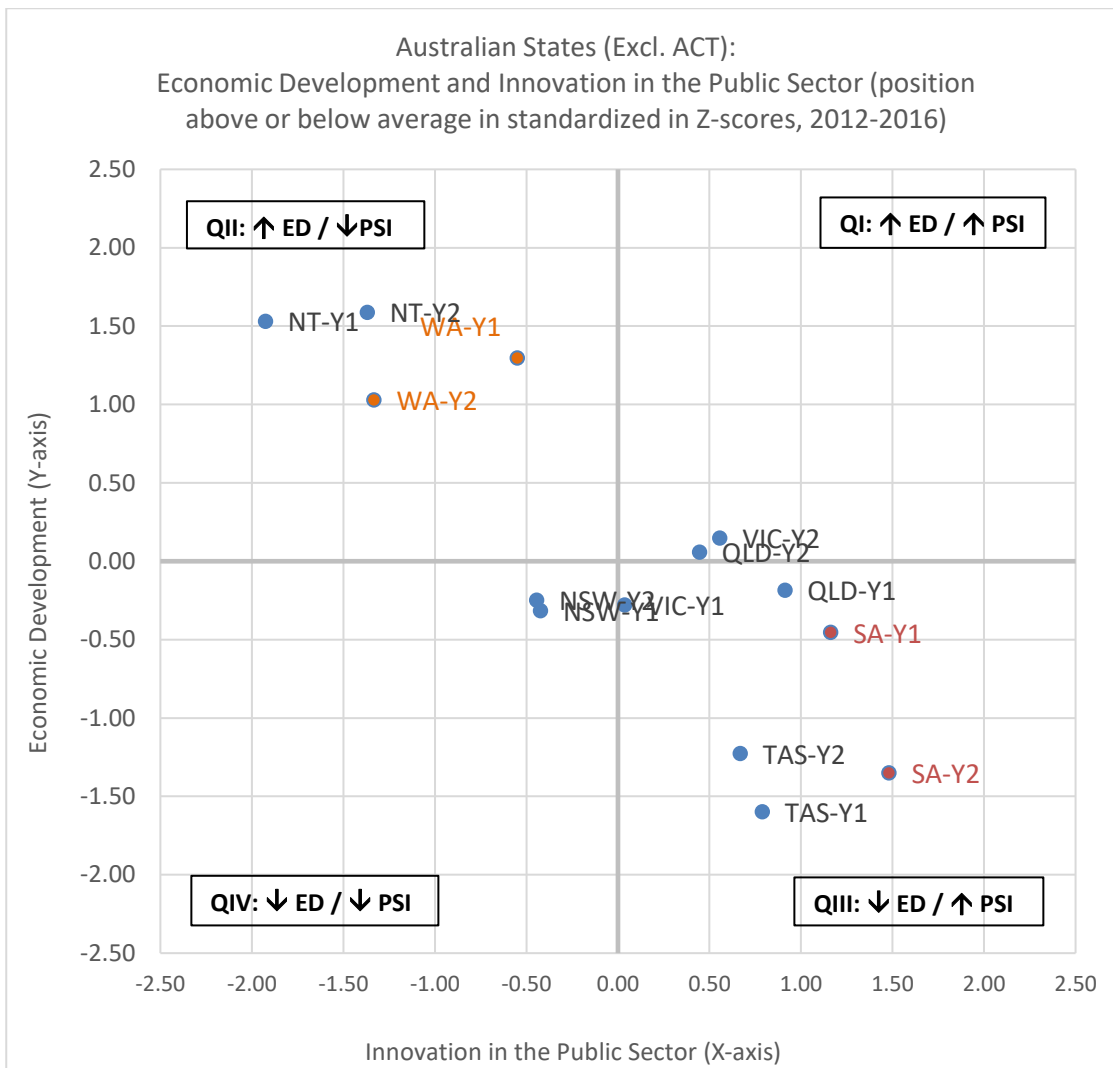


Figure 2 Quadrant scatter graphs for case study selection – including and excluding outlier (Australian Capital Territory). Economic Development and Public Sector Innovation (above or below average in standardized in Z-scores along, 2012-2016).
Source: Author.

In **Figure 2** above, each State was placed in a quadrant scatterplot with point 'zero' in its centre (national average) to simultaneously contrast their positions in relation to the two variables. The graph includes two different years, 2011 or 2012 as Year 1 (Y1) and 2015 or 2016 as Year 2 (Y2) to show how PSI reporting and ED have shifted. The X-Axis represents PSI. Any State located to the right of the centre scored above the national public sector innovation mean. Any State located to the left, scored below the national mean. The scores for the second variable of Economic Development are located along the Y-Axis. Any region located on the top half of the graph scored above the national mean, and any region located below, scored below average. The fact that States and Territories fall in all quadrants show that regional factors have an effect in these variables. Thus, the quadrants show:

- QI (HH): States with scores
 - *higher* than average in public sector innovation
 - *higher* than average in economic development
- *QII (HL): States with scores
 - *lower* than average PSI
 - *higher* than average in ED
- *QIII (LH): States with scores
 - *higher* than average in PSI
 - *lower* than average in ED
- QIV (LL): States with scores
 - *lower* than average in PSI
 - *lower* than average in ED

In the first graph, the ACT appears as an outlier in terms of both variables, located in the top right quadrant, Q1. This makes sense because the federal government operates mostly from here (40% or around 53 700 ongoing employees in 2016 (APSC, 2016b) which represents a very well-paid, almost one fifth of labour force of the State, in contrast with other States in which Federal public sector employment represents between 0.43% (Western Australia) and 1.32% (Tasmania) of the labour force)(ABS, 2016; ABS, 2018a). By excluding the ACT scores, the average becomes more representative of a central measure for Australia. The new distribution of the States without the ACT score can be observed in the second graph of **Figure 2**. The States that score differently in both variables fall in Quadrants II and III (*). QII holds Western Australia and the Northern Territory. In QIII, South Australia and Tasmania are observed to remain in that quadrant in Y1 and Y2. Northern Territory and Tasmania were considered too different (one is an island facing different challenges from those faced by mainland territories) and small. The other two choices were South Australia and Western Australia, which are considered 'similar urban systems' (Beer, 2016).

Opposing cases offer an interesting window to understanding and learning about factors that may play a role in explaining or disregarding causation. If a phenomenon is present in both States, then it does not play a (prominent) role in shaping PSI. For example, given a higher PSI in South Australia, if both States have gone through the professionalisation of the public sector force, then it can be disregarded as a causal mechanism for increased PSI, as this is also a process undergone by Western Australia, where PSI is lower than South Australia. Moreover, their differences in ED scores also provide the opportunity to consider if and how there might be a role or not for ED in PSI or vice-versa.

3.5 Data collection

This methodology is cross-sectoral, multi-scalar, and cross-temporal for the time period of 2000-2018. Data collection included both primary data and secondary data in the selected States and the Australian Capital Territory.

Primary data was collected within two months. Between February and March 2017 from 56 semi-structured interviews were conducted in Australia with 67 interviewees: 23 in Western Australia, 25 in South Australia and 19 in Canberra, within the Australian Capital Territory (location of Federal Government) (See Figure 3 and Appendix B).

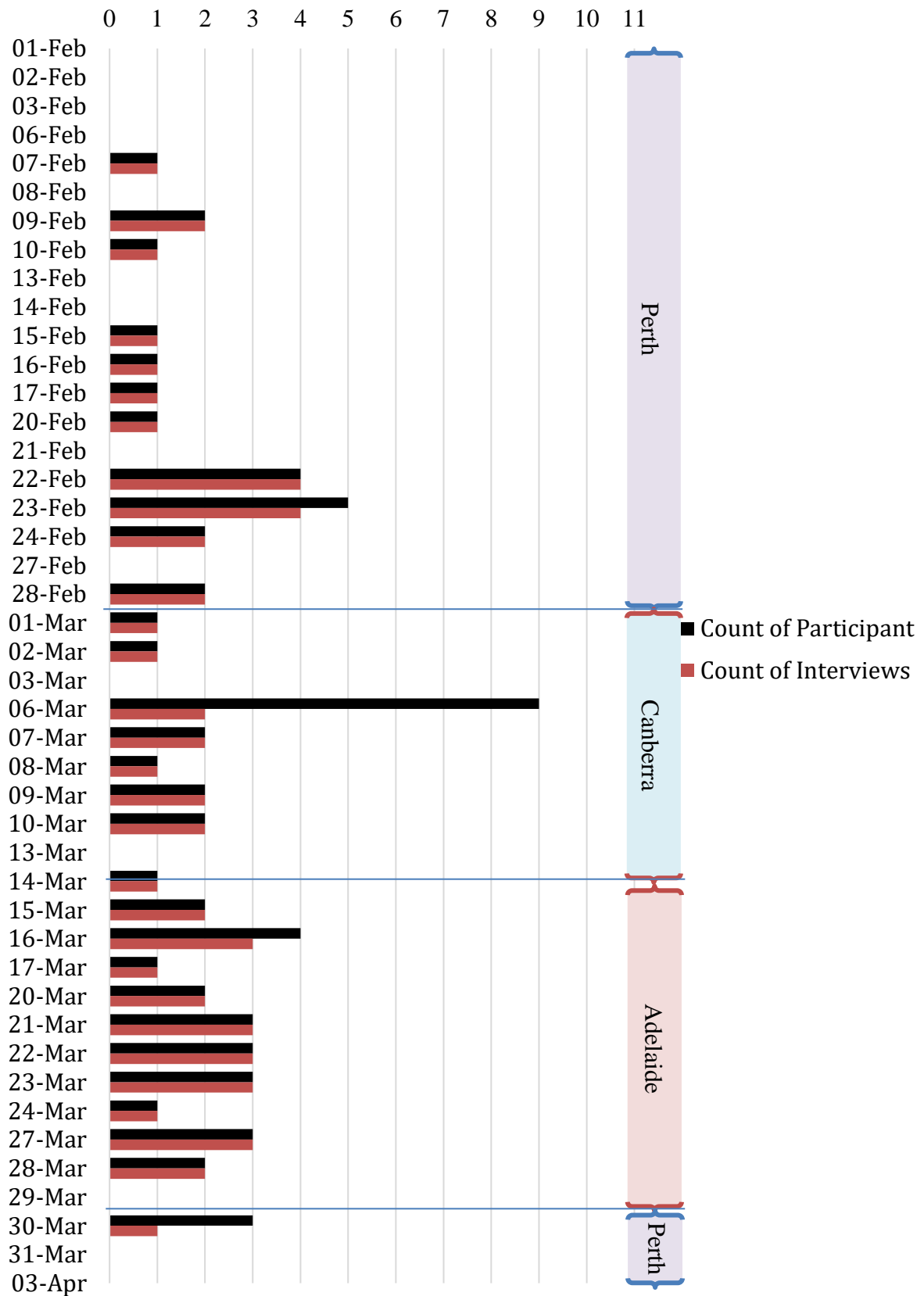


Figure 3 Fieldwork in Australia: Count of interviews and participants per day (Feb 1st, 2017 - April 3rd, 2017 excluding weekends)

Source: Author

The selection of interviewees aimed to represent the view of multiple actors (See **Figure 4** and **Table 8**). Informants represented the federal level, State level, regional (where applicable), and local expertise. These included:

- Senior Public officers of State and Federal public administration (current or former if relevant). Including interviewees from central decision-making agencies e.g. Premier and Cabinet, but also agencies related to economic development policy.
- Senior Government Advisory entities (e.g. Productivity Commission at the Federal Level; e.g. the South Australia Economic Development Board)
- Senior Representatives of local governments (Local Government Associations)
- Public Sector Union representatives
- Senior peak business associations representatives: This meant selecting interviewees that presumably would be able to speak on behalf of a sector given their role (e.g. Senior policy advisor in the International Chamber of Commerce State branch)
- Academics and specialised research centres: both in their capacities of directors to discuss their interactions and appreciations of the public sector – University/ Research Centre relations; or in their capacity of scholars in innovation or economic development who engage with government in areas relating to subnational economic development.

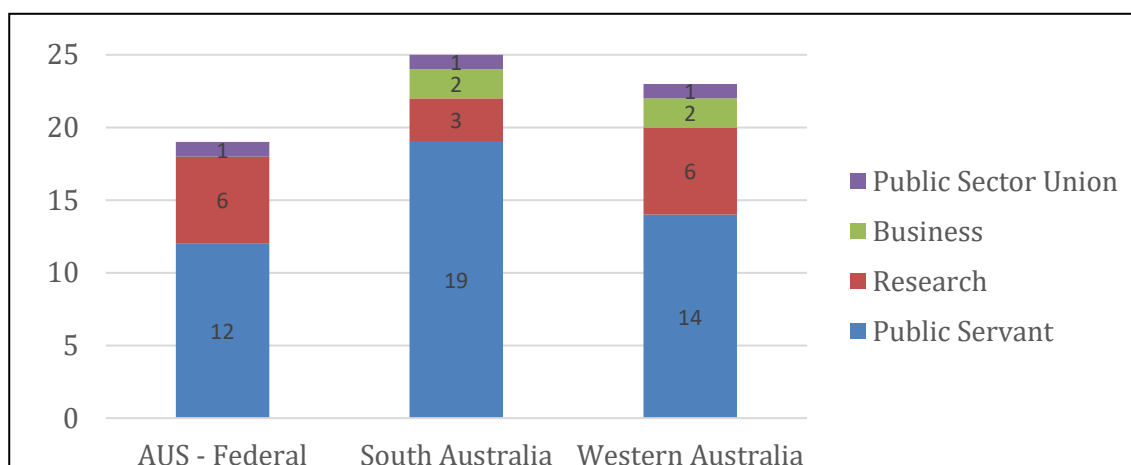


Figure 4 Fieldwork in Australia: Distribution of interviewees per location and sector

Source: Author

Sector	State		
	WA	SA	Fed.
Public Sector			
<i>Federal government</i>			
Australian Transaction Reports and Analysis Centre	-	-	1
Commonwealth Scientific & Industrial Research Organisation	-	-	1
Department of Industry, Innovation and Science	-	-	1
Department of Infrastructure and Regional Development	-	-	6
Productivity Commission	-	-	3
<i>Central State government</i>			
Department of Finance of WA / Dep.Treasury & Finance of SA	1	1	-
Department of Planning, Transport and Infrastructure	-	2	-
Department of the Premier and Cabinet	4	6	-
Department of Regional Development of WA / Primary Industries and Regions Department of SA	2	3	-
Department of State Development	2	3	-
Investment Attraction South Australia	-	1	-
LANDCORP	1	-	-
South Australia Police and UNISA Advisory Committee	-	1	-
<i>Central State government advisory body</i>			
South Australia Economic Development Board	-	2	-
<i>Regional government</i>			
A Regional Development Commission	1	-	-
<i>Local government</i>			
Western Australia Local Government Association / Local Government Association of South Australia	3	1	-
A Local Government in SA	-	1	-
Industry			
Chamber of Commerce & Industry WA / Business SA	1	1	-
Construction Contractors Association of Western Australia Inc	1	-	-
Real State Developer and UNISA Advisory Committee	-	1	-
Public Sector Union			
Community and Public Sector Union	1	1	1
Academics / Researchers			
Committee for Economic Development of Australia	-	-	1
Faculty of Business, Government and Law, Australia National University	-	-	1
Federation Business School	-	-	1
Regional Australia Institute	-	-	3
University of South Australia		1+2	
Bankwest Curtin Economics Centre, Curtin University	1		
Centre for Regional Development, University of Western Australia	1		
Department of Planning and Geography, Curtin University	1		
Political Science and International Relations, University of Western Australia	1		
School of Agriculture and Environment, University of Western Australia	2		
Subtotal Total	23	25	19

Total Interviewees: 67

Table 8 Interviewees' organisational affiliation

Source: Author Note: some interviewees have more than one affiliation.

Initial contacts were established with academic hosts in Australia who were familiar with CURDS and Newcastle University. The goal was to obtain help identifying and contacting potential interviewees. Two academics and the Director of a Research NGO, backed by their organisations, kindly offered their expertise and support: the Centre for Regional Development, University of Western Australia (Host 1); the Regional Australia Institute, Canberra (Host 2); and the University of South Australia (Host 3). This support was crucial for establishing contacts with over half the interviewees (either directly or indirectly through their networks) and for providing the physical means to work (i.e. desk space, printer, internet access, etc.).

Table 9 below shows how the interviewees were found. Once in Australia, the contact strategy involved sending letters via e-mail to potential interviewees identified online through the Agencies' organigram; or if the former could not be found, then through other relevant sources such as *Twitter* for example (See Sariego-Kluge, 2017 for more details on my experience carrying out this fieldwork). A master spreadsheet held relevant organisations and key people referenced from different sources, contacts and interviewees to keep track of the contact process.

Three thematic blocks based on the research questions and the analytical framework grouped the questions for the semi structured interviews, a fourth block held more general questions to elicit answers that may or may not have been included in the literature. Depending on the sector of the interviewee (academic/research, government, unions, or industry) some questions were reframed or omitted. Definitions in general were not used during the interview, as it was intended that the participant would give their own views shaped by their context, knowledge and experiences. Only in one question, toward the end of the interviews (so as to not lead the respondent), a definition of PSI was given to ask about its role in ED and why to elicit an extension or a different perspective on what had already been said (see question 26 in Appendix D the list of questions).

Actors	WA	ACT	SA
Contacted by initiative of author / supervisors' suggestions	2	21	43
	3	30 31 32	45
	5	33	48 58
	6	34	51
	7 18	36	53
	15	37	55
	16	38	56
	17	40	61
	19	41	62
Contacted through Host_1 in Perth, WA (3)	1		
	4		
	8	39	
	9		
	35		
	10		
	11		
13 14			
		22	
Contacted through Host_2 in Canberra, ACT (22)		20	
		23	
		24 25 26 27 28	
		29	
			44
			46
			47
			49
			50
			52
		54	
		57	
		59	
		60	
		63	
	64 65 66		

Note

- # is the interviewee ID number.
- Each line per column is an interview session

Table 9 Process of finding and contacting interviewees per location.

Source: Author

The following are some examples of the questions:

Examples of interview questions for RQ1

- [Conceptualisation] What is PSI? How is it conceptualised in the public sector?
- [Operation + Time shifts] From your perspective, how does PSI operate at different levels of government? How does this contrast with how 'things used to be'?

Examples for RQ2

- [PSI + interscalar relations, Federal government] Are there differences with how the Federal government relates to each of the States? How do you account for them?
- [PSI + interscalar relations, local governments] How long has the local government association existed, how has it changed over time and how has been its relationship with the State government over time in terms of public sector innovation?

Examples for RQ3

- [Engaging external sectors + influence] Are there formal spaces or processes to participate in the provision and generation of knowledge and ideas together with the public sector? What are the formal mechanisms by which the sector can and does participate in advocating, influencing or constructing together knowledge that may result into public sector innovations? Which formal mechanisms are more important and when? What are your perceptions surrounding these efforts? What are some weaknesses and strengths?
- [Engaging external sectors + Time shifts] Thinking about how it used to be, have you noticed a change in relation to these spaces? Their availability? Flexibility? Outcomes? Have you noticed differences in relation to preferences or favour certain types or contents of ideas or knowledge over others?

Examples general:

- [PSI drivers/obstacles + internal/external processes and forces] What would you consider are the top three difficulties for introducing new ways of doing things, new processes, new policies, new ways of organising government, or taking new directions for economic development in the State?

Most interviews took between 1 and 1.5 hours, although some as long as 2.5 hours. To facilitate the analysis, all interviews were transcribed. Specialist software was useful to dictate instead of typing (i.e. *Dragon Naturally Speaking*). After considerable time for adjustment with the new software and with the transcription pedal, dictation proved to be between 33% and 50% faster than typing. The difference in rates depended on the absence of background noise and on how slow and clear the interviewee spoke (coffee shops are the worst place for background noise).

In general, interviews were on an individual basis but occasionally the interviewee would bring other colleagues, advisors, or an intern to the meeting. On three of these occasions the support staff did not have a sufficiently relevant role to be included in the list of interviewees, for they were interns or colleagues from the communications departments, whose contributions were kept to a minimum. In total, two interviews were conducted with two informants, two with three and one with six interviewees. For the latter, a group interview seemed more appropriate, for only one and half hours were available for the interview and only two days given to prepare. Interviews of two or more participants had both benefits and disadvantages. Where there were only two people, one being more open and vocal than the other encouraged the second to open up as well by identifying points of contestation and complementing what was said. This willingness to speak openly diminished in a larger group, despite my efforts to try to make sure that everyone contributed. This is probably a result of lack of trust among the participants. Finally, four interviews took place over the phone or via online software, such as Skype.

Secondary Data

While considering the temporal and contextual limits to official documents, secondary data, mostly from the 2000s onwards, provided important grounding, supplemented, and in some instances, validated primary data. Secondary data comprised of official documents such as government and research reports and speeches, policy papers, political party platforms of elected party, official websites, selected news articles, public-sector survey and census data, Australian statistics, and legislation (mainly the public sector acts). A master spreadsheet was created to keep track of documents.

Some relevant policy documents or government plans for past years were not readily available online. For example, Liberal or Labor Party State websites do not store past State platforms on their current websites. For these cases, the world's '*Internet Archive: Way back Machine*' was an invaluable source. This archive is a non-profit, "digital library of Internet sites and other cultural artefacts in digital form" (Internet Archive, 1996-) that saves websites as they were in particular moments in time (including most of their downloadable contents). Moreover, Australia has its own Internet archive, the "Australian Government Web Archive" and "Pandora" (National Library of Australia, 1996-). Both archives complemented each other if one did not have the sought information. Finally, the archive of the Australian Broadcasting Corporation (1932-) also proved useful in occasions.

The documents for secondary analysis selected to run the queries were:

- Government policy papers, enquiries, reviews, websites pertaining to
 - public sector reform, modernisation, and related topics
 - economic development plans
- Parliament reports and acts
- Series of State of the Sector (1998-2017): An annual report that the public sector commission or public service commission writes to inform Parliament and Minister on personnel management, industrial relations, and performance against standards and set out by the Commissioners.
- Annual Budget speeches for WA, SA and the Federal Government (2000-2017)
- Platform for Government Series (1998-2016): Elected political party views and directions for the State
- Advisory body reports
- Formal written speeches by relevant actors
- Relevant News Reports

3.6 Data analysis

The process of sifting, sorting, and coding the data, and its analysis was arduous and thorough. The first step was reading all the interviews and making notes about relevant aspects in relation to the literature review and annotate reflections about the contents, such as when other interviewees referred to a similar aspect, or ideas for themes to try to make sense of the data. A second step involved coding to organise the data into categories that can be contrasted with each other.

To identify the best, easier, and quicker way for the aforementioned processes (which some researchers have described as a 'thoroughly dull aspect of the research process' (Cloke *et al.*, 2004, p. 233)), the author experimented with three different techniques, which more or less, each was used for the confection of one of the three empirical chapters. In order, these were: using data coding/analysis software, NVivo©; the framework method; and manual coding.

Computer assisted coding was arduous for the primary data coding, for the number of interviews required many hours reading from the screen; the difficulty of sifting through the interviews easily, e.g. not being able to use the physical memory of the location of the pages; the rather complicated note taking process in the software itself; and there were limits to the extraction of the context of the code.

The strengths of the NVivo software are in its text search capacities, mostly for the secondary data analysis. Once a theme was identified from the interviews, a search for related words would show all documents and passages where it was mentioned, the references and the documents with the relevant sections highlighted, serving as a fast and useful resources to validate or not some claims. This search function, which is surprisingly fast, was of great use for scanning the 370+ government documents from each State and the Federal level and selecting the relevant passages. For example, a search query for the criteria *innov** (any word that begins with those five letters) was found in 56 government documents in South Australia and about 50 for Western Australia (from the total that the author had collected covering the period between 2000-2018) (See Figure 5). A number of those did not refer to PSI, so a process of manual filtering was necessary. Another example of another text search query was the phrase 'public value'. Each of the passages where the word appeared was analysed individually and in light of the themes emerging from the interviews and used not only to triangulate but to supplement these as well.

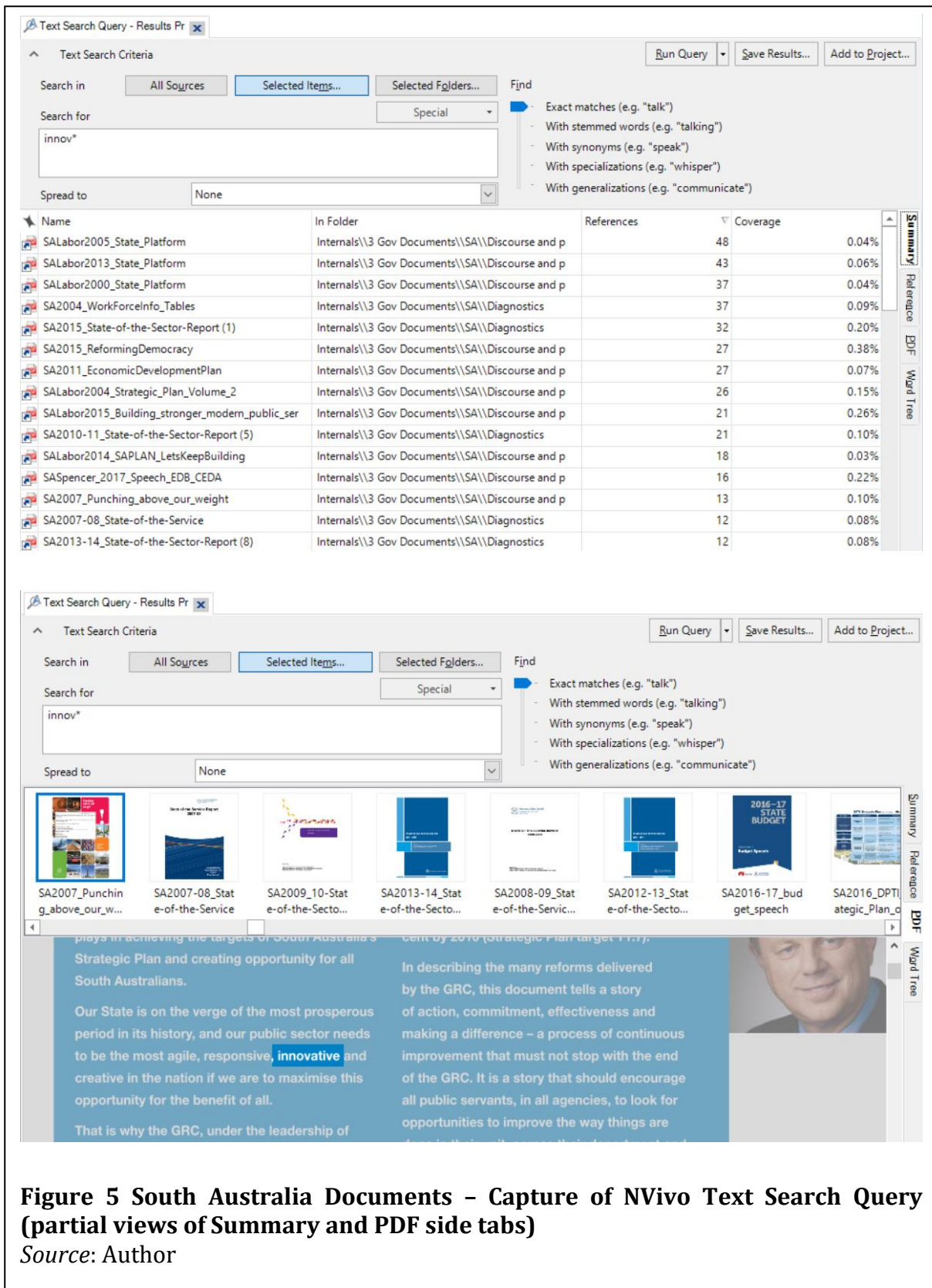


Figure 5 South Australia Documents – Capture of NVivo Text Search Query (partial views of Summary and PDF side tabs)

Source: Author

The Framework Analysis technique seemed promising, a variable of interest per column (a code) and a case per row (Gale *et al.*, 2013). The cells include a verbatim summary of what the interviewee said, including relevant quotations with page and line number(s). The idea in Framework Analysis is to code first using NVivo®, which was not done,

given the foresaid problems. Thus, the Framework was used for the data extraction more than the summary, which proved heavily cumbersome. In addition, the number of variables and cases, plus the comparative element, made the subsequent analytical process even more difficult.

The third technique, hand coding, proved to be the preferred method; not the definitive though, as the author will continue to experiment to find the best them. While messy and lengthy, it was physically better for avoiding eye strain, easier to keep control of the process, and helped enhance creativity for open coding. Finally, in all the techniques a summary of the node needed to take place to be able to analyse the data to group them under themes, which was highly time consuming. The processes of coding and producing themes are described below.

Initially codes were organised to match expected themes from the theories reviewed. Yet, this was preventing the possibility of uncovering important insights that were unexpected. Thus, the data analysis took a turn to a more open coding approach that did not involve trying to fit the responses in a theoretical or conceptual pre-determined 'box' but using intensive exercises to identify themes that seemed important and were relevant to the research questions. Only at a later point these would be considered on how they speak to diverse theoretical constructs and vice-versa. This was crucial, as for example, this is how the 'institutional thickness' concept was found to best explain some of the key differences that were uncovered between the States.

The open coding exercise was another challenge, as at the beginning, more than 100 nested nodes were identified. Understanding the difficulty of managing this amount of data, useful concept map software such as DocEar (see **Figure 6**) and tables in Word documents played an important role to aid in the identification of key themes and linkages between them, causes, effects and explanations.

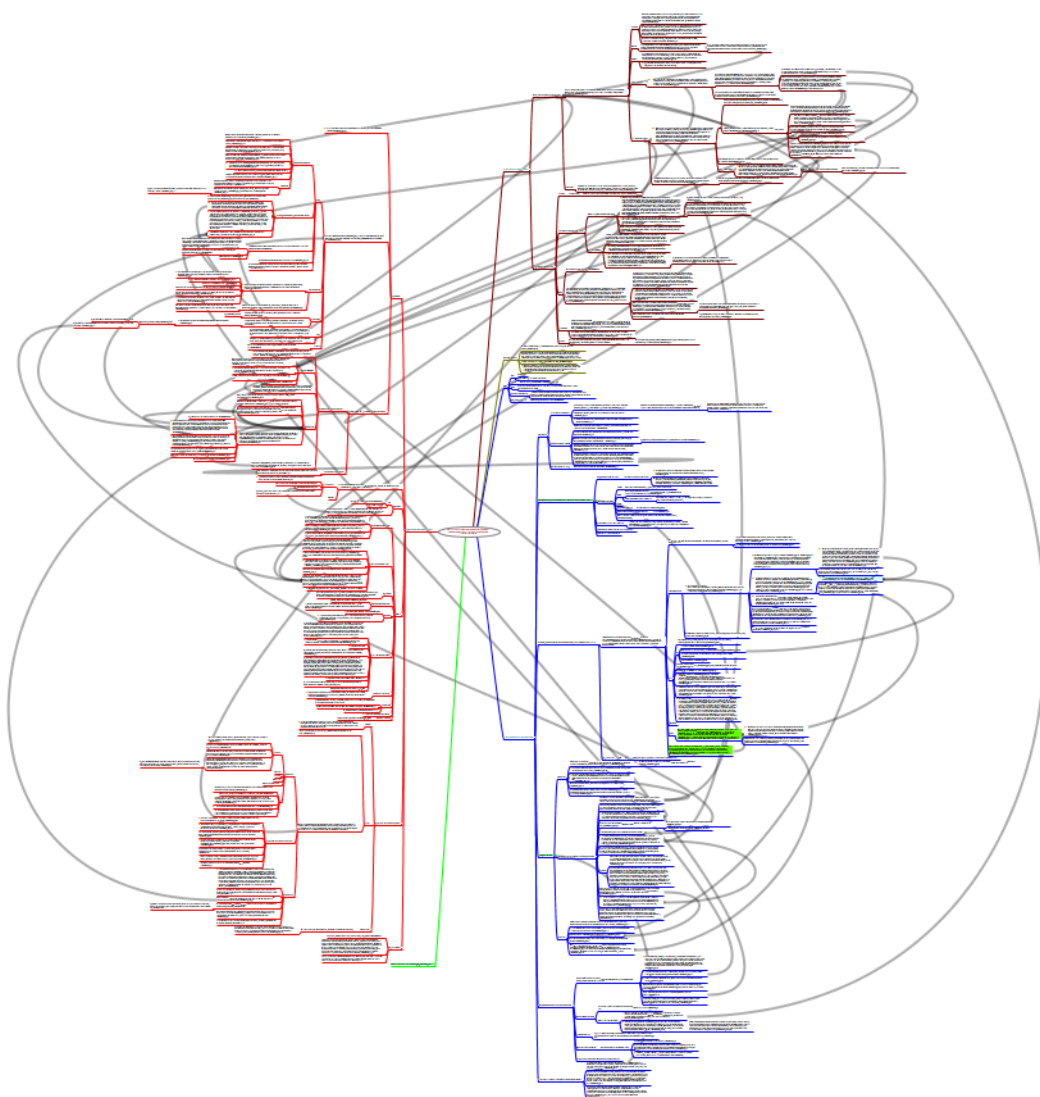


Figure 6 Preliminary data analysis map with codes, themes, connections, interpretations and explanations from primary data

Source: Author, using DocEar open source software

Yet, coding was a process that went back and forth in the process of sorting the data (see **Table 10** for examples of codes). Thus, while useful for the analysis process, maps had to be complemented with written text. Extracts from each of the interviews under each code went either to a Word document, or to the Framework Analysis Excel sheet. The original extract was pasted into one column, then a summary with the key points on the next column, first for one State, then for the other and finally the Federal perspective

about the states would be incorporated. After having a clear notion about all the contents, themes were used to organise and interpret the data per State and identify similarities and differences between them. The range of themes went from 10-12 per Chapter.

Preliminary Code 5 (for RQ1) included:		Preliminary Code 6 (RQ2) included:		Preliminary Code 7 (RQ3) included:	
Code	Description	Code	Description	Code	Description
<i>PS</i>	Public sector characteristic in relation to PSI	<i>ACTORS</i>	actors or their interrelations	<i>POL ELECTIONS / POLITICAL CYCLES</i>	role of politicians and politics on PSI
<i>DEF</i>	about definitions	<i>FORMAL</i>	Formalisation of PSI	<i>ENGAGING ACTORS</i>	Opportunities for engaging with other sectors
<i>ED</i>	about PSI and ED	<i>SILOS</i>	Fragmentation in the public sector	<i>UNIS</i>	Interactions with public sector and universities
<i>SOURCES / DRIVERS</i>	for PSI	<i>RISK</i>	The role of risk in PSI	<i>OTHER-C</i>	Relations with other countries
<i>DIS</i>	discourses around PSI	<i>LEARNING</i>	Role of learning in PSI	<i>KNOW FLOWS</i>	Issues with knowledge flows
<i>OP</i>	PSI operation	<i>LEADER</i>	Role of leadership in PSI	<i>MEDIA</i>	Role of media in PSI
<i>EX</i>	PSI examples	<i>INFORMAL</i>	Role of informal relations in PSI	<i>RESPONSIVE NESS</i>	Role of Responsiveness in PSI

Table 10 Examples of some codes used during the analysis

Source: Author

To select which themes on which to focus was a balance between differences between the States, and relevance of the themes. Similarities, if present, could serve the purpose of shedding light into factors that perhaps did not have a major causal effect onto the understandings and operation of PSI. This could serve to refine factors that are found in the literature. Yet, the practical issue about how much time space and time was available to conduct this research, prevented this analysis. Preference was given to differences between the States around PSI, given their underlying similarities.

The relevance of the themes was determined by how often it was mentioned in the interviews or by whom in terms of sector or actor, and how much sense it made in the context of the rest of my knowledge about the state (from both primary and secondary data). The conceptual mapping software again served a good purpose here. This was a useful to organise the themes and my thoughts around them in order to write them down in the chapter. Yet, the entire process of analysis was extremely time consuming, mostly because within each of the questions during the interviews, participants could give answers that were useful for all or two of the research questions. Originally, the plan involved questions which answers would fall in each of the chapters separately. But, as is the nature of qualitative research and unstructured interviews, this was rarely the case.

At the end of diverse experimental data sorting, sifting and analysis, the process involved:

1. **Identifying topics or codes** that were mentioned by interviewees divided by State and Federal level about major areas, such as ‘defining public sector innovation’ or under a particular interview question, such as ‘top three drivers/barriers to PSI in the context of ED’ **and listing them under themes that grouped/linked them in general;**
2. **Comparing and contrasting themes** between the States; and sectors and scale if relevant;
3. **Selecting** those that appeared more salient, that is, where the differences between States were more noticeable. A few were also selected for their importance in the literature or for the overall argument, etc.;
4. **Describing and summarising the themes** using the data and presenting (extracts from) the data, using examples;
5. **Explaining these differences** by using the primary and secondary data; and
6. **Linking the findings with the literature.**

3.7 Reliability and validity

In terms of reliability in qualitative research, good filing systems can be important to retrieve the data used for the analysis (Baxter and Jack, 2008). Thus, spreadsheets keeping track of the primary and secondary data were used to organise data sources. Moreover, for each of the stages of the analysis (coding, themes, diagrams), there are documents, per chapter and sometimes per section, archived and labelled to permit easy retrieval.

In terms of validity, misinterpretation or misunderstanding may occur, particularly if using interviews (Swanborn, 2010). Thus, steps were put in place to maximize accuracy both in measurement and interpretations. For example, issues that might have been at dispute were carefully presented; triangulation of important data and claims (e.g. that which brought understanding about the case, or the degree to which a particular statement helped clarify or differentiate between conflicting meanings (Swanborn, 2010, pp. 111-112) was sought either by verifying with other interviewees, or finding supporting documentation if possible.

Triangulation can be a useful tool, beyond verifying situations of conflicted meanings. In the literature, at least four basic ways of triangulation have been suggested (Denzin 1970: Chapter 12 in Yeung, 1997): data triangulation (validation of the data through cross verification from different sources); theoretical triangulation (using several, different theoretical approaches towards the same set of object or objects of inquiry); investigator triangulation (e.g. having several different observers for the same phenomenon); and methodological triangulation (combining different methods, or variations within the same method). In particular, methodological triangulation is useful to obtain supplementary data about more than one dimension of a topic “different data may complement each other in revealing different facets of the social world” (Yeung, 1997, p. 64). Triangulation in this sense is more about making connections within specific cases rather than validating data from different sources.

Thus, data triangulation by contrasting interviewees accounts was useful not only to find discrepancies, if there were any, but more to show different ways of situating a phenomenon. By collecting data from a diverse range of actors and settings, and combining primary data with secondary data, risk of researcher and method bias was reduced (Maxwell, 2004).

3.8 Ethical considerations

This research process followed the conducts listed in the ethical codes of the Royal Statistical Society and the Social Research Association, as presented by Dale *et al.* (2008) (**Table 11** below) to complement the 'Ethical Assessment Form' required by Newcastle University, signed in November 2016.

Conduct	RSS	SRA
1. Ensure that you know the relevant laws and regulations - abide by these.	✓	✓
2. Freely given informed consent wherever possible; be aware of power issues, explain the research fully and uses of data produced.	✓	
3. Do not produce misleading research; honestly and proportionately state problems and limitations of your data and method. Distinguish interpretation of results from opinion. Give readers enough information to assess the quality of work.	✓	✓
4. Seek to upgrade your own skills.	✓	
5. Only do research work that you are competent to do.	✓	
6. Respect privacy-don't unnecessarily intrude on subjects.		✓
7. Consider the effects of your research, including publication; minimize harm to research participants and self.		✓
8. Maintain confidentiality of data-and inform research participants about the use to which data will be put.	✓	✓

Table 11 A comparison of the ethical codes of the Royal statistical Society and Social Research Association
Source: Adapted from (Dale *et al.*, 2008, p. 529)

In regard to primary data safekeeping and reporting, all interviewees were briefed in writing about the research general aim and questions. Informed, voluntary consent for recording and written consent for the academic use of the data recorded was obtained from all interviewees. A passage from the consent form read that data would be kept confidential and secure. Anonymity was also guaranteed, unless they specified at the end of the interview that their name could be used in publications (See the informed consent form in Appendix C.). Regardless of their choice, anonymity was preferred for all direct quotes for uniformity. Every effort was made so that any identifiable information that may directly connect an interviewee to the text was anonymized, in line with research conventions. In the case of high-level officials, easily identifiable by their job post, their post was generically described to avoid a revelation of their identity.

3.9 Conclusions

This Chapter showed the ontological and epistemological premises under which the research was conducted and discussed the rationale behind the processes for developing explanations through a causal approach for comparative case study research and it answered a multimethod call by authors from PSI literature (De Vries *et al.*, 2016). The need for an intensive design was based on the multi-scalar, multi-sectoral, multi-spatial, and multi-temporal factors identified in the analytical framework, along with multiplicity of variables and actors to consider. The chapter also describe and reflected about the practical aspects of the research, such as data collection, analysis and ethical issues. **Figure 7** offers a summary of the research design.

Aim: To develop a fuller understanding and explanation of PSI in the context of economic development at the subnational level

- Question 1: PSI conceptualisation & operationalisation
- Question 2: Internal processes shaping PSI
- Question 3: External forces influencing PSI

Case study selection

- Phenomenon under study: public sector innovation
- Factor of interest: economic development context
- Constant factors to allow for comparison: sharing national institutions (e.g. language, norms, regulations, type of government)

Qualitative techniques for data collection

- 56 semi structured interviews based on analytical framework across sectors in each State and across government scales.
- Collection of secondary data ranging more or less the years 2000 - 2018 (government documents, reports, reviews and enquiries; official current and past websites; budget speeches; official speeches; data bases; legislation)

Qualitative techniques for data analysis

- Working through coding and open coding (iterative induction and abstraction), themes, and causal analysis

Techniques for validation and reliability

- Data and method triangulation
- Systematic filing system for easy retrieval of data and analysis

Figure 7 Research Design – Comparative Case Study Research

Source: Author

Chapter 4. South Australia and Western Australia in Context

4.1 Introduction

This chapter provides the spatio-temporal context for the discussion of the empirical findings in chapters five, six, and seven. Importantly, it shows shared national and subnational institutions, and differences in relevant socio-economic, political and geographical indicators between two States of a confederated Australia: South Australia and Western Australia.

Organised into four parts, a first introductory section which includes a brief comment about how *regions* are understood in Australia (as mostly rural areas) and explains why this Thesis refers instead to each State as a region. The second section opens with the national context of Australia, focusing on relevant shared institutions that give way for a comparison between the two selected subnational States. A third section outlines and comments the States' internal governance organisational structures and their differences. It also includes the functions allocated across levels of government; and how financial resources are obtained and distributed to pursue their responsibilities, which may influence or play a role in economic development in the WA and SA. The fourth section focuses in contrasting the economy and the political economy of the States. Finally, the Chapter closes with the main conclusions to situate the foundations for the analytical chapters 5, 6, and 7 as a platform from which to assess the differences that emerge in the following three empirical chapter.

The Commonwealth of Australia is a Federal, Constitutional Monarchy since the year 1901 (Department of Foreign Affairs and Trade, 2016). Six former British colonies make up its six States (referred to as 'State' governments): New South Wales, Victoria, South Australia, Queensland, Tasmania, and Western Australia (See Figure 8). In addition, the country identifies ten territories, of which three have been granted by Parliament self-Government responsibilities: the Australian Capital Territory, Norfolk Island, and the Northern Territory (Australian Government Solicitor, 2010 [1901]).

Australia sits within the top 20 countries with highest GDP per capita and Australia ranks 3rd in the United Nation's Human Development Index. Its name comes from the Latin word *australis* for southern; while high income countries are conventionally

located in the 'global north', the 26th Parallel is transverse Australia, in line with South Africa and Peru. Only twenty-five million people live there, about 0.03% of the world population, as per the World Bank data, yet it is the 6th largest country in the world (the smallest continent). Much of its landmass is desert or semi-arid land (the 'outback'), which together cover a little over a third of the country. From late 1940s to mid-1970s Australia protected its industries using trade barriers and production subsidies, until mid 1980s, when the country opened its economy through the reduction of tariffs (Martinus *et al.*, 2018).

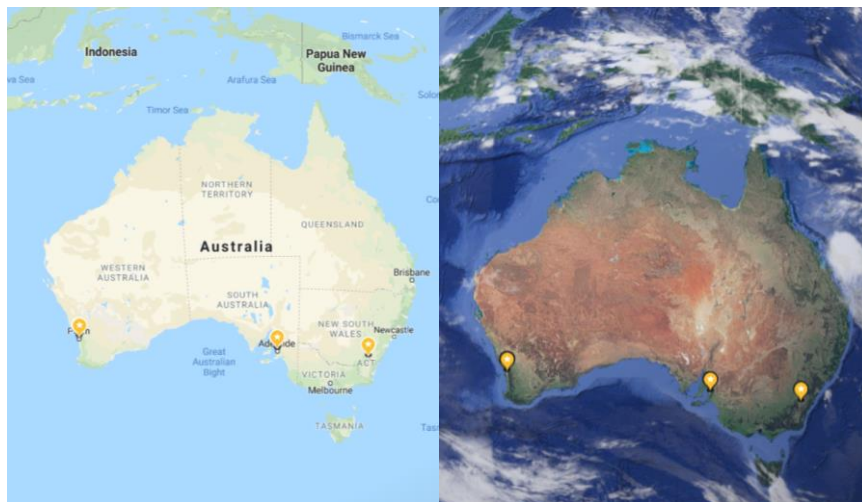


Figure 8 Australia in the World map and satellite vision

Note: Yellow pins from left to right: Perth, Western Australia; Adelaide, South Australia; Canberra, Australia Capital Territory (ACT).

A note on regions of Australia

From an international perspective, States are considered 'regions' of Australia, particularly for subnational global statistics such as those from the OECD or the United Nations. In Australia, these 'regions' are named States. Thus, in this country, regions have a different meaning. Yet, academics claim there is no clear conceptualisation of regions in Australia (Paül and Haslam McKenzie, 2015), often these are thought as rural areas within Australian States, even though policy and theories do not make this distinction (Paül and Haslam McKenzie, 2015).

In the literature, regions have been considered to be increasingly important as foci of economic organisation and political performance and action (Morgan, 1997; Amin, 1999; Cumbers and MacKinnon, 2011); they are considered to be neither an aggregation of firms nor scaled-down versions of national or State governments (Selini and Socci 2002 in Kitson *et al.*, 2004). 'Region(s)' and 'regional' are concepts in construction and have gone from being considered a bounded, 'pre-given container' of social, political, and economic activities to being considered as processes, relations, dynamism, evolution and socio-political contestation (Brenner 2001 Jones and MacLeod, 2011).

Considering that both South Australia and Western Australia are small in terms of population; that over 75% of their residents are concentrated in their capital cities (See table below); that they are members of a Federated nation-state; and that while they are physically large, specially Western Australia, and economically, socially and physically diverse, government is centralised and hierarchical in these States (Everingham 2009). Thus, the approach to 'region' in this thesis considers each State as a region.

Therefore, empirically, by region this thesis will refer to the Australian States and will focus on the State government as point of departure for the interscalar analyses. On the occasional exception for empirical purposes and government relations analysis, the text will refer to the regional level within States as understood generally in Australia. For example, in Western Australia nine regions have had a legislated role since 1993 through different types of agencies at State level (Paül and Haslam McKenzie, 2015). In South Australia, eight regions are recognised for joint economic development efforts across local, State, and federal government levels (Government of Australia, 2019).

4.2 Highly ranked institutions for economic development and high human development indicators

As explained in the previous chapter, the similarities shared by the two States are important to have a baseline for comparison and reduce the scope for variability between the regions. These are mainly the Australian Constitution, the Federated Government, and thus broader regulations and type of government, a common language, and a shared former British colonial history.

A functioning and advanced formal institutional setting also characterises the national context of these States. Some specific institutions recognised in the literature for their role in economic development are also present, such as well-developed intellectual property rights, democratic traditions, and high quality of government (Rodríguez-Pose and Di Cataldo, 2015; Zukauskaitė *et al.*, 2017). This is important because the expectation would then be that overall Australian States show some of the key conditions identified by the literature to form and develop strong economies.

For example, perceptions of corruption in a scale from 1-100 in the *Bayesian Corruption Indicator*, 100 being the most corrupt, have decreased from a score of 20 in 1990 to 16 in 2017 in Australia (this about the same level as the UK; the lowest level in OECD countries is New Zealand with a score of 8 in 2017) (Teorell *et al.*, 2019a). Australia also ranks high in *Government Effectiveness*, an indicator that measures perceptions of the degree of independence from political pressures and the quality of the civil service, the quality of formulation of policy and the credibility of the government's commitment to these, and the quality of their implementation (Kaufmann and Kraay, 2019). Freedom House's *Functioning of Government* indicator, which measures government accountability and independence, government freedom from pervasive corruption and degree of openness and transparency, has also portrayed Australia as a top scorer (in position 12) consistently since 2005 amongst OECD countries. Finally, Australia scored 7.99 in 2015 in an indicator of *Legal Structure and Security of Property Rights*, similar to other OECD countries such as the United Kingdom which scores 7.92. This indicator measures judicial independence, impartial courts, protection of intellectual property, military interference, and integrity of the legal system (Teorell *et al.*, 2019b).

Moreover, Australia ranks very high in the United Nation's Human Development Index. In 2017 it ranked third in the world after Norway and Switzerland, and has stayed among the top three countries since at least 1990 (UNDP, 2018). As an example, the population with tertiary education increased from 25% to 38% since 1990, locating Australia amongst the top ten in the OECD in 2010 (Teorell *et al.*, 2019c). The regional well-being data from the OECD for 2018, shows similarities in the percentage of labour force with at least secondary education (80.2% in SA and 82.1% in WA) and high life expectancy (82.4 in SA and 82.5 in WA). Showing how well ranked is Australia, both in economy driving institutions and in economic development indicators, allows for differences to emerge that go beyond the traditional institutional answers to economic development road stops.

Key differences do emerge, however, between South Australia's and Western Australia's economy and economic wellbeing. A closer look reveals differences between the two states such as apparent school retention years 8 through 12, where South Australia has a 95.7% retention rate and Western Australia 82.8% (Parliamentary Library, 2018b). In 2016, long term unemployment was experienced by 1.9% of the labour force in South Australia, and by 1.3% of the labour force in Western Australia (ABS, 2017a). While the figure for WA is lower, it increased 144% from 2012, in contrast with SA's increase of 66% from 2012 to 2016. In respect to inequality and the Palma indicator, in 2016 the richest ten percent of South Australia earned 1.021 times the income of the poorest 40% of the State; in the case of Western Australia, this figure was higher, 1.058 times, showing how inequality is higher in this State (See Cobham *et al.*, 2016 for an explanation of this indicator; ABS, 2018d). These differences open the scope for learning about differences in regional institutions that may play an important roles in PSI and economic wellbeing.

4.3 The economy in the States: a struggling South Australia and a consolidated Western Australia

Some of the main reasons for becoming a Federation in 1901 were that the former colonies had different types of economic activities (mining and agriculture on one hand -the case of Western Australia- and an industrial base on the other -the case of South Australia-) and had huge physical distances to cover between them (Cole, 2014); the pressure by some States to open trade and reduce commerce barriers within Australia in favour of a common market (E.g. Western Australia), and protect industry from external imports (E.g. South Australia); among others (See Brown 2005 in Cole, 2014, p. 31).

Nowadays, one of the most important differences between these two States continues to be economic (see **Table 11**). Western Australia doubled South Australia's Gross State Product in 2016-17. And its GSP per capita was one third higher than South Australia for the same period. Household income per capita (HIC) show a difference of about AU\$6000 in favour of WA (See **Figure 9**). Yet, this gap between these States' HIC begins to show and widen only from around the year 2002 onwards (See **Figure 10**). Before, both States had similar household income per capita.

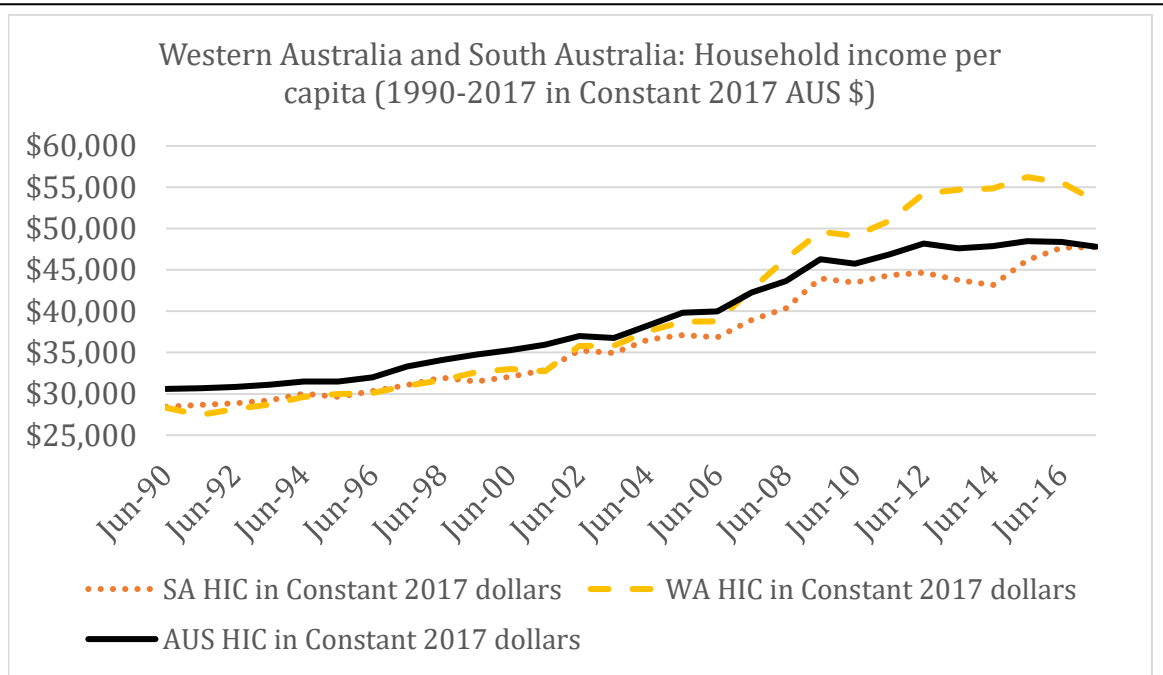


Figure 9 Western Australia and South Australia: Household income per capita (1990-2017 in Constant 2017 AUS \$)

Source: Author, based on data from ABS 5220.0 Australian National Accounts: State Accounts, Table 16. Household Income Account and Per Capita, Western Australia: Current prices; Table 20. Household Income Account and Per Capita, Australia: Current prices; Table 15. Household Income Account and Per Capita, South Australia: Current prices; ABS Consumer Price Index reference period 2011-12.

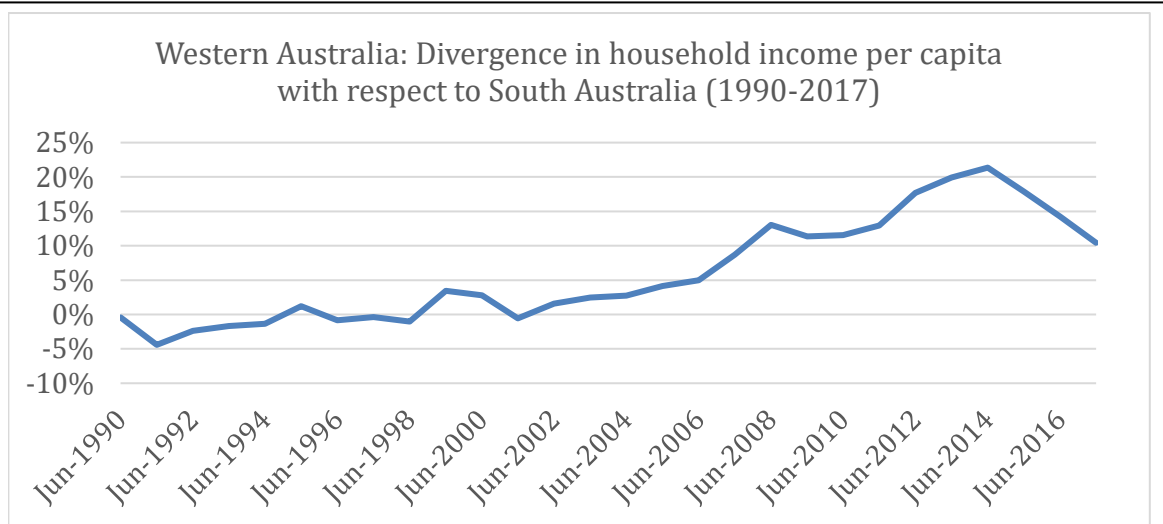


Figure 10 Western Australia: Divergence in household income per capita with respect to South Australia (1990-2017)

Source: Author, based on data from ABS 5220.0 Australian National Accounts: State Accounts, Table 16. Household Income Account and Per Capita, Western Australia: Current prices; Table 20. Household Income Account and Per Capita, Australia: Current prices; Table 15. Household Income Account and Per Capita, South Australia: Current prices; ABS Consumer Price Index reference period 2011-12.

Western Australia's national proportion of exports is well over 30%, while South Australia's is only 4 percent. The mining industry in Western Australia contributes to a third of its GSP; the top 3 exports and value our iron ores, gas, and gold, all from the extractive industries. South Australia on the other hand shows alcoholic beverages, education related travel, and wheat as its top three exports. South Australia's top trading partners are also a bit more diversified than Western Australia's. While both have China in the number one position, for Western Australia this market represents over 40 percent of all its trade, while for South Australia it is only 20 percent. The product and market dependency of Western Australian is often part of government plans for the diversification of the economy (See Johnson, 2006).

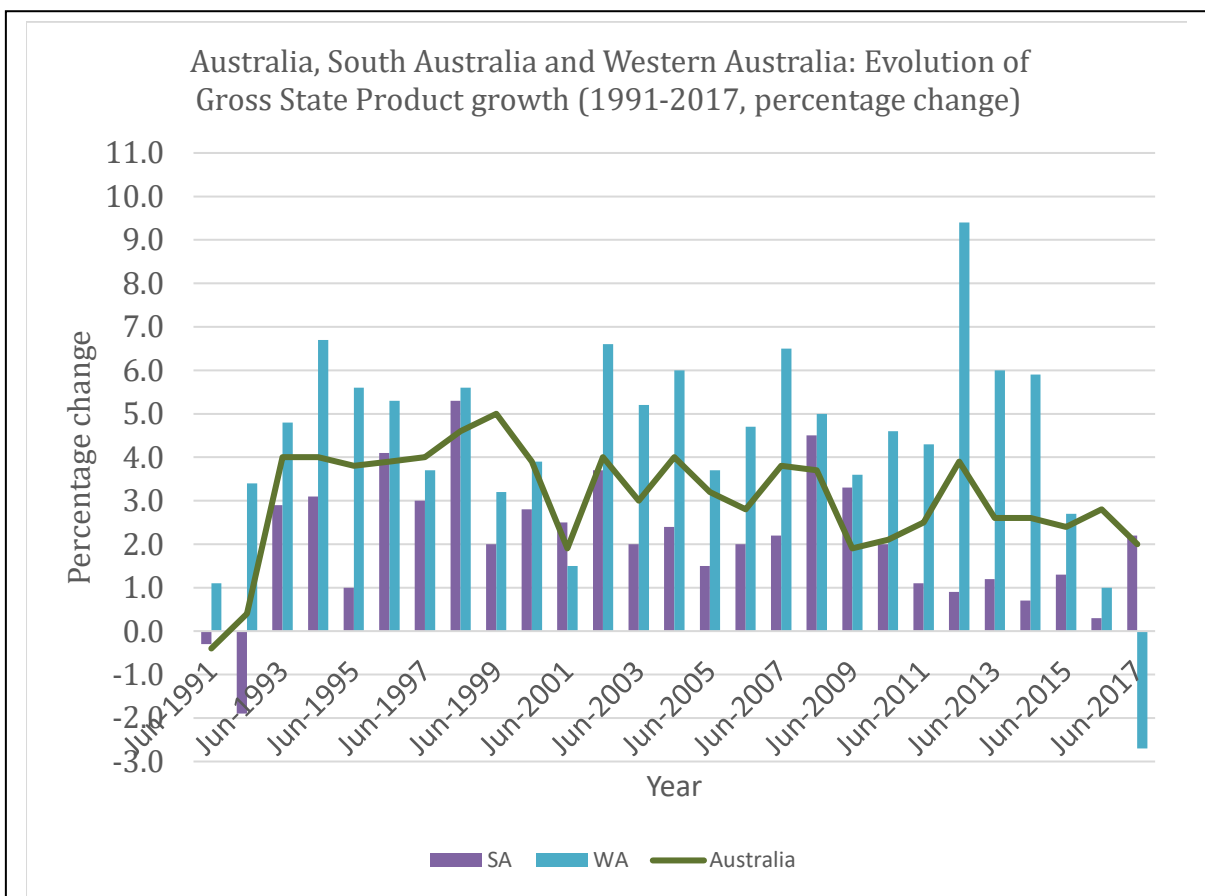


Figure 11 Australia, Western Australia and South Australia: Gross domestic product and gross state product: Chain volume measures - Percentage changes (1990-2017).

Source: Author, based on data from the Australian Bureau of Statistics 5220.001 Australian National Accounts: State Accounts, Table 1. Gross State Product, Chain volume measures and current prices.

The problem around this dependency translates into economic booms and busts depending on China's changing strategies for purchasing and production patterns thus affecting Western Australia's economy dramatically. So much so that it can drive periods of exponential growth or exponential slowdown. South Australia instead has a less risky economy. Yet, it's foundations are still considered weak, thus the state is continuously trying to drive up economic growth and develop a strong, embedded economy, particularly with the ongoing car manufacturing factory closures (Spoehr, 2017).

Feature	Western Australia	South Australia	Australia
Area (km²)	252,664,624	984,275	768,812,632
Population (2018)	2,595,192	1,736,422	24,992,860
Population born overseas (2016)	796,328 / 31 %	383,280 / 23 %	6,149,388
Proportion completed Year 12 - total population aged 15+ years (2016)	51.7 %	47.4 %	51.9 %
Proportion of population residing in State capital (2015)	78 %	76 %	-
Federal representation from State	28/227	22/227	-
GSP (million, 2016-17)	233,152	101,791	1,692,092
GSP/capita (2016-17, AUS \$)	90,799	59,285	69,402
Unemployment rate	6.3%	5.7%	5.4%
Total exports (million, 2016-17)	117,878	14,935	336,808
% of total national exports	35 %	4 %	-
Top three exports in value (2017-18)	Iron ores & concentrates, Gas, Gold	Alcoholic beverages, Education-related travel, Wheat	
Total imports (million, 2016-17)	45,736	13,562	374,218
% of total national imports	12.4 %	3.6 %	-
Key industries in terms of employment generation	Construction, Retail	Health care and Retail	
Trade as % of GSP (2016-17)	48.6	11.1	-
Key market, % of total trade share /value two-way trade (million, 2016-17) / top 5 trade partners	China (41%) / 63,969 Japan (12.9%), Republic of Korea (7.2%), Hong Kong (6.3%), UK (3.4%)	China (20%) / 3,966 US (11%), Japan (6.5%), India (6.3%) Malasya (6.2%)	

Table 12: South Australia and Western Australia key economic and relevant social and demographic indicators

Sources: (ABS, 2017b; Department of Foreign Affairs and Trade, 2017; ABS, 2018a; ABS, 2018f; Parliamentary Library, 2018b; Department of Foreign Affairs and Trade, 2019a; Department of Foreign Affairs and Trade, 2019b; Government of South Australia, 2019a; Government of Western Australia, 2019; Parliament of Australia, 2019)

Note: currency is in AUS \$ Dollars

Specifically, the history of the development of Western Australia's economy can be described as a:

“continuous story of abundant, but remote land, a shortage of labour and a demand for transnational capital. The political leadership's role has always been to integrate these factors of production and mitigate barriers to growth” (Johnson, 2006, p. 155).

Western Australia's key economic resource, land, and any resources that could be extracted from it, have shaped how the public sector views its own function in the State. Some authors even consider that expanding the resource base upon which the private sector can build has been the *most* important function of the State (Lines 1991 in Johnson, 2006, p. 155).

Western Australia's economic structure has been based on export led extractive industries since the first colonies settled in the banks of the river Swan (Johnson, 2006). Its economy grew predominantly as a result of foreign capital; for mining and agriculture this resulted in the development of substantial technological capacity. The public sector began nurturing these industries since the 1960s and coupled with the country's increased exposure to the global commodity markets in mid 1980s peaking in the early 2000s, and the rise of Chinese demand for mineral resources set the stage to develop expertise about these industries in the public sector and the capacity to build over previous knowledge in this area (Maxwell, 2018). The political economy of the State has focused in supporting and regulating this market to yield vast returns for State and the country. In the 2000s began another mining boom period of a little over a decade of sustained economic growth, much higher than national average. The State led the country's GDP while also enriching its treasuries via royalties.

Recently, in 2014, WA began experiencing a slow-down of its economic growth and even recession. The mining sector went through a natural contraction of the industry, as it entered the production phase. Construction being over, the state's GSP fell sharply in 2015 and has continued with a negative trend thereafter. In April 2017 West Australian Premier Mark McGowan announced WA's finances had gone from being the best in the country, to the worst "since the Great Depression" (Foster, 2017).

Western Australia has had the imperative of reaping economic benefits from the resources sector and this has shaped the public sector knowledge and focus. They have developed specialised knowledge to promote and regulate this activity; and understood from experience that market tools are useful to reach public sector goals, shaping the governments' overall approach to public sector reform and public sector innovation. Yet, the dependency on external demand is a crucial issue that makes this a challenging economic context within this particular development path.

In the case of South Australia, the State's industrial economy grew throughout the war and post-war eras into the early-1970s. Yet, the mid of the 1970s, within a period of global economic restructuring, marked the beginning of the manufacturing decline in the state, which characterises it until today (Dean, 2017). Car manufacturing industries arrived to the State in the early 1900s and soon became the leading employer and manufacturing sector. After a few decades the industry began to decline and between 1990 and 2003, 17,000 jobs in manufacturing were lost in South Australia (also including the decline of jobs in low productivity industries such as clothing, textiles, transport equipment, and machinery industries) (Dean, 2017). By 2018, the Car manufacturing industry in South Australia shut its last factory (Joyce, 2019).

While recently South Australia's economic prospects have started to improve (Deloitte, 2018), the steadily declining manufacturing sector, and the collapse of the State Bank back in 1991, all contributed to the slow gross state product and employment growth, the loss of population and a declined share of exports compared to the rest of Australia (Joyce, 2019). Industries nowadays include wine, wheat, meet and meat preparations, refined copper and copper products, and metal ores and metal scrap.

4.4 Internal governance and organisational structures

Australia has a Westminster System of Government, alike to the United Kingdom. Under the Australian Constitution signed in 1901, States agreed to give away judicial and legislative powers to the newly established Commonwealth, but retained those which do not enter in conflict with the Federal government legal competencies (Cole, 2014). Exclusive federal government functions were related to customs and tariffs, currency, external relations and defence, post office, copyrights and patents, company loans,

maritime and immigration issues, and banking and insurance (Cole, 2014). Yet, decisions by the High Court of Australia over time have added powers of the national government in addition to sustaining a pronounced vertical fiscal imbalance (Wiltshire, 2014). A vertical fiscal imbalance refers to a mismatch between being able to raise revenue and the spending responsibilities of governments, which is a constant criticism and source of tension between the states and the Commonwealth (c.f. Chapter 6).

Nowadays, except for those functions the Constitution considers exclusive to the domain of the Commonwealth Government, State governments perform the full range of government functions. These include education, transport, maintenance of infrastructure, law and order, energy, policing and prisons, community services, and health (See Figure 12). States also regulate and influence economic activity, and redistribute income by means of transfer payments (ABS, 2018g). In SA local government is made up of 68 local government areas, whereas in WA, local government is made up of 140 local government areas. Overall their functions are limited to issues like local roads and rubbish collection, although Chapter 6 shows important differences between SA and WA regarding the relationship between both levels of government, and how this has led to increased trust and competences at the local level for SA.

State Governments are formed from the party or coalition that holds the majority of seats in the lower house of each State's bicameral Parliament. The lower house or the House of Assembly in South Australia, has 47 members while Western Australia's Legislative Assembly has 59 members. On the other hand, the upper house in South Australia, the legislative council, holds 22 seats, while Western Australia's holds 36 members.

Power is centralised at the State Government, with most economic development decisions made and policy put into practice at this scale. Both States have had only Labor (centre left) and Liberal (centre right) parties making government or leading coalitions since the early 1990s, just like the Federal government (Table 13). During the 1990s both SA and WA had mostly Liberal governments. In the 2000s both States shifted to the left and Labor began its decade. In the late 2000s WA shifted back to a Liberal Government while SA maintained its preference for Labor up until 2017. This coincidence in Labor governments in both States helps diminish the role the governing party might have played in terms of the differences that emerge between SA and WA, as shown in the analytical chapters.

The Australian Constitution gives the Commonwealth specific responsibilities. State, territory and local governments have their own responsibilities.





















Commonwealth	State/Territories	Local/Territories
 Defence	 Delivery of health services	 Local roads
 Foreign policy	 Delivery of education services	 Parks and public gardens
 Customs	 Delivery of community services	 Rubbish collection
 Immigration	 Transport	 Recycling
 Communications	 Energy	
 National trade	 Infrastructure	
 National policies in areas of health, ageing, education, transport and energy	 Policing and prisons	
 Welfare policy and payments		
 National security		

Figure 12 Australia: Distribution of responsibilities between levels of government

Source: APS Induction e-learning program. Module 3 – Structure of Government.

[https://resources.apsc.gov.au/aps-](https://resources.apsc.gov.au/aps-induction/a001_module_3_m3_5_the_relationship_between_levels_of_government.html)

[induction/a001_module_3_m3_5_the_relationship_between_levels_of_government.html](https://resources.apsc.gov.au/aps-induction/a001_module_3_m3_5_the_relationship_between_levels_of_government.html)

During the early 1990s, Australia was characterised by a rise of neoliberalism. In terms of the public sector administration, this rise was partly fuelled by internal and corporate management reforms to the sector in the 1980s. These were meant to empower the public servant and increase administrative quality (O’Flynn, 2007) in a context of internationalisation of the Australian Economy. Reforms were later expanded by a marketisation phase in public management, which arose alongside the economic rationalist approach during the 1990s (Pusey 1991 in O’Flynn, 2007). Traditional administrative approach that emphasized inputs and processes, began to be replaced for one that focused on results (Halligan, 2010). A public sector that heavily regulated economy and maintained a welfare state approach, shifted toward turning to the private sector and adopting market principles for the public sector at the federal and state levels (Parker and Guthrie, 1993; Halligan, 2010).

The size of the public sector in South Australia represented almost 13% of total persons employed in 2018 (108,265 persons) (Government of South Australia, 2019b)(See Figure 13). In Western Australia, 140,403 persons worked for the public sector in 2017, which was around 10% of WA’s workforce (Government of Western Australia, 2017c).

In addition, the Federal government had over 9,000 public service employees in South Australia, and almost 7,000 in Western Australia (APSC, 2016b). While public sector employment overall has been growing in both States, in Western Australia this growth has not been proportional to the population growth, as can be inferred from its sharp decline in proportion to the labour force since 2010-11.

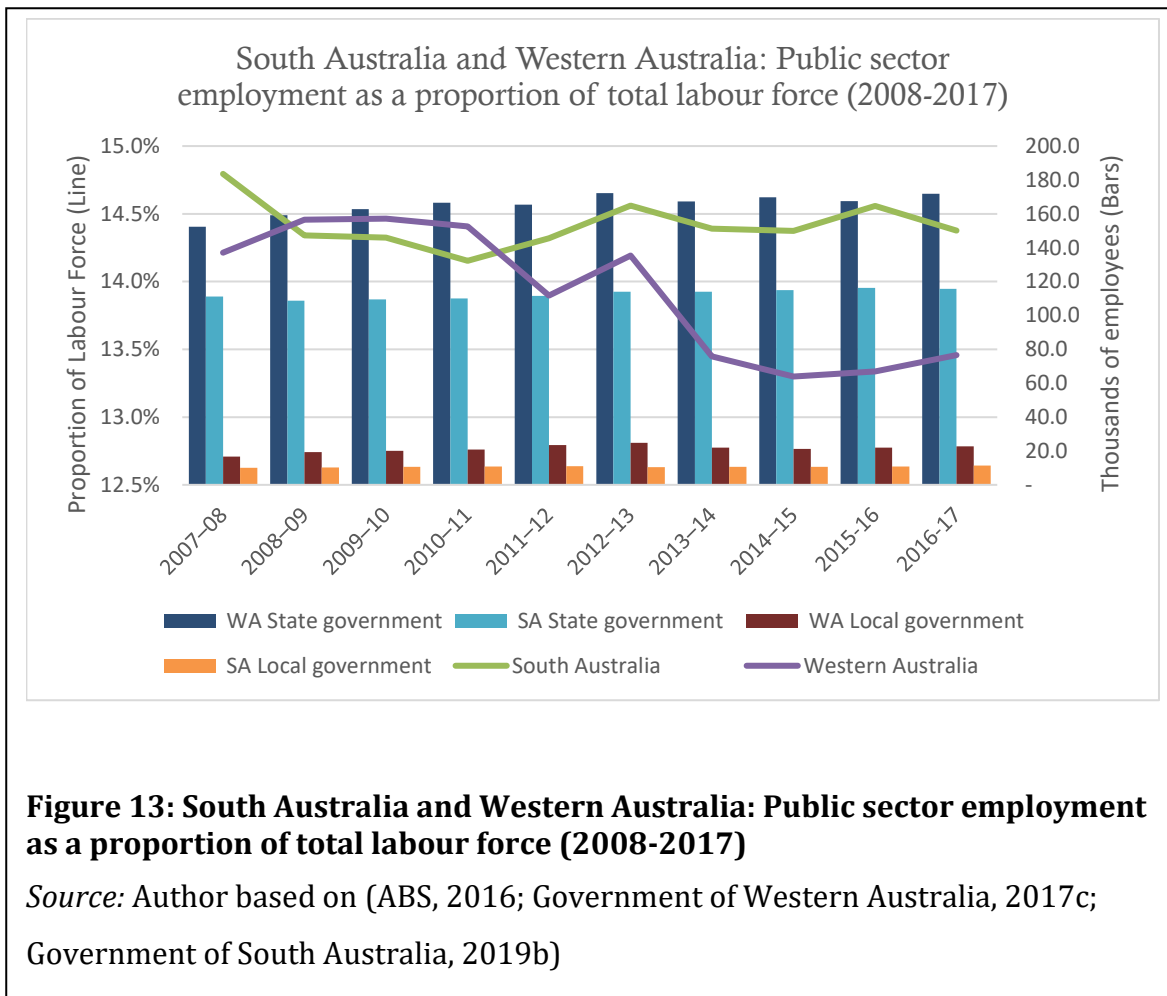
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Federal		~			* ~	Lib.	~			~
WA		* ~	Lib.		~					* ~
SA	*	* ~	Lib.		*	~				*
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Federal			~			* ~	Lab.		* ~	
WA		Lab.		~	*		~*	Lib.		
SA	* ~	Lab.			~				~	*
	2012	2013	2014	2015	2016	2017	2018			
Federal		** ~		*	~	Lib.				
WA		~				* ~	Lab.			
SA			~				* ~			

~ Elections Pink Hung parliament

* Change of Premier Labor Liberal

Table 13 - Australia, Western Australia and South Australia: Time line depicting shifts in political party, change of premier and elections.

Source: Author, based on reports on elections from the Parliament of Australia.



In 2017 Western Australia government included sixteen Ministers and the Premier; 7 of which were charged with overseeing economic development issues. Often in Australia the Premier and Ministers are charged to oversee more than one area of government. For example, in WA the Premier then oversaw issues of Tourism and Science (Government of Western Australia, 2017a; Government of Western Australia, 2017b). South Australia’s government on the other hand, included fourteen Ministers and the Premier, of which 8 were charged with overseeing economic development issues, such as employment, regional development, defence industries, tourism, etc. (Government of South Australia, 2017b; Government of South Australia, 2017c). SA sought a number of ministers oversee issues related with several Departments, while Western Australia only one minister oversaw issues from more than one Department.

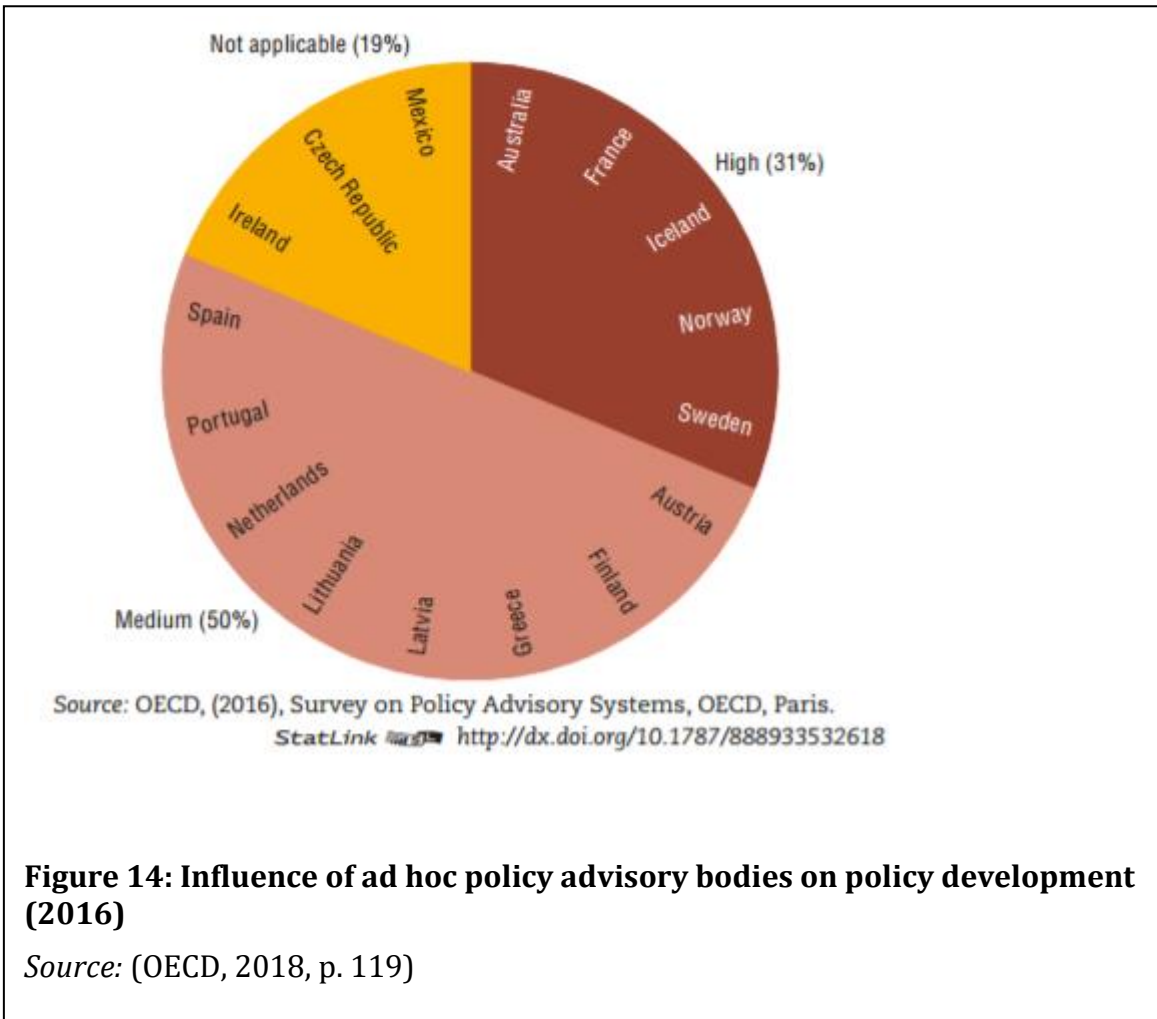
Western Australia and South Australia: Selected Minister economic development responsibilities and selected Departments (Feb, 2017)			
Minister responsibilities		Selected Departments	
Western Australia	South Australia	Western Australia	South Australia
Premier; Minister for Tourism and Science	Premier	Department of the Premier and Cabinet	Department of the Premier and Cabinet
Minister for Training and Workforce Development	Attorney-General, Minister for Industrial Relations; the Public Sector; Consumer and Business Services	Department of Training and Workforce Development	Department for Trade, Tourism and Investment
Minister for State Development; Transport; Innovation	Minister for Employment; Manufacturing and Innovation; Automotive Transformation; Science and Information Economy	Department of State Development	Department of State Development
Minister for Commerce	Minister for State Development; Mineral Resources and Energy	Department of Commerce	
Minister for Regional Development; Lands; Minister Assisting the Minister for State Development	Minister for Agriculture; Food and Fisheries; Tourism	Department of Lands	Defence SA
Minister for Mines and Petroleum; Finance; Small Business	Minister for Investment and Trade; Small Business; Defence Industries	Department of Mines and Petroleum	Department of Energy and Mining
Minister for Agriculture and Food	Minister for Regional Development; Local Government	Department of Regional Development	Department of Planning, Transport and infrastructure
	Minister for Transport and Infrastructure; Housing and Urban Development	Department of Agriculture and Food	Department of Primary Industries and Regions

Table 14 Western Australia and South Australia: Selected minister economic development responsibilities and the selected departments (2017)

Source: Own elaboration based on (Government of South Australia, 2017b; Government of South Australia, 2017c; Government of Western Australia, 2017a; Government of Western Australia, 2017b)

Beyond Departments, State governments also create other types of public agencies. The OECD (2018) has categorised some of these ad hoc advisory bodies as having 'high impact' in the processes of policy development in Australia, which make their inclusion here important. In 2018 South Australia had 190 boards and committees (such as Green Industries SA, a statutory authority with an appointed public-private board that steers the agency to improve resources efficiency and productivity) and Western Australia over 290 (Premier's Circular, 2017) (such as the Rural Business Development Corporation, which offers financial support for the farming sector and delivers services for the good of rural industry).

In South Australia, structural options for new entities forming new boards and committees include statutory authorities, public corporations, and advisory bodies (Premier and Cabinet Circular, 2014). Statutory authorities are relatively independent decision-making bodies (depending on the extent of their establishing legislation) often in relation to regulation (issuing guidelines or standards) created by government with specific periods for review or sunset clauses. They are mostly be governed by members of a board which can be appointed by the Governor or managed by public servants. They can be classified by their functions: non-commercial service delivery, usually subject to high-level of ministerial control (such as Green Industries SA); commercial service delivery, generally subject to tempered ministerial direction and control; and, regulatory, which are independent from government. Public corporations have predominantly trading or commercial interests. They are accountable to their minister and subject to their direction and control, with a certain degree of independence. For example, TAFE SA (an education and training state-owned corporation with a public-private board aiming for employment outcomes). Advisory bodies are specifically created by legislation (statutory) or by a Minister of the Crown (non-statutory) to provide advice to the responsible minister. They may offer perspectives from a range of actors, such as eminent businesses and persons or the broader community, as relevant to the functions of the body. For example, what was the Economic Development Board (Non-Statutory).



In Western Australia public sector boards and committees are in general responsible oversee and ensure good governance of a public sector body, that is that the necessary “systems and processes are in place to shape enable in overseeing the bodies management efficiently” (Premier's Circular, 2017). Six different categories of boards are identified in Western Australia: trading boards (government owned organisations engaged in commercial activities); governing boards (usually statutory bodies with functions and powers set out in their enabling legislation); policy, review or specialist boards (coordination or policy role); regulatory, registration, appeal or quasi-judicial boards which make independent decisions through regulatory and registration roles; stewardship boards (steward resources and assets); and advisory or consultative boards (provide independent advice on strategic or broadly significant matters to the government, they can be statutory or non-statutory). An important aspect of the previously described public bodies is that they involve public and private actors working together to achieve State goals .

These instances seek, in principle, that government is closer to the community, and it is a way that States' propose higher involvement by nongovernment actors in decision-making processes.

Finally, both South Australia and Western Australia have the figure of *Machinery of Government* which is the faculty of the elected Premier to shift the internal public sector organisation structure. Thus, often when there is a change of government, particularly if political parties change, important shifts are expected in the way agencies and departments are organised. Changes may include mergers, abolitions, or separations.

With respect to States' revenues, it rests on taxes on employers' payrolls, on property, and on the use and provision of services and goods. Grants from the Commonwealth Government supplement their revenue, including the allocation of Goods and Services Tax (GST) revenue (ABS, 2018g). According to critics, there has been a failure to secure a sustainable model, and rather, the outcome has been a dependency on the Federal government, mainly because of the conditions around spending for those transfers (Cole, 2014, p. 37). Nowadays, in terms of revenues, in 2012-2013 only about 56% of State spending came from their own sources (Smith and Taylor, 2014, p. 13). As an example, back in 1901, only 5% as a proportion of GDP amounted to all levels of government taxation; nowadays Commonwealth taxation amounts to a proportion of 27% of GDP, 23% raised by the Commonwealth and only 4% by the States (Cole, 2014, p. 38). This often results in some States contributing more than others into the Commonwealth's Treasury arcs, which is a constant source of tension in the Federation.

As a result of the Commonwealth's re-allocation of resources, Western Australia and South Australia governments have had similar amounts of revenue to spend per capita. Figure 15 shows how the amount of current grants and subsidies in South Australia for the year 2016-17 is about 50 percent of its revenues; whereas in Western Australia this contribution was only about a third for the same period. And Figure 16 shows similar levels of per capita State revenue for the past decade in both Western Australia and South Australia. Yet, these States differ greatly in their Gross State Domestic product and thus in their contribution to the Commonwealth.

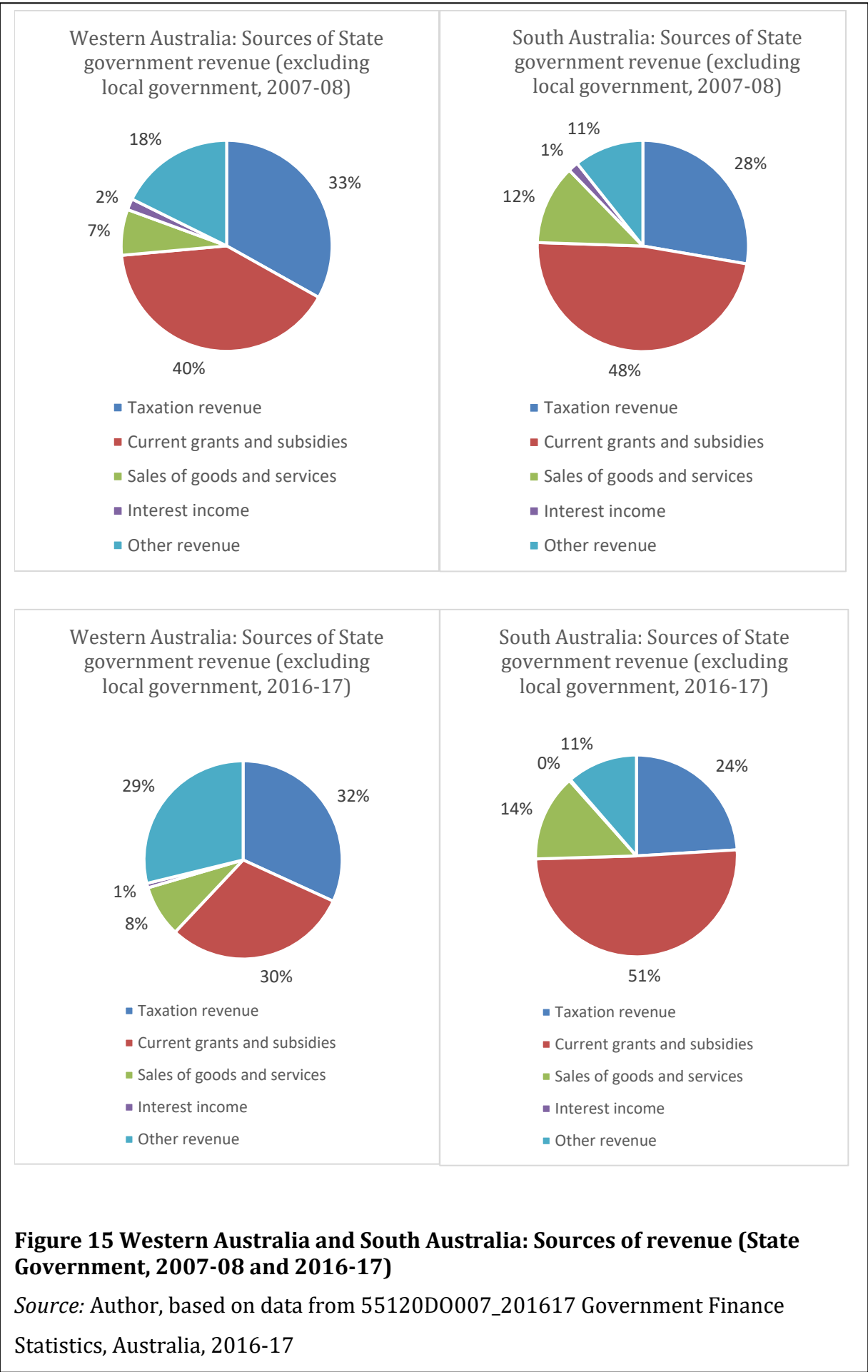


Figure 15 Western Australia and South Australia: Sources of revenue (State Government, 2007-08 and 2016-17)

Source: Author, based on data from 55120D0007_201617 Government Finance Statistics, Australia, 2016-17

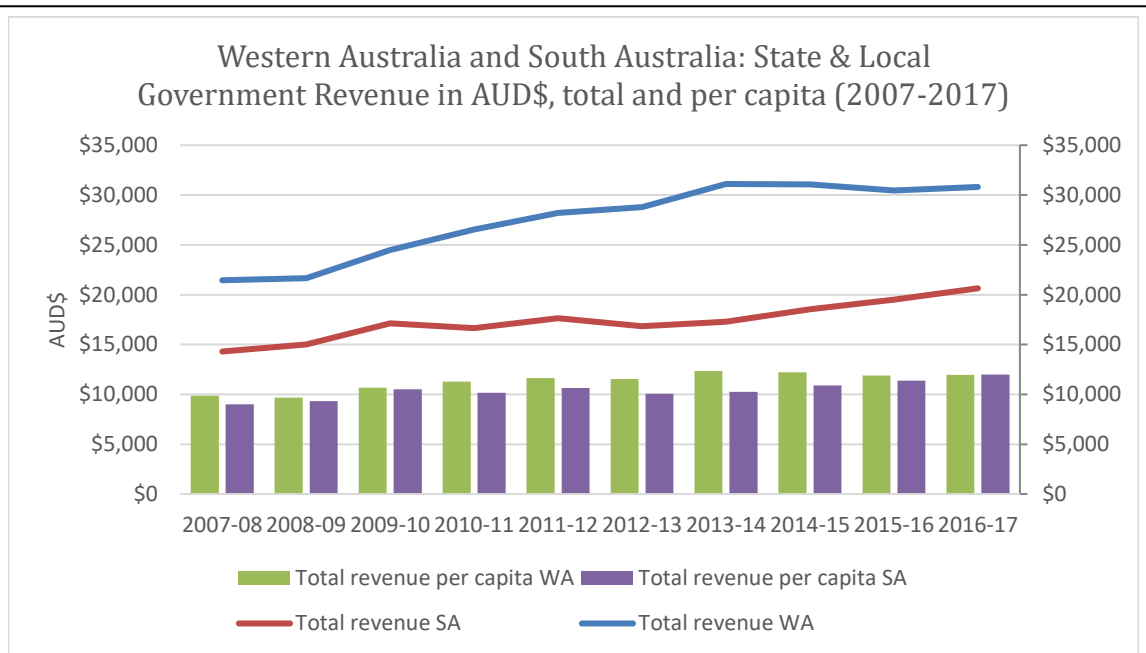


Figure 16 Western Australia and South Australia: Total Revenue and Total Revenue per capita (State Government, 2007-08 and 2016-17)

Source: Author, based on data from 55120D0007_201617 Government Finance Statistics, Australia, 2016-17

Yet, most of the funding received by the States go to health, education, housing and community amenities, social security, and public order and safety (over 75%)(ABS, 2018c), which leaves them with a limited to modest margin for policy manoeuvring.

4.5 Conclusions

In conclusion, this Chapter showed important similarities that allow to have a baseline for comparison between South Australia and Western Australia, particularly to control for those differences which are traditionally considered favourable for economic development. The Chapter also showed differences between the States, mostly in terms of their economies, but also in terms of some economic development indicators. Continuously for more than two and half decades Western Australia has displayed a strong economy based on the consolidation of its extractive resources industry and the experience developed by the public sector in supporting this industry.

Yet, the question about how sustainable this approach over time is emerges when the industry fails to continue growing; in a context of a 'bust' period of the mining boom, Western Australia's economy falls hard. The question about how public sector innovation is understood, pursued and put into practice in this context of boom and bust, then arises. In contrast, South Australia, while not traditionally having a continued strong economy, might understand and practice PSI differently. How do the differences in economic contexts shape public sector innovation? The following three Chapters explore this question by starting with analysing the conceptualisation and operationalisation of PSI in both States since the early 2000s. Chapter 6 then goes on to explore how, in these different economic contexts, the internal workings of the public sector have behaved in respect to PSI. Finally, Ch 7 introduces external forces to the public sector in the equation, and analyses how these shape PSI considering the economic contexts of South Australia and Western Australia.

Chapter 5. Conceptualization and operationalisation of public sector innovation

5.1 Introduction

The aim of this chapter is to understand and explain how public sector innovation is conceptualised and operationalised in the public sector in Australia at the subnational level in a context of economic development and why. Actors from diverse spheres of action offered perspectives that shed light into the complexities and tensions that can limit, shape, guide or accompany PSI thus opening up different realms for its understanding from a non-normative stance. Thus, this chapter also serves the purpose to question the positive undertones that the term and its definitions often carry (c.f. Arundel and Huber, 2013, p. 147).

The Chapter develops an analytical typology that offers an understanding of public sector innovation from a regional, central, public sector level, supplementing the literature on PSI. Crucially, by uncovering how innovation has been conceptualised and its operationalisation over a period of time, and how this has changed and why, this chapter sheds light onto the underlying dynamics that help explain these conceptual and operational differences.

Multiple understandings around public sector innovation co-exist within the States and the Commonwealth government in Australia, which is consistent with other PSI studies elsewhere (E.g. National Audit Office, 2006). Even though “[PSI] is still not particularly well understood” (SA_50, a Principal Consultant, Office for the Public Sector, Dep. Premier & Cabinet, 21 March 2017, Author’s Interview), “we have been talking about PSI for a long time, for ten years or more” (SA_43, an Executive Director; and SA_67, Advisor, Dep. Premier & Cabinet, 16 March 2017, Author’s Interview) and “there has been more emphasis in PSI from the top over the recent years” (SA_62, High Level Executive, Primary Industries and Regions Department, 28 March 2017, Author’s Interview) (echoed by WA_02, Commissioner, Public Service Commission, Dep. of the Premier & Cabinet, 09 February 2017, Author’s Interview). Everywhere the term elicits different types of judgements:

- ‘irritating’ (WA_18, a Principal Adviser, Dep. Premier & Cabinet, 24 February 2017, Author’s Interview),

- ‘oxymoron’ (WA_09, a Director, a Regional Development Commission, 22 February 2017, Author’s Interview; WA_12, Chair of WA Regional Development Trust, Adviser to Minister of Regional Development, Adviser to UWA, 22 February 2017, Author’s Interview),
- ‘fuzzy’ (CW_37, a Director, National Innovation and Science Agenda Delivery Unit, 09 March 2017, Author’s Interview),
- ‘nebulous’ (WA_64, Deputy CEO; WA_65, High Level Executive; WA_66, a Manager, Western Local Government Association, 30 March 2017, Author’s Interview),
- ‘popular’ (Idem),
- ‘misused’ (CW_21, Associate Professor on Innovation, Federation Business School, 28 February 2017, Author’s Interview; WA_17, CEO, Construction and Contractors Association of Western Australia Inc., 23 February 2017, Author’s Interview),
- ‘overused’ (SA_49, Professor, Vice-Chancellor, UNISA, EDB Member, 21 March 2017, Author’s Interview),
- ‘confused’ (CW_22, Regional Australia Institute (Non-Profit), 01 March 2017, Author’s Interview),
- ‘marketed’ (CW_21, Associate Professor on Innovation, Federation Business School, 28 February 2017, Author’s Interview), and
- ‘rubbery’ (SA_47, a Director, Department of Planning, Transport and Infrastructure, 20 March 2017, Author’s Interview).

Yet, albeit ‘completely inconsistently’, innovation is a term widely used in the sector (SA_46, a Director, Department of State Development, 17 March 2017, Author’s Interview). Given its increasing prominence in policy discourse, and the lack of consensus around it, understanding the ways this term is used takes special relevance.

PSI has permeated public sector reform processes and operations in different ways in South Australia and Western Australia. To understand and explain these differences, three analytical categories are useful to portray general approaches to PSI in each State:

- (5.2) PSI for cost reduction and increased productivity in the public sector
- (5.3) Market-oriented PSI
- (5.4) Outcome-driven PSI

Sections 5.2, 5.3, and 5.4 aim to discuss and explain the understandings around each of these approaches, both conceptually and operationally. Section 5.5 concludes the Chapter with the key findings and questions to follow up in the next two chapters.

5.2 PSI associated with cost reduction and increased productivity

PSI associated with processes for increased productivity and reduction of costs is a theme present theme in both WA and SA although to a lesser extent than the other two approaches, and in SA to a lesser extent than WA. This is similar to the findings in the literature, where a third of sampled studies expressed a goal for innovation in public sector organisations that emphasized ‘performing more with less’ (De Vries *et al.*, 2016, p. 154). Differences between the States are mostly in relation to the operationalisation of approaching PSI in this way. This section attempts to contribute with understanding and explaining why these differences and how these relate with the scope of PSI in a context of economic development.

5.2.1 PSI, efficiency, and fiscal constraints

In a report about the State of the Sector, the Public Sector Commissioner in Western Australia stated that “the current financial climate places the onus on public authorities to economise, adapt and innovate” (WA, 2015, p. 7). Similar ideas were expressed in a State Budget Speech in South Australia “these times demand that agencies improve and innovate, to do more with less” (Snelling, 2013, p. 8). While both States promote similar uses for PSI in a context of fiscal pressure (**Figure 17**), differences emerge in the effects that interviewees associated with PSI.

	2011-12	2012-13	2013-14	2014-15	2015-16
New South Wales	-0.5	-0.7	-0.3	0.1	0.1
Victoria	-0.6	-0.8	0.3	-0.1	0.0
Queensland	-1.9	-2.7	-0.9	-0.2	-0.1
South Australia	-1.2	-1.1	-1.8	-0.1	0.1
Western Australia	-0.7	-0.8	-0.4	-0.7	-1.3
Tasmania	-1.1	-0.6	-0.6	-0.2	-0.1
Northern Territory	-2.5	-1.8	-0.5	-0.5	-0.1
Australian Capital Territory	-1.0	-2.2	-1.7	-2.6	-1.7

Figure 17 General government sector fiscal balance – percentage of gross state product (2011-12 – 2015-16)

Source: (Parliamentary Library, 2017)

In WA, the perception from a Director at the Department of Regional Development, is that in a context of public service “[p]eople focus on input innovation not output or outcome innovation” (WA_04 a Director, Dep. of Regional Development, 10 February 2017, Author’s Interview). This responds to trends in the public sector where managers and public leaders had been trained to focus on inputs (use of public sector resources) and outputs (performance of staff and department) over outcomes (the end goal) (Osborne, 2006). That is, priority is balanced towards new ways of keeping down costs and resources rather than PSI being about the outcome:

“So, people are innovative because they reduced the cost of service delivery and not innovative because they transformed the impact of that service delivery. I would rather transform the impact; then work out how to save twenty cents on a dollar.” (WA_04 a Director, Dep. of Regional Development, 10 February 2017, Author’s Interview)

This is in line with the way PSI has been associated with budget and employee cuts in Budget speeches in WA and the perception from Public Sector Union representatives. For example, finding ways to reduce growth in salaries and voluntary separation of practitioners were considered innovative mechanisms to reduce public expenditure (Nahan, 2015, p. 6). In earlier years, ‘difficult decisions’ to stabilise the State’s financial position were labelled innovative, such as decreasing underlying government expenses growth to 9.2% in 2009-10, down from 13.5% in 2008-09 (Barnett, 2010, p. 1). While WA was at an economic mining boom period, the sector briefly experienced difficulties immediately after financial economic crisis (Maxwell, 2018), which might explain these decisions (although their growth somewhat declined in 2009-10 neither WA nor Australia were negatively affected by the crisis -Ch4-).

These examples lead me to question how innovative these policies really are, and to what extent is innovation a term that was being used to cover-up cuts or label unpopular measures. Thus, there have been occasions in WA when ‘innovation’ has been used to accompany decisions that may be less about ‘new’ and more about giving a positive spin to a potentially controversial initiative, which resonates with the research by Perren and Sapsed (2013) about it becoming a multipurpose political tool. Moreover, if the normative definition for innovation is applied here, the ‘improvement’ aspect would beg to consider the question ‘improvement for whom’. Moreover, “a cry for getting agile and innovative is often followed by cuts in budget or abolishing departments” (WA_08, Research Officer, Unions WA, 20

February 2017, Author's Interview). This explains a defensive position of 'suspicion' about PSI that some actors hold, such as the interviewee's experience above, in Western Australia.

While in South Australia the effects of fiscal pressures and constraints have translated into downsizing in terms of numbers of employees over the past ten years (SA_60, a Manager, Department of Planning, Transport and Infrastructure, 27 March 2017, Author's Interview), the association of PSI with potentially controversial measures is not present.

In SA, "PSI is growing momentum with the growing pressures on the public service to show value for money and public value" (SA_60, a Manager, Department of Planning, Transport and Infrastructure, 27 March 2017, Author's Interview) and not having enough funding "has meant that to a certain extent we have to be more innovative" (SA_58, a Director, Dep. Premier & Cabinet, 24 March 2017, Author's Interview).

A closer inspection of these quotes and their context reveal a couple of particularities. The mention of 'public value' (which is expanded in the last section of this Chapter) is consistent with a strong and consistent public value path the State of South Australia has been following since the early 2000s in relation to public sector reform, in contrast to Western Australia, which has focused more on Market-Oriented PSI and a Costs reduction and Productivity Approach to PSI. The other quote uses the phrase 'to a certain extent'. Given the position of the interviewee, this does not seem to convey a clear direction for PSI for coping with fiscal pressures.

Finally, an interesting corollary for the association of PSI with reducing costs, comes from an interviewee from the Federal level, who considers fiscal pressure to encourage PSI and therefore increase productivity. By implementing resources constraints, innovative solutions are more likely to be found: "If it were up to me, I'd declare a 40% efficiency dividend to encourage innovation" (CW_38, High level official, National Financial Intelligence Centre, 10 March 2017, Author's Interview) suggests vehemently one of the interviewees of the Commonwealth (efficiency dividends have been used to save revenue through annual funding reductions established at different rates per year in both the Federal and State budgets (Horne, 2012b; Horne, 2012a)). Yet, interestingly, using Australian Public Service Commission census data, Demircioglu and Audretsch (2017) recently tested the effect of budgetary restrictions on innovation and found no statistically significant effect on PSI. Subsection 5.2.2 explores this further.

5.2.2 'Big picture' trade-off for short term achievements

The drive for efficiency and productivity over the years also has had an effect on the scope for PSI. In another interview, participants in Western Australia claimed that while the public sector has become more innovative in recent times as a result of this approach, innovations are limited in scope:

“[W]e are being asked to do more and more with fewer and fewer people; and therefore we have to be innovative, and creative and efficient in how we manage our role and our functions. Having said that, a lot of what we do isn't necessarily in the world ... records. We just look at the processes we use and ask, are there better, more efficient ways of doing it?” (WA_13, a Manager; and WA_14, a General Manager, Dep. of State Development, 23 February 2017, Author's Interview)

These administrative changes will have elements of innovation in their implementation, but it would be about the minutiae rather than transformative innovations (SA_47, a Director, Department of Planning, Transport and Infrastructure, 20 March 2017, Author's Interview). Moreover, NPM style reforms into the public sector for increased control, accountability, and efficiency such as project management techniques, have also been subject of critique in terms limiting of the scope for PSI.

“So, there's a heavy focus amount on project management in the public sector. Project management is a good thing, but tends to focus largely on getting things done on time and as agreed, whereas I think the focus needs to be on developing quality outcomes and translating them into impact; and less focus on the incremental change that tends to be what project management is about achieving. Because in order to be able to measure, quantify, step out all the things that are necessary under a project management regime, you have to have a very small-scale outcome. We traded off a big picture view and transformational change to what's achievable in the short-term” (WA_04 a Director, Dep. of Regional Development, 10 February 2017, Author's Interview).

The reason for this trade-off then, is attributed to administrative and political cycles factors: first, there is a substantial focus in project management (completing tasks on the time stipulated, under the cost and under the quality stipulated), which is important, but the development of quality outcomes and their translation into impact becomes

secondary. This is a legacy of NPM measures seeking greater control and accountability, favouring continuous improvement. While project management can be a great administrative tool, it favours PSI for getting things done in the time agreed. Moreover, smaller-scale outcomes are more manageable, easier to measure, and thus inherently limit the scope for innovation. This aligns with the literature, where a strong emphasis on targets has been identified to hinder PSI (Mulgan and Albury, 2003). While small step, procedural innovations can be of great value, lack of resources and a focus of PSI on saving costs limits the possibility of thinking about 'big picture' issues in Western Australia.

In South Australia, innovation has been considered a tool for thinking about the 'big picture'.

“With the establishment of the Government Reform Commission (GRC), the South Australian Government took a significant step towards creating a public sector that’s focussed on customer service and strives for innovation and continuous improvement. During its 18-month life span the GRC has started a process that will change the face of the South Australian public sector.” (SA_GRC, 2007, p. 1)

Across the sector, PSI is presented as distinct to continuous improvement. Acknowledging both terms highlights a view that differentiates step changes from fundamental changes (in the form, in this case, of changing the face of the SA public sector). Continuous improvement, both in public administration and business studies, is usually associated total management processes: processes engineering and quality standards that can be measured and certified for efficiency (Hartley, 2005; Fryer *et al.*, 2007).

In WA, by describing PSI as “continuous innovation of increased efficiency” and a predominant focus in the 'bottom line' (business jargon for overall budget cost) (CW_21, Associate Professor on Innovation, Federation Business School, 28 February 2017, Author’s Interview), some interviewees refer to new public management and neoliberal agendas in Australian government to justify for the cost saving focus in PSI, and the predominant interest in the private sector as the source of innovative activity (CW_21, Associate Professor on Innovation, Federation Business School, 28 February 2017, Author’s Interview; WA_02, Commissioner, Public Service Commission, Dep. of the

Premier & Cabinet, 09 February 2017, Author's Interview). In a Public Sector Reform Report in WA called for having 'exposure to and learning from the best of private sector practice' (Trenorden, 2012, p. 20) for PSI seems to respond to the idea that successful concepts used in the market must also be successful in the public sector. While sharing knowledge and interaction between sectors can be valuable for PSI, transposing private sector best practice has been argued against by Potts and Kastle (2010), not least because even in the private sector applying best-practice ideas does not always work, but the incentive structures that operate in the public sector are profoundly different.

5.2.3 Resources and the scope for PSI

Experience of the State government budget cuts in Western Australia is that it limits the scope for innovations or effectively does not leave any resources with which to be innovative (WA_09, a Director, a Regional Development Commission, 22 February 2017, Author's Interview). For example, one interviewee observed that in times of fiscal pressures, graduate programmes are "the first to go" (WA_18, a Principal Adviser, Dep. Premier & Cabinet, 24 February 2017, Author's Interview). This is important for recent, young graduates tend to bring new approaches and ideas that may turn into innovations.

In SA, some interviewees argued that the economic shocks South Australia has experienced, such as the closing of car manufacturers, "precipitates different thinking on how to cope with economic shocks" for "necessity is the mother of invention" (SA_49, Professor, Vice-Chancellor, UNISA, EDB Member, 21 March 2017, Author's Interview). Yet, most interviewees showed concerns related to the limited capacity to experiment and innovate as 'one of the poorer States' in Australia (SA_43, an Executive Director, Dep. Premier & Cabinet, 16 March 2017, Author's Interview; SA_53, Professor, UNISA, 22 March 2017, Author's Interview). Participants mentioned that they have encountered the perception that ideas are expensive, and therefore finding the funding and other resources to innovate is difficult (Idem; 44_SA_GOV; SA_48, Deputy CEO, Department of Treasury and Finance, 20 March 2017, Author's Interview).

At the local scale, interviewees shed some light on the impact of budget pressure and scope for PSI. One of the directors of the Western Australia Local Governments Association (WALGA) explained how in moments of affluence, resources can be invested

in experimenting. Yet, he cautioned, this is not always the case in WA, when often PSI at the State level is often confused with investing in digital technologies (Ch 6 discusses an infamous case about this). In a reality of a constrained budget scenario, the push for PSI is also there, but in the search for increased productivity in systems and processes:

“So, I guess, you know, money itself becomes an impediment to innovation, as well as being a catalyst for innovation, there are two ends of the spectrum” (WA_64, Deputy CEO; WA_65, High Level Executive; WA_66, a Manager, Western Local Government Association, 30 March 2017, Author’s Interview).

A U-shaped relationship between available resources and scope for PSI begins to emerge, as differences in the types of innovations that can be expected from both scenarios:

“In a cash poor scenario we need to be looking at streamlining processes, looking at opportunities to share resources, to work collaboratively with the private sector, with the not-for profit sector, those kinds of things as a way of improving productivity. Rather than necessarily coming up with new concepts, or new products, which will fundamentally change the way we are doing things. I think it would be the more incremental boring I guess stuff than those big-game changes” (Idem).

While working collaboratively and sharing resources within the public sector and with other sectors can spur new ideas and means of achieving the same or more for a lower cost. Yet, conditions need to be present to favour these interactions, such as adequate regulatory frameworks; especially in the public sector, which is reliant on building blocks put in the past cumulatively to shape actions today (Bartos, 2002) (Ch6 explores important differences in the regulatory framework between SA and WA, where the latter has been prevented).

Scholars have studied the relationship between budget pressure and innovative activity in the public sector, particularly about its effect as a driver (or not) of PSI (See Demircioglu and Audretsch, 2017); less the relationship between budget pressure the approach to PSI and the scope of the innovation. In **Figure 18**, it may be observed how there is high potential for PSI under high budget pressure. Yet, the push is to innovate for the reduction of costs, which as a side effect may have an impact in an outcome. Thus, the scope for PSI can be limited in a budget constrained situation, even more if the

regulatory conditions to innovate are lacking to widen the scope for alternatives. Moreover, not only is there little potential for a fundamental change in the way things are done, but Demircioglu and Audretsch (2017) have shown that while there is a big push for PSI in this context, little PSI is actually happening in Australia. Unlike Western Australia, interviewees in South Australia ranked lack of resources among their top three barriers to PSI in a context of economic development.

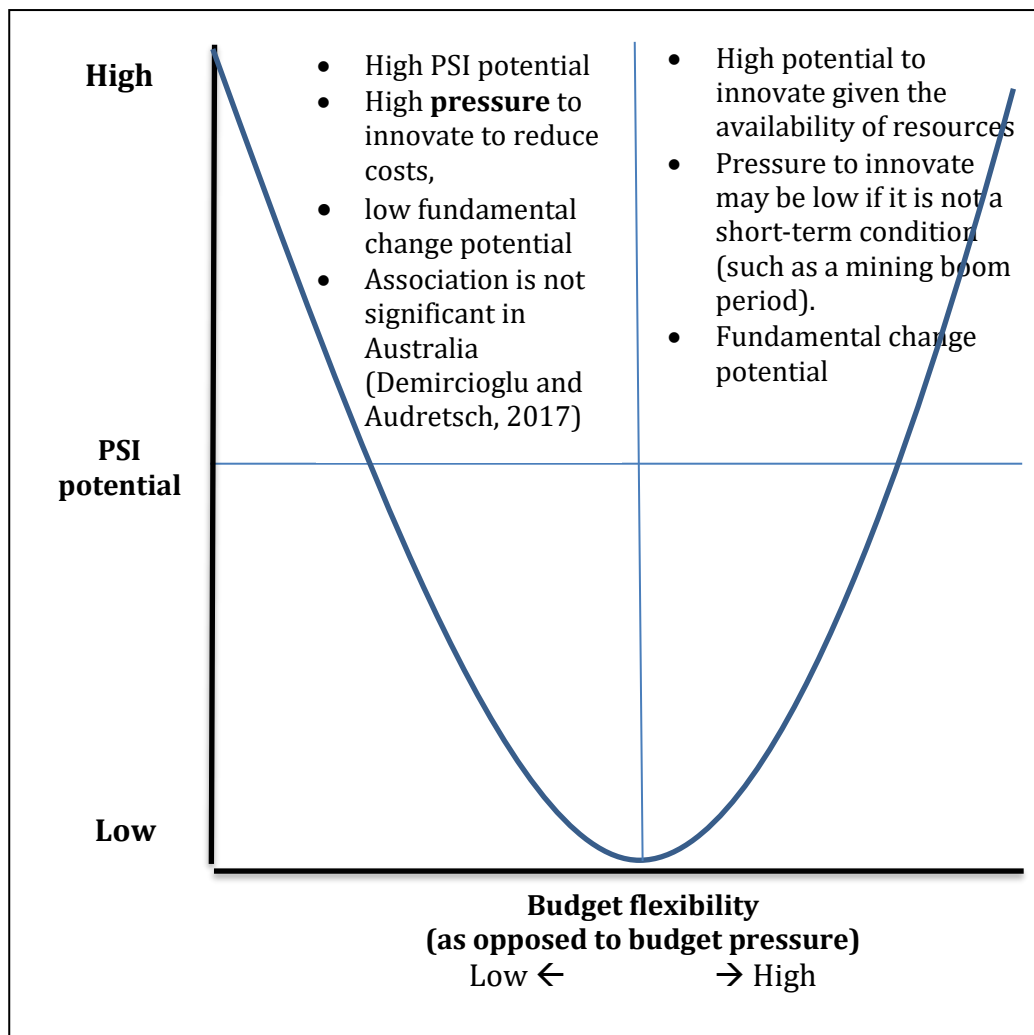


Figure 18 U-shaped relationship between PSI Potential and Budget Flexibility (as opposed to budget pressure)

Source: Author

Western Australia and South Australia have approached budget pressure for increased efficiency in the public sector in different ways. When Western Australia has needed to cut down budgets, it has promoted innovations that may be catalogued as continuous improvement for their small role in outcomes for the community and lack of transformational impact. South Australia when faced with these budget restrictions has

continued with their values driven approach to PSI, perhaps pressing on time, as well as budget, but prioritizing community outcomes over efficiency innovations. Thus, in times of abundance, while more resources would allow for more experimentation, there is not much of an incentive to innovate, for there is no immediate emergency or concern in terms of the electorate. When there are too little resources, the stimulus for innovation is present, only there is only so much that can be done under a budget restriction, in terms of transformative change. There is a middle ground somewhere. Moreover, this would apply only to those approaches to structured innovation, for often the opportunity to innovate comes from contextual elements falling into place, such as a hung Parliament for example, or a catalytic moment such as a crisis.

In cases where the budget is flexible (low budget pressure), increased resources could be invested in generating innovations that will fundamentally change 'the way things are done'. Yet, the incentives to do this could be conditioned to the general economic conditions of the State combined with length of time under financial pressure. For example, in a State like South Australia, budgets have been consistently tighter than in a State like WA, where the mining boom has permitted more flexibility. In the former suddenly having more resources are more likely to lead to innovation than constantly having more resources.

5.3 Market-oriented PSI

Markets are not only state regulated and constrained, but also advanced and changed by their interactions with the state (O'Neill, 1997). Three *Market-oriented PSI* conceptualisations emerged from the interviews and official texts. All have the explicit goal of encouraging private sector innovation and growth; and to simultaneously obtain innovative solutions for the public sector. This subsection develops those conceptual understandings and operational practices associated with market-oriented PSI approaches: PSI for commercialisation; and PSI and innovation policy that is, promoting industry innovation.

5.3.1 Commercialisation of PSI

This approach to PSI associates innovation with the commercialisation or ‘cooperation’ with administrative processes and public sector solutions to firms or to other governments in Australia and abroad. The latter can have an underlying interest of creating future value for transnational local firms. Western Australia’s export led economy has also permeated into what the public sector can offer: “[PSI] in respect of Western Australia export capability, there are agencies’ services and products that may be suitable in a similar circumstance in other markets” (WA_13, a Manager; and WA_14, a General Manager, Dep. of State Development, 23 February 2017, Author’s Interview). Two examples are discussed below.

First, is the initiative led by Western Australian Land Information Authority (Landgate) (WA_02, Commissioner, Public Service Commission, Dep. of the Premier & Cabinet, 09 February 2017, Author’s Interview):

“Evolving since 1829 from the original Surveyor-General's Office, Landgate became a statutory authority in 2007, heralding a new era in location information in Western Australia. Since then, while retaining our purpose as the guardian of property ownership and custodian of WA's location information asset, Landgate has set about commercialising its offering to deliver a broad range of products and services to West Australians – providing even greater benefits to the State. While we focus on delivering our core business, Landgate has also become recognised in the public and private sectors for its leadership in innovation and customer service. We are constantly looking at ways to improve, to give our customers and the community an even better experience and offering.” (WA, 2018)

The above is an example of Western Australia encouraging the identification of opportunities for commercialisation of their public services and innovating to pursue them. Both WA and SA have strongly positioned the public sector in its role of promoting industry innovation (next subsection). Yet, Western Australia has associated PSI with encouraging private sector innovation *while* also profiting from it. Heightened by the Commonwealth’s National Innovation and Science Agenda (WA_12, Chair of WA Regional Development Trust, Adviser to Minister of Regional Development, Adviser to UWA, 22 February 2017, Author’s Interview), the 2016 *State Innovation Strategy*

launched in Western Australia made a point about public sector innovation in the form of ‘public sector agencies will support innovation’ by being ‘a first customer to innovators’ and ‘incubate innovations addressing government problems’ (WA, 2016, p. 4), which entails encouraging private sector innovation in combination with PSI.

The perspective from the Strategy’s steering team in the Department of the Premier and Cabinet was collected from the interviews. One of the ideas is to encourage innovation by the private sector in the public sector’s problem areas; then the public sector would adopt these innovations. If successful, the government could become a shareholder of the firm with the innovation and help scale it for its use by other agencies in the public sector in Western Australia and commercialise it to other governments in the country or abroad, generating a return to the investment for Western Australia Government (WA_06, Chief Information Officer for State Development, Transport, Innovation, Dep. Premier & Cabinet, 16 February 2017, Author’s Interview).

This is an example of an attempt by the public sector to use the market forces to work with other actors in a form where both actors can have economic gain. This approach combines innovations which are *internal* to the public sector with those that made *through* public sector (European Commission, 2013; Hollanders *et al.*, 2013). PSI is used to signal public sector involvement in the expansion of industry-based innovations for the public sector; which, if adopted, would make the public sector more innovative; and eventually, if successful, the public sector would facilitate the scaling of the innovation, thus simultaneously helping the growth of the firm and the spreading and commercialising the solution across the public sector generating extra income for the government.

While this Strategy was not put into operation by the government of Mark McGowan (2017-), it illustrates the views of the role of the public sector from a conservative government that had been in power for almost ten years. Moreover, Western Australia has been an export-led State that has had the experience of nurturing and investing in innovation in the mining sector; its most profitable sector, to make sure it keeps delivering jobs and income for the State a familiar strategy given Western Australia’s historical trajectory (as per Ch4).

Another example around the commercialization of public services in Western Australia comes from the Department of Mines and Petroleum (DMP). The perception of an interviewee from the Department of State Development is that the capacity building assistance given by the DMP to other countries (such as building agency structures, implementing royalty regimes, and generating geotechnical data), gives a competitive advantage to Western Australian firms seeking to invest in those countries. This is because the companies will be familiar with the processes and systems used in Western Australia and that have already been transferred through cooperation.

“Therefore by association, it may become easier for Western Australian companies if they go into a particular African country, where the Mines agency has been exposed to the kind of principles that Western Australia uses, it may be easier for them to get ahead of competitors in that marketplace” (WA_14, a General Manager, Dep. of State Development, 23 February 2017, Author's Interview)

In this respect public sector innovation is associated with cooperation with a market approach. This resonates with the notion of extraterritoriality (Phelps, 2007) where subnational territories use foreign policy tools in favour of local interests.

Unlike South Australia, Western Australia's public sector has actively embraced its public sector innovations within the market to push for the economic development interests of the State.

5.3.2 PSI and innovation policy

“(…) in our view there has never been a time when innovation, and a competitive ethos, was more necessary within the public sector than it is right now”
(WA_Legislative_Council, 2012, pp. 19-20).

PSI is also conceptualised as innovation policy. Some interviewees at the Federal level considered that “most innovation is facilitated by government rather than undertaken by government” (CW_30, Research Principal Adviser; CW_31, High level public official; CW_32, Researcher, Productivity Commission, 06 March 2017, Author's Interview).

Others, recognising meta-innovation, perceived the role of PSI in terms of the government's duty to boost innovation in firms: "real innovation should facilitate private sector innovation" (CW_38, High level official, National Financial Intelligence Centre, 10 March 2017, Author's Interview).

Similarly, in WA, an important focus of PSI involved innovating to facilitate innovation in industry. In Western Australia, "we are talking to agencies about how they would support innovation using their business" (WA_19, an Executive Director, Dep. Premier & Cabinet, 24 February 2017, Author's Interview), that is, how, through the everyday running of government operations, agencies could support innovation in industry (WA_06, Chief Information Officer for State Development, Transport, Innovation, Dep. Premier & Cabinet, 16 February 2017, Author's Interview). The private sector in Western Australia echoed and extended this view: "Public sector innovation is understanding that economic development comes from the private sector" (WA_07, Economic Policy Adviser, Chamber of Commerce and Industry, 17 February 2017, Author's Interview). These perceptions seem to deposit the weight of economic development on the market and enterprise, reflecting a narrow neoliberal approach to economic development, which can restrict the scope for the public sector to innovate for other goals or through other means different from market practices.

Over the past century, this view has characterised Western Australia (WA_19, an Executive Director, Dep. Premier & Cabinet, 24 February 2017, Author's Interview). Governments have invested, developed, and provided expertise and data to work with other organisations and support innovation and the development of industries, chiefly the extractive resources industries (Johnson, 2006). Recent examples of this support are: the CORE Hub, "Australia's first co-working, collaboration and innovation hub focused on the resources industry" (Smailes *et al.*, 2016); 'Unearthed', a company that organises online competitions to solve complex industry problems and that organises 'Hackathons' (connecting entrepreneurs to use industry data to develop solutions for the resources sector) (Unearthed Solutions, 2016).

This is important because it shows a well-known path for the Western Australian public sector. One that has led to extremely successful outcomes in a particular industry (the extractive resources industry), and thus can have a strong grip in the options considered and directions taken by Western Australia, that is, the notion that the answer to economic development is fundamentally in the market. The sustained success of the

industry over time is much owed to the intervention of the state (Johnson, 2006) and therefore the public sector is more likely to resort to these familiar types of interventions in the context of economic development.

In South Australia, one of the most frequent public sector innovation examples cited by interviewees was a multi-million initiative designed to spur innovation in the private sector as a result of the declining of manufacturing and the closure of several car factories over the past decade. In early 2012 South Australia's public sector began investing in Tonsley, Australia's First Innovation District the *Sustainable Industries Education Centre at the Sustainable Technologies Precinct* at Tonsley Park, "integrating industry, education, training, research, residential living and community" (Government of South Australia, 2018b) in an abandoned Mitsubishi car factory which had closed in 2008 (Government of South Australia, 2018b). Four key elements comprise the initiative: focus on four industries (health, medical devices and assistive technologies, cleantech and renewable energy, software and simulation, mining and energy services); bringing together different economic actors, including different sizes of firms (start-ups and big supply chain companies), innovation hubs, incubator accelerators, universities, and government R&D companies; and promoting their networking, for example, by making sure eating and drinking is procured outside their buildings (Idem)(SA_56, a Director, Investment Attraction South Australia, 23 March 2017, Author's Interview). The investment required AUS\$125 million in 2010-2011; in the following year, AUS\$9.1 billion went to infrastructure to travel to and from Tonsley and the surrounding areas, as well as in the Park itself; and further \$63 billion in 2013-14 helped consolidate it (Foley, 2010; Snelling, 2011).

The South Australia government decided to "do an exceptional thing (and) show manufacturers, show business what it looks like to be in an environment where you can most likely be innovative" (SA_56, a Director, Investment Attraction South Australia, 23 March 2017, Author's Interview). Yet, Tonsley is not perceived as a major source of business innovation (Beer, 2018). An interesting point here is the role of *animateur* of innovation (Morgan, 2013) that the South Australia public sector is self-described as trying to pursue. The State's eroding manufacturing industry led to a decision of investing in the development of a multibillion public sector 'innovative' project for economic development. A risky move because while the creation of new permanent jobs was more or less guaranteed, although not of the type that were lost with the closing

down of the car plants (Beer, 2018), the goal of it becoming an ‘innovation district’ is very much an issue that escapes state control.

The public sector in South Australia, unlike Western Australia, does not hold cumulative and expansive knowledge about specific industry needs (i.e. the extractive industry in WA). In this regard, their PSI in innovation policy in South Australia can be associated more with an experimental approach.

This can also be appreciated by the contrast in views regarding *Market-Oriented PSI* in specific agencies vs the central government in South Australia. While in the public sector of Western Australia associating PSI with encouraging private sector innovation seemed to be widespread in the sector, in South Australia these views were stronger in agencies whose mission relies on developing private sector specific industries, such as agriculture and related industries.

Primary industries carry a significant level of importance in Australia. Rural Research and Development Corporations (RRDCs) exist to improve the long-term sustainability, competitiveness, productivity and profitability of key food security industries, i.e. forestry, agricultural and fishing industries (Australian Government, 2018) (WA_01, Professor, School of Agriculture and Environment, UWA, 07 February 2017, Author’s Interview). Accountable to both government and industry, the RRDCs are funded primarily by statutory R&D charges on various commodities; and eligible R&D is matched with funding from the Australian Government. For over 25 years this government-industry partnership model has been successfully operating. This State view on the importance of these industries, and therefore the role of the state in relation to them, permeates into the governmental agencies who oversee them.

In South Australia, the Department of Primary Industries and Regions (DPI&R), works with the primary goods industry is different from, for example, the way that a Finance Department might engage with general industry. For example, when asked about PSI, this is what the DPI&R said:

“Thinking about where time and costs can be saved -process engineering- is necessary for there is a rising cost in business and a need to be able to be a fast mover if we want to maintain our competitive advantages as a State, particularly in our core businesses such as agribusiness. We have to uptake new technologies faster, we have to have targeted research programs, access knowledge quickly

and be able to communicate that out to our agribusiness groups.” (SA_51, Acting Deputy CEO, Primary Industries and Regions Department, 21 March 2017, Author’s Interview).

In South Australia, agencies whose role is to sharpen specific industries’ businesses competitive edge seem to be more prone to view PSI from a *Market-Oriented* perspective.

In sum, over time the central government of Western Australia has continuously nurtured and placed the weight of economic development on the market thus favouring a Market-Oriented PSI approach. This responds to a trajectory of successful nurturing of the extractive industries. Innovation policy is readily justified with theory strongly underpinned in Neoliberalism which has become the ‘common sense of the times’, as Peck and Tickell (2002, p. 381) have described the pervasiveness of this politico-economic rationality. Yet, this approach can restrict the possibilities for using PSI to question current economic development models or seek structural, fundamentally different alternatives. In the case of South Australia a market-oriented PSI approach has not been an entire public sector approach, but specific of those agencies whose missions rely on it. The next section elaborates on an outcome driven PSI approach, South Australia’s entire public sector approach.

5.4 Outcome-driven PSI

Unlike the other two PSI approaches, the outcome driven PSI approach views and ways of operationalising PSI, are mostly associated with South Australia. Outcome here is taken by its definition in the public sector: “Purpose-oriented descriptions of results, which take a broad and long-term perspective. They are potentially inspirational and motivational and sufficiently broad to incorporate contributions from a number of organizations.” (Norman, 2007, p. 538)

In South Australia, PSI is guided by notions of public value, a notion that is highly contextual (Alford & Hughes, 2008 in Moore, 1994; Fuglsang and Rønning, 2015). In SA, PSI explicitly seeks better services, improved outcomes, increased levels of trust and it is driven by public sector values. That is, PSI is visualised as a tool to help face constant societal, economic, environmental, market and technological changes which create both

challenges and opportunities. PSI with this view may associated with aspiring to achieve medium to long term structural solutions, and is driven by public sector principles and aspirations, broadly speaking. This approach is reminiscent to the post-NPM approaches discussed in Ch2 (Bevir, 2011; Pollitt and Bouckaert, 2017).

5.4.1 Distributive goals

Innovation is a concept that has slowly been included in public sector policy papers over the last fifteen years in South Australia, growing its intensity in use and scope more recently (SA_46, a Director, Department of State Development, 17 March 2017, Author's Interview; SA_62, High Level Executive, Primary Industries and Regions Department, 28 March 2017, Author's Interview).

In 2007, South Australia lived a short burst of intense economic growth, which waned by the end 2008 as a result of the global economic crisis. Referring to this growth, the then Premier of South Australia, Mike Rann, wrote:

“Our State is on the verge of the most prosperous period in its history, and our public sector needs to be the most agile, responsive, innovative and creative in the nation if we are to maximise this opportunity for the benefit of all.” (SA_GRC, 2007, p. i; underlined by author)

Importantly, the Premier conceptualised public sector innovation as a tool for a distributive goal, as per his reference to maximising this opportunity for all. An example of this view is creation of the Australian Centre for Social Innovation (TACSI) as a result of the 2008 “Thinkers in Residence” programme. It aimed to bring new ideas by hosting international experts for a few months to “address urgent challenges or to explore areas of opportunity, through new policy development and systems reform Government” (Don Dunstan Foundation, 2018) – Ch 7 discusses this programme further. TACSI received government funding for almost a decade (Foley, 2008; Weatherill, 2013) “to find new and better ways to eliminate the inequality, poverty and poor life prospects many people experience, despite intensive efforts to help them” (TACSI, 2018). Although perceptions around the Centre have not been always favourable (SA_50, a Principal Consultant, Office for the Public Sector, Dep. Premier & Cabinet, 21 March 2017, Author's Interview), its creation and funding helps paint the overall picture of the operation of PSI in South Australia's emphasis on outcomes.

Moreover, to show a continuity of this approach, at the moment of interviewing for this Thesis, the State was in the process of setting up a public sector innovation lab to search for innovative solutions to complex problems (Idem). That is, to “improve the lives of South Australians by using innovation to address complex issues in the community” (OCPSE, 2018b).

On the other hand, Western Australia’s public sector associated PSI with this type of approach briefly, by considering PSI as a potentially useful tool for tackling complex policy and socio-economic issues ‘many for which there are no precedents’ (WA_19, an Executive Director, Dep. Premier & Cabinet, 24 February 2017, Author’s Interview). This approach to PSI, past the initial waves of NPM pushing for efficiency, and industry innovation where historically PSI efforts had prevailed in WA (Idem), came about in 2010 inspired by a global wave of fiscal constraints taken in response to the 2009 global financial crisis. A team in the Department of Agriculture and Food led the initiative after observing governments around the globe (US, UK, and EU) brought PSI to the centre in their need to cut their budgets and still deliver quality public services (Idem).

Nevertheless, in Western Australia the push was not coming so much from the crisis. While there was a contraction in the economy growth on the year immediately after the crisis, it was for a very brief period and the mining boom still continued for a few more years. Thus, an interviewee explained that inspired by this global situation WA decided to embark in a PSI journey not out of ‘a need for’ austerity but as medium-term planning effort, as projecting forward they pre-empted fiscal constraints (WA_19, an Executive Director, Dep. Premier & Cabinet, 24 February 2017, Author’s Interview). Thus, at the time PSI was instead, associated with reflection and self-evaluation in light of the population they were serving:

“[W]hether what we were doing as a public sector was actually making a difference, and whether investments were actually being beneficial to the people they were serving” (...) “[if these were] fit services to the citizen or business”(Burchell and Delane, 2012, p. 6).

Included in this reflection were the mentioned ‘wicked problems’ with no precedents, that needed solving e.g. climate change, demographic change, etc. (WA_19, an Executive Director, Dep. Premier & Cabinet, 24 February 2017, Author’s Interview). An initial collaboration with the Australian Public Service (Federal level) led to a triad of annual

conferences, and the creation of a public sector innovation network (Idem)(DAF and DC, 2010; Burchell, 2014).

By, 2015, however, the government's perspective over PSI shifted to: 'How can we contribute to economic prosperity?' (Idem). At the point of the height of the economic slowdown in Western Australia, the focus of PSI in the State government shifted their perspective of an outcome-driven PSI to associating PSI with promoting innovation in the firm and industries to help increase productivity and foster economic growth (a market-oriented PSI). The government began discussions with agencies about how they could support innovation in industry (see also section above of PSI and Innovation). For example, through procurement, "how could an agency procure innovations using their business?" (WA_19, an Executive Director, Dep. Premier & Cabinet, 24 February 2017, Author's Interview), and through the "Start IT Up WA Challenge", whereby a members from technology-based start-up community could apply to provide commercially viable solutions to public sector problems (Idem)(WA, 2016).

This suggests that the cyclical nature of economic conditions and context is important for the understanding of PSI and approaches to public sector innovation. Going through an extended economic growth phase opened the possibility for associating PSI with outcomes and what could be interpreted as the intention of reducing future negative impact from a contraction in economic growth. Once the economy started slowing down, the government shifted the focus to a market-oriented PSI, reflecting the long-term State's favourable experience relying on the private sector growth for the economic development of the State and political economy views from the conservative party that had been in power for over seven years.

While the outcome-based view of PSI led by the Department of Agriculture and Food quickly involved the State and Commonwealth governments, it remained a line agency initiative that failed to become centralised and embedded into the public sector.

Another example in South Australia is Change@SouthAustralia (a continuation of the Public Sector Renewal Program), an initiative which began in 2012 with the aim to change, through innovation and cultural change, the way the public sector operates (Government of South Australia, 2018a). In relation to this program, the *State of the Sector* report of 2013 in South Australia, expressed the following:

“Change@SouthAustralia has a critical role in building a better future for this State, and a South Australian public sector that is a world leader in managing change. The initiative is designed to steer the delivery of a higher quality and more innovative public service able to quickly respond to challenges faced by the South Australian community (SA_OPER, 2013, p. 11)

Here, innovation is in the context of steering the delivery of innovative public services to respond to challenges faced by communities in South Australia. That is, again, the emphasis is on the response to challenges underpinned by the crucial role attributed to the public sector in ‘building a better future’ rather than efficiency cuts to liberate resources.

In the case of Western Australia, in a State of the Service Report, in spite of declaring the importance of PSI to meet the challenges of “an increasingly complex operating environment” [...] “given the current environment of fiscal constraint” (WA, 2013, pp. 55-56), the onus was the process, rather than outcomes:

“The Department of the Premier and Cabinet’s (DPC’s) ‘Partnership forum’ is using collaborative techniques to identify innovative ways of delivering services” (WA, 2013, p. 50).

The conceptualisation and operationalisation PSI in Western Australia then, seems to be about shifting responsibilities in delivering services, which then, is more about responding to increased fiscal pressures of the mining downturn and elections, than about tackling complex issues.

5.4.2 Public value

In 2007, a public sector policy paper described public value as:

“The value in a specific approach may be financial, but it could also be better services (leading to improved satisfaction), improved outcomes, or increased levels of trust” (e.g. between government and the public) (SA_GRC, 2007, p. 22)

This indicates an inclusive discussion about innovation, where citizen satisfaction, policy outcomes, and increased trust seem to be at the same level as financial goals and that extends beyond just the economic. In 2014, PSI was associated with public sector values by the Commissioner for Public Sector Employment of South Australia (SA_CPSE, 2014);

and in 2015, innovation was linked with participation for exploring new ways of delivering public value (SA_DP&C, 2015) as part of a State Government's commitment to democratic reform that started in 2013 with the 'Better Together' policy (SA_DP&C, 2013). Here, innovation was used to describe new ways of engaging with communities. In the 2015 *Reforming Democracy* paper, Premier Wetherill declared that "The old days of 'announce and defend' decision-making by Government are over. A new era of genuinely engaging people – of 'debate and decide' – has arrived" (SA_DP&C, 2015, p. 3). This approach furthered the steps taken in 2013 through the 'Better Together' policy, to encourage the connection and collaboration with communities for decision making, policy design, and delivery. In recent years, this has intensified (SA_45, a Manager, Office for the Public Sector, Dep. Premier & Cabinet, 16 March 2017, Author's Interview; SA_46, a Director, Department of State Development, 17 March 2017, Author's Interview; SA_62, High Level Executive, Primary Industries and Regions Department, 28 March 2017, Author's Interview).

By 2017 the determining condition for public expenditure was demonstrating public value, rather than saving costs:

"Public sector innovation is growing momentum with the growing pressures on the public service to show value for money and public value. So, the public service now needs to demonstrate public value to anything we do in South Australia. Is the way we draft our submissions to cabinet, asked for funding, is to demonstrate that public value." (SA_60, a Manager, Department of Planning, Transport and Infrastructure, 27 March 2017, Author's Interview)

In contrast with Western Australia, South Australia views are that within a context of fiscal pressure, PSI is associated with public value while considering the State's finances, rather than making the main goal about the reduction of costs.

An interviewee who had over 30 years experience in the public sector expressed how PSI is about "looking at what is the value of your contribution to the community" (SA_52, a former Director, Department of State Development, 22 March 2017, Author's Interview). Moreover, they went on to explain that distilling this value includes evaluating "what is happening at the different levels, local, state, national, and how does that impact the types of services you offer" (Idem). Finally, they expand, this evaluation of value shapes how they organise themselves, the services or the approaches they use

that impact on other parts of the State and the community, and what they are doing in terms of preparing for the future (Idem). From this perspective, the approach to innovation that centres around impact for communities.

Overall, a continuity by the South Australian Public sector can be appreciated in its public value, and outcome-based approach to PSI.

Western Australia on the other hand, has not consistently pursued a values driven type of PSI. While in the year 2003 the Western Australian public sector acknowledged a need to integrate “environmental protection, social advancement and economic prosperity” which would require “innovative ways of working across traditional agency lines and in collaboration with partners in the community and in business sectors” (WA_DP&C, 2003, p. 11), in 2009 an Economic Audit Committee in WA, still identified “the need for the public sector to do more to foster innovation and work across organisational boundaries using collaborative approaches to develop policy and deliver services” (WA, 2012, p. 21). This signals that the mechanisms for defining and re-defining what public value meant for Western Australia have been constantly lacking.

5.5 Conclusions

The conceptualisation and operationalisation of PSI in Australia and South Australia can be understood using three distinct approaches taken by the states: One, PSI associated with cost reduction and increased productivity: PSI, efficiency, and fiscal constraints; ‘Big picture’ trade-off for short term achievements; and the role of resources and the scope for PSI. Two, Market-oriented PSI, includes the commercialisation of PSI; and PSI and innovation policy. Three, Outcome-driven PSI, which includes distributive goals and PSI; and Public value.

In general, for the past almost two decades, PSI in South Australia has been more closely associated with an outcome-driven approach to PSI in contrast to Western Australia. Some interviewees from WA did mention that innovation had the purpose to ‘improve outcomes’ or ‘deliver a lasting benefit’, however, SA interviewees from diverse sectors and positions were vehement and expansive in this point; as well as official documentation.

Both South Australia and Western Australia have conceptualised and operationalised PSI in line with global trends of economic narratives informed by growth accumulation strategies such as urban economics and industrial districts; and the importance of private sector innovation in fostering competitiveness. South Australia, however, has not embraced the possibilities of the market as widely as Western Australia. This responds, in part, to a social democratic political economy trajectory of the State, which facilitated the beginning of a systematic shift from new public management principles to post-NPM ones. Drawing from official documents in combination with responses from interviewees, **Table 15** presents a summary of the approaches to the conceptualisation and operationalisation of PSI in South Australia and Western Australia, covering almost two decades. This is contrasted with the political party leading the public sector and the economic performance of the State.

State		Year																			
Variable		99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
PSI	WA	P	P	P	P	P	P	P	P	P	P	P	O	O	O	O	M	M	M	M	
	SA	P	P	P	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
HIC	WA	↑	↗	↓	↑	↑	↑	↗	↗	↑	↑	↑	↓	↑	↑	↑	↗	↑	↓	↓	
	SA	↓	↑	↑	↑	↓	↑	↗	↓	↗	↑	↑	↓	↗	↗	↓	↓	↑	↑	↑	
POL	WA	C	C	L	L	L	L	L	L	L	L	C	C	C	C	C	C	C	C	L	L
	SA	C	C	C	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	C
		99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
		Year																			

Legend

Primary PSI approach (PSI)		Household income per capita growth (HIC)		Political Party (POL)	
P	Productivity	↑	Growth rate over the mean	C	Conservative (Liberal)
M	Market	↗	Growth rate below the mean	L	Labor
O	Outcomes	↓	De-growth		

Table 15 Western Australia and South Australia: PSI approaches, Economic Growth and Political Party (1999-2018)

Source: Author based on data from Chapter 4 and primary data from interviews discussed in Chapter 5.

Based on the conceptualisations and operation of PSI in WA and SA, it emerges that general economic conditions in addition to political economy views are important for the understanding of PSI. In the case of WA, the State's recent economic contraction impacted the States' views towards a need for saving costs. In the case of South Australia, generally their economy has been one of lesser growth and prolonged deindustrialisation. Western Australia in particular, shows signs that its economic cycle affects the use given to PSI. That is, the way innovation is instrumental varies according to their position in the economic cycle, whether it is in growth or contraction, whether it is under stress or comfort. This is framed around the view that accumulation policies are fast and determinant solutions to growth problems (Peck and Tickell, 2002) which is reflected by the 'shift' in PSI exemplified earlier by Western Australia.

Under more prosperous times of the mining boom, PSI went from being associated with the market to one that was values driven. This initiative, however, pushed by a line agency, did not hold over time. In moments of to the mining downturn, Western Australia turned to focus all efforts into continuing to do what it knows to do best: encourage innovation in the private sector, that is, PSI orientated to the market. In South Australia, on the other hand, public sector innovation has been developed more consistently associated for almost two decades, with an Outcomes-Based approach (the reasons why are explored further in Ch 6). Moreover, the approach to PSI can have an effect on the scope of PSI. A U-shaped relationship between PSI potential and budget pressures showed that the likelihood of a fundamental change under budget pressures in a context of sustained economic growth is very low, especially under a conservative, NPM neoliberal, NPM-inspired political economy. Moreover, in a context of continued budget pressure, an injection of resources can lead to potentially fundamental changes (e.g. the creation of the Tonsley district in South Australia) in a context of a social democratic political economy.

This chapter has also shown that how the state is conceptualised and understood matters for explaining PSI. The past and current political economy of regions limit the extent, direction, and form of PSI. The positive connotation usually attributed to PSI is put into question once a closer look was taken at the nuances of the actions that accompany the use of the concept throughout the interviews, especially when PSI is associated with costs reductions and productivity.

Chapter 6. Internal processes to the public sector and their role in shaping public sector innovation

6.1 Introduction

The aim of this chapter is to understand and explain how and why differences in internal processes in the public-sector are shaping PSI in the context of economic development in each State. In general, with this Chapter we can learn more about the drivers (and their persistence) shaping the foresaid.

The Chapter signals important shifts in public sector reforms from the 1990s into the 2000s and onwards to develop themes that explain key differences between the two States. Particularly, those regarding formal and informal institutional dimensions internal to the public sector and how feedback processes shape PSI in a context of economic development are explained.

Using the diverging PSI journeys between South Australia and Western Australia as a departure point by building from the responses of the public sector reform reviews and the continuity of these responses until 2017, leadership and collaboration respectively emerge as internal processes that have shaped in a distinctive ways public sector innovation in these States.

Leadership emerged as an important theme from the interviews. In PSI literature, leadership is identified as one of many factors that influence PSI at the organisational level (Damanpour and Schneider, 2006; Damanpour and Schneider, 2009; De Vries *et al.*, 2016). This section shows how leadership from the top at the whole of the public sector level, coupled with a push to flatten structures and stimulate leadership from other levels, tied with leadership through the use of informal networks are also important for PSI. The findings of this section also help answer how far innovative leadership is distributed within and across organisations (Hartley, 2005) by showing that a sector that shows adaptive, pragmatic, widespread and leadership inclusive of informal networks is favourable for PSI. Moreover, scholars on regional economic development argue that effective leadership is increasingly important for the success of places (Beer and Clower, 2014); some even suggest that place-leadership might be the missing link in

understanding differences between places that 'grow' and places that stagnate (Rodriguez-Pose, 2013). This is connected with the factor of institutional thickness for economic development about having a regional understanding of a common goal or project for the region (Amin, 1999). The case of South Australia shows that even if there are no longstanding industries and regionally embedded strong economic activities, their capacity for economic development is sustained over time, with moderate pikes but also moderate falls and economic development indicators that, although slowly, are in a continuous track of improvement.

Second, differences in collaboration, coordination and cooperation, the ability of each State to strengthen their public sector organisational capacity (O'Neill, 1997) both horizontally (at State government level) and vertically (between scales of government) play a role in PSI by affecting knowledge exchanges and coordination stability.

6.2 Diverging public sector innovation journeys

In the early 1990s, the financial collapse of the State Banks of South Australia owned by the SA State government (Fahey *et al.* (2002) Review); and the political corruption scandal involving financial dealings in WA State government during the late 1980s (referred to as WA Inc.) among other events, marked the trajectory of public sector reform in these States. Resulting from NPM-inspired policies, these scandals led to public claims for more control and accountability (Parker and Guthrie, 1993) and calls for review and reform in the public sector in both South Australia and Western Australia.

Two examples from the first decade of the 2000s help illustrate and explain how, while both States had a Labor government, Western Australia continued to implement versions of new public management ideas; and, how South Australia instead, began to abandon NPM and shift toward a different public sector reform approach.

In Western Australia, the government's Functional Review Taskforce in 2002 considered the sector was still missing out on efficiency savings and improved productivity (WA Budget Speech, 2003) and continued to benchmark against the private sector, particularly around corporate service delivery trends (Mance, 2006). Similarly, that same year in South Australia, the Report from the 'Fahey Review' also focused on the

need for efficiency, and called for all sectors, not just the public sector, to ensure sufficient effort is placed on supporting a competitive economy (Fahey *et al.*, 2002, Foreword). A difference, however, was on the emphasis around the *difficulties* of how to achieve more with less. While the Report attributed these to a lack of ‘can do’ attitude of the public sector, the Review in SA also pointed to a need for working together, emphasising both between the public sector and other sectors, and the need for a cohesive public sector (the former is expanded in Ch7) (Fahey *et al.*, 2002, p. 3).

Another key difference was how each Labor government responded to the Reviews. In South Australia, the government responded by emphasising action under five themes: *facilitative culture within a professional public service* through innovation, risk management, leadership, openness and support from all; *Collaborate working*– within the public sector *and* with other actors- to deliver outcomes to the community (for example, the Economic Development Board and the Social Inclusion Board were established in 2002 to generate new ideas and to enable broader approaches across government). *Professional public service*: a key aspect here was recognising the need for a clarity of purpose to provide vision and direction to the public sector and understanding the roles agencies have to play to achieve those goals; for example, via the 2004, 2007 and 2011 State Strategic plans. *Clear roles and accountabilities*; and *Improvement of government management processes* (Rann, 2002). These themes slowly materialised throughout the decades that followed, as explained in the following sections.

In the case of WA, a leading response to the Review report was an ambitious reform project to remove back office processes (e.g. finance systems and human resources administration) from individual agencies and centralise them into three working Shared Services Centres by mid-2006 (see official website of the time (DP&C, 2002)). Under the principles of consolidation, standardisation, simplification, and automatisation, the government began the centralisation process in 2003 with the expectation of future savings of about AUD\$55 million per year (Mance, 2006).

Thus, Western Australia response continued to align with NPM principles. While the idea seemed sound, in practice its implementation did not meet expectations:

“If you are looking for classic failures of attempts of innovation, look no further than the shared services we went through here in the 2000s, it cost hundreds of millions of dollars and failed; it went radically wrong almost from day one and it had to be decommissioned, about 9 or 10 years ago.” (WA_02, Commissioner, Public Service Commission, Dep. of the Premier & Cabinet, 09 February 2017, Author’s Interview).

After a total investment of AUS\$450 million in the initiative, a process to return corporate services to 59 agencies began in early 2012 and by the 2014 it was fully decommissioned, costing an additional AUS\$90 million to the taxpayer (Nahan, 2013). Western Australia spent over ten years developing, implementing, and later decommissioning an ambitious project to reduce costs without having the capacity to embark on such complex task. According to a Report by the Economic Audit Committee in 2009, this was attributed to a lack of opportunities for formal and informal cooperation and collaboration within the public sector, echoing another 2007 report by the Auditor General. Another of the causes identified by the Committee, was a lack of an appropriate leadership environment. Problems about lack of collaboration, added the report, can be enhanced in a context of political pressure by creating new specialist agencies for example (Hicks *et al.*, 2001). In sum, the Report claimed that for these reasons, often change agendas do not get implemented across government in Western Australia (Economic Audit Committee, 2009, p. 17). Western Australia’s public sector did not have the organisational capacity to implement such complex project, nor did their public sector reform projects focus on changing this organisational capacity.

6.3 The role of leadership(s): The response to the reviews

6.3.1 Introduction

The role of leadership in PSI is explained, having and sharing a clear vision and goals to frame PSI efforts through adaptive and pragmatic leadership; and by making administrative structures more flexible, augment the leadership capacity of the State.

6.3.2 Adaptive and pragmatic leadership from the top

Leadership emerged as an important aspect of South Australia's trajectory with public sector reform and PSI for its role in achieving and continuing political agreements. For example, supporting the continuation of the Fahey Review was a controversial move by the then Premier Rann, for it had been commissioned under the previous government of the opposition. Moreover, the former Premier had resigned over transparency issues concerning alleged pay-outs to transnational corporations (Parker, 2001; Bennett, 2002). Taking a bipartisan approach to public sector reform in South Australia shows the importance given by Premier Rann and his government to collaborative approaches to govern; an initiative that was further developed in the subsequent government (as explained in the following sections). Since 2002 and framed by the five themes mentioned above, South Australia's Labor government set in motion collections of policies that changed the approach taken until then in the public sector and that continued at least until 2017. In the words of an interviewee who experienced this shift:

“Public sector reform, under the previous [Liberal] government, was quite mechanistic, laying foundations for a more contractual relationship, a FOPP, Funder, Owner, Purchaser, and Provider, approach. So, discussions were around the notion of transactions; defining the service in terms of cost for time and quality, a costed framework to contract out, a legacy of Reagan and Thatcher; trying to privatize as much public sector activity as possible. That went out the window. We moved away from FOPP thinking with the change of government, we moved into a much stronger, complex systems thinking (Peter Singer), about trust and relationships. We learned that FOPP works in certain types of government services, but others have a much stronger relationship set of characteristics. For example, electricity was ‘FOPPed’, but it was not delivering objectives, so it was pulled back in. Some activities sit better within the core role of government, that cannot be outsourced, for example industry development” (SA_48, Deputy CEO, Department of Treasury and Finance, 20 March 2017, Author's Interview).

This quote suggests that the public sector had formally interiorised the advantages and disadvantages of a FOPP type approach to public services and learned from this during the 2000s. South Australia's response to the Fahey Review Report was a slower, more systemic public sector reform, which reflects a Post NPM approach (O'Flynn, 2007). Moreover, having learned what aspects from the administration were adequate for NPM tools, it was the beginning of a reform process that sought to move away from a generalised NPM approach to public administration, toward an approach that re-directed this learning process away from a managerial focus toward a nurturing relationships and trust grounded in a principles based approach, unlike Western Australia, where as recently as in 2016 newspapers were publishing about attempted coups to government by large Estate Developers (WA_10, Senior Research Fellow, Dep., Planning and Geography, Curtin University, 22 February 2017, Author's Interview). Premier Rann and his team sought out conceptual and theoretical frameworks, such as Mark Moore's conceptualisation of public value, or around systems thinking by Peter Singer, to follow and test in SA's public sector reforms (SA_46, a Director, Department of State Development, 17 March 2017, Author's Interview). In the case of WA, leadership about the public sector was more about continuing to apply tools and solutions that would increase cost savings rather than seeking to learn from the past and concerting agreements on the role of the public sector.

Borrowing from the reasoning behind the literature of territorial innovation systems, particularly regarding the 'learning region' (Cooke and Morgan, 1998) and adapting it to the public sector, a region that is more self-aware or reflexive in conceptual and operational terms, is more likely to innovate by recognizing and discarding routines and practices that are no longer useful to meet their distribution and accumulation goals. In the case of South Australia, leadership from the top was both *adaptive* (to facilitate integration of old activities with new ones) and *pragmatic* (to transform learning by developing new metaphors and narratives) (Sorensen and Torfing, 2015). This favours the development of cognitive proximity (Boschma, 2005) within the public sector (people may learn from each other if they share the same knowledge base and expertise) which facilitates knowledge absorption for innovation. In the case of Western Australia, governments attempted to remedy excessive fragmentation caused by following NPM principles by implementing NPM-style solution, thus continuing with the same public administration approach.

In this sense, learning was based on the conceptual assumptions underpinning public sector reform (Bekkers *et al.*, 2011a), and here, for a transformative type of innovation, leadership plays a key role to facilitate and guide the adaptation that follows from experiential and formal learning processes in the public sector.

6.3.3 Focused vs widespread leadership

Nowadays in Western Australia and in South Australia political and public-sector employee leadership are important in defining approaches to public sector innovation, although differing in form, breadth and complexity. Chief executive officers in government sending signals and promoting a culture of questioning is acknowledged as important in Western Australia, yet it is not widespread (WA_03, Co-Director/Professor, Centre for Regional Development, UWA, 9 February 2017, Author's Interview; WA_02, Commissioner, Public Service Commission, Dep. of the Premier & Cabinet, 09 February 2017, Author's Interview; WA_19, an Executive Director, Dep. Premier & Cabinet, 24 February 2017, Author's Interview).

In South Australia on the other hand, interviewees pointed to a more spread-out leadership approach. From the Premier (SA_41, Deputy CEO, Primary Industries and Regions Department, 15 March 2017, Author's Interview), to the Economic Development Board Chair, to the Director of the Foreign Direct Investment Agency, (SA_49, Professor, Vice-Chancellor, UNISA, EDB Member, 21 March 2017, Author's Interview); and increasingly to those in general leadership positions (SA_60, a Manager, Department of Planning, Transport and Infrastructure, 27 March 2017, Author's Interview; SA_62, High Level Executive, Primary Industries and Regions Department, 28 March 2017, Author's Interview) having clear strategies and being accountable (SA_59, Former Police Commissioner, 27 March 2017, Author's Interview). In contrast with WA, in SA, a plurality of actors in leadership roles at different scales and in different areas of the public sector encouraging public sector innovation has meant a more integrated approach and shift that favours PSI more in SA than in WA.

Nevertheless, challenges persist in South Australia. As an interviewee pointed out, there is still sometimes a perception that what the public sector does is of low value. When consultants offer advice from outside, it is more valued, perceives this interviewee. When they are brought in, there is no freedom or less flexibility for leaders with vision to do what they would have been paid for to do otherwise; therefore, internal talent is

perceived to be de-valued. Government is constantly second guessing itself, which 'kills' innovation, perceives the same interviewee. The public sector does not trust the talent they have (SA_56, a Director, Investment Attraction South Australia, 23 March 2017, Author's Interview). Moreover, in SA, because resources are limited it is difficult to introduce innovations, there are more approvals, and more people to convince, who need to share the vision in a bureaucratic and political realm (SA_41, Deputy CEO, Primary Industries and Regions Department, 15 March 2017, Author's Interview); and it is difficult to get an idea recognized as an opportunity (SA_51, Acting Deputy CEO, Primary Industries and Regions Department, 21 March 2017, Author's Interview). Another interviewee perceives from a particular organisation that being innovative and doing 'exciting things', is not possible, one would have to leave. Moreover, they comment, people are in fear of losing their jobs (senior levels who are in contract). The ability to change and adapt is not focused toward what's valuable (SA_54, General Manager, a Local Government, 22 March 2017, Author's Interview). These appreciations show that while SA may be further down in their progress toward widespread leadership than WA, there are still pockets within agencies where leadership is still an issue for encouraging PSI.

In the case of Western Australia, experience by some interviewees shows that in some circumstances, individuals in public administration and politics can emerge as innovative leaders in a pocket of time, and attempt to drive transformative changes for the States.

"You often get very good public servants who are innovative and think about innovation in order to achieve more outcomes with this; in addition to individual good political actors" (WA_03, Co-Director/Professor, Centre for Regional Development, UWA, 9 February 2017, Author's Interview).

Thus, in spite of a neoliberal small government policy agenda by which government has to 'do more with less' in Western Australia; and in spite of not having a formal structure for innovation, an interviewee from a regional development research centre experienced occasions when the foresaid limited innovation style might be challenged.

An example is the case of the Royalties for Regions Act 2009 (R4R) which was not planned nor proposed by government. The R4R was a major accomplishment for rural Western Australia (Paül and Haslam McKenzie, 2015) –the R4R secured 25 per cent of

the State's onshore petroleum and mining royalties- which was only able to pass because of an electoral *impasse* in the form of a hung parliament in the 2008 States elections. This led the minority National Party to hold the balance of power in negotiations, playing a key role in the passing of R4R Act in exchange of the support needed by the conservative Liberal party to govern (Tonts *et al.*, 2013). The Nationals argued that "that rural areas were disproportionately contributing to the State and national economies, but the government was not equitably re-investing in them" (Paül and Haslam McKenzie, 2015, p. 377). Fresh new income of about \$AUS 1 billion per year would be invested only in non-metropolitan areas (for the regions) in addition to the State's government obligations, encouraging the participation of regional decision-makers (Paül and Haslam McKenzie, 2015).

This innovative, world leading Act (WA_12, Chair of WA Regional Development Trust, Adviser to Minister of Regional Development, Adviser to UWA, 22 February 2017, Author's Interview), came to pass not as a result of systematic economic development innovation programme, but because of the confluence of a catalytic moment with a number of different projects that were 'shovel ready', that is ready for their implementation. This example serves to highlight that in the absence of innovation structures, instances or 'pockets' of innovation still happen when certain political and practical conditions are met.

Nevertheless, while innovative in terms of its quality of being 'new', critics argue it has not brought about fundamental change, even after a few years. Critique to the R4R scheme includes continued dependence on staple commodities (mining); intervening in favour of specific markets (e.g. funding part of mining exploration activities, or railways for the transportation of materials) (Tonts *et al.*, 2013); and in terms of funding short term projects to gain votes or for 'pork barrelling' rather than strategic medium to long term projects (WA_12, Chair of WA Regional Development Trust, Adviser to Minister of Regional Development, Adviser to UWA, 22 February 2017, Author's Interview; Tonts *et al.*, 2013). Moreover, one interviewee said: "(...) things get funded for low transparency reasons and not necessarily for a strong understanding of what outcome you're attempting to achieve by doing it" (WA_04 a Director, Dep. of Regional Development, 10 February 2017, Author's Interview), rather than investing strategically, with a clear vision of a long term goal.

Thus, a major innovation, such as the R4R scheme, in spite of the copious amount of public investments and the potential to drive transformational change in the rural areas of Western Australia, has not achieved expectations. The innovative element of transferring more funds to rural areas was not enough to be fundamentally transformative in a context of economic development, which links back to the issue of pockets of leaders vs a widespread approach to leadership.

6.3.4 Leadership in informal networks

The creation and use of informal networks to push forward new initiatives is another way by which widespread leadership is apparent in South Australia. Interviewees in this State emphasised the role informal relations and trust for public sector innovation, while Western Australia informants this was not stressed.

“Informal relationships in the public sector are vital. You just need a core group of people that like working together to bring in other groups to trial things; that’s how ideas get seeded. It’s a little bit, kind of a team but is not a formal at all, it’s just people we trust; a cohort of creative people that don’t mind going outside their formal remit. They may look at a different way of doing things and they just experiment in the background until it is ready for release, you know, that is actually, I think the informal networks are vital. And I think that is actually an attribute of the public sector, because it is huge, it has tentacles everywhere and connections, and so diverse; but people know each other, they feel they are part of the family, because they are part of the government, the public sector. Sometimes the informal is easier than the formal, the formal is constrained by role, or a project brief, or expectations” (SA_56, a Director, Investment Attraction South Australia, 23 March 2017, Author’s Interview).

Within a sector that is often formally defined by what it can do, informal relations seem to offer the possibility of thinking differently and developing ideas before bringing them forward to decision makers. The quote also emphasizes the connection that exists between the public sector servants in terms of its size and common goals, which functions as a backdrop for creating trusting relations. Yet, an academic is cautious about how the fact that relationships are important in making things happen, they can also be an impediment to new ideas. The role of relationships between people to get things moving in SA is:

“Very strong. Relationships last for a long time, and often traced back to school, so which school you went to can be enormously influential; this can facilitate things but doesn’t necessarily make the economy open to new, external ideas” (SA_53, Professor, UNISA, 22 March 2017, Author’s Interview)

Other perceptions about the spaces or opportunities for structured informal interactions are that there is still far to go in terms of encouraging informal institutions in South Australia’s public sector:

“In Adelaide there is much less of a scene [than in Melbourne], so, of course the public sector draws in and reflects the culture in which it sits. And so we’re just not, we’re just never been that sort of city. I think there’s still needs to be some strategic thinking around what those informal institutions would be in the public sector” (SA_50, a Principal Consultant, Office for the Public Sector, Dep. Premier & Cabinet, 21 March 2017, Author’s Interview)

The lack of mention from Western Australian interviewees about the role of informal relations other than emphasising the problems of policy that is not evidence based but influenced by political relations, points to a more fragmented public sector in WA than in SA, which is the theme that is developed in the following section.

6.4 Proximity between levels of the public sector, and public sector reform approaches over time

6.4.1 Introduction

The following section of the diverging innovation journey examines and explains perceptions about fragmentation and cooperation in policy and administrative structures within the States’ governments; disarticulation and coordination between scales of government; and their role in reinforcing or deviating trajectories of public sector reform and PSI in Western Australia and South Australia.

6.4.2 Fragmentation and collaboration within state government

In terms of policy in early 2017, South Australia’s State government had a number of public sector reform programmes that had been complementing each other over time, since the *Fahey Review* in 2002. As an example of their cumulative, consistent, and wide-reaching approach, the theme of collaboration for change or innovative thinking within the sector offers a contrasting visualization between South Australia and Western Australia (see **Table 16**).

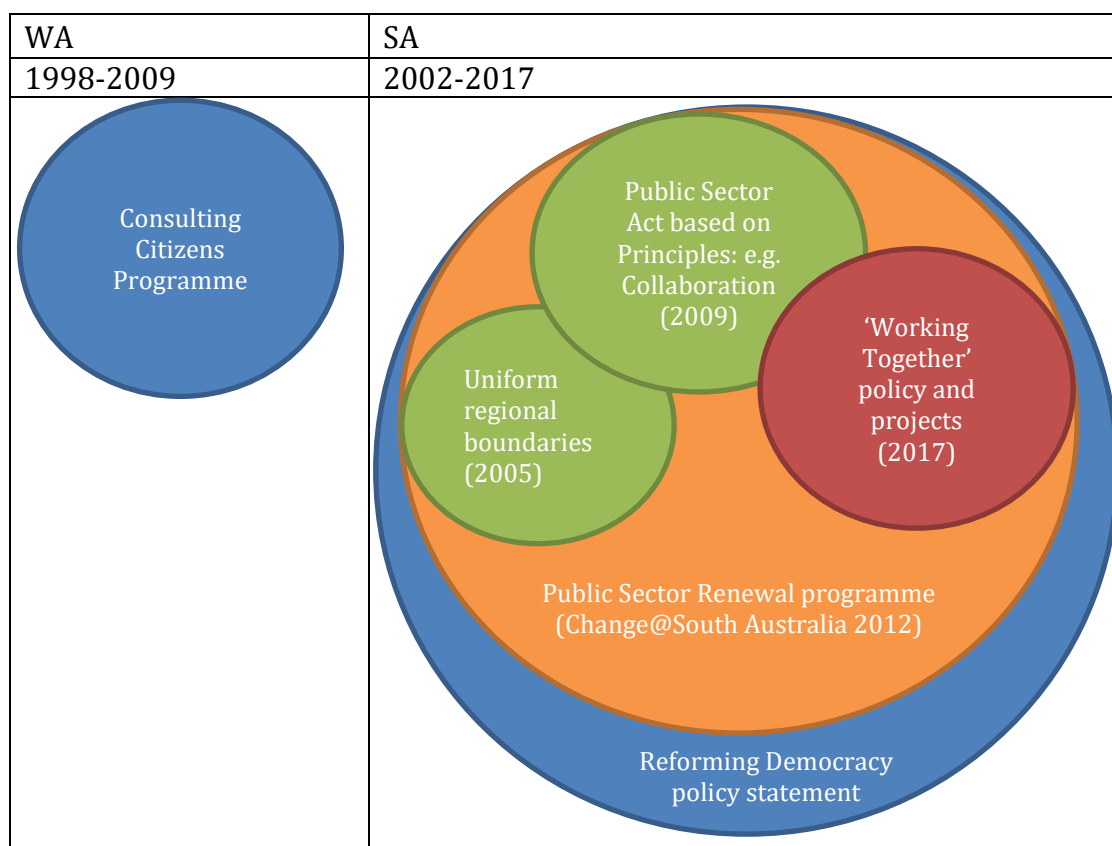


Table 16: Example of SA and WA public sector complementing policy guides, projects and programmes on collaboration for change and their continuation throughout time

Source: Author based on (WA_DP&C, 2004b; WA_DP&C, 2006b; SA_DP&C, 2013; Office for the Public Sector, 2015; SA_DP&C, 2015; SA_SMC, 2017)

Note: Colours: green – legislation; blue - policy statement; orange – programme; red – policy and projects

In WA, this type of complementarity throughout time is only found in its *Consulting Citizens* programme. While collaboration within the public sector had been identified as necessary in WA (E.g. WA_DP&C, 2004a; WA_DP&C, 2006a; Economic Audit Committee, 2009; Stansbury and Barre, 2011), policy focused more on intersectoral collaboration (WA_DP&C, 2006b; WA, 2012; WA, 2013; WA, 2014) as it made “good business sense”

(increased efficiency) and was considered to help foster public sector innovation (WA, 2012, p. 16; WA, 2013, p. 48). This extensive and in-depth initiative included several formal consultation processes since 1998 to develop tools for citizen participation; and culminated with a 2004-2009 Citizenship strategy to strengthen democracy. Yet, citizen involvement was not present in the development of the public sector States level strategies of 2004 and 2006, for example. On the other hand, cross-government collaboration has been priority on government agenda since at least 2005 in South Australia.

Some examples of policies that seek collaborative, innovative solutions to persistent issues in the public sector, or to develop and seize opportunities are: a public sector CEOs summit for collaboration framed around the SA State Strategy (SA_OPE, 2006); and creating administrative uniform regional boundaries for planning and enabling more effective government collaboration and resource sharing (first in the country) (SA_OPE, 2007). Moreover, by 2009 'collaboration' became one of the principles of a newly enacted legislative framework for the public sector was based on principles such as 'collaboration' rather than on prescriptive rules (SA_OESPI, 2009); and five government Action Teams were commissioned to work on projects for increased performance in the public sector.

One of these was on fostering innovation through the promotion and development of whole of government collaboration in 2010 (SA_OESPI, 2010). Recognised as a source of information, ideas, experience and expertise (SA_OESPI, 2011) the government continued to emphasise collaboration in its agenda to achieve its and the community desired outcomes starting the decade with the Change@SouthAustralia programme and up to 2017 with the 'Working Together' policy (SA_OESPI, 2011; SA_OPER, 2012; SA_OPER, 2013). Simultaneously, the '90-day' project, launched in 2012 (still running in 2019, with a new Liberal government in place (Office for the Public Sector, 2015; OCPSE, 2018a)) was a "Deliberate attempt to look at what's not working, best crystallization of innovation I've seen" (SA_57, Professor, Deputy Vice-Chancellor, UNISA, EDB, 23 March 2017, Author's Interview). In 2013 collaboration not only within but also with other sectors began to be a process of systematic effort (SA_DP&C, 2014). While the governments of SA had simultaneously throughout the years also worked on improving collaboration with other sectors (more on this in Ch7).

The State's actions can be interpreted as reaching a point where the sector had first systematically worked in strengthening their own networks to then begin prioritizing efforts to work with other sectors. These policies have pushed ahead South Australia in terms of their awareness and capability to be able to provide greater opportunities for the access, harnessing and implementation of new ideas.

One reason for this policy evolution in South Australia, besides the fact that the same Premier and then the same Party continued in government, was that the new premier in 2014, Jay Weatherill, was part of Government since 2002. Moreover, he worked closely with the Government Reform Commission while in his role as the Minister Assisting the Premier in Cabinet Business and Public Sector Management between 2006-2010 (SA_OPE, 2007), and continued to be actively involved in government after that. The continuity of government initiatives around public sector reform benefited from his privileged position to understand and build on from the changes that he had been part of promoting. Leadership also has an important role here, for his years of experience in government and in reflecting about and shaping the understanding of the role of the public sector with other party colleagues; and desire this continuation. This also shows the role of individual agency for it reflects his experience and personal involvement in particular projects and policies.

In WA, one of the explanations for the lack of development of complementary policies to achieve increased collaboration in the public sector and a lack of ambition to create sustained plans over time, has been its political interest to nurture and capitalise from its overwhelmingly fruitful resources sector. Western Australia's experience is one where investing in the private sector has proven, decidedly, to drive the States' economy, a recipe that has worked successfully in the past. But if collaboration within the public sector is lacking, one interviewee from South Australia asks "what is the extent to which the market is a blocker of PSI innovation?" (SA_50, a Principal Consultant, Office for the Public Sector, Dep. Premier & Cabinet, 21 March 2017, Author's Interview).

In the case of Western Australia, not only the success of the private sector for the State, but the success of mostly one type of economic activity has led the government to develop specialised knowledge in reaping the benefits of that particular economic activity. Continuing from the argument made in Chapter 5, a focused market or economic activity allowed public sector specialization in regulating, promoting, and

focusing distributing efforts linked with the extractive industries. There can be a link here with related and unrelated variety of economic activities and the capacity of the public sector and the States to manage the market, and what it learns from the market; its most successful PSIs are related with the extractive industry (E.g. Landgate in Ch5). The size and diversity of the economy over time can shape the path of the public sector. A strong, less diverse economy can force the public sector to specialise in particular industries and related industries, and shape PSI approaches for economic development.

In addition to, and sometimes, as a result of policies around collaboration, differences also emerge between WA and SA in terms of their public sector administrative structures. In the case of Western Australia, interviewees perceive the public sector is too large, and too hierarchical (WA_09, a Director, a Regional Development Commission, 22 February 2017, Author's Interview).

"I think and this is something that the ICC [*International Chamber of Commerce*] and I have very strong views on, especially regarding economic development, is that you've got always different departments and agencies in the States government here, and you've got States development you've got Agriculture, you've got Royalties for Regions, you've got tourism and they're all individual, they don't talk, there is no central port or repository, you know?" (WA_18, a Principal Adviser, Dep. Premier & Cabinet, 24 February 2017, Author's Interview).

As per the quote above and other interviewees, the shift to a fragmented public sector (for example, decentralising industry development and FDI attraction (WA_13, a Manager; and WA_14, a General Manager, Dep. of State Development, 23 February 2017, Author's Interview) is perceived to make coordination difficult and that it can restrict collaboration (WA_07, Economic Policy Adviser, Chamber of Commerce and Industry, 17 February 2017, Author's Interview). Importantly, these siloes are perceived to make a negative difference for innovations to travel (WA_12, Chair of WA Regional Development Trust, Adviser to Minister of Regional Development, Adviser to UWA, 22 February 2017, Author's Interview).

The overall appreciation in WA is that the tendency in the past decade and half has been to continue toward greater fragmentation of the public sector in search for increased efficiency savings. Yet, inefficiencies can also occur because agencies may not

communicate between each other, both because there is no perceived need and out of competition encouraged by NPM principles. Finally, the global move towards increased accountability is a third reason attributed to increased fragmentation in Western Australia. For example, sharing resources would make the lender's efficiency 'look bad', and therefore encouraging silos in government (WA_09, a Director, a Regional Development Commission, 22 February 2017, Author's Interview). Thus, an increased call for accountability and being able to measure expenses down the unit cost curtailed collaboration and the facility to work together between agencies in Western Australia.

South Australia interviewees in general paint a different picture. While South Australia, like the rest of the world, also shifted toward increased fragmentation and accountability, one informant explained that a direction or a tendency toward flatter structures and mobile work force between teams and across agencies has been progressing and has decreased the level of fragmentation:

"This direction is reflected in our values and the role of the State. Beyond structures and committees, it's about the right people and the right mind set" (SA_60, a Manager, Department of Planning, Transport and Infrastructure, 27 March 2017, Author's Interview).

For the past 10 years, the push for flatter administrative structures in South Australia has meant that people are becoming more accountable and responsibilities are being more spread across (Idem) and has facilitated the emergence of new ideas and their implementation (Idem; SA_62, High Level Executive, Primary Industries and Regions Department, 28 March 2017, Author's Interview). Projects like the 90-Day Change project also has helped with the issue of too many silos (SA_51, Acting Deputy CEO, Primary Industries and Regions Department, 21 March 2017, Author's Interview) by bringing together different agencies to work around a particular problem.

Leadership plays an important role in administrative structures as well by fuelling collaboration. While legacy issues are still preventing new paths from being created opines an interviewee (SA_44, a Manager, Department of State Development, 16 March 2017, Author's Interview); new ways are also emerging in SA. For example, a recent approach by the Treasury Department fuelled by tendencies in the sector and by a change in leadership consisted in moving away from an antagonistic relationship to one of working with agencies to find the best solutions to their problems, rather than just

being involved at the last minute only in decision about whether to fund a proposal. An innovation in the way government agencies work together to solve a problem, has been involving Treasury at an earlier stage in the design of the business case to help identify the problem is the best approach to solving it, in addition to getting help with clarity for posterior evaluation of government programmes (SA_48, Deputy CEO, Department of Treasury and Finance, 20 March 2017, Author's Interview). Western Australia's Treasury on the contrary, in a context of the mining boom meltdown has shifted to rejecting every proposal (WA_18, a Principal Adviser, Dep. Premier & Cabinet, 24 February 2017, Author's Interview). That is, the perception is that after the decrease in growth began, Treasury began rejecting proposals by default. In South Australia, on the contrary, the move has been toward working together with other public sector agencies.

Nevertheless, the move toward less fragmentation and increased collaboration at State government level has been inconsistent and patchy in SA. Fragmentation that is still present across departments in South Australia (SA_49, Professor, Vice-Chancellor, UNISA, EDB Member, 21 March 2017, Author's Interview). Moreover, because agencies have their own budgets and are not responsible across sectors, this budget, or economic resource push becomes the primary blocker and strengthens the silo approach (SA_50, a Principal Consultant, Office for the Public Sector, Dep. Premier & Cabinet, 21 March 2017, Author's Interview). The role that fragmentation plays in affecting collaboration for PSI in SA seems to be weaker than in WA. Resources, though, or the lack of resources, do seem to have an important impact in PSI in SA, and this is further discussed at the end of this Chapter.

To conclude, a systematic approach to individual departmental action illustrates a public sector in WA that has struggled to adapt from a neoliberal approach to policy making and implementation in economic development, which advocates for a public sector that focuses on administration. The 'thinking' under a neoliberal framework is done by elected officials who, as discussed in Chapter 7, are biased toward getting re-elected, and this works against taking important time off to evaluate and re-think the mechanisms available for the States to enhance its strategic capacity in ED. In the case of Western Australia, the pressure is off mostly for its access to the resources coming from its strong extractive and adjacent industries.

6.4.3 Disarticulation vs coordination between scales of government

Decreased capability for joining efforts is also present between government scales for the case of Western Australia; while South Australia shows a stronger vertical organisational strengthening capacity. This is shown and explained by examining the evolution of the relationship between State governments and the local government associations of each State; the governance arrangements at the regional level; and the issues emerging between the States and the Federal government.

How scales of government interact with each other makes a difference in terms of internal coordination, approaches to economic regional development, and also, how innovative these may be, by the facilitation of knowledge exchange, but also, by supporting initiatives with technical cooperation and with resources. While one could argue that three or more tiers of lesser coordinated government may give citizens a greater probability for having their needs met; smooth public sector coordination can help free resources that would otherwise be invested in amending mistakes, clarifying misunderstandings and revising duplication of initiatives; to be invested in the development strategic capacities for the States. Moreover, intergovernmental government relationships within and between scales also have important roles in shaping PSI in a context of economic development by strengthening part of the States' strategic capacity.

In Western Australia, 139 local governments (all but one) are members of the Western Australian Local Governments Association (WALGA), (WA_64, Deputy CEO; WA_65, High Level Executive; WA_66, a Manager, Western Local Government Association, 30 March 2017, Author's Interview) which became the one representative body for local governments in the year 2001. Its homologous organisation in SA is the Local Government Association of South Australia (LGASA), which incorporates the voluntary paid subscription membership from all 68 councils in the State since 1975. While both organisations are the peak bodies for councils in each State, and act as the local governments' voice to other levels of government by offering a single point of entry to the sector, these two organizations perform different roles in each States. One has a strategic role (SA) and the other is still in a managerial role (WA). In general, the issues that emerge here are in terms of formal cooperation between government levels; regulatory flexibility for local governments to innovate; and the importance of trust in the relationships between these levels.

In terms of formal cooperation, relations between WALGA and the State government had not been formalised through any agreement for ten years (up to August 2017 when a new one was signed (OPS 2017, p50)). This, among other things, has affected the capacity for local governments of Western Australia to cooperate with other local governments and external actors, and to operate in concert with State government. Frequently, explain WALGA representatives, the association has found itself prey of States political agendas (WA_64, Deputy CEO; WA_65, High Level Executive; WA_66, a Manager, Western Local Government Association, 30 March 2017, Author's Interview) meaning that conditions for the operation of local governments can be easily negotiated in exchange of support for votes, forcing the sector to have to focus an important amount of effort and resources in trying to manage constant threats and shifts to these conditions rather than being able to focus on more strategic areas.

The LGASA on the other hand, has been formally included in over 40 acts of Parliament since its incorporation into the Local Government Act in 1974 (SA_42, Strategic Adviser, Local Government Association of South Australia, 15 March 2017, Author's Interview). This had begun as a systematic effort by LGASA in search to separate States politics (changing party and government) from operational interests of local governments through legislation.

“We believe operational interests of local governments should be determined by the communities of selected bodies. In terms of a scale of capacity of States intervention in local government for the wrong reasons, SA would be at one end of the scale of the less interventionist model” (SA_42, Strategic Adviser, Local Government Association of South Australia, 15 March 2017, Author's Interview)

For example, the only way that South Australia can amalgamate local governments is if a law is passed, rather than a Minister being able to decide (Idem). Councils are expected and trusted to manage key issues, and to find the necessary funding themselves, as evidenced by the pressure to reduce funding from running the local government system and an increased reliance by the States government in the LGASA by pushing for the Association's inclusion in new legislation (Idem). By an estimate offered by a key informant, 60% of their resources were spent fighting State government back in the 1980, whereas now, probably 60% are spent providing good practice leadership to councils (SA_42, Strategic Adviser, Local Government Association of South Australia, 15 March 2017, Author's Interview).

LGASA's inclusion in SA's legislation has kept States politics at the margins by safeguarding councils and liberating State resources; and has allowed local governments to collaborate through their association on more strategic issues for the sector rather than having to invest resources in fixing the State-local relationship.

Related to the above, is the regulatory flexibility for councils to develop alternatives for funding new initiatives. Increasingly the Commonwealth and States funding cutbacks, or unwillingness to provide new funding, is forcing local governments to find new funding sources. While it is in the interest of Western Australia in this case to reduce costs, this has proven challenging for this sector, as relations between these two levels of government have soured over the past 10 years. For example, WALGA identified the problem of not having the legal rights to cooperate between local councils and other actors a critical issue, yet, it was disregarded by State government:

“We are legally banned from creating companies, owning them, and being partners with them. (...) We advocated for a range of mechanisms like regional subsidiaries to give councils options about how we could create extra funding (...) We said ‘take the South Australia model and put it in Western Australia’. So, they took the model, they put it in Western Australia and regulated it to death. It basically makes it ineffective and risk free” (WA_64, Deputy CEO; WA_65, High Level Executive; WA_66, a Manager, Western Local Government Association, 30 March 2017, Author's Interview)

A potential funding solution became useless for a lack of trust between government levels. This lack of trust has prevented their participation or has been used as an excuse to prevent their active involvement in the drafting and development of new regulations affecting local governments financially or more importantly, the formalisation of an interscalar government partnership agreement.

“[T]he government and particularly conservative governments take a risk first approach I think, and so, all they saw in our request for this new structure was a risk: A) councils could make mistakes, B) councils could get into a lot of financial difficulty, and particularly for them, C) that the community would blame the States for enabling that structure to be established if it went wrong” (WA_64, Deputy CEO; WA_65, High Level Executive; WA_66, a Manager, Western Local Government Association, 30 March 2017, Author's Interview)

From this quote, the issue of trust has a strong political flavour that appears to be more about the votes than legitimacy. At least three reasons emerged for this broken relationship.

First, at the point of fracture between the two levels of government, WALGA had been running an aggressive advocacy media line against the States government for making decisions without consultation (Idem). According to WALGA this might have led to the demise of a few ministers of the State. This might have created a reputation of a confrontative WALGA, that once given a legitimate role it can potentially turn around and threaten political careers.

The second reason is attributed WA's rationale of the public sector's involvement in the economy:

“My experience, again, particularly of, politically conservative governments is because, I think they come from the perspective of firstly, small government. Good government is small government. So, if you give local governments greater capacity to grow and develop then you are effectively encouraging the expansion and growth of that level of government; and so, I think there's just a fundamental point of principle that doesn't sit well with that enabling, kind of activity” (Idem)

The rationales led by conservative governments in WA were prevented in SA by creating institutions that avoided politicising local government operations. This links back to the reasons justifying the different approaches to PSI from Chapter 5.

A third reason argued by WALGA (Idem) is related to the ordeal of WA Inc., where strong suggestions of corruption came from mis-borrowing money and the fear of replicating something similar at the local level can be a reason for which the State government comes from a position of fear in the way they view the sector.

On the contrary, in South Australia, the independent Local Government Finance Authority of SA (unique in the country, funded by LGASA in the 1980s), pays a tax equivalent to a fund that is run by the Association for research and development that is used to resource own reform initiatives, or those that respond to decentralisation of States functions. With the creation of this Finance Authority and other institutions during the 1980s, the LGASA showed the State government that it could take on complex areas for the councils and get councils to agree to smart ways of doing things.

Most importantly for the aim of this chapter, the above shows how obstacles to collaborate between councils can have a determining impact in shaping public sector innovation for it affects not only the interchanges of knowledge but also working together, for example, to solve problems, come up with alternatives, or design opportunities.

In terms of the way the States and the **Federal government** work together, issues around economic structure and funding, politics, and distance as themes that appear to shape the articulation capacity between these levels of government in each of the States.

In terms of *economic structure and funding*, Western Australia, a general resentment for the Federal government and perhaps the Commonwealth in general emerges from the interviews, mainly regarding the way the Federal government interacts differently with each State:

“We have in the last twenty years formed the view that we can largely do everything we need to do without the Commonwealth. South Australia is a basket case economically and so desperately needs the Commonwealth; so, I imagine it has a much more positive relationship based on dependency.” (WA_04 a Director, Dep. of Regional Development, 10 February 2017, Author’s Interview)

As per the quote above, the perception is that the Commonwealth has a better relationship with South Australia than Western Australia is based on the status of the economy in each of the States.

“Because all the mineral resources are in WA so they seem themselves as making a massive contribution to national GDP and why isn’t there one for one investment in the WA based on the level of proportional contribution to the GDP and those sorts of things. So that’s often leads to a failure that’s [*inaudible*] in the relationship between the Commonwealth and WA.” (CW_24, an Executive Director; CW_25, a Unit General Manager; CW_26, a Head of Bureau; CW_27, a General Manager; CW_28, an Acting General Manager; CW_29, a Director, Department of Infrastructure and Regional Development, 06 March 2017, Author’s Interview)

Commonwealth interviewees argue that WA perceives they can do well without the national government for they have a well-grounded industry within their territory’s rich

natural resources, and that this feeds into a continuous questioning of the States' 'massive' contribution to the rest of the country. They also claim South Australia needs to nurture its relationship with the federal government for it does not have a strong economic base. This makes sense as SA is a States that could needs more technical cooperation, more resources in general, and would benefit more of coordinating with the Commonwealth to strengthen its economy. A nuance about this is pointed out by another interviewee:

“Western Australia is a sort of mine and boom-bust State, it spends a lot of time being sort of a mendicant State that requires a net flow of resources from the Commonwealth, and then occasionally when the commodity prices do well royalties and stuff come back the other way and we are sort of at the end of one of those cycles” (CW_22, Regional Australia Institute (Non-Profit), 01 March 2017, Author's Interview)

Arguably then, the relationship between the levels of government strengthens when States are economically vulnerable, as pointed when referring to the mining boom and bust cycles. In the case of South Australia, claims an interviewee, the Federal government is a major contributor to the States' economic structural adjustment processes by shaping the future of the industry development through investment. For example, the recent \$100 Billion contract to build 12 submarines over 50 years, “plus range of programmes like the regional development Australia fund” (SA_53, Professor, UNISA, 22 March 2017, Author's Interview). This academic is pointing out the major stabilizing force that the Commonwealth plays in South Australia while its economy is vulnerable.

In terms of *politics*, a perception exists that if Commonwealth and States governing parties align, it would be an enabler of innovative initiatives taken by that States:

“Yeah, if the relationship with the Commonwealth is a good one.. that's a good point, it is definitely a clear enabler. And as you can imagine, when you're a Labor State, and it's a Liberal Federal Government, that is more difficult” (SA_58, a Director, Dep. Premier & Cabinet, 24 March 2017, Author's Interview).

Arguably, approaches to PSI in States then, are also influenced by the rationale and ideology present in the Federal government. This can occur by different ways. For example, the Commonwealth has the capacity to create new obligations for the States

through the negotiation of international treaties, or it can influence the destination of funding through conditioning its allocation in areas of States responsibility:

“[T]hey say ‘we’ll give you 500 million dollars, but you have to use it for this and this and this’. Unless the State wants to say ‘well, we don’t want the funds’ and end all of this, you know? So, in that sort of way is that they kind of coerce.”
(WA_07, Economic Policy Adviser, Chamber of Commerce and Industry, 17 February 2017, Author’s Interview)

An example by which the Commonwealth pursued its own policy objectives in an area of States’ responsibility was the privatisation of a number of enterprises. During the 1980-90s the Productivity Commission (*a Federal level advisory agency*) identified the predominance of government trading enterprises in many areas of infrastructure provision, such as the water and electricity. An interviewee comments about this:

“The States were actually given incentive payments by the federal government to privatize those assets. And it took place unevenly, but in broad terms everyone got there, more commercialized, market ties approach (SA_53, Professor, UNISA, 22 March 2017, Author’s Interview).

Tax compensations from selling government business enterprises by the Labor Federal government effectively turned to incentive payments that encouraged States to privatise traditional public services such as State banks and insurance offices (AUS, 1997; OECD, 1998). Both States had Liberal governments at the time, facilitating the application of this national policy which aligned to their principles even if coming from the opposition.

From these examples emerges the case of the agency of South Australia in shifting away from NPM when the Federal government was Liberal, making it seem that in fact, Western Australia was more aligned to its Liberal Federal government, despite having a Labor government at the time. Moreover, the Defense contract mentioned earlier in South Australia, was negotiated and agreed in favour of SA whilst Labor was in government and the Federal government was Liberal. This aligns with the perception of one of the academics interviewed: “political colours of the States don’t matter that much” (CW_21, Associate Professor on Innovation, Federation Business School, 28 February 2017, Author’s Interview).

Federal government can influence approaches to innovation taken by the States and how these relate with economic development. Relationships with the Commonwealth are important because investment decisions flow from the federal government, and because it can also create new obligations to States government or even interfere with States priorities. Yet, effective advocacy for contracts may depend on other factors: “it’s the personal politics of who is being influential that’s important” (SA_53, Professor, UNISA, 22 March 2017, Author’s Interview), thus, it does not depend very much on the political party but more on personal relations. South Australia is closer to Canberra and has a natural advantage in creating and pursuing these personal relations beyond the official representatives that work in Canberra.

In this sense, *physical, temporal, and organisational distance* is another reason attributed to differentiated relations between the Federal and States governments:

“They [WA] are a just a long way away.. Four hours to fly to Perth, and it’s a three-hour time zone, so when I get to work in the morning, I meet those people getting up early to do some exercise, they are barely awake in WA, so distance is just a natural disconnect” (CW_22, Regional Australia Institute (Non-Profit), 01 March 2017, Author’s Interview)

South Australia on the other hand, is much closer to Canberra that WA, Adelaide can be reached under 2 hours by plane, and it is only half an hour behind Canberra’s time-zone; facilitating the connection between each level of government.

Moreover, in Western Australia, there is a perception by some interviewees that in addition to the physical distance, there's also organisational distance (Boschma, 2005) and political distance between the federal government and States government.

An example of the above and that leads into the next vertical coordination subsection, the regional level, frictions in WA emerge at both State and regional levels. The Commonwealth regionally based agencies (the Regional Development Australia Committees) aim to manage information problems, to manage resources and influence at the local level, yet:

“They don’t invest in organizational capability, they don’t work out how to give those guys a clean mandate, it’s still subject to political whims, they are not doing very well” (CW_22, Regional Australia Institute (Non-Profit), 01 March 2017, Author’s Interview)

These agencies are not strategically managed, limiting the potential to have a system responsive to ideas and freedom to innovate. Issues with the State government include contention, confusion, and the duplication of efforts in this space (WA_04 a Director, Dep. of Regional Development, 10 February 2017, Author’s Interview).

Relations between the Commonwealth and WA have been perceived fragile by some for a long time.

“We often complain we have too much government in WA, the Western Australians experience is that we’re a long way to the east of Australia and therefore they forget about us, which is why there is a bit of an independent movement in WA for quite a long time now” (WA_01, Professor, School of Agriculture and Environment, UWA, 07 February 2017, Author’s Interview)

The above is an example of how the relationship between WA and the federal government is considered strained and inefficiencies of coordination lead to efforts not being combined toward the same broad goals. This perception is in line with other’s perceptions (Menzies, 2014). Moreover, the line ‘they forget about us’ can indicate resentment which, coupled with the funding issues mentioned earlier, leads into the continuation of independent movements cited by the interviewee. Moreover, this exclusionary feeling is also underlined by WA’s the geographical location in respect to the world:

“We’ve got much more open borders if you like, as public service with Indonesia and Asian counterparts” [than with the rest of Australia] (WA_02, Commissioner, Public Service Commission, Dep. of the Premier & Cabinet, 09 February 2017, Author’s Interview)

Interviewees in Western Australia emphasised that their geographical position favoured close relations with countries such as Indonesia, Singapore, and Malaysia, sometimes even closer than with other Australian states. An easier foreign market access has led to a general export-led focus for their economic development, than South Australia, whose

closest market is New Zealand and the rest of Australia. It has sparked the public sector's innovative approach to sell education in public administration services for example, but also other innovative initiatives that help Australian companies do business in other countries (c.f. chapter 5).

Finally, at a **regional level**, Western Australia also presents issues with coordination. Two different sets of agencies function at this level, one funded by the State (Regional Development Commissions (RDCs)), the other, with Federal funding (Regional Development Australia Committees (RDACs)). In contrast with WA and the rest of Australia, South Australia has coordinated the three levels of government into only one set of regional agencies, the Regional Development Australia Boards (RDAs). These are funded by all three government scales: local, States, and federal government resources (Government of Australia, 2019). This is because they were co-founded by the States government and the local government. At the time when the federal government wanted to reform some structures it had locally dealing with regional arrangements in South Australia, it made sense to merge it with the structure that was already set up (SA_42, Strategic Adviser, Local Government Association of South Australia, 15 March 2017, Author's Interview).

For one, they were already being funded and run by the States and local government levels; and two, SA has very low population outside of Adelaide and if the three governments are not working together, it would be a waste of time (SA_42, Strategic Adviser, Local Government Association of South Australia, 15 March 2017, Author's Interview). Thus, it made sense for the Federal government to join efforts with the other two levels of government that were already working together. Yet, the question about how strategic or innovative regional agencies can be, whether coordinated or not between government scales has been questioned. In relation to South Australia, the RDAs role is perceived important, although too small to engage much with innovation (CW_23, a Research General Manager, PhD, Regional Australia Institute (Non-Profit), 02 March 2017, Author's Interview). Moreover, an academic interviewee perceives that:

“Regional agencies are often serving conservative populations and industry structures” (SA_53, Professor, UNISA, 22 March 2017, Author's Interview)

That is, that political interests and power dynamics also play a role in their performance.

Regarding WA, and particularly RDCs, while they have a coordination, facilitating role, the extent to which they can shape Western Australian regional trajectory is questioned by other actors in the States. For example, referring to a particular region, an interviewee claims:

“They create things that create jobs, they create opportunities, but I don't see it as being innovative in that it hasn't, in the last 20 years, changed the trajectory of that region, which is still absolutely based in its geography, um, and its fixed by large global processes about how the market is working in a much broader sense.” (WA_10, Senior Research Fellow, Dep., Planning and Geography, Curtin University, 22 February 2017, Author's Interview)

This academic' perception, matches that of others, who perceive that RDCs actions as not having a broad level of influence (WA_03, Co-Director/Professor, Centre for Regional Development, UWA, 9 February 2017, Author's Interview; WA_12, Chair of WA Regional Development Trust, Adviser to Minister of Regional Development, Adviser to UWA, 22 February 2017, Author's Interview). The other set of agencies, the RDACs, are perceived not to be very well connected to the State public sector level, that is, to the regional development strategies of the RDCs (CW_23, a Research General Manager, PhD, Regional Australia Institute (Non-Profit), 02 March 2017, Author's Interview). Reasons for this can include the difficulties in the interactions between State and Federal levels of government.

In general, researchers have made important critiques on lack of coordination between government levels in Australia, emphasising a proliferation of agencies, often funded by different tiers of government that have been transferred responsibilities but not funds (Beer *et al.*, 2005, p. 56), or responsibilities and funds, but no real decision-making power in the case of WA for example (also Paül and Haslam McKenzie, 2015, p. 385). Yet, South Australia shows an increased organisational strength by having only one set of agencies working at the regional level. The merits are that while they may not have much resources, they can more easily tap into sources of information and knowledge and be offered or involved in the former.

6.5 Conclusion: End of Journey - Rationale and evolution of public sector reforms

This chapter addressed the question about how processes within the public sector shape the conceptualisation and operationalisation of public sector innovation in a context of economic development and why by examining differences between Western Australia and South Australia in their innovation journeys: leadership and administration structures; coordination and interactions within the public sector and between levels of government; and transversally, the guiding rationales in public sector reform.

A public sector more conducive to PSI in South Australia was shaped by years of a shared vision around public sector reform processes and the importance of a clear leadership from the top, supported by widespread leadership within increasingly flattened organisational structures.

Thus, leadership has played an important role shaping PSI in South Australia in at least three connected ways: strong leadership from the top with strong commitment to a vision and key principles that has facilitated the spread of emerging leadership to different levels within organisations. Leadership can also be perceived by the construction and use of interpersonal networks within the public sector.

This Chapter contributed to the literature on leadership and innovation by showing that leadership has had a role beyond supporting collaborative processes (Ansell and Gash, 2012), when these processes are considered precursors to some innovations. Past research has asked public managers perspectives on which leadership qualities they consider important for innovation (Ricard *et al.*, 2017). This chapter showed *empirically* which types of leadership were important in their State's processes of innovation, thus adding to the literature about how to shift entire public systems toward having an increased innovative capacity (Ricard *et al.*, 2017).

Moreover, given the economic context of South Australia, while leadership and a consensus around the state project has not been enough for increased economic growth perhaps it has played a role in avoiding recession and to continuously pursue different avenues to find economic growth stability.

In Western Australia there has not been a marked leadership involving a shift to other types of public sector reform throughout the years, and this has limited the options for change of course in the State. One of the key aims of WA's public sector in the turn of the

century continued to be efficiency cuts. While WA's response to the Review by Geoff Gallop's Labor government at the time was to support a major initiative to 'cut government waste' and duplication, facilitate the achievement of strategic goals and core services delivery, and liberate funds to be invested in priority areas such as Health and Education (Government of Western Australia, 2005, p. 14) which was aligned with Labor ideals, the approach to public sector reform remained one that persisted on a path of attempting NPM inspired solutions to cost reduction without having sufficient collaboration and innovation mechanisms in place within the sector to realise this goal.

In South Australia on the other hand, leadership has spread to different formal and informal levels across the public sector. This is a result of sustained efforts by the same party and people in South Australia over a long time, guided by particular theoretical frameworks, and learning processes from NPM inspired policies, played a determinant; and having an inclusive approach to public sector reform, which has favoured the development of policies that seek to strengthen the public sector and its relationships within and with other actors in society (Ch7) by starting to break away from the path of new public management.

Yet, more than the continuation of the same party in government, the *abundance or scarcity of resources*, has influenced the extent to which each State has built on past efforts of public sector reform and how it has shaped the role of the public sector in the economy, and how this has shaped PSI approaches. Thus, in both States, the structure of the economy has influenced the extent to which each States has built on past efforts of public sector reform and how it has shaped the role of the public sector in the economy. In the case of South Australia, its constant struggle with an unstable economy has encouraged the State to emphasise the dimension of public sector cohesion along with interactions with other actors; taking public sector collaboration farther than Western Australia, as appreciated in the latter's lack of a continued policy over time for public sector collaboration.

Western Australia's internal public sector processes for innovation such as collaboration and widespread leadership, have been strongly informed by the State's economic success in the past, which is now shaping where efforts are addressed and the solutions that are pursued there. Western Australia has had particular success in experiencing sustained income from the resources sector for quite a few years. This has shaped the path the public sector is most likely to take in the future. A private sector that does very

well and that is well regulated has had high returns for the public sector. The public sector's own learning experience dictates that that is the best road to take (their context). Thus, experiential learning seems to have had an enormous weight in Western Australia policy design for the public sector. While being dependent on resources is risky, and programmes for the diversification of the economy are in place, experiential learning can have a very strong weight in decision making, unless a clear vision and leadership to convey the need to shift paths is sufficient to break away from that. Moreover, the influence that having a strong, almost mono-industrial sector economy has been limiting the need of the public sector to rise beyond regulation and distribution functions (to functions that involve questioning the status quo and that may lead to innovation, or such as facilitating the creation of a future vision for the States by diverse sets of actors in society, or promoting, challenging and reflecting about the role of the States, for example).

Regarding to the States' organisational characteristics, South Australia is focusing on the processes for public sector innovation; particularly encouraging structured processes to source and develop ideas together in the public sector; while Western Australia, is more fragmented and siloed. This has facilitated the State's capacity to learn, devise and execute plans for change, and strengthen their organisations. Western Australia seems more reactive to economic fluctuations. Its economic structure and success of its mineral resources have shaped the public sector's approach to one that seeks to reproduce and foster the private sector success.

Western Australia has a more vertically fragmented public sector than South Australia. In SA, regional level of operation and the local level are well coordinated. The Local Government Association of South Australia's early organizational capacity led to the formalisation of its role in the State. Through financing arrangements, it has been able to liberate resources to invest in research and development; and its performance has earned the ongoing trust of different government branches at the State level. The LGASA has played an important mediating role between the sectors, which has also facilitated the operation of only one set of regional agencies that bring together the three levels of government. A cooperative, working relationship between levels of government in SA, with mechanisms in place to prevent the abduction of local government day-to-day operative issues by political parties, and a financing authority that invests in its sector, create an enabling environment for innovation.

WA on the other hand, is still struggling to sort its relationship between levels of government: a perverse articulation with local government; disjointed regional government agencies and resentment with the Federal government. The capacity of local governments to act in concert faces difficulties from a systematic exclusion by central government which result into limited scope of cooperation in meeting local needs; limited access to extra sources of funding; and increased operational pressure from budget cuts. These limitations operate against having spaces and mechanisms in place to facilitate what could be innovative approaches to local government issues and the creation of opportunities by having a smooth relationship with the State government. At the regional level, the duplicity of agencies may influence the capacity to achieve innovation in developmental trajectories of Western Australia's regions.

Finally, WA's resentment against the Federal government is shaped by its spatio-temporal and political distance to the country's capital, influencing WA's export-led development and a market-based approach to PSI.

The following chapter examines how external relations influence public sector innovation in a context of economic development at the subnational level and why.

Chapter 7. External forces and their influence in PSI and economic development

7.1 Introduction

The aim of this chapter is to understand and explain how external forces outside the state influence public sector innovation in a context of economic development. This is done by examining first, how accelerating voter feedback is shaping and speeding up policy re-prioritisation in the public sector and the role of the media; and exploring key perceived tensions between electoral cycles, political accountability and risk. Combined, external forces to the public sector result into a tendency to prefer short-term PSI.

Within this political context of accelerated feedback, a factor of institutional thickness (State differences in intersectoral interactions) also has a role influencing PSI in the context of economic development at the regional level, and thus emerged as a second, external force conditioning this phenomenon.

This finding is supported by research that has quantitatively identified that both internal and external collaboration matter for PSI (European Commission, 2010a) and by collaboration literature for PSI (Sorensen and Torfing, 2012). How these inter-relations matters in a context of economic development and how it affects PSI is a nuanced contribution from this chapter to the literature.

Shaped by the levels of intersectoral interactions, the third section develops four key roles for a better analytical understanding of the ways through which the public sector relates to other sectors, particularly around information and knowledge exchanges. This serves the dual purpose of showing, first, a contrast in how each state gives shape to processes of interaction between sectors and thus in shapes spaces for political negotiations (Cerny 1990 in O'Neill, 1997). Second, the way the interpretation of these roles are shaping the relationship between PSI and ED.

Finally, this chapter also contributes to a nuanced extension of PSI and risk literature (Flemig *et al.*, 2016), particularly about contextual factors that enable or constrain public sector innovation.

7.2 Politics, elections, and public perception

7.2.1 Introduction

Tensions between politics, electoral cycle, public perception, and public sector innovation are increasingly at play in both states. Interviewees from both states signalled some aspects of electoral and political processes as a major impediment to PSI in general.

Forces such as the increasingly fast pace of the development and adoption of new information and communication technologies, have strengthened the role of short-term political cycles, and votes and potential votes in public sector innovation. An increasing need for good news and a positive public opinion is identified by interviewees as an important factor influencing PSI. In what sense, how this is happening, the reasons why and the consequences to PSI and economic development are explained in the following sections.

7.2.2 Acceleration of re-prioritisation

“Our State is on the verge of the most prosperous period in its history, and our public sector needs to be the most agile, responsive, innovative and creative in the nation if we are to maximise this opportunity for the benefit of all.” (SA_GRC, 2007, p. i)

Interviewees in both Western Australia and South Australia perceive that the increased frequency by which Ministers shift priorities in state government limit the ability of public sector practitioners to innovate (WA_08, Research Officer, Unions WA, 20 February 2017, Author’s Interviews; WA_01, Professor, School of Agriculture and Environment, UWA, 07 February 2017, Author’s Interview).

“Priorities can change weekly, or even daily, you never know what the latest hot political potato is, the latest budget preferences” (SA_54, General Manager, a Local Government, 22 March 2017, Author’s Interview).

A local government interviewee who spent time working in the State Government perceived that given limited resources to focus on a topic in a sustained way this affected the capacity of the public sector workforce to innovate (Idem). A lack of

grounding of priorities has affected the public sector's capacity to invest time on them and potentially find or create ways to address them differently.

Examples of these changes in priorities or directions include shifting from a focus on employment conditions to community partnerships as high unemployment became noticeable; or to the environment, once climate change and heating gained prominence in global discussions; to then, return to economic growth and energy production (SA_52, a former Director, Department of State Development, 22 March 2017, Author's Interview). Yet, experience referred by some interviewees show that changes in priorities often respond to factors other than local and global trends.

“Most policies come out of thin air, out of the brain of some politician, who makes decisions on the basis of voters' opinion.” (WA_01, Professor, School of Agriculture and Environment, UWA, 07 February 2017, Author's Interview)

As implied by this quote, these changes in priorities might be based in less formally assessed ideas. Reasons for this involve an increased sensitivity to the opinions and concerns of voters -signalled by using public opinion polls to inform decision making processes-, and the resulting acceleration of these on prioritisation processes.

Thus, resource constraints, political debates around priorities responding to local and global trends, and a drive for re-election, as per the increased and frequent attention on voters' opinions from polls, are perceived drivers of recurrent changes in priorities.

'Quicker leaps' (SA_52, a former Director, Department of State Development, 22 March 2017, Author's Interview) for re-prioritisation are also influenced by having to keep up with an increasingly fast changing context resulting from technological developments; strengthened global interconnections and their increased local impact; faster international trade; and, a heightened knowledge production and easier access to information and knowledge (Idem). Thus, earlier and wider access to demands and people's expectations are reinforced by progressively available technologies to voice, collect, share and shape those demands (e.g. social media, etc.) (See Nam, 2012; Criado *et al.*, 2013 for a review on the use of Social Media by governments for innovation).

“I think there's been a shift in the use of social media, ... in the last five years I've seen a shift that our decision-makers and our politicians are engaging quite proactively” (SA_57, Professor, Deputy Vice-Chancellor, UNISA, Member of EDB, 23 March 2017, Author's Interview).

This can be interpreted as a move towards greater accountability, transparency and scrutiny; making democracy work better by more closely connecting voters with political decision makers. As perceived by an interviewee of Western Australia, South Australia has shifted its

“[E]xperience in terms of democracy and the rights of industry and citizens to be able to influence and prioritize outcomes” (WA_17, CEO, Construction and Contractors Association of Western Australia Inc., 23 February 2017, Author's Interview)

Yet, this can also be interpreted as a shift to more transactional politics. ‘Everything is about being re-elected’ (WA_09, a Director, a Regional Development Commission, 22 February 2017, Author's Interview), as an interviewee explained with some disdain. Here, a possibly tokenistic approach by government in exchange for votes is highlighted: “There is an electorate misunderstanding, because the electorate is demanding it, politicians will do it” (WA_07, Economic Policy Adviser, Chamber of Commerce and Industry, 17 February 2017, Author's Interview). Thus, what is of relevance here is not that government is seemingly increasingly listening to its electorate, however, but that the pace to assess public sector performance is accelerating and consequently so are demands for change and therefore their acknowledgement by the public sector.

“My sense is that all of this [PSI speech/actions] is window dressing. ‘Does it bring about fundamental change?’ No. ‘Is it about the fundamental issue about the business of government and what government should be doing?’ No. Is it about ‘you have a really cute idea that we can then run around social media?’ Yes. ‘Have you got a really cute idea about how we can fix a small problem?’ Maybe. But some of the long-term fundamental issues are very slow to come about.” (SA_53, Professor, UNISA, 22 March 2017, Author's Interview)

Two issues emerge from the paragraphs above: the fragility of longer-term visions and the increasing role of transactional politics in economic development; and the role of the media, economic development indicators and voter perceptions for PSI.

Stability and electoral promises are at play if electoral agreements are continuously changing. The balance between voter satisfaction and the possibility of innovating for long-term economic wellbeing is increasingly difficult because of the acceleration of the assessment of public sector responsiveness by voters; the resulting demands for change; and the acknowledgement of these demands by the public sector. In this sense, the public sector seems to be rather quick in shifting to try to respond to their voter base and to increase future votes.

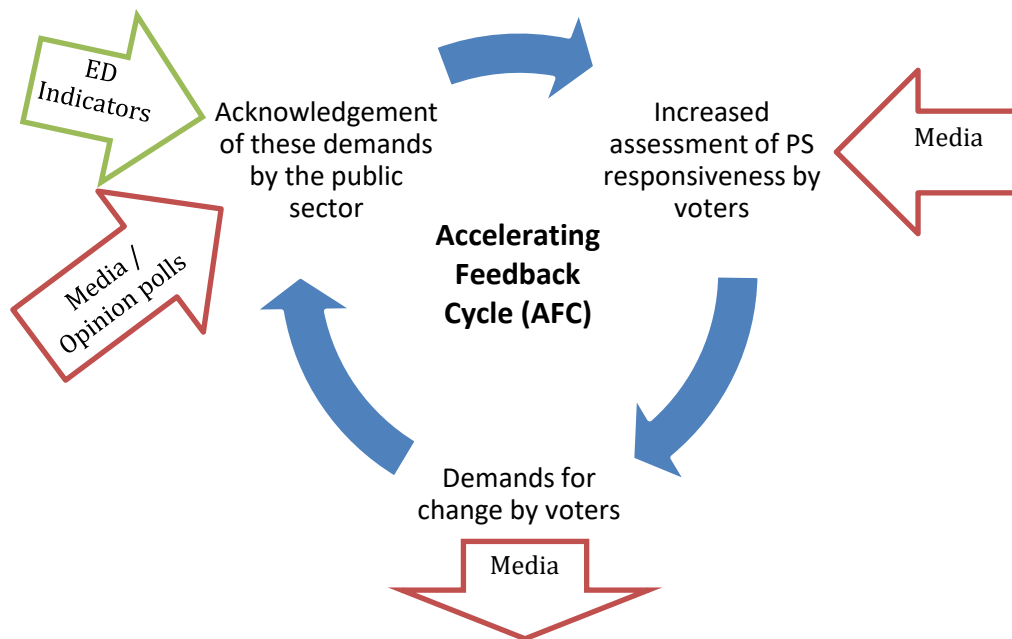


Figure 19: Acceleration of the feedback and implementation cycle for policy prioritisation

Source: Author

Here, interviewees were quick to point the major role of the media in PSI. This is in line with research by Galligan and Roberts (2008) who discuss the growing role of the media in democratic politics in Australia. While it has been recognised in the literature as both a precursor of PSI by pressuring for greater efficiency in the public sector (Korac *et al.*, 2017), and a deterrent for PSI given that failures are often highly publicised (Bekkers *et al.*, 2011a), an extra dimension for its role emerged from the emphasis on the shifting prioritisations mentioned in the interviews.

Particularly, the increased velocity by which media has influence in politics. This is expressed by the shorter cycle of news production and the speedy access to information and opinions by voters, the specialisation of news sources, the democratisation of the

news and opinions, and the increase of news; along with traditional and new actors getting involved through media advertisement and paid spaces.

Thus, media influence has had an impact in accelerating the feedback and implementation cycle for policy prioritisation. It is an expression of increasing pressure for the public sector to adapt to increasingly rapidly changing environment; which progressively more and more people have the possibility to observe and experience, and therefore assess, express and demand adequate and timely responses to their concerns.

In addition to the media, economic indicators such as monthly unemployment rates have recently begun to have a more immediate effect in the faster priority shifting process in the public sector. For example, the industry participation policy implemented in 2014 in South Australia is about how to drive economic development through procurement, from small projects to significant infrastructure ones. The State is taking this to a point where there is a minimum weighting that must be given to economic development (measured by the indicator mentioned above for example), within procurement processes (SA_58, a Director, Dep. Premier & Cabinet, 24 March 2017, Author's Interview). Cabinet debates involve discussions on how to balance the number of jobs that will be created versus another initiative that may be innovative and affordable, but that creates less jobs; or initiatives that promote local entrepreneurship versus, for example, those that attract foreign direct investment; and in this sense, the month's unemployment rate can be determinant (Idem). If the rate is going up, voters can be much more sensitive about jobs; but then, explains the interviewee, the question rises about how much the state is prepared to pay per job: 'AUD\$ 6,000?, AUD\$15,000?, AUD\$18,000?' Conversely, when the rate is steady, and the sense of urgency decreases, it can lead to investing more money in research; which may create less direct jobs but has the potential to create something that becomes more attractive in the future (Idem).

In sum, accelerating feedback forces, opinion polls and short-term economic indicators, cause a continuous shift in priorities of public policy efforts and limit, to a certain extent, the possibility of public sector practitioners to innovate.

Two aspects about this acceleration of the feedback cycle are important to mention. First, a change in priorities does not mean speedy changes in practical terms. Even if priorities shift quickly, effects may not be immediately visible.

There is still a perception of the public sector as a ‘slow moving institution beast’ and a need for it ‘to respond with greater agility to changing circumstances’ (SA_50, a Principal Consultant, Office for the Public Sector, Dep. Premier & Cabinet, 21 March 2017, Author's Interview).

Second, while frequent changes in government priorities may hamper medium to long term goals PSI, or the possibility to harness the sector’s knowledge and experience to innovate in external, visible issues, it does not mean the public sector innovates less. The need to show a responsive public sector encourages PSI to seize opportunities or address sudden threats. This can also be an opportunity to influence policy. If decision makers are willing to try new things in exchange of votes, it can also be an opening for external actors to pursue specific interests that could be met quickly by considering changes in economic indicators, the results of opinion polls, the media and finding windows of opportunity.

Finally, it also does not mean that transformative PSI is not possible. Political agreements may occur overnight that derive into long-term economic development effects, such as the hung-Parliament and the Royalties for Regions Act in Western Australia (see Chapter 5).

7.2.3 The dilemma of PSI, short-term commitments, and influencing political agenda

The consequences of this accelerating feedback cycle (AFC) for PSI are three-fold: the dilemma of innovating and risk aversion; short-term policy commitments; and uneven access to influence the political agenda. Voters increasingly demand for a more responsive and a more progressive public sector. PSI for increased responsiveness may involve taking some types of risks that can be emergent and uncertain, such as sudden shifts in political agreements, or in socio-economic patterns (Flemig *et al.*, 2016). The expectation that the public sector will always get the blame if anything goes wrong is a limiting tension perceived by an interviewee in South Australia:

“There’s an expectation of government that if it goes faster, it’s smarter and it’s more progressive, yet the government will always hold the blame if it goes wrong. So this risk paradigm is always ... there is an expectation that the government is safe hands. And when you go faster, you know what I mean, there’s that tension, I think, it’s a challenge.” (SA_58, a Director, Dep. Premier & Cabinet, 24 March 2017, Author’s Interview)

To learn from mistakes, voters' tolerance for failure is important for public sector innovation (Behn and Altshuler, 1997). Yet, public failures can raise concerns of accountability and can have a negative effect on political careers. Having to keep the top political figure in a safe standing with the electorate is important (SA_53, Professor, UNISA, 22 March 2017, Author's Interview). Some interviewees go as far as to claim that the very nature of PSI is 'keeping the Minister out of problems' (WA_35, Professor, School of Agricultural and Resource Economics, UWA, 08 March 2017, Author's Interview). Moreover, feared failure and the risk of losing votes or losing face is increasingly shaping political will to innovate in both SA and WA. "The fear of failure and the political fallout from it is what holds people back" (SA_60, a Manager, Department of Planning, Transport and Infrastructure, 27 March 2017, Author's Interview).

As a result of the pervasive concern about the media by the public sector, an increased risk aversion is perceived in Western Australia, to anything that the media might criticize; moreover, claims the same interviewee, the current political dynamic is about managing alleged crises and controlling media narratives (WA_07, Economic Policy Adviser, Chamber of Commerce and Industry, 17 February 2017, Author's Interview). While attempts to influence content in the media and to counteract similar efforts by opponents during electoral campaigns and during specific political conflicts is an important growing characteristic in Australian politics (Tiffen, 2008), the concern about media is more permanent now, rather than contingent to specific issues; and, as expected, it has an effect on PSI .

The difficulty of predicting threats of higher political costs or political accountability can play against PSI (Flemig *et al.*, 2016). A nuanced view of this relates to an important issue raised by interviewees, about how visible an innovative initiative taken by the public sector is to the electorate. In this sense, interviewees referenced a recognised link in PSI literature between media scrutiny, the electorate, and PSI aversion:

"I've heard that a Minister from a recently elected government said to an agency: 'I don't want any bad news'. Now, as soon as you say that, innovation is out of the window, everyone just goes locked down, follows the process, and goes conservative." (WA_09, a Director, a Regional Development Commission, 22 February 2017, Author's Interview)

Given dispositions against initiatives that may have a component of political cost, this approach from the top discourages innovation. Not only does it prevent learning from failure, but also the lack of political support also severely limits public sector practitioners to explore other ways for approaching issues, for they find themselves in a context of dissuasion that restricts access to resources and interactions with other sectors for this purpose.

Moreover, the need to have good news and a positive public opinion (SA_57, Professor, Deputy Vice-Chancellor, UNISA, EDB, 23 March 2017, Author's Interview) can also be an obstacle for gaining political support to allow for exploratory conversations with other sectors (SA_46, a Director, Department of State Development, 17 March 2017, Author's Interview; SA_52, a former Director, Department of State Development, 22 March 2017, Author's Interview); and can encourage a fear from people in senior level contracts to be removed if they are 'too out there' (SA_54, General Manager, a Local Government, 22 March 2017, Author's Interview).

Finally, in Western Australia, a firm representative perceives that the window of opportunity to innovate is when newly elected in power, for when the term is over, government is associated with status quo, and if the innovation fails, they take the blame (WA_07, Economic Policy Adviser, Chamber of Commerce and Industry, 17 February 2017, Author's Interview). A successful innovation at the end of the term though, may not be enough to win elections either, as insinuated by Bekkers *et al.* (2011a) in the sense that it could lead to changes in electoral voting. An example is the Tesla Battery project for the 2017 elections where Labor lost its leadership in South Australia.

This was an innovative government initiative that attracted numerous media headings given the characteristics of the project, how it came about (via a Twitter conversation with Elon Musk, CEO of Tesla Company), and for its completion ahead of time. Derived from this success, "Cheap Power" became one of the four key axes on the electoral campaign for Labor (South Australian Labor, 2018). Yet, overridden by other factors such as the prominence of a minority party 'SA Best' and specific issues against the Labor party, such as the release of the 'Oakden report' into abuses in a mental health state run facility (Manwaring, 2018) and the unpopular decision to sell the Daw Park Repatriation hospital site (Parliamentary Library, 2018a), the opposition still got elected. While the innovation did not guarantee a favourable election result for Labor, media campaigns led by business coalitions (SA_61, a Director, Business SA, 27 March 2017,

Author's Interview), did have an important role either by pressuring for a solution to electricity problems in South Australia; or by providing a serendipitous platform for the incumbent government to come up with an innovative solution to try to guarantee the necessary votes.

Thus, in spite all the above there seems to be leeway for those innovations that are less publicly visible, or if visible, that may bring in new votes, as per the following the public sector's preference for short term commitments.

An increased politicisation and the preference for short term commitments by those leading the public sector, compared to 30-40 years ago (SA_53, Professor, UNISA, 22 March 2017, Author's Interview) is another consequence for PSI from this Accelerating Feedback Cycle. For example, in South Australia, referring to the state level, a local government practitioner stressed how for a Minister an innovative initiative would have to yield an outcome within the government cycle, or else resources would be better invested in 'something that will get more votes' (SA_54, General Manager, a Local Government, 22 March 2017, Author's Interview). This is echoed by an academic from Western Australia, who perceives that elected officials "do not think beyond three years, and they certainly do not commit beyond three years" (WA_01, Professor, School of Agriculture and Environment, UWA, 07 February 2017, Author's Interview). In this sense, interviewees expressed great challenges for PSI as initiatives are often limited within the electoral cycle of three years, or maximum to the length of two terms (WA_01, Professor, School of Agriculture and Environment, UWA, 07 February 2017, Author's Interview; WA_16, a Research Officer, Dep. of Finance, 23 February 2017, Author's Interview; SA_45, a Manager, Office for the Public Sector, Dep. Premier & Cabinet, 16 March 2017, Author's Interview; SA_46, a Director, Department of State Development, 17 March 2017, Author's Interview).

This preference for the short term can be analysed in two ways. First, from former quotes emerge a question about the policy maker's alleged over sensitivity to voter polls is underlying the discussion here. It reflects a perception of a public sector that is focused on short-term goals and whose potentially innovative actions respond to the topic of the day to satisfy and gain new voters. Yet, the predisposition to innovate to get more votes, is a way by which the risk averseness is broken; that is, how risk averse public sectors are, becomes nuanced and a distinction has to be made about how innovations with a short-term impact are received with less aversion as those which

would take longer to yield results. Resources are finite, can limit effectively the possibility of organised and agreed medium and long term transformative innovative actions.

Innovations with short term impact are dependent on the focus of the political agenda of the government of the day, for the loss of independence among public servants in Australia contribute that innovations have the characteristic of being somewhat ephemeral, becoming more widely accepted but also “comes and goes, breezes in and out” (SA_53, Professor, UNISA, 22 March 2017, Author’s Interview). That is, projects or initiatives that are not rooted in a system for a wider structural change nor institutionalised to persist a change of government but quick fixes that may or not become permanent.

Moreover, innovative programmes with potential may be defunded without having had enough time to have an effect or “to take seed. There is no room for ‘patient policy’; we’re constantly in that cycle” claims the director of Director, Strategic Economics and Policy Coordination, Department of State Development in South Australia (SA_46, a Director, Department of State Development, 17 March 2017, Author’s Interview), as some issues take more than four, five years to see any marked difference.

This is partially driven by the political cycles and “the structure of the political arrangements” (Idem). That is, the interviewee argued that it is the adversarial nature of the electoral and parliamentary processes that forces and encourages short-term partisan thinking, rather than long term bi-partisan thinking. Yet, three or four decades ago Australia had basically the same electoral and parliamentary process. Rather, what has changed, and is encouraging short termism, is the accelerated and increased feedback received by the public sector. Structural, policy-based reforms take time to make an impact, beyond an election cycle. It would take leadership to manage the confusion and disorder of a structural reform because actors ‘get upset’, claimed another interviewee, particularly during the election year, as the risk of de-stabilising government is not an option (SA_44, a Manager, Department of State Development, 16 March 2017, Author’s Interview). As expressed by a different interviewee from the Department of State Development, political leadership is necessary to manage perceptions and this seems to be lacking. In terms of PSI, this leads to incrementalism rather than systemic change (Idem).

The third consequence of the AFC is the uneven access to influence the political agenda. This includes the struggle of “being heard by decision makers” and “the personal politics of who is being influential” (SA_53, Professor, UNISA, 22 March 2017, Author’s Interview). In the first case, a Senior Industrial Officer of the Public Service Association, for example, claimed that “the Unions get consulted about the implementation not about the idea” (SA_55, Senior Industrial Officer, Public Service Association, 23 March 2017, Author’s Interview); and academics point out that the willingness to listen depends on political whim and direction (WA_03, Co-Director/Professor, Centre for Regional Development, UWA, 9 February 2017, Author’s Interview); and on the orthodoxy over who has the solutions i.e. advisors (who measure the temperature of the electorate) and the Treasury Department (who provide or withdraw the funds) (SA_53, Professor, UNISA, 22 March 2017, Author’s Interview).

For the latter, personal politics, a local government public service practitioner explained that community divisions may influence at a personal level the actions of elected members of a local council, preventing innovative initiatives (SA_54, General Manager, a Local Government, 22 March 2017, Author’s Interview). This relates to another perception of innovative strategies being hijacked by political agendas (SA_56, a Director, Investment Attraction South Australia, 23 March 2017, Author’s Interview).

Yet, in the case of South Australia, business associations had a different perception about influencing political agenda. Some interviewees have explained how they can use media to influence decision making to align with the interests of their organisations’ membership.

“The role of the media in influencing the political agenda is massive, it is absolutely massive. And this is one of the reasons why we get, of any other industry association in the state, by far the most media exposure, and because of that, the government listens to us, because the media listens to us. So, we are in the middle of this vortex that keeps spinning around, which is a good position to be at. We are constantly communicating through the media to government, but also working with government at the same time. We’re going to be more likely to get an effective outcome than if we aren’t engaged with the media; because at the end of it, it comes down to votes, it comes down to winning; and where does the constituency get most of its information? Through the media.” (SA_61, a Director, Business SA, 27 March 2017, Author’s Interview)

This is a particularly telling quote that shows the important role of the media on public opinion in South Australia, and how sensitive politicians are to that public opinion. It also shows the influence that Business Associations can have on governments in South Australia. In contrast with Western Australia (see quote below) this is probably a result of the economic situation of the State.

In Western Australia, influence by business associations is not as straight forward:

“We advocate but it’s hard to get on government’s radar, too many things to deal with. Minister’s primary source of advice is his Department, who consider themselves subject experts and do not consult that much necessarily” (WA_07, Economic Policy Adviser, Chamber of Commerce and Industry, 17 February 2017, Author’s Interview)

A clear perception emerges from the interviews on how the fear of losing votes and the difficulties of influencing political agenda can make the public sector conservative in terms of taking risks for the implementation of innovative ideas; or it incentivises shifting risk onto others.

Thus, voters act as a force that both pushes in favour and against PSI. Moreover, the increased speed, volume and variety of demands as shown in the feedback cycle, makes this an increasingly complex reality. If not through media, other ways through which the public sector relates with other sectors such as the academia or businesses shine light onto the opportunities that other agents tentatively hold to shape public policy, including innovative public policy. This is the topic for the following section.

7.3 Intersectoral interactions

7.3.1 Introduction

Innovation literature on firms and knowledge spillovers show that interaction with external agents (through trade, labour mobility, foreign direct investment, networks’ memberships, or informal groups) may be conducive to innovation as sources of new ideas (Fitjar and Rodriguez-Pose 2011) and to the acquisition of new knowledge and improvement of organisational learning capabilities (Amin 1999).

Differences in the nature of interactions can facilitate or hinder: information and knowledge exchanges between sectors and co-production (Sorensen and Torfing, 2011); the possibility of working together and shaping some of the forms of PSI and their implementation (Sorensen and Torfing, 2011); and the rise of a common agenda (Zukauskaite *et al.*, 2017) to guide PSI efforts. In addition to voter perceptions, short term politics, and media, other actors can have a direct influence on PSI. By contrasting perceptions about the quality of interactions between the public sector and other sectors such as firms and universities in WA and SA, this section argues that the emerging differences result from differences in the institutional thickness (Amin and Thrift, 1994) of each region, particularly dimension of interactions (Zukauskaite *et al.*, 2017) makes a difference for PSI.

7.3.2 Multi-actor interactions

Multi-actor entities involving several sectors, and in general relations between the public sector and businesses and the public sector with universities in South Australia and Western Australia are discussed below.

State Government Boards and Committees are part of both South Australia and Western Australia's governance framework (trading boards, stewardship boards, regulatory boards, etc.) and their roles are to provide: oversight of government functions, informing government policy or strategy in WA (Premier's Circular, 2017); and leadership, independent decision making, or specialist advice to government for the delivery of services in SA (Premier and Cabinet Circular, 2014). By June 2018, SA had 192, and WA 292 entities, which is proportional to their population. These numbers have been decreasing over time to be substituted by other forms of engagement that allow a direct connection with different groups in society in the case of South Australia (Premier and Cabinet Circular, 2014); in the case of Western Australia, the reduction is about saving costs (Premier's Circular, 2017).

GB&Cs were rarely mentioned by interviewees, except for the Economic Development Board (EDB) in South Australia, which was often brought up as an example of a relevant actor in the state's economic development direction setting. For over 15 years the South Australia government developed a practice of integrating community and business leaders into decision making processes with high government officials by connecting an Advisory Board with a Cabinet Committee. Set up by government between 2002-2018 to

gain strategic advice and insight mostly from business leaders, but also from community leaders, and academics; the EDB was an independent, apolitical, pluri-actor body that also championed processes for SA's competitiveness and led strategic projects teams (EDB, 2018). Members' expertise included a range of areas including: industry development; resources and energy; banking and finance; public policy; regional development; higher education; agribusiness; science, innovation and commercialisation; urban renewal (EDB, 2018). EDB functions led to their chair and deputy chair also in the Economic Development Cabinet Committee (EDCC), whose membership includes the State Premier and Ministers who ran relevant Departments (Government of South Australia, 2017a).

This is an indicator of a tighter integration between business and community sectors in South Australia than in Western Australia where at least for the past two decades, no such Board has been established.

7.3.3 Businesses

In the case of businesses, the private sector is perceived by public sector interviewees to be 'really bad at engaging with government' in Western Australia (WA_04 a Director, Dep. of Regional Development, 10 February 2017, Author's Interview). Yet, firm representatives say 'we advocate hard to get on government's radar, but the Minister's primary source of advice is his Department, who consider themselves subject experts and do not consult that much necessarily (WA_07, Economic Policy Adviser, Chamber of Commerce and Industry, 17 February 2017, Author's Interview).

In contrast, in South Australia firm representatives perceive a public sector that is generally open to the inputs from the Chamber, although with some exceptions, which are perceived to arise from personality differences, especially at the political level (SA_61, a Director, Business SA, 27 March 2017, Author's Interview).

In WA, a negative experience of the public sector engaging in failed business dealings is one of the reasons often cited by interviewees to explain this disconnection between sectors (WA_04 a Director, Dep. of Regional Development, 10 February 2017, Author's Interview; WA_19, an Executive Director, Dep. Premier & Cabinet, 24 February 2017, Author's Interview). By the end of the 1980s an infamous political scandal labelled *WA Inc.* led to time in jail for Labor Premier Brian Burke (1983-1988) for corruption in office, and Liberal Premier, Ray O'Connor (1982-1983) and to a loss of almost AUD\$ 1

billion from the public treasury (Johnson, 2006). Attempting to diversify the base of WA's economy (i.e. away from resources extraction), close partnerships were formed with a locally based growth coalition through Government Corporations; and this led to rising conflicts of interest with the State Government resulting from "a lack of arms' length separation between those who donated and those who benefited from government contracts" (Idem, p. 243). This mistrust between sectors and perceptions about its legitimacy are still present in light of claims of a 'silent coup' by land developers Satterley Estate Development in WA (Burrell, 2016).

The *WA Inc.* scandal predisposed the public sector to be extra careful about how it engages and to what extent, with other sectors in society. Successive governments have been highly conservative in the extent to which they will engage with the private sector as "the ghost of WA Inc. is still haunting the corridors" (WA_19, an Executive Director, Dep. Premier & Cabinet, 24 February 2017, Author's Interview). The distance taken is perceived to have led to an uneven relationship between the sectors in WA:

"[T]he private sector largely has a strong upper hand dealing with the public sector in negotiating terms of contracts. We just don't have the experience, and we're very nervous about engaging in public private partnerships, or value capture or all these sorts of notions." (WA_04 a Director, Dep. of Regional Development, 10 February 2017, Author's Interview)

This perception is echoed by Johnson (2006), who found that the public partner has to balance the often conflicting maximisation of profit with long-term community interest; and simultaneously handle electoral pressures and agent competency in Western Australia (Idem, p. 246). Moreover, research shows that often the hiring or contracting part has more to lose, that through public-private partnerships risk is often inefficiently allocated, leading to negative outcomes, such as higher costs or severe time delays (Flemig *et al.*, 2016, pp. 426-427). Thus, understanding how to engage with other sectors for mutual benefit and similar risk-taking in a transparent way is significant, particularly for the Western Australian public sector.

An important caveat in Western Australia is the public sector's relationship, throughout the years, with the traditional economy sector, the resources industry (Johnson, 2006, p. 196). The public sector shows a bias to support this business and take key industry policy advice from them. This bias, based in economic dependence, has prevented a

more balanced approach to naturally interacting with the private sector. So far this has limited the possibilities to explore more collaborative ways of interaction rather than relying on those that are just market-based; and developing a shared vision with wider remits of the private sector, rather than with just with the large, traditional companies (i.e. Mining companies).

This intersectoral discoordination and lack of shared vision is a result of not having had the economic pressure for such social agreement for a long time. Nowadays, the approach is changing in WA, the slow-down of the economic boom period has led to exploring possibilities in this realm again (WA_04 a Director, Dep. of Regional Development, 10 February 2017, Author's Interview). This is recognised by private sector interviewees as well (WA_07, Economic Policy Adviser, Chamber of Commerce and Industry, 17 February 2017, Author's Interview).

For example, the Western Australia Innovation Strategy set up a Board involving private and public sector people to manage the portfolio of investment in innovations for the public sector (WA_06, Chief Information Officer for State Development, Transport, Innovation, Dep. Premier & Cabinet, 16 February 2017, Author's Interview - February 2017).

Years of disconnection between business and public sectors in WA contrast sharply with the case of South Australia. In SA, it seems that their history of engaging with a variety of representatives of the private sector has allowed the public sector to develop tools for an increased trust and more effective engagement with the broader private sector. The relationship with business leaders has been strong and ongoing since at least mid-1990s. For example, the Adelaide 2020 Vision initiative:

“This was a group of people, I was one of them, we went to the then premier and said: ‘Mister Premier, where is the future for South Australia? What is it that you would like to do that we, the private sector can fit into the public sector so that we can work together to make something happen?’ ” (SA_63, Longstanding and Influential Business Owner, Real State Developer, UNISA Advisory Committee, 28 March 2017, Author's Interview).

These interactions have continued throughout time and are both formal (e.g. EDB Board) and informal (‘our Premier has a lot of direct relationships with major employers’, e.g. Santos PhP, a mining company, or Thomas Foods (SA_43, an Executive

Director; and SA_67, Advisor, Dep. Premier & Cabinet, 16 March 2017, Author's Interview). In particular, the EDB had business leaders who were members of the Board, and the ten economic priorities leading their work were also drafted with the collaboration of various sectors, including businesses (Idem). Moreover, South Australia is perceived to have more public-private partnerships than Western Australia (SA_60, a Manager, Department of Planning, Transport and Infrastructure, 27 March 2017, Author's Interview). Yet, there are still perceptions of a prescriptive approach to certain aspects of engagement with the private sector, for example, by pre-determining how business should use specific grants given by the state, as if 'we knew best' (SA_54, General Manager, a Local Government, 22 March 2017, Author's Interview).

7.3.4 Universities

"I think their [South Australia] University sector is much more tied into their business and industry sectors, I think South Australia has very limited economic opportunity and is quite innovative in realizing their limited opportunity. Whereas Western Australia has massive opportunities if you include mining, we are quite lazy if you stripped out the mining (WA_04 a Director, Dep. of Regional Development, 10 February 2017, Author's Interview)

Referring to the public sector's relationship with universities, the perspective of the WA public sector practitioner above is that South Australia has a longer history of University and private sector engagement than WA: Universities are more involved in SA and are a voice to listen to; this helps the public sector make better informed decisions to lead economic activity (WA_04 a Director, Dep. of Regional Development, 10 February 2017, Author's Interview). They perceive that the private sector has a cognitive advantage over the public sector and that the private sector sets the economic agenda and the public sector develops policy to support what is already happening. Obtaining external input from research actors, such as think tanks and universities, therefore, becomes important for this interviewee.

"I think that we have to get better at engaging with the private sector... we have to get smarter and better. From an innovation perspective we have to get on equal footing with the private sector." (Idem)

Academics also perceived limited engagement from the public sector with universities in WA. Speaking about a specific project about the future of Western Australia farms (*Future Farms 2050* project), a Professor laments the lack of engagement from the public sector in WA:

“We have better engagement nationally than we do in WA; and we have better engagement internationally than we do in Australia” (WA_01, Professor, School of Agriculture and Environment, UWA, 07 February 2017, Author’s Interview).

A lack of communication and cooperation between the public sector and Universities, perceived by the Professor is seconded by the previous interviewee who perceived that Universities have a role to play in relation to the public sector. In WA, however, that role is not well understood within Universities (too focused on research for research sake rather than policy oriented), nor well understood within government (which is mostly interested in impact and specific outcomes) (WA_04 a Director, Dep. of Regional Development, 10 February 2017, Author’s Interview). Moreover, claims an interviewee, Universities do not have enough political leverage to be heard by government:

“Universities tend to come with poorly described outcomes, slightly embarrassed by them, or overly passionate about the outcomes and assess it as the only answer in the universe. None of those play well in government. Universities do not have a standing to challenge government. And so, even if they were ridiculously passionate about their silly idea, they don’t have the standing to prosecute that through a political process” (Idem)

This interviewee describes how unimportant universities can be perceived by government and emphasises their limited influence in decision making processes. Another interviewee, the Director of the Bankwest Curtin Economics Centre at Curtin Business School at Curtin University of Western Australia, emphasised that their role as independent economic and social research organisation, is to provide ‘objective evidence’ and deliver that evidence in a form which assists those who are crafting policy (WA_11, Director/Professor, Bankwest Curtin Economics Centre, Curtin University, 22 February 2017, Author's Interview). Thus, while they aim to influence policy by having presence in a few advisory boards and organising events with policy makers, their narrative attempts to explain that theirs is a non-political influence. Similarly, the Director from the Centre for Regional Development at the University of Western

Australia, signalled that the public sector listening or not depends on the ‘political whim and direction of government’ and that it is up to the research centre to keep government abreast of their work and to ensure that government understands their value, yet, they perceive they cannot influence government, only highlight issues (WA_03, Co-Director/Professor, Centre for Regional Development, UWA, 9 February 2017, Author’s Interview).

In general, the picture drawn here in WA is one of a closed public sector, that may be partially open to receive what could be considered “factual evidence” if universities or research centres actively reach out to do that. Thus, the weight of the responsibility to engage is in the research centres, and the capacity to engage is limited by public sector constraints on the type of relationship they are willing to hold on the one hand, and in a misalignment of expectations by each of the actors on the other hand. In the case of South Australia, some interviewees claim a lack of influence in policy making by universities (SA_53, Professor, UNISA, 22 March 2017, Author’s Interview), yet, in comparison to Western Australia, South Australia has a different approach in engaging Universities, one that, while limited, seeks and is open to their advice in shaping policy (e.g. though the EDB).

7.3.5 Roles played by the public sector

While political forces have an important role to play in the PSI/ED relationship in both States, to affront them the public sector adopts different formal and informal channels and mechanisms which are shaped in different ways depending on the institutional arrangements of the region. Differences between South Australia and Western Australia are visible through the roles that the public sector adopts to relate with diverse sectors across the state and beyond to access knowledge and information; or to come up with new ideas. These are conducive to particular organisational structures that shape PSI and its relationship with ED. These roles are performed through processes that contrast in narrow and broad scopes between the two states, and that lead to PSI in a diversity of ways and with different opportunities and challenges. Thus, to aid the analytical understanding and explaining the differences by which each state’s public sector relates to other sectors, four different roles adopted by the public sector were identified for this section: *receptive, enabling, interactive and strategic* (See **Table 17**). These can formally and informally orient and shape interactions in relation to sourcing information and knowledge exchanges and collaboration for PSI in a context of economic development.

Role for the public sector	Direction of the relationship (information and knowledge flows for PSI in ED)	
Receptive	<-	Public sector collects knowledge and is open to listen.
Enabling	->	Public sector connects actors to facilitate PSI; provides platforms, spaces for inter-sectoral exchanges; provides knowledge, or innovations to other actors; hires other sector actors.
Interactive	-> <-	Inter-change of knowledge with other actors, involves learning and may involve constructing new solutions together.
Strategic	<-> <->	It involves all the above and has the specific focus of devising and advising about the major guidelines for the future economic route and directions for the state based on a jointly developed future vision.

Table 17: Public sector roles in knowledge exchange and collaboration
Source: Author

In a *receptive role*, the public sector intentionally collects or receives information and ideas related to economic development from other sectors in society through formal and informal channels or mechanisms that are established to facilitate access from other sectors to the guidance of public sector initiatives.

For example, South Australia adopts a wider receptive role than Western Australia through receptive spaces, such as their ‘YourSay’ platform and the ‘Unsolicited Proposals Office’. The ‘YourSay’ consultation hub in SA, aims to influence government decisions by collecting information and opinions from the general population:

“We use it to try and invite ideas around certain issues; Government is being much more open for that participatory democracy, inviting ideas, open to that feedback. This is an improvement from where it was.” (SA_58, a Director, Dep. Premier & Cabinet, 24 March 2017, Author's Interview)

Any department that wants to promote a major initiative or undertake a reform, is expected to put the information on *YourSay*. This is supported by a network of communication tools via main social media channels. The expectation was to continue moving away from ‘announce and defend’ to ‘debate and decide’ engagement with voters. In this role, government is still the decision maker in many of the instances, but it first engages and understands the issue and explore the options for addressing it

differently (Idem). This is part of the 'Better Together' Programme started in 2013 which is founded on a political mandate to encourage the public sector to engage with the community.

Western Australia on the other hand, had a leading Citizen Engagement Strategy in the early 2000s which by 2006 stopped being priority. Commitment had diminished and continued to be pushed aside at least until the end of 2017 (Service Priority Review, 2017, p. 34).

The 'Unsolicited Proposals' scheme offers the opportunity for community actors to present proposals that have not been requested formally. While both States share the initiative, they have very different levels of receptiveness. Western Australia limits the scope of the proposals to land development ideas. In contrast, South Australia is open to a broader sphere of economic development ideas, which include proposals on delivery of services to or on behalf of government; government support for a specific project; the use of government assets; or land development as well.

"It is a way of government saying we are open for business, we're open for ideas."
(SA_58, a Director, Dep. Premier & Cabinet, 24 March 2017, Author's Interview)

An example from Western Australia shows the limits to their public sector's receptive role. The State Training Board in Western Australia is meant to interact with industry on skilling and workforce development; but the consensus is, mentions an interviewee, that it is not that effective, and that this is more of a 'box ticking exercise' for consulting industry as opposed to really engaging with them (WA_07, Economic Policy Adviser, Chamber of Commerce and Industry, 17 February 2017, Author's Interview). While both States have institutionalised these roles, South Australia has more spaces through which to exercise its 'receptiveness' and in a broader remit of topics than Western Australia.

An *enabling role* for the public sector is one where it seeks to prompt innovative action by enabling or brokering connections or relationships (including market ones such as hiring from other sectors) between public sector agencies and other actors in society that may lead to innovative projects or approaches. This may involve providing formal platforms and informal connections. The role can include improving processes for other sectors if it involves PSI.

A key initiative running through Western Australia's 2016-2020 ICT Strategy in the form of an 'Innovation Hub' for the public sector would have been an example of this enabling role (it did not materialise). The idea was to provide an online platform where agencies could share their innovation needs and other actors could answer the call. Another example in Western Australia is the use of informal networks of a person in a strategic engagement post of Chief Information Officer from the Department of the Premier & Cabinet. Their role involved speaking to actors from different sectors and areas to identify opportunities for collaboration. For example, connecting agencies with relevant innovators, such as a software application to warn swimmers in real time about possible shark attacks.

In the case of South Australia, an example of this role is the formal effort made by the public sector to create platforms that facilitate relationships between actors and sectors within a community for place making (SA_46, a Director, Department of State Development, 17 March 2017, Author's Interview). Or, a local government identifying an opportunity for sustainable energy for lighting the streets and then handing over the development of the idea to the community while offering support along the way (SA_54, General Manager, a Local Government, 22 March 2017, Author's Interview). That is, bridging and brokering relationships by previously identifying opportunities and deciding to facilitate them, the public sector is creating channels for receiving inputs, offering spaces to discuss ideas, and helping to develop with the available resources them.

Finally, another form of adopting an enabling role is by purposely hiring actors from other sectors, i.e. former external consultants, for their experience and knowledge to enable an extension of the capacities of the public sector that may lead to an institutional learning process. Yet, an interviewee explained how decisions were more likely to be second guessed and it was more difficult that visions and ideas gained traction once they were hired as a public sector practitioner, in contrast to being an external, trusted advisor (SA_56, a Director, Investment Attraction South Australia, 23 March 2017, Author's Interview). Thus, the enabling role may fall short, for the new employee cannot act as if they were in their own institutional home, finding themselves limited by the public sector culture and having to adapt their behaviour.

Yet, also by not letting go entirely of their learned ways, i.e. identifying networks of like-minded people with whom they can work (Idem), they also slowly begin to bring change into the public sector.

Some problems may rise when an opportunity cannot wait for public sector's due process and therefore, it gets missed. The challenge here is having the structure to guide and support these interactions, otherwise it may come down to personal politics whether the opportunity exists to meet with State representatives.

An *interactive role* is one where the public sector is inter-exchanging knowledge or innovations and actively discussing potential ideas with other sectors. Further, it may involve co-designing, co-creating or co-implementing projects with other sectors. An *interactive role* involves a transparent, simultaneous exchange of ideas and knowledge to produce new ideas and solutions with other sectors around goals such as economic development. In a structured setting, these interactions potentiate learning, maximizing opportunities and disruption.

In the case of South Australia, since 2012 it has had a formal, organisational structure set up (the '90-Day Change Project' that through practice, refinement, evaluation, developed into a 'Public Sector Innovation Lab' in 2018) supporting intersectoral knowledge exchanges to solve specific but complex long-standing issues (including economic development ones) by seizing on the diversity of actors and different knowledge bases, experiences and thinking styles.

By implementing an innovative methodology that includes pulling together groups across government and stakeholders external to government to re-tackle challenges in 90 days, 75 individual projects were implemented by early 2017, after 5.5 years running (DP&C, 2016, p. 6). Moreover, in the spirit of improving collaboration within the public sector as well, the success of the projects are also evaluated by public sector participants, particularly around the impact on the operationalisation of the values held by the Public Sector Commission: Service, Professionalism, Trust, Respect, Collaboration & Engagement, Honesty & Integrity, Courage & Tenacity, Sustainability. Its success has been recognized in other States of Australia, by the national government, and governments abroad.

The director of the project claimed that this methodology and engagement with other actors/sectors is having a deeper impact in the way people go about thinking issues: “It is reframing or rewiring thinking processes, and this has proved invaluable” (SA_45, a Manager, Office for the Public Sector, Dep. Premier & Cabinet, 16 March 2017, Author’s Interview). This is important for it reflects a cultural shift happening in the sector as a result of this very specific policy initiative.

An example from Western Australia, which is a limited initiative inspired on South Australia’s similar programme, is the 30-Day Regulatory Mapping projects, running from 2016, yet by Jan 2019 it had only completed four projects. Here the public sector actively discusses processes with industries to identify and reduce red-tape, or regulatory obstacles affecting their efficiency; they are ‘targeted to make a fast and meaningful difference for businesses in key industry sectors and the broader community’ (DT, 2018).

Issues with this role for the public sector have to do with probity and data protection when engaging with other sectors, which can limit the interactions to a level that is not fruitful for PSI. Moreover, the costs to sustain these types of interactions can be high, therefore excluding some lesser funded Departments or agencies. One of the main reasons that can explain SA’s and WA’s contrast in scope of their interactive roles with other sectors is, again, the availability of resources. For example, an interviewee explains with regards to land development in South Australia:

“Previously [before the mining downturn] they [WA] just threw money at stuff; WA has done a lot more planning up front in more detail than we have been able to do yet. We would never have the financial resources to do that. We always rely on working in partnership with the private sector to deliver infrastructure.”
(SA_60, a Manager, Department of Planning, Transport and Infrastructure, 27 March 2017, Author’s Interview)

This quote illustrates how budget pressures is one of the reasons that have driven the South Australian public sector to engage more closely with other sectors, and that has shaped the relationship between the sectors for a long time. In contrast, in WA’s context, while the slowing down of the mining boom is gradually triggering similar responses for engaging with other sectors, a history of mis-trust and lack of participatory strategies have made this role more difficult for WA.

Finally, in a *strategic role*, the public sector interacts with other sectors for knowledge production or policy guidance at a state strategic level. This may involve the conformation of a pluri-sectoral consulting body on economic development issues that has representatives in government; the production of an economic development state strategy; or, developing a programme dedicated to reflect upon complex state issues, including those related to economic development with foreign recognised expertise. This is a role that has been intensely promoted by the South Australian public sector since 2002. Western Australia, on the other hand, has practiced it less.

For example, in terms of drafting a vision for the state a marked difference appeared between South Australia and Western Australia. SA had an integrated public-sector approach to a State vision and development strategy that was developed and revised twice by different sectors and actors throughout 13 years (2004-2017) and integrated throughout the departments of the sector and used as a benchmark platform that was publicly available and widely disseminated, until a different political party was elected into office in 2017. In the case of WA, while the intent might have been to create a vision for the State, these vision and goals were drafted by government unilaterally and failed to include baseline indicators to measure the State's advancement toward that vision. Nowadays in Western Australia, is still far from having a unified understanding of economic development:

“At the state level we don't have unified view of economic development. So, each agency may have a view of what it considers to be appropriate in that space. The notion itself of economic development is a somewhat muddy notion anyway, and particularly when you're talking regional economic development. We have a philosophical difference between us, people who see it simply as economic development and those people who see it as social-economic development (...). These things are not well understood or advanced in Western Australia, often there's lots of tension between agencies around, whether they have vision of where the State is going.” (WA_04 a Director, Dep. of Regional Development, 10 February 2017, Author's Interview).

Three key points emerge from this quote: there is a fragmented and contested understanding and practice of ED by state agencies; fragmented or even missing vision of a direction for the state by state agencies; and this in turn, is perceived to raise

tension between agencies. Western Australia's public-sector approach to economic development, and in general to a State development strategy, did not have a concerted approach to its elaboration. A little over 10 pages long, both these plans fall short in comparison to South Australia's elaborate strategies. This is confirmed by McMahon and Phillimore (2013) who catalogued WA's plans limited versions of a state plan (Brueckner and Pforr, 2011) and that were not committed to a strategic management approach as South Australia.

Another strategic role adopted by the public sector in South Australia was through the establishment and participation in the Economic Development Board. The EDB was often mentioned as a key mechanism that is conducive to innovative ideas. Their purpose allowed for the possibility of a good idea for economic development finding a way to become implemented. South Australia's first Foreign Direct Investment Attraction Agency was established from a recommendation that came from this Board; the setting up of the office of the Industry Advocate, the introduction of the Industry Participation Policy; or the establishment of the South Australia brand/logo. The possibility of becoming one of the few 'Geek Cities' that exist in the world, which was an idea that was brought up by an international entrepreneur who had an audience in the Board, was also materialised given the advice of the Board. The idea involved installing high speed fibre cable across the city centre of Adelaide, connecting businesses and universities for research and educational purposes. The now 'Ten Gigabit Adelaide' (City of Adelaide Council, 2018) aimed to attract investment to the area and facilitate research knowledge exchanges.

South Australia has yet another example of a strategic role played by the public sector for PSI: the "Thinkers in Residence" programme. Started in 2003, and then handed over to the Don Dunstan foundation and the University of Adelaide 2013, this programme was a global first that aimed to "address urgent challenges or to explore areas of opportunity, through new policy development and systems reform" (Don Dunstan Foundation, 2018). It worked by bringing a key figure considered a global leader and exemplar in their field with new ideas from abroad. They received support and engaged actively with all sectors of society to create and deliver the recommendations around specific issues, such as manufacturing and transport.

A reason for the differences in the scope of their strategic roles between Western Australia and South Australia was often attributed by interviewees to a fear or distrust between sectors, based on the financial collapse of the State Bank of South Australia and to the WA Inc. scandal. While in South Australia this might have had an impact in the overall industry access to financial resources, the political corruption scandal in WA seems to have had a particularly lasting impact for WA as per its mention by several interviewees in limiting the public sector interaction with the private sector (no one mentioned the bank collapse in SA).

Finally, limitations with an initiative such as this Economic Development Board include that they can become an insiders' club, that is, exclusionary of outsiders and their ideas; and that its members can have vested interests in the recommendations they make (SA_53, Professor, UNISA, 22 March 2017, Author's Interview). Therefore, on the one hand it is a conduit to accessing different sets of ideas coming from a range of sectors given the composition of the Board and putting them into practice given its advisory position. On the other hand, however, a lack of transparency and consultation can derive into limiting the capacity for innovation.

7.4 Conclusions

The aim of this chapter was to identify the ways external forces outside the public sector influence innovation in a context of regional economic development and why. Two forces were key for PSI. First, the combination of political forces and elections, the accelerating feedback cycle consisting of shifts in public sector prioritisation through the perceptions of the public, and the role of the media. Second, cognitive proximity of intersectoral interactions, which exemplify the roles the public sector takes in engaging with other sectors for PSI.

Advancements in telecommunication and information technologies are accelerating the general public's assessment of responsiveness by government. The role of the media is stressed, linking it back to the voter base, and the short-termism governments prefer; and the dilemma of innovating or not while assessing risks and the potential impact on an election. In this sense, practitioners are increasingly pressured to think politically rather than technically.

That is, to consider the potential perceptions of the electorate in their advice to policy makers and heads of government. This has meant that while PSI may be more accepted in the sense of implementing 'big bang' style ideas, these are also less about a change that can be rooted into the institutional system or shift it, and more about appearances for an election.

Tensions between changing public demands and risk may limit or encourage different types of PSI and the quicker the world moves, the less time there is to think about how to change institutionalised structures. Political forces and electoral cycles linked with public perception and votes, have increasingly led to sensitive, short-term reactions by the public sector of both States; potential votes and voting intentions are increasingly shaping PSI; and difficulties in influencing decision-making processes; although in different ways in each State, as a result of their institutional and organisational relations.

Thus, the question arises about how feasible to serve are these increased responsiveness demands. This is likely to depend on whether the issue has been long lasting or not. That is, this increased responsiveness cycle can in one way increase pressure on governments to act on issues that have been long overdue (e.g. climate change); but in other cases, the time and potential votes pressure can lead to costly mistakes (e.g. WA's experience with the back-office services wasteful project).

On the other hand, evidence emerged from South Australia suggesting that in relation to Western Australia, SA has had more cohesive and integrated intersectoral interactions (in terms of having set formal and informal mechanisms for sharing and developing ideas) between and among government jurisdictions, and other actors such as the academia and firms. Thus, a contrasting dimension of the institutional thickness of these two states is the quality of the interactions between the public sector, the private sector, and universities in general for PSI and economic development. Perceptions about these are markedly different between South Australia and Western Australia. In Western Australia the organisational characteristics of the public sector have been slowly shifting towards providing more accessible, open structures for some sectors to provide input in economic development. Yet, South Australia shows a more embedded capacity of interaction and collaboration between sectors, as is illustrated by the way their intersectoral relations flow better between businesses, the public sector and the academia.

Moreover, the presence and strength of relationships built within the State and other groups in society also show differences in the strength of “collective policy and strategy formation at the [sub-national] level involving a range of state, para-state and non-state organisations” (Painter 2000, p. 371 -brackets are my substitution for ‘local’). This may be thought of capacity of the public sector to organise itself (i.e. strategic capacity).

While SA has had a history of involvement and integration of the sectors in forms that echoes Rhodes (1997) explanation of a shift to governance; WA has not had much success in their inter-sectoral relations beyond those with their traditional economy industries extractive resources, given its past success in securing funds for the state. This has weakened the ability of WA to exchange and co-produce knowledge, to shape PSI, and to shape a future vision for the state.

Chapter 8. Conclusions

8.1 Introduction

This chapter draws together key conceptual and empirical findings arising from this thesis and discusses general conclusions about public sector innovation, and territorial economic development in the region, drawing from the empirical analysis of two regions in Australia: South Australia and Western Australia.

The study aimed to develop a fuller understanding and explanation of public sector innovation in the context of regional economic development. To do this, three research questions were answered in the previous three empirical chapters:

1. How is public sector innovation conceptualised and operationalised in the public sector?
2. How do internal processes within the state shape public sector innovation?
3. In what ways do external forces outside the state influence public sector innovation?

Together, they contribute to furthering our understanding of PSI by providing explanations that propose underlying causal relations which refine concepts and theories in PSI literature and economic geography literature. The research design sought to gain relative insights from the empirical research to uncover causal patterns of explanation by applying a contrasting case study selection method that controlled for some common contextual factors such as national institutions. The findings offer a spatio-temporal dynamic perspective to the study of PSI by analysing emerging differences between South Australia and Western Australia over time.

The following sections of the Chapter discuss how these findings relate to three key broader academic debates. First, on regional economic development by bringing in the role of innovation in the state and expanding the interactive dimension of institutional thickness. Second, on environmental antecedents of public sector innovation by demonstrating the role of geography in PSI and on PSI in a context of economic development. Finally, on governance, the changing and different roles states can adopt and the limits and opportunities these can provide for PSI in a context of economic development. The Chapter closes with reflections on the study and future research directions. Policy lessons are also included, which may be useful for anyone seeking to try PSI as an instrument for enhancing economic development in their region.

8.2 Bringing the role of innovation in the state into regional economic development academic debates and literature

A contribution made by this study is that it brought the role of innovation in the state into regional economic development. The main critique in the literature review was the little attention on the role of the state, particularly in the literature around innovation studies and economic development. Innovation from the perspective of the firm and industries have been the focus of the study of innovation and innovation dynamics in economic geography; and thus, innovation is associated to sustained regional competitiveness. Excluding the role innovation may play through other actors such as the state, limits the understanding of the role innovation may have in a context of economic development.

A first aspect of this contribution is conceptual, in relation to the role different actors play in territorial innovation models (Moulaert and Sekia, 2003), specifically, the state. An extension to TIMs is that the way each set of economic actors understands and operationalises innovation will differ for the essential, constituting differences that distinguish them from one another shapes the way they engage with innovation. The scope of the public sector: its territorial, and multi-thematic reach in the economy, and its ethos; in combination with the changing public sector administration paradigm to Post-NPM, the state emerges as a key actor 'leading' the 'how to pursue economic development' through different roles that involve the establishment of formal (and informal) mechanisms, structures, and processes that may facilitate or limit organised, systematic and targeted interactions between sectors. In this context, improving PSI skills involves strengthening the region's strategic capacity and denotes a move toward a collectivisation of governmental policy making and practices. Indeed, the combination of Post-NPM and public sector innovation stresses the role of agency from all actors involved.

A second aspect of this contribution is an empirical one, regarding institutional thickness. Contrasting the scope of the roles the state adopts in its interactions with other sectors can be a valuable technique to examine the interaction between organisations, institutions and institutional change in different regions in a context of economic development (Zukauskaitė *et al.*, 2017).

A third aspect has to do with the relationship between the economic trajectory of the territory and the role of the state over time. That is, with the 'prevailing and historical structures and conditions influencing the state's apparatus' (O'Neill, 2008 [1997], p. 265). The public sector and the actors that relate through it and within it over time, hold a sector memory, accumulated knowledge and experience that can largely shape the actions of the present, particularly the approaches taken to PSI and the willingness or predisposition to deviate from what has worked in the past. In the public sector, past cumulative efforts build up to conduct behaviour through specific avenues that have been carved over time, and depending on the context, these may be very deep, as in the case of WA. Its own learning experience dictates the best road to take given their own context, which does not guarantee the expected returns, yet this is reinforced when the expected returns do occur over the years (e.g. WA and the success of the extractive industry in the State). How much has the public sector been able to specialize in reaping the benefits of particular economic activities while simultaneously encouraging their growth? There is an association between the related and unrelated variety of economic activities and the developed capacity of the state to make the best of the market. A focused market or economic activity allows for more specialised public sector in regulating, promoting, and distributing efforts linked with specific industries.

8.3 Governance and the nuanced changing roles of the state

In line with the notions of a polymorphous quality of the state that allows it to adapt to changing circumstances (Mann 2012 [1993] in Painter, 2000) and the quality of ongoing transformation of the institutionalization of the state explained by the qualitative state approach (MacKinnon, 2012), this study highlighted the pitfalls and opportunities of an increasing demand for fast adaptation and responsiveness by the state. A tension exists between the possibilities that are opened within a structured and intersectoral approach to regional economic development planning; versus the increasing demand for responsiveness and external media pressure, opportunism and reputational risk.

While still being the central institution shaping patterns of local and regional development (Pike *et al.*, 2017), the state is becoming more open and porous, in different degrees, to external actors and relations to meet their specific goals and interests.

The degree of openness and the conditions for these interactions differ, depending on several factors that are contextual and which may have higher or lower influence depending on the region. For example, political economy traditions are important in explaining the scope and depth of these interactions but these alone cannot explain the full picture. The history of past engagements by the public sector and their result, favourable or not to their interests, shape issues of trust between sectors on one hand, and in another feed the learning base of the public sector which can influence its institutional preferences for engagement in the future. The public sector's constraint or not of resources, and a wider leadership base promoting these formal and informal interactions also play an important role. Thus, the idea of going from government to governance as a shift that began in the late 1990s (Rhodes, 1997) is a nuanced phenomenon that is expressed differently in each region. Differences in the degrees, forms, and results of this *openness* respond to differences in institutional relations in the region.

To understand and explain the manifestations, scope and limits of this openness and interactions in relation to PSI in a context of economic development, this Thesis proposes four different roles that may be adopted by the public sector in its interactions with other sectors of society in a diversity of ways that influence the arena for political negotiations (Cerny 1990 in O'Neill, 1997) in a region. The four roles, Receptive, Interactive, Enabling and Strategic, are with respect to information and knowledge reception, exchanges and construction, and cooperation and collaboration, both through the existing channels and mechanisms, or by enabling new organisational structures or institutional mechanisms.

In a *receptive role* where the public sector formally and informally collects or receives information and ideas related to economic development from other sectors in society to guide public sector initiatives (such as the 'YourSAy' platform or their 'Unsolicited Proposals Office' initiatives) contributions may influence and shape PSI agenda by helping to identify, facilitate, and seize economic development opportunities; and by facilitating the reception of feedback and learning. A broadly receptive role could lead to increased opportunities to innovate if the public sector is receptive and effectively engaging with ideas and proposals.

The limits to a receptive role become apparent when consultation is only about complying with a requisite rather than engaging with the sectors and thus the resulting advice and consultation is not considered for political reasons.

An *enabling role* for the public sector is one where it seeks to prompt innovative action by enabling or brokering connections or relationships between public sector agencies and other actors in society that may lead to innovative projects or approaches. This may involve providing formal platforms and informal connections. This role can include for example, processes of knowledge transfers that result from a market transaction such as hiring former consultants from the private sector. That is, bridging and brokering relationships by previously identifying opportunities and deciding to facilitate them, the public sector is creating channels for receiving inputs, offering spaces to discuss ideas, and helping to develop them with the available resources.

The challenge here is having the structure to guide and support these interactions, otherwise it may come down to a factor of personal politics that determines whether or not the opportunity exists to meet and influence. Another limitation is that due processes in public administration may impede seizing a window of opportunity that came about through an informal expression of the enabling role. A third limitation has to do with the challenges that can be faced when hiring novel agents from outside the public sector (i.e. a former private sector consultant) to enable PSI. Thus, the enabling role may fall short, for the new employee cannot act as if they were in their previous external position, finding themselves limited by the public sector and having to adapt their behaviour. Yet, by also not letting go entirely of their learned ways, i.e. identifying networks of like-minded people with whom they can work, they also can slowly begin to bring change into the public sector.

The *interactive role* involves a transparent, simultaneous exchanges to produce knowledge with other sectors around a particular economic development goal. Here, the emphasis is in the learning process triggered by a new multi-actor, interactive methodology in the approach to solving complex, persistent problems. In a structured setting, (occasionally it may involve Chatham House rules) these interactions potentiate learning and maximizing opportunities. An interactive role for PSI in relation to ED is especially important for the learning potential, breaking road blocks, and maximizing a quest, not only for solutions, but also for disruption and innovation.

Clear and continued leadership to provide an authorizing environment is necessary to offer a formal framework where public sector practitioners are endorsed by higher authorities to pursue PSI. This role also serves the purpose of creating awareness of the benefits of inter-agency, multi-actor engagements for providing solutions to persistent and complex problems, as well as helping generate a sense of a common regional agenda.

An issue faced by the public sector adopting this role, which may limit the outcome of any innovation, relates to limits during the engagement with other sectors and even other public sector agencies in terms of sharing information and knowledge. Probity issues, freedom of information, privacy issues on citizen's data, and inadvertently revealing information that may benefit some business over other. Moreover, while budget pressures can stimulate seeking out other actors, the costs and resources necessary to sustain this role can also be high. Thus, only some agencies can engage in an interactive active role for PSI. Finally, in this role, shared projects are very specific and do not offer room to reflect on transformative innovations that can challenge dominant institutions (c.f. Zukauskaite *et al.* (2017)).

In a *Strategic role* the public sector adopts all the roles above to determine future visions for the course of the state; or strategic initiatives for the economic future of the state. This may involve the design and adjustments of a state economic development vision and strategy for the region. The potential for the state to play a strategic role links back to post-NPM theorisations around collaboration and networked governance, which can expand the boundaries of information and knowledge that are inevitably limited in each sector, and widen the scope for PSI possibilities (Morgan, 2016).

An issue with this role is that the members of the select Board or Committee can become an 'insider's club' with vested interests. Thus, on the one hand it is a conduit to accessing different sets of ideas coming from a range of sectors given the composition of the Board and putting them into practice given its advisory position. On the other hand, however, a lack of transparency and consultation can derive into limiting the capacity for innovation. Thus, who has access to these spaces and whether some people are more influential than others is an important challenge to consider about this role.

Who gets listened to tends to be conditioned by personal or organisational politics, but also the potential impact of the idea and its implementation period, which raise again

questions of how the impact is judged and by whom, and the limits that electoral cycles given party politics push onto the implementation of potential innovations.

In sum, these four roles for the public sector also show instances on how states influence and offer opportunities to influence processes of interaction between sectors for the exchanges and construction of information, knowledge, solutions, and future visions. As it may be observed, the roles the public sector may adopt in its interaction with external actors vary in terms of degree of involvement. The receptive role is one where the public sector had the least participation, it just receives or collects data, information, ideas, and then decides what to do with what it collected. In a strategic role in the opposite end, the public sector is fully immersed in the exchange and construction of ideas with other sectors. Yet, the possibilities of a wider or narrower scope in the adoption of each of these roles offer variety in the potential for public sector innovation approaches and transformative outcomes.

8.4 Proposing a public sector innovation analytical framework by demonstrating the role of geography in PSI

Literature in PSI calls for increased explanations about innovation (De Vries *et al.*, 2016). Much of the academic and grey literature work so far has focused on PSI at the organisational level and tend to be normative in their definitions about PSI (see Pollitt and Hupe, 2011; Kattel, 2015), emphasising what it *should* be, rather than how it has been understood and practiced. Studying PSI from a territorial perspective opened up the possibility for a richer discussion on PSI and around the diversity of factors that can shape its conceptualisation and practice, particularly in a context of economic development (**See Figure 20**).

A preliminary contribution to the literature from this section is by **refining the understanding of the core goals for PSI and their operational scope** by proposing three analytical categories according formal **institutions** such as the way the public sector has portrayed PSI in official documents, and the perceptions of a range of **key actors** about its operationalisation in the regions. Moreover, these categories also showed direct and indirect implications to economic development and the role the state can play in shaping these. Theoretical concepts from public administration and political economy such as *new public management, neoliberalism and post-NMP* guided the

classification for their interpretative power. These categories challenge the notion that the concept of innovation holds a large number of interpretations by reducing them into three groups: (a) PSI for cost reduction and increased productivity in the public sector; (b) Market-oriented PSI; and (c) Outcome-driven PSI. Yet, given the differences between them, this finding echoes the work by Perren and Sapsed (2013) in the UK Parliament, which indicates that *innovation* persists to be a malleable concept.

The operational scope for PSI varies in each of the categories, in (a) PSI is likely to return outputs limited to savings in costs, if successful; or to procedural, input innovations, rather than outcome innovations (if innovation happens at all). This is because the need to reduce costs may indirectly also reduce the capacity for innovation by cutting down potential sources of knowledge and ideas, such as graduate programmes (as in the case of Western Australia). Moreover, NPM tools such as project management, inherently limit the scope for innovation toward measurable, small-scale outputs.

In (b), the operationalisation of PSI puts the weight of economic development is on the market. Innovation policy is readily justified with theory strongly underpinned in Neoliberalism which has become the 'common sense of the times', as Peck and Tickell (2002, p. 381) have described the pervasiveness of this politico-economic rationality. This can restrict the possibilities for using PSI to question current economic development models or seeking structural, transformative alternatives.

In (c) PSI aligns with the general wave of post-NPM public sector reforms (Bevir, 2011; Kuhlmann and Bouckaert, 2016), which favour community values (including the public sector and social inclusion, e.g. participatory democracy) and shifts in institutional arrangements (new ways of joining up in the public sector after deficiencies of fragmentation became apparent and partnering with other sectors). This approach has the potential to favour the types of PSI that put the centre of economic development farther from market competition and closer to a more holistic paradigm of economic development (such as those that include local and regional economic development, including those of social innovation regions (Moulaert and Sekia, 2003)).

Another contribution of this thesis in this section is about refining **the role of the wider institutional settings and processes in public sector innovation** from a territorial perspective rather than as individual organisations or sets of similar agencies (Kattel, 2015). While the literature has considered context and environmental antecedents, this

thesis builds on them by adding new powerful factors that emerged from considering the public sector as a whole, such as the trajectory of the economic structure and conditions of the region and its political economy.

The *economic structure and conditions* in the region shape the approach taken by governments to PSI. For example, South Australia's struggling economy, restricted public sector budget, and small economy meant that the public sector needed to do more to show its aim of achieving prevailing notions of justice, in addition to economic growth (Offe 1984 in O'Neill, 1997). Moreover, the approach to which innovation is associated with can also vary according to the status of the economy, whether it is in growth or contraction, within the specific industrial structure. For example, the cyclical and structural nature of WA's economy (the mining boom slowing down) has made a difference in their views and operationalisations about PSI.

The *political economy* of the public sector is not necessarily dependent on the Party that is in government at the time, but may respond to the traditions of political economy of the territory. For example, WA shifting from a brief incursion into an *outcome-based* approach to PSI to a *cost-reduction* and *market driven PSI* approaches, in line with their well-established neoliberal political economy. Thus, a region's economic trajectory and the public sector's understanding of *what works* based on the results of past experience with industries in their territory.

By refining and expanding the role of internal processes **within the state, particularly around regional and scalar institutional interactions** in PSI, this Thesis contributes with both new and nuanced analytical lenses for the study of PSI. The theoretical concept of *Institutional Thickness* is useful to explore regional PSI dynamics in a context of economic development. Through the specific factor of high level of interactions and a common agenda, this thesis explains how internal public sector dynamics influence the approach to public sector innovation and the general implications these can have on PSI economic development initiatives at the subnational level.

Specifically, *leadership, learning, and, cognitive and organisational proximity* were useful concepts that not only reflected the findings but also shed light into understanding the role of interactive processes for PSI within the sector. In the literature, it is well recognised how *leadership* is crucial for organisational level PSI (Borins, 2002) and at place level for increased economic growth (Beer and Clower, 2014). This thesis supports

the findings on the importance of the role of *leadership* in the territory (thus its inclusion in the analytical framework) and refines this importance by identifying adaptive, pragmatic and distributive (Sorensen and Torfing, 2015) as leadership types of whole-of-the public sector that play an important role in realising institutional change. These types of leaderships combined may encourage institutional learnings and help tighten organisational and cognitive proximity within the regional public sector but also between different tiers of government, which sets the bases for potentially transformative, large-scale, PSI processes (e.g. fragmentation of the public sector can prevent the success of large-scale public sector innovations, as was the case of WA).

For example, institutional change in SA happened through reform, that is, where the public sector directed and endorsed these changes (Hall and Thelen 2009 in Zukauskaitė *et al.*, 2017) through a 'layering' mode of institutional change (Mahoney and Tellen 2010 in Zukauskaitė *et al.*, 2017). Continued adaptive, pragmatic and distributive *leadership* to concert a vision and direction to the public sector, and to support agencies to understand their roles in meeting this vision; coupled with a systematic organisational and policy *learning* to adapt from the lessons of NPM approaches; and developing guidelines, policies, programmes, and strategies to strengthen the cognitive *proximity*, working relations and cooperation within the sector (and with other actors); were crucial to innovate and shift public sector reform to Post-NPM approaches, rather than trying to go back to the Pre-NPM state.

A fourth element of the analytical framework, and an extension of the literature on PSI, is about expanding and refining the analysis of **external forces to the state and regional institutional interactions for their role in shaping PSI in a context of regional economic development.**

While public perception, public demands and the role of the media have been acknowledged in PSI literature as factors that shape PSI (De Vries *et al.*, 2016), a nuanced study focused on the effects of an *accelerated feedback* by the general public (along with the analysis of the influence monthly economic indicators have on economic development policy decision making processes) and its effects on the re-prioritization of public policy can contribute to understanding and explaining limits, scope, and opportunities of public sector innovation.

Interactions between the public sector and other sectors in a region, such as universities and business associations, and community organisations also act as an external force shaping PSI. Organisational participation in networks is recognised as an environmental antecedent of organisational public sector innovation in the literature (De Vries *et al.*, 2016). In this line, the concepts of *openness and variety* and of high levels of interaction for formal and informal cooperation and information and knowledge exchanges found within the *Institutional Thickness* framing, find confirmation of its importance for regional level of public sector innovation in a context of economic development as well.

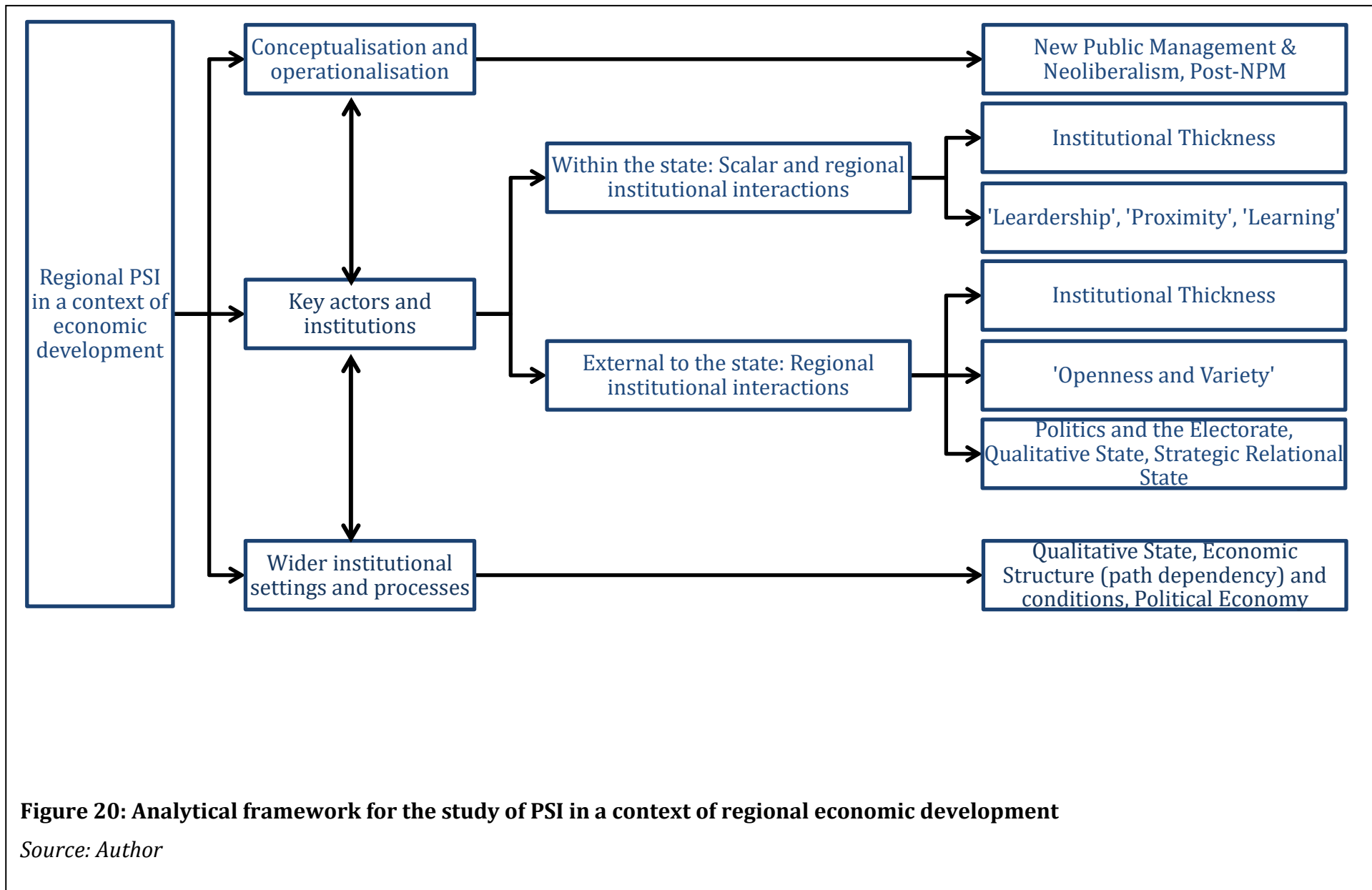
In addition, the latter conceptual lens opens up a nuanced analytical gap in the PSI literature, particularly, the study of whether interactions lead to the development of a common agenda for the region and to a notion that they are together involved with or share this common agenda. For the examination of territorial PSI, studying how and why the public sector has implemented formal and informal mechanisms over time to involve other sectors -including universities and firm associations- in the definition of economic priorities for the state, allows for a greater understanding about the potential scope for PSI and the role of the public sector in facilitating or not some of the influence other actors in society may have on PSI.

For example, in some cases, such as South Australia, the formalisation of these interactions can become an alternative as a slower version of the accelerated feedback cycle, for these interactions favour transparency and accountability, while offering a collective type of responsiveness push both for short-term PSI outcomes, or structurally transformative innovations. In other cases, such as in Western Australia, the issue of trust emerges as a reason for greater organisational and cognitive distance between sectors, therefore partly influencing and reinforcing the structure of the economy of the State.

Theoretical concepts are proposed to be included in an analytical framework for PSI in the context of economic development. The *qualitative state* (O'Neill, 1997) and the *strategic relational state* (Jessop 1990, 2007 in Jessop, 2001b; MacKinnon, 2012) are useful for the study of regional PSI in the context of economic development to understand the myriad of ways by which the state is involved in distribution and accumulation processes in the economy; and how the state becomes the expression of interests and interrelations of a series of social groups competing or building alliances to influence state institutions. These concepts are also helpful to understand the

importance of studying how these interests are expressed, how their power of influence shapes PSI, and how formal and informal existing mechanisms for influence favour some groups in society over others, thus favouring certain types, scopes or approaches to PSI over others. For example, questions around who gets listened to in board such as the Economic Development Advisory Board of South Australia; or which groups have enough funds to buy public pressure via the local media (e.g. South Australia again); or who has the ability and personal politics to influence Minister's perspectives over night (examples that emerged from both States).

Therefore, from the analysis of all chapters this Thesis concludes that PSI is shaped by the public sector's political economy views, the region's economic trajectory (how industrially diversified and embedded it is), the availability of resources -fiscal climate and the growth of their economy-, and its institutional thickness, understood as the interplay within and between organisations and institutions, and the extent to which the interactions between sectors for knowledge exchanges, working together, influencing, and shaping visions of the future of the region shape PSI.



8.5 Reflexions, future research, and policy lessons

The variety and complexity of elements in South Australia and Western Australia that could shape the understanding and conceptualisation of PSI would have required an in-depth study for which the resources were not available. While those elements that were recognised as most relevant in the empirical data were included in the research, some other aspects that could have influenced PSI were not included. For example, the balance of the distribution of power (Zukauskaitė *et al.*, 2017). The quote about how much influence a certain business association can have through paid media is linked with informal interpersonal relations which, in small States like SA and WA, can be of most importance in determining who has or which groups have an advantage over others in shaping the actions of the States. Thus, this shows the importance of future research avenues in this direction. In relation to this, there are at least two different sectors of society that were not included in the research and that could shed important light into the understanding and operationalisation of PSI: representatives of community groups, to have the perspective of the citizen, and the media, to understand the workings, ethics, and politics of advertising.

Moreover, future research could also be complemented with a quantitative analysis of the census data to test other factors that emerged tangentially during this research, for example, the association between younger employees entering the sector and PSI could open other avenues to explore in terms of knowledge spillovers within the public sector as part of the internal processes shaping PSI. This could be extended later to where they are being trained and how this shapes their views about the role of the public sector and how PSI it is conceptualised; and vice versa, how the culture within the sector forces young employees to mould or is instead open to new ideas.

In terms of the Post-NPM turn in public sector reform, this is a phenomenon that while it works along Neoliberalism, shows signs of moving away from New public Management and Rational Choice (Hartley, 2005) public sector paradigms into one of participative democracy (Bevir, 2011) that could have the capacity to develop platforms and mechanisms that would allow questioning the *status quo* and perhaps proposing alternatives to economic growth in the form of sustainable economic wellbeing. Yet, further research is needed to test this.

Also, different PSI approaches can influence industry innovation; how, under what conditions and with what outcomes can feed into regional systems innovation and evolutionary economic geography literature and contribute to further the understanding and explanation of the underexplored role of the public sector in this topic (Morgan, 2013).

Finally, while the aim of this thesis was not to provide public policy advice, not least because South Australia and Western Australia are quite unique regions, key lessons may be drawn from the thesis findings to contribute with some ideas to policy and practice.

One. Before embarking into major innovative whole of public sector reform, policy makers and practitioners could aim to ensure that the bases for the necessary communication and coordination exist. That is, a fragmented public sector might will have more difficulty to succeed and may even result in a grand scale disaster. Such was the case of the corporate services reform designed to centralise back office services (e.g. human resources administration) in Western Australia. The 'spectacular' failure of this project, costing over half a billion AUS dollars to the taxpayer and more than ten years from a failed start to dismantlement was formally attributed to a lack of cooperation and collaboration within the public sector, issue that had been already pointed out in earlier reviews and which denoted a weak organisational proximity (Boschma, 2005) within the sector.

South Australia instead had a slow motion approach to public sector reform since the early 2000's, which emphasised developing a cohesive public sector. Reform initiatives can be seen as a continuation of each other and with a logic that seeks preparing the ground for what comes next. This stages approach of reform led to witness the beginning of the clear shifts in the administration to flattening leadership structures, potentiating new ideas, and creating ownership to pursue them. While leadership has always been identified in the literature as a matter of utmost importance, the stress here would be to break away from traditional forms of leadership to one that involves adaptive forms of leadership (Sorensen and Torfing, 2015) by facilitating learning from the past and integrating those learnings with new ideas and encouraging distributive forms of leadership. That is, allowing for greater freedom, both in terms of coming up with and discussing ideas based on previous learnings, but also in terms of how to put them into practice.

Difficulties include that a certain degree of flexibility and trust is required.

Understanding and practicing public sector values, and facilitating regulatory frameworks help overcome this and shifts the focus from establishing procedures to focusing on goals and outcomes. This may provide public sector officials the necessary flexibility needed to practice their administration. Yet, while lack of resources may encourage PSI, to some extent, in some latitudes, this can also be an issue. Few public sectors in the world have the resources available for public servants to actually have time to pursue any creative idea that may be of value to the tax payer in addition to their core tasks. Moreover, some authors and governments are advocating for the creation of public sector innovation labs as a way of facilitating this process {See \Tönurist, 2017 #1559;Morgan, 2018 #1967}.

Two. Intergovernmental communication can be importantly facilitated by a mediating organisation.

While local government associations are common, how these organisations perform their representative role can play a fundamental part in the accomplishment or not of economic development goals. For example, the Local Government Association of South Australia (LGA SA) has successfully mediated the tensions that can rise between levels of government (e.g. regarding misalignments of interests (Shin, 2015) or as a result of devolution processes unaccompanied by sufficient resources (MacKinnon *et al.*, 2008)), by performing a supporting role that has served as a bridge for communication, a ‘translator’ and safe keeper of interests of both the local governments and the state government. For example, by liberating funds to be invested in innovation and time for strategic thinking for the sector, or by finding less resistance for changes in the functions or resources allocation and trust in their operational capacity. The latter may build a cognitive bridge that allows for the creation and maintenance of a shared institutional framework.

This resonates with questions posed by Zukauskaite *et al.* (2017), particularly around organisational actorhood and the way these can shape institutions. This example extends the notion of actorhood to include the role of organisations in aligning perceived misaligned institutional frameworks between each public sector level and facilitating their effective interaction. LGA SA has become a key agent in maintaining this functioning arrangement, and serving as a mediator between the two levels of the public sector to maintain levels of trust (e.g. greater flexibility for negotiations and the

administration of funds and the generation of funding revenues). Moreover, their existence has helped guarantee the alignment of priorities; the allocation of resources and functions between public sector scales; and its operational independence from State politics (over 40 Acts of Parliament have formalised the relationship between the State government and the Association).

Thus, to be an effective mediating entity, speaking the language of both the State governments (or central government in a non-Federation) and the local governments is crucial. This involves a profound understanding of the key interests from each of those sectors. Trust is fundamental for communication to work. Therefore, while seeking a beneficial outcome for local governments, the mediating organisation may want to consider the needs of the State government. A well-balanced mediating organisation can help effective coordination within the local government sector and between government scales. Most importantly, by understanding both realities, the organisation is in a unique position to innovate in matters that range from financial innovation (e.g. improve funding by creating an entity that borrows on behalf of all the local governments with lower interest rates and where loans are guaranteed by the State) to offering specialised and individualised training, the necessary tools for local governments day-to-day activities, to make better use of their resources. This may include liberating funds to be invested in innovation research.

Three, capitalise from the longest running public sector successes in areas where rooted and specialized knowledge is found in the public sector, where learning has been a continuous systematic process, and where the capacity to adapt to internal changing processes and external forces is present. These factors facilitate public sector innovation for the knowledge of what is needed (given their long-standing experience), along with the existing and proven capacity to change and adapt. The example of Western Australia's public sector learning and adapting to best encourage its key extractive industries, shows a public sector which was able to act, learn and refine its actions continuously until reaching a point of expertise that knows how to capitalise from and for the industry by creating new opportunities.

Thus, the question is, within the immense range of public services, policies, processes, projects, programs, etc. which emerge as a well-grounded, continuously adapting and learning from the past, and excelling in meeting goals over time? These may be opportunities to systematise that learning by identifying key competences, processes,

regulations, interactions and organisational factors; codify them, and potentiate them, even into other areas.

Four, using market tools for increased accumulation and distribution of capital.

Often public sectors in the global South (excluding Australia) will perceive the market as an off-limits area in terms of its own public sector functioning. Yet, a reflexion exercise on how to use the market or market tools to achieve public value or to reach public goals and achieve particular outcomes can lead to innovative ideas. If capitalism is the economic system, then the public sector can be creative in seizing its opportunities.

While this is risky, for some may argue that it may be a way of promoting privatisation, using market tools to provide assistance, or going back to NPM tools for public administration; what is important here is to go beyond these traditional means through which governments engage with the market (which may actually undermine the distributive capacity of the state in the long run), and instead capitalise on the knowledge economy by tapping and systematizing the vast knowledge possessed by states. Such is the example of Landcorp in Western Australia, which has managed to offer information services for which firms are happy to pay.

This type of approach would require having clear ethical boundaries and sound principles to make sure that the acquisition of information is available to all, in accordance to their income, and that the state does not undermine its distributive capacity.

Five, creating both formal and informal spaces for tapping into knowledge, information, and perceptions with internal and external actors. The roles played by the public sector in their interactions with external actors are important to the extent that allow for opportunities to be found and seized; allow to capitalise the knowledge and information available in other sectors of society; and to maximise learning opportunities for the public sector. While this is a challenge, not least because different actors hold different interpretations about PSI, and because of social groups variation in the access these spaces; these spaces may provide opportunities for both medium to long-term thinking and for taking short-term actions if PSI is considered under one of the three different approaches. These could guide the scope of the thinking process, manage expectations and help actors align under a similar thinking spectrum to facilitate the interaction processes.

A related, important lesson is the disposition by some governments to support projects that will yield results during their governing term and to be innovative about it. This could open a window of opportunities to promote short term changes that may have tangible outcomes in economic development. Thus, while frequent changes in government priorities may hamper medium to long term goals PSI, or the possibility to harness the sector's knowledge and experience to innovate in external, visible issues, the need to show a responsive public sector encourages PSI to seize opportunities or address sudden threats, and this can also be an opportunity to influence policy. If decision makers are willing to try new things in exchange of votes, it can also be an opening for external actors to pursue specific interests that could be met quickly by considering changes in economic indicators, the results of opinion polls, and the media. Of course, this will depend on the manoeuvring scope by the government arm pursuing the innovation.

For example, the Executive Government would have to have the capacity to enact and execute new policy without delay, e.g. without needing the approval of the Parliament or Legislative Assembly, or if needed, with sufficient political strength to make it pass without delay. If it is a party from the Legislative Assembly, equally, they would have to have sufficient political capital to pass it. A challenge in this case could be that tracing the source of the initiative to a particular political party in Parliament may require the development of proper communication and information campaigns to reap the potential effects on a future electoral contention. Depending on where this takes place in the world, such campaign may or may not be feasible (e.g. lack of resources) and thus may or not make sense from an electoral point of view and the leverage for implementation may be gone.

Six, the accelerating feedback cycle needs to be managed to maximize the newly found opportunity of more people being involved and interested in politics, either formally or informally. While the political temptation to shift voters' minds in favour of the government can lead to out of the blue, innovative initiatives, it can be risky to base short-term policy on a change of a quarterly indicator (for example how much to pay for a job depending on whether unemployment rose or fell that month).

Social agreements about medium to long term priorities need to be in place for a few years (with specific dates for revision) in order to manage expectations and shift debates toward how to meet the outcomes that are sought out. Voters' perceptions are

being micromanaged as a result of the increased media and social media access. The difficulty to coordinate between government levels and branches of government also makes the public sector vulnerable to continued, shifting demands as they shift from social group to social group.

Mechanisms to respond and manage these perceptions need to be in place, both to learn from voters, gain their trust, and to orient discussions towards how issues may be solved or goals may be achieved. The creation of spaces that can help society organise itself in terms of debating and prioritizing issues can be an important role for the state; that is, the strategic kind of role discussed above extended to help debate processes, the formulation of problems, and potentially reaching agreements to put forward in the form of legislation or any other appropriate tool available for economic development goals.

References

Abdi, H. (2007) 'Z-scores', in Salkind, N. (ed.) *Encyclopedia of Measurement and Statistics*. Thousand Oaks (CA): Sage.

ABS (2016) '6291.0 - Labour Force, Australia, Detailed - Electronic Delivery 2016' Australian Bureau of Statistics, A. G. *Time Series Workbook*. ABS Official Government Website. Available at: <http://www.abs.gov.au/Ausstats/abs@.nsf/mf/6291.0.55.001>.

ABS (2017a) '6291.0 - UM2 - Unemployed persons by Duration of job search, State and Territory, January 1991 onwards' Australian Bureau of Statistics, A. G. *All Time Series*. Last updated Nov 2017. ABS Official Government Website. Available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6291.0.55.001Nov%202017?OpenDocument>.

ABS (2017b) 'Data by Region' Australian Bureau of Statistics. Last updated 31 March 2017. ABS Official Government Website. Available at: [http://stat.abs.gov.au/itt/r.jsp?databyregion#/.](http://stat.abs.gov.au/itt/r.jsp?databyregion#/)

ABS (2018a) '3101.0 - Australian Demographic Statistics, Sep 2018' *Time Series Spreadsheet*. 31 May 2018. ABS Official Government Website: Australian Bureau of Statistics, Australian Government. Available at: <https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3101.0>.

ABS (2018b) '5220.0 - Australian National Accounts: State Accounts, 2017-18' *All Time Series*. Last updated Nov 2018. ABS Official Government Website: Australian Bureau of Statistics, Australian Government. Available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/8146.02014-15?OpenDocument>.

ABS (2018c) '5512.0 - Government Finance Statistics, Australia, 2016-17'. Canberra: Australian Bureau of Statistics, Government of Australia 24 April 2018. Available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/5512.02016-17?OpenDocument>.

ABS (2018d) '6523.0 - Household Income and Wealth, Australia, 2015-16' *All Time Series*. Last updated Feb 2016. ABS Official Government Website: Australian Bureau of Statistics, Australian Government. Available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/8146.02014-15?OpenDocument>.

ABS (2018e) '8146.0 - Household Use of Information Technology, Australia, 2014-15' *All Time Series*. Last updated Feb 2016. ABS Official Government Website: Australian Bureau of Statistics, Australian Government. Available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/8146.02014-15?OpenDocument>.

ABS (2018f) '8155.0 - Australian Industry, 2017-18 ' *Time Series Spreadsheet*. 2019. ABS Official Government Website: Australian Bureau of Statistics, Australian Government. Available at: <https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3101.0>.

- ABS (2018g) *Explanatory Notes for 5512.0 - Government Finance Statistics, Australia, 2016-17*. Canberra: Australian Bureau of Statistics, Government of Australia. [Online]. Available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/5512.02016-17?OpenDocument> (Accessed: 24 April 2018).
- Agostino, D., Arena, M. and Arnaboldi, M. (2013) 'Leading change in public organisations: the role of mediators', *Leadership & Organization Development Journal*, 34(7), pp. 596-615.
- Altshuler, A. A. and Zegans, M. D. (1997) 'Innovation and Public Management: Notes from the State House and City Hall', in Altshuler, A. A. and Behn, R. D. (eds.) *Innovation in American Government: Challenges, Opportunities, and Dilemmas*. Washington, D.C.: Brookings Institution Press, pp. 68-80.
- Amin, A. (1999) 'An Institutional Perspective on Regional Economic Development', *International Journal of Urban and Regional Research*, 23(2), pp. 365-378.
- Amin, A. and Thrift, N. (1994) 'Living in the global', in Amin, A. and Thrift, N. (eds.) *Globalization, institutions, and regional development in Europe*. Oxford: Oxford University Press, pp. 1-22.
- Ansell, C. and Gash, A. (2012) 'Stewards, mediators, and catalysts: Toward a model of collaborative leadership', *The Innovation Journal: The Public Sector Innovation Journal*, 17(1), pp. Article-Article 7.
- APSC (2012a) '2012 State of the Service Employee Census (Dataset)'. May 2012. Canberra: Australian Public Service Commission, Australian Government. Available at: <https://www.data.gov.au/dataset/ds-dga-0ee96011-dec8-47e5-8d21-8c92cf0e4d13>.
- APSC (2012b) *2012 State of the Service Employee Census (Questionnaire)*. Canberra: Australian Public Service Commission, Australian Government.
- APSC (2013a) '2013 State of the Service Employee Census (Dataset)'. Canberra: Australian Public Service Commission, Australian Government, p. 44. Available at: <https://www.data.gov.au/dataset/ds-dga-be113f54-1aef-4682-b06e-f062fe6dfc73>.
- APSC (2013b) *2013 State of the Service Employee Census (Questionnaire)*. Canberra: Australian Public Service Commission, Australian Government.
- APSC (2014a) '2014 APS Employee Census (Dataset)'. Canberra: Australian Public Service Commission, Australian Government, p. 38. Available at: <https://www.data.gov.au/dataset/ds-dga-cc6c9728-f872-4be0-ac96-ad85b842be9f>.
- APSC (2014b) '2014 APS Employee Census (Dataset)'. Canberra: Australian Public Service Commission, Australian Government. Available at: <https://www.data.gov.au/dataset/ds-dga-cc6c9728-f872-4be0-ac96-ad85b842be9f>.
- APSC (2014c) *2014 APS Employee Census (Questionnaire)*. Canberra: Australian Public Service Commission, Australian Government.
- APSC (2015a) '2015 APS Employee Census (Data Set)'. 9 May to 10 June 2016 Canberra: Australian Public Service Commission, Australian Government. Available at: <https://www.data.gov.au/dataset/ds-dga-a4966e7a-6777-4aac-8abb-41e1f1fca29c>.

APSC (2015b) *2015 APS Employee Census (Questionnaire)*. Canberra: Australian Public Service Commission, Australian Government.

APSC (2015c) *State of the Service Report 2014–15*. Canberra: Australian Public Service Commission. [Online]. Available at: http://www.apsc.gov.au/_data/assets/pdf_file/0010/72379/sosr-2014-15-web.pdf.

APSC (2016a) *2016 APS Employee Census (Questionnaire)*. Canberra: Australian Public Service Commission, Australian Government.

APSC (2016b) '2016 APS Employment database (APSED) (Database)'. Open access: Australian Public Service Commission, Australian Government. Available at: <https://www.apsc.gov.au/section-1-all-employees>.

APSC (2017) '2016 APS Employee Census (Dataset)'. 9 May to 10 June 2016. Semi open access: Australian Public Service Commission, Australian Government. Available at: <https://www.data.gov.au/dataset/ds-dga-e8e374e4-e028-440f-972b-f824a18ee1b4>.

Arundel, A., Casali, L. and Hollanders, H. (2015) 'How European public sector agencies innovate: The use of bottom-up, policy-dependent and knowledge-scanning innovation methods', *Research Policy*, 44(7), pp. 1271-1282.

Arundel, A. and Huber, D. (2013) 'From too little to too much innovation? Issues in measuring innovation in the public sector', *Structural Change and Economic Dynamics*, 27, pp. 146-159.

Asaduzzaman, M. (2011) 'Innovation in local governance: Decentralization and citizen participation in Bangladesh', in A. Anttiroiko, P. Valkama and Bailey, S. (eds.) *Innovation and the Public Sector*. IOS Press eBooks. Available at: <http://dx.doi.org/10.3233/978-1-60750-729-1-220>.

Asheim, B. (2009) 'Learning Regions', in Kitchin, R. and Thrift, N. (eds.) *International Encyclopedia of Human Geography*. Amsterdam: Elsevier, pp. 172–178.

Asheim, B., Grillitsch, M. and Trippel, M. (2015) 'Regional Innovation Systems: Past - Present - Future', in Doloreux, D., Shearmur, R. and Carrincazeaux, C. (eds.) *Handbook on the Geography of Innovation*. Pre-print version: Edward Elgar.

Australian Broadcasting Corporation (1932-) *ABC Archives: The sights and sounds of our history*. Available at: <http://www.abc.net.au/archives>.

Australian Government (2018) *Rural Research and Development Corporations* [Website]. Available at: <http://www.agriculture.gov.au/ag-farm-food/innovation/research-and-development-corporations-and-companies>.

Australian Government Solicitor (2010 [1901]) *Australia's Constitution pocket edition: with overview and notes by the Australian Government Solicitor*. 7 edn. Australian Capital Territory: Commonwealth of Australia.

Balzat, M. and Hanusch, H. (2004) 'Recent trends in the research on national innovation systems', *Journal Of Evolutionary Economics*, 14(2), pp. 197-210.

- Barnett, C. (2010) *Budget Speech 2010-11*. Perth: Department of Treasury, Government of Western Australia. [Online]. Available at: <http://www.ourstatebudget.wa.gov.au/Previous-Budgets/>.
- Bartos, S. (2002) 'Creating and Sustaining Innovation', *Australian Journal of Public Administration*, 62(1), pp. 9-14.
- Baxter, P. and Jack, S. (2008) 'Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers', *Qualitative Report*, 13(4), pp. 544-559.
- Beer, A. (2016) E-mail correspondence.
- Beer, A. (2018) 'The closure of the Australian car manufacturing industry: redundancy, policy and community impacts', *Australian Geographer*, 49(3), pp. 419-438.
- Beer, A. and Clower, T. (2014) 'Mobilizing leadership in cities and regions', *Regional Studies, Regional Science*, 1(1), pp. 5-20.
- Beer, A., Clower, T., Haughtow, G. and Maude, A. (2005) 'Neoliberalism and the Institutions for Regional Development in Australia', *Geographical Research*, 43(1), pp. 49-58.
- Behn, R. D. (1997) 'The dilemmas of innovation in American government', in Altshuler, A. A. and Behn, R. D. (eds.) *Innovation in American Government: Challenges, Opportunities, and Dilemmas*. Washington, D.C.: Brookings Institution Press, pp. 3-37.
- Behn, R. D. and Altshuler, A. A. (1997) *Innovation in American Government: Challenges, Opportunities, and Dilemmas*. Washington, D.C.: Brookings Institution Press.
- Bekkers, V., Edelenbos, J. and Steijn, B. (eds.) (2011a) *Innovation in the public sector: Linking capacity and leadership*. Basingstoke: Palgrave Macmillan.
- Bekkers, V., Edelenbos, J. and Steijn, B. (2011b) 'Introduction', in Bekkers, V., Edelenbos, J. and Steijn, B. (eds.) *Innovation in the public sector: Linking capacity and leadership*. Basingstoke: Palgrave Macmillan, pp. 3-32.
- Bekkers, V. and Tummers, L. (2017) 'Perspectives on public sector reform: An innovation perspective', in Van de Walle, S. and Groeneveld, S. (eds.) *Theory and Practice of Public Sector Reform*. New York and Oxon: Routledge.
- Bennett, S. (2002) *Research Note: South Australia Election 2002*. Canberra: Information and Research Services; Department of the Parliamentary Library; Commonwealth of Australia. [Online]. Available at: http://parlinfo.aph.gov.au/parlInfo/download/library/prspub/IT566/upload_binary/it5667.pdf;fileType=application/pdf#search=%22election%20south%20australia%20publications%202000s%20prspub%22.
- Bernier, L., Hafsi, T. and Deschamps, C. (2015) 'Environmental Determinants of Public Sector Innovation: A study of innovation awards in Canada', *Public Management Review*, 17(6), pp. 834-856.
- Bevir, M. (2011) 'Governance and governmentality after neoliberalism', *Policy & Politics*, 39(4), pp. 457-471.

- Bevir, M. (2013) *A Theory of Governance*. London: University of California Press.
- Bloch, C. and Bugge, M. M. (2013) 'Public sector innovation-From theory to measurement', *Structural Change and Economic Dynamics*, 27, pp. 133-145.
- Block, F. and Evans, P. (2005) 'The State and the Economy', in Smelser, N. J. and Swedberg, R. (eds.) *The handbook of economic sociology*. 2nd. edn. Princeton, N.J.: Princeton University Press, pp. 505-526.
- Bommert, B. (2010) 'Collaborative innovation in the public sector', *International Public Management Review*, 11(1), pp. 15-33.
- Borins, S. (1998) *Innovating with Integrity: How Local Heroes Are Transforming American Government*. Washington D.C., USA: Georgetown University Press.
- Borins, S. (2000) 'Loose Cannons and Rule Breakers, or Enterprising Leaders? Some Evidence About Innovative Public Managers', *Public Administration Review*, 60(6), pp. 498-507.
- Borins, S. (2001) 'Encouraging innovation in the public sector', *Journal of Intellectual Capital*, 2(2), pp. 310-319.
- Borins, S. (2002) 'Leadership and innovation in the public sector', *Leadership & Organization Development Journal*, 23(8), pp. 467-476.
- Borins, S. (2014) *The Persistence of Innovation in Government: A Guide for Innovative Public Servants*. New York: Ash Center for Democratic Governance and Innovation with Brookings Institution Press.
- Boschma, R. (2005) 'Proximity and Innovation: A Critical Assessment', *Regional Studies*, 39(1), pp. 61-74.
- Boschma, R. and Iammarino, S. (2009) 'Related variety, trade linkages, and regional growth in Italy', *Economic Geography*, 85(3), pp. 289-311.
- Brown, L. and Osborne, S. P. (2013) 'Risk and Innovation', *Public Management Review*, 15(2), pp. 186-208.
- Brueckner, M. and Pforr, C. (2011) 'The rise and fall of sustainability in Western Australian politics: a review of sustainable development under the Western Australian Labor government between 2001 and 2008', *Sustainability: Science, Practice and Policy*, 7(2), pp. 3-17.
- Bugge, M. M., Mortensen, P. S. and Bloch, C. (2011) *Measuring Public Innovation in the Nordic Countries (MEPIN) - Report on the Nordic Pilot studies: Analyses of methodology and results* (Rapport 40/2011). Nordisk institutt for studier av innovasjon, f. o. u. [Online]. Available at: <http://www.nifu.no/files/2012/11/NIFUrapport2011-40.pdf>.
- Burchell, M. (2014) *Nomination form. Achievement Awards, Assessment Criteria: Best Practice in Collaboration Across Government Agencies in the Same Jurisdiction*. Western Australia Institute of Public Administration.

- Burchell, M. and Delane, R. (2012) *XXIII ISPIM Conference – Action for Innovation: Innovating from Experience*. Barcelona, 17-20 June 2012. The International Society for Professional Innovation Management (ISPIM).
- Burrell, A. (2016) 'Colin Barnett accuses business leaders of 'silent coup' to oust him', *The Australian* (edn), 01/09/2016. [Online] Available at: <https://www.theaustralian.com.au/nation/politics/colin-barnett-accuses-business-leaders-of-silent-coup-to-oust-him/news-story/be31bc703345e0ffe33b30f0b66fb68f>.
- Carayannis, E., Barth, T. and Campbell, D. (2012) 'The Quintuple Helix innovation model: global warming as a challenge and driver for innovation', *Journal of Innovation and Entrepreneurship*, 1(1), pp. 1-12.
- Carayannis, E. and Grigoroudis, E. (2014) 'Linking innovation, productivity, and competitiveness: Implications for policy and practice', *Journal of Technology Transfer*, 39(2), pp. 199-218.
- Cerny, P. G. (1990) *The changing architecture of politics : structure, agency, and the future of the State*. London: Sage Publications.
- City of Adelaide Council (2018) *Ten Gigabit Adelaide: Australia's first 10Gbps fibre optic network*. Available at: <https://www.cityofadelaide.com.au/city-business/why-adelaide/adelaide-smart-city/ten-gigabit-adelaide/>.
- Cloke, P., Cook, I., Crang, P., Goodwin, M., Painter, J. and Philo, C. (2004) *Practicing Human Geography*. London: SAGE Publications.
- Cobham, A., Schlögl, L. and Sumner, A. (2016) 'Inequality and the Tails: the Palma Proposition and Ratio', *Global Policy*, 7(1), pp. 25-36.
- Cole, J. (2014) 'The historical context of Australia's Federation', in CEDA (ed.) *A Federation for the 21st Century [Report]*. Melbourne: The Committee for Economic Development of Australia, pp. 28-40.
- Cooke, P. and Morgan, K. (1998) *The associational economy: firms, regions, and innovation*. Oxford: Oxford University Press.
- Criado, J. I., Sandoval-Almazan, R. and Ramon Gil-Garcia, J. (2013) 'Government innovation through social media', *Government Information Quarterly*, 30(4), pp. 319-326.
- Cumbers, A. and MacKinnon, D. (2011) 'Ch 21: Putting 'the political' back into the region: Power, agency and a reconstituted regional political economy', in Pike, A., Rodríguez-Pose, A. and Tomaney, J. (eds.) *Handbook of local and regional development*. Oxon and New York: Routledge, pp. 249-258.
- DAF and DC (2010) *Thinking outside the box... Innovation in the WA Public Sector. A Report from the WA Public Sector Innovation Workshop*. Perth: Department of Agriculture and Food and Department of Commerce, Government of Western Australia.
- Daglio, M., Gerson, D. and Kitchen, H. (2015) 'Building Organisational Capacity for Public Sector Innovation - Background Paper prepared for the OECD Conference "Innovating the Public Sector: from Ideas to Impact"', Paris. OECD.

Dale, A., Wathan, J. and Higgins, V. (2008) '31. Secondary Analysis of Quantitative Data Sources', in Alasuutari, P., Bickman, L. and Brannen, J. (eds.) *The SAGE Handbook of Social Research Methods*. London: SAGE, pp. 520-535.

Damanpour, F. and Schneider, M. (2006) 'Phases of the Adoption of Innovation in Organizations: Effects of Environment, Organization and Top Managers', *British Journal of Management*, 17(3), pp. 215-236.

Damanpour, F. and Schneider, M. (2009) 'Characteristics of innovation and innovation adoption in public organizations: Assessing the role of managers', *Journal of Public Administration Research and Theory*, 19(3), pp. 495-522.

Damanpour, F., Walker, R. M. and Avellaneda, C. N. (2009) 'Combinative Effects of Innovation Types and Organizational Performance: A Longitudinal Study of Service Organizations', *Journal of Management Studies*, 46(4), pp. 650-675.

De Vries, H., Bekkers, V. and Tummers, L. (2016) 'Innovation in the public sector: a systematic review and future research agenda', *Public Administration*, 94(1), pp. 146-166.

Dean, M. B. (2017) *Manufacturing the future? A critical analysis of policy responses to deindustrialisation in South Australia*. The University of Adelaide [Online]. Available at: <http://hdl.handle.net/2440/113265>.

Deloitte (2018) *Business Outlook* Canberra: Deloitte.

Demircioglu, M. A. and Audretsch, D. B. (2017) 'Conditions for innovation in public sector organizations', *Research Policy*, 46(9), pp. 1681-1691.

Department of Foreign Affairs and Trade (2016) 'Australia in Brief'. Australian Capital Territory: Australian Government. Available at: <http://dfat.gov.au/about-australia/Pages/about-australia.aspx>.

Department of Foreign Affairs and Trade (2017) *Australia's Trade by State and Territory 2016-17*. Australian Capital Territory: Australian Government <http://dfat.gov.au/about-us/publications/Documents/australias-trade-by-state-and-territory-2016-17.pdf>.

Department of Foreign Affairs and Trade (2019a) *South Australia*. Australian Capital Territory: Australian Government <https://dfat.gov.au/trade/resources/Documents/sa.pdf>.

Department of Foreign Affairs and Trade (2019b) *Western Australia*. Australian Capital Territory: Australian Government <https://dfat.gov.au/trade/resources/Documents/wa.pdf>.

Doloreux, D. and Parto, S. (2005) 'Regional innovation systems: Current discourse and unresolved issues', *Technology in Society*, 27(2), pp. 133-153.

Don Dunstan Foundation (2018) *Thinkers in Residence*. Available at: <https://www.dunstan.org.au/projects/thinkers-history/> (Accessed: 26 November).

DP&C (2002) *Welcome - Western Australian Government's Functional Review Implementation Team (FRIT)* [Website]. Available at:

<http://pandora.nla.gov.au/pan/41789/20040505-0000/www.functionalreview.dpc.wa.gov.au/index1401.html?fuseaction=home.welcome>

DP&C (2016) *Working Together for Joined-Up Policy Delivery Report - 90-Day Change Project*. Adelaide: Change@South Australia, Department of the Premier and Cabinet, Government of South Australia.

DT (2018) *Regulatory Mapping and Reform Projects* [Website]. Available at: <https://www.treasury.wa.gov.au/Economic-Policy/90-Day-Projects/Regulatory-Mapping-Projects/>.

Easton, G. (2010) 'Critical realism in case study research', *Industrial Marketing Management*, 39, pp. 118-128.

Economic Audit Committee (2009) *Final Report - Putting the Public First: Partnering with the Community and Business to Deliver Outcomes*. Perth: Timothy Marney et al, Economic Audit Committee, Government of Western Australia. [Online]. Available at: <https://web.archive.org/web/20110224214546/http://www.dpc.wa.gov.au/Publications/EconomicAuditReport/Pages/Default.aspx>.

EDB (2018) 'Purpose Statement / About Us' [Website]. Economic Development Board, Government of South Australia. Available at: <http://economicdevelopmentboardsa.com.au>.

Edwards, P. K., O'Mahoney, J. and Vincent, S. (eds.) (2014) *Studying organizations using critical realism: a practical guide*. First edn. Oxford: Oxford University Press.

Etzkowitz, H. and Leydesdorff, L. (2000) 'The dynamics of innovation: from National Systems and "Mode 2" to a Triple Helix of university-industry-government relations', *Research Policy*, 29(2), pp. 109-123.

European Commission (2010a) 'Flash Eurobarometer 305 (Innobarometer 2010)' ZA5458 Data file Version 1.0.0 The GALLUP Organisation. Brussels: GESIS Data Archive.

European Commission (2010b) *Innobarometer 2010: Analytical Report Innovation in Public Administration*. European Commission.

European Commission (2013) *Powering European Public Sector Innovation: Report of the Expert Group on Public Sector Innovation*. Brussels: European Commission.

Fagerberg, J. (1994) 'Technology and International Differences in Growth Rates', *Journal of Economic Literature*, 32(3), pp. 1147-1175.

Fagerberg, J., Fosaas, M. and Sapprasert, K. (2012) 'Innovation: Exploring the knowledge base', *Research Policy*, 41(7), pp. 1132-1153.

Fahey, J., Crafter, G. and Payze, R. (2002) *Public sector responsiveness in the 21st Century: A review of South Australian processes (Fahey Review)*. Adelaide: Task Force. [Online]. Available at: <https://web.archive.org/web/20041111014153/http://www.premcab.sa.gov.au:80/pdf/PublicSectorReviewReport.pdf>.

- Farole, T., Rodriguez-Pose, A. and Storper, M. (2010) 'Human geography and the institutions that underlie economic growth', *Progress in Human Geography*, 35(1), pp. 58-80.
- Ferguson, S., Burford, S. and Kennedy, M. (2013) 'Divergent Approaches to Knowledge and Innovation in the Public Sector', *International Journal of Public Administration*, 36(3), pp. 168-178.
- Fernandez, S. and Wise, L. R. (2010) 'An Exploration Of Why Public Organizations 'ingest' Innovations', *Public Administration*, 88(4), pp. 979-998.
- Ferrarezi, E., Amorim, S. N. D., Tomacheski, J. A. and Vargas, E. R. d. (2014) *Sustentabilidade de iniciativas premiadas no concurso inovação: indícios de mudança da gestão no governo federal?* Brasília: Escola Nacional de Administração Pública (ENAP).
- Fitjar, R. D. and Rodriguez-Pose, A. (2011) 'Innovating in the Periphery: Firms, Values and Innovation in Southwest Norway', *European Planning Studies*, 19(4), pp. 555-574.
- Flemig, S., Osborne, S. and Kinder, T. (2016) 'Risky business—reconceptualizing risk and innovation in public services', *Public Money & Management*, 36(6), pp. 425-432.
- Flyvbjerg, B. (2006) 'Five Misunderstandings About Case-Study Research', *Qualitative Inquiry*, 12, pp. 219-245.
- Foley, K. (2008) *2008–09 Budget Speech (Budget Paper 2)*. Adelaide: Government of South Australia. [Online]. Available at: <http://www.ourstatebudget.wa.gov.au/Previous-Budgets/>.
- Foley, K. (2010) *2010–11 Budget Speech (Budget Paper 2)*. Adelaide: Government of South Australia. [Online]. Available at: <http://www.ourstatebudget.wa.gov.au/Previous-Budgets/>.
- Foster, B. (2017) 'WA has the worst set of finances since the Great Depression: McGowan' *WAToday.com.au* [Online News]. Online. Available at: <http://www.watoday.com.au/wa-news/wa-has-the-worst-set-of-finances-since-the-great-depression-mcgowan-20170406-gvf03h.html>.
- Franzel, J. M. (2008) 'Urban Government Innovation: Identifying Current Innovations and Factors that Contribute to Their Adoption', *Review of Policy Research*, 25(3), pp. 253-277.
- Fratesi, U. and Senn, L. (2009) 'Regional Growth, Connections and Economic Modelling: An Introduction', in Fratesi, U. and Senn, L. (eds.) *Growth and innovation of competitive regions the role of internal and external connections*. Berlin: Springer-Verlag, pp. 3-27.
- Freeman, C. (1995) 'The national system of innovation in historical perspective', *Cambridge Journal Of Economics*, 19(1), pp. 5-24.
- Frenken, K., Oort, F. V. and Verburg, T. (2007) 'Related variety, unrelated variety and regional economic growth', *Regional Studies*, 41(5), pp. 685-697.

- Fryer, K. J., Antony, J. and Douglas, A. (2007) 'Critical success factors of continuous improvement in the public sector: a literature review and some key findings', *The TQM Magazine*, 19(5), pp. 497-517.
- Fuglsang, L. and Rønning, R. (2015) 'On innovation patterns and value-tensions in public services', *Service Industries Journal*, 35(9), pp. 467-482.
- Gale, N. K., Heath, G., Cameron, E., Rashid, S. and Redwood, S. (2013) 'Using the framework method for the analysis of qualitative data in multi-disciplinary health research', *BMC Medical Research Methodology*, 13(117), pp. 1-8.
- Galligan, B. and Roberts, W. (2008) 'Media and politics', in *Oxford Companion to Australian Politics*. Oxford University Press.
- Gerson, D. (2014) 'Building Capacity for Public Sector Innovation ', *World Association of Public Employment Services*. Paris. OECD.
- Gertler, M. and Wolfe, D. (2002a) 'Introduction', in Gertler, M. and Wolfe, D. A. (eds.) *Innovation and Social Learning: Institutional Adaptation in an Era of Technological Change*. Gordonsville, UK: Palgrave Macmillan Limited, pp. 1-24.
- Gertler, M. and Wolfe, D. A. (2002b) *Innovation and social learning institutional adaptation in an era of technological change*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.
- Government of Australia (2019) *My RDA, South Australia*. Available at: <https://www.rda.gov.au/my-rda/sa.aspx> (Accessed: 25 January).
- Government of South Australia (2017a) *Economic Development Cabinet Committee: Terms of Reference*. [Online]. Available at: https://dpc.sa.gov.au/_data/assets/pdf_file/0017/18017/EDCC-Terms-of-Reference.pdf.
- Government of South Australia (2017b) *Government Departments* [Website]. Available at: <https://web.archive.org/web/20170208234927/http://www.sa.gov.au/topics/about-sa/government/departments>.
- Government of South Australia (2017c) *The Team* [Website]. Available at: <https://web.archive.org/web/20170410192433/http://www.premier.sa.gov.au/index.php/the-team>.
- Government of South Australia (2018a) *About - Change@SouthAustralia* [Website]. Available at: <https://yoursay.sa.gov.au/decisions/change-southaustralia/about>.
- Government of South Australia (2018b) *Tonsley* [Website]. Available at: <https://tonsley.com.au/> (Accessed: 2018).
- Government of South Australia (2019a) *Gross State Product 2017-18*. Adelaide: Department of Treasury and Finance, Government of South Australia https://treasury.sa.gov.au/_data/assets/pdf_file/0005/41747/GSP-and-GDP_2017-18.pdf.

Government of South Australia (2019b) *Workforce Information*. Available at: <https://publicsector.sa.gov.au/about/office-for-the-public-sector/workforce-information/>.

Government of Western Australia (2005) *The Gallop Government's Achievements 2001-2005: Western Australia, a better place to live*. Perth: Government of Western Australia, [Online]. Available at: http://espace.library.curtin.edu.au:80/R?func=dbin-jump-full&local_base=era01gallop&object_id=105476.

Government of Western Australia (2017a) *Government Departments* [Website]. Available at: <https://web.archive.org/web/20170209004036/https://www.wa.gov.au/departments-agencies>.

Government of Western Australia (2017b) *Government Ministry* [Website]. Available at: <https://web.archive.org/web/20170218232457/https://www.premier.wa.gov.au/Ministers/Pages/Default.aspx>.

Government of Western Australia (2017c) *State of the sector 2017*. Perth: Public Sector Commission.

Government of Western Australia (2019) *Economy* [Webpage]. Available at: <https://www.jtsi.wa.gov.au/about-the-state/quality-of-life/economy>.

Grossman, G. M. and Helpman, E. (1994) 'Endogenous Innovation in the Theory of Growth', *Journal of Economic Perspectives*, 8(1), pp. 23-44.

Grundel, I. and Dahlström, M. (2016) 'A Quadruple and Quintuple Helix Approach to Regional Innovation Systems in the Transformation to a Forestry-Based Bioeconomy', *Journal of the Knowledge Economy*, 7(4), pp. 963-983.

Hall, M. and Holt, R. (2008) 'New Public Management and cultural change: the case of the UK', in Windrum, P. and Koch, P. M. (eds.) *Innovation in Public Sector Services: Entrepreneurship, Creativity and Management*. Cheltenham and Northampton: Edward Elgar, pp. 21-40.

Halligan, J. (2010) '1 New Public Sector Models: Reform in Australia and New Zealand', in Lane, J. (ed.) *Public Sector Reform: Rationale, Trends and Problems*. London: SAGE Publications,.

Hartley, J. (2005) 'Innovation in Governance and Public Services: Past and Present', *Public Money & Management*, 25(1), pp. 27-34.

Harvey, D. (1990 [1989]) *The condition of postmodernity: an enquiry into the origins of cultural change*. Cambridge, Mass.: Blackwell.

Held, D. (2013) *Political Theory and the Modern State*. Hoboken: Wiley.

Hicks, S., Langoulant, J., Shean, R. and Wauchope, M. (2001) *The Report of the Taskforce Established to Review the Machinery of Western Australia's Government*. Perth: The Machinery of Government Taskforce, Ministry of the Premier and Cabinet, Government of Western Australia. [Online]. Available at:

[https://www.slp.wa.gov.au/publications/publications.nsf/DocByAgency/5012586EF3A03EA948256A7200091C5F/\\$file/Final+MOG+report+19.6.01.pdf](https://www.slp.wa.gov.au/publications/publications.nsf/DocByAgency/5012586EF3A03EA948256A7200091C5F/$file/Final+MOG+report+19.6.01.pdf).

Hollanders, H., Arundel, A., Buligescu, B., Peter, V., Roman, L., Simmonds, P. and Es-Sadki, N. (2013) *European Public Sector Innovation Scoreboard 2013 - A pilot exercise*. Brussels: Enterprise and Industry: European Commission.

Hood, C. (1991) 'A public management for all seasons?', *Public Administration*, 69(1), pp. 3-19.

Horne, N. (2012a) *The Commonwealth efficiency dividend: an overview*. Canberra: Parliament. [Online]. Available at: [https://www.aph.gov.au/About Parliament/Parliamentary Departments/Parliamentary Library/pubs/BN/2012-2013/EfficiencyDividend](https://www.aph.gov.au/About%20Parliament/Parliamentary%20Departments/Parliamentary%20Library/pubs/BN/2012-2013/EfficiencyDividend).

Horne, N. (2012b) *Public sector staffing reductions in the states and territories*. Canberra: Parliament. [Online]. Available at: [https://www.aph.gov.au/About Parliament/Parliamentary Departments/Parliamentary Library/FlagPost/2012/September/Public sector staffing reductions in th](https://www.aph.gov.au/About%20Parliament/Parliamentary%20Departments/Parliamentary%20Library/FlagPost/2012/September/Public%20sector%20staffing%20reductions%20in%20th).

Howells, J. R. L. (2002) 'Tacit knowledge, innovation and economic geography', *Urban Studies*, 39(5-6), pp. 871-884.

Hughes, A., Moore, K. and Kataria, N. (2011) 'Innovation in Public Sector Organisations: A pilot survey for measuring innovation across the public sector'. Available at: http://www.nesta.org.uk/sites/default/files/innovation_in_public_sector_orgs.pdf.

Iammarino, S. (2005) 'An evolutionary integrated view of Regional Systems of Innovation: Concepts, measures and historical perspectives', *European Planning Studies*, 13(4), pp. 497-519.

Ihrke, D., Proctor, R. and Gabris, J. (2003) 'Understanding Innovation in Municipal Government: City Council Member Perspectives', *Journal of Urban Affairs*, 25(1), pp. 79-90.

Internet Archive (1996-) *Internet Archive: Digital library of Internet sites* [Webpage]. Available at: <https://archive.org> (Accessed: 2018).

Jessop, B. (1990) *State Theory : Putting the Capitalist State in Its Place*. Cambridge: Wiley.

Jessop, B. (2001a) 'Institutional re(turns) and the strategic - relational approach', *Environment and Planning A*, 33(7), pp. 1213-1235.

Jessop, B. (2001b) 'Institutional Re(turns) and the Strategic – Relational Approach', *Environment and Planning A: Economy and Space*, 33(7), pp. 1213-1235.

Jessop, B. (2014) 'States and State Power: A Strategic-Relational Approach' *Seminar: Capital, the State and European Integration* [Conference video]. Hrvatska, Croatia: SkriptaTV, 18 October 2014. [Online] Available at: <https://www.youtube.com/watch?v=ASbFGrnERcY&list=PLuIp8plfYA4mymuVftcikqo36g6E39CrR&index=1>.

Jessop, B., Moulaert, F., Hulgard, L. and Hamdouch, A. (2013) 'Social innovation research: A new stage in innovation analysis?', in Moulaert, F., MacCallum, D., Mehmood, A. and Hamdouch, A. (eds.) *The international handbook on social innovation: collective action, social learning and transdisciplinary research*. Cheltenham: Edward Elgar.

Johnson, K. (2006) *Subnational Economic Development in Federal Systems: The Case of Western Australia*. Thesis for the degree of Doctor of Philosophy thesis. The University of Western Australia.

Jones, M. and MacLeod, G. (2011) 'Ch 22: Conceptualizing spatial economic governance', in Pike, A., Rodríguez-Pose, A. and Tomaney, J. (eds.) *Handbook of local and regional development*. Oxon and New York: Routledge, pp. 259-271.

Jones, M. R. (1997) 'Spatial selectivity of the state? The regulationist enigma and local struggles over economic governance', *Environment and Planning A*, 29, pp. 831-864.

Joyce, S. (2019) *Review of the South Australian Government's International and Interstate Engagement Bodies and Functions*. Adelaide: Joyce Advisory Strategic Clarity.

Kattel, R. (2015) 'What would Max Weber Say about Public-Sector Innovation?', *The NISPAcee Journal of Public Administration and Policy*, 8(1), pp. 9-19.

Kaufmann, D. and Kraay, A. (2019) 'Government Effectiveness Estimate Indicator, 2017' *Worldwide Governance Indicators*. World Bank Group,. Available at: <http://info.worldbank.org/governance/wgi/index.aspx#home>.

Kitson, M., Martin, R. and Tyler, P. (2004) 'Regional Competitiveness: An Elusive yet Key Concept?', *Regional Studies*, 38(9), pp. 991-999.

Korac, S., Saliterer, I. and Walker, R. M. (2017) 'Analysing the environmental antecedents of innovation adoption among politicians and public managers', *Public Management Review*, 19(4), pp. 566-587.

Kriz, A., Banks, S. and Molloy, C. (2017) 'Readying a region: temporally exploring the development of an Australian regional quadruple helix', *R & D Management*, 48(1), pp. 25-43.

Kuhlmann, S. and Bouckaert, G. (eds.) (2016) *Local Public Sector Reforms in Times of Crisis - National Trajectories and International Comparisons*. UK: Palgrave Macmillan

Laegreid, P., Roness, P. G. and Verhoest, K. (2011) 'Explaining the Innovative Culture and Activities of State Agencies', *Organization Studies*, 32(10), pp. 1321-1347.

Lewis, J. M., Ricard, L. M. and Klijn, E. H. (2017) 'How innovation drivers, networking and leadership shape public sector innovation capacity', *International Review of Administrative Sciences*, 0(0), pp. 1-20.

Luke, B., Kearins, K. and Verreynne, M. L. (2011) 'Developing a conceptual framework of strategic entrepreneurship', *International Journal of Entrepreneurial Behavior & Research*, 17(3), pp. 314-337.

Luke, B., Verreyne, M. L. and Kearins, K. (2010) 'Innovative and entrepreneurial activity in the public sector: The changing face of public sector institutions', *Innovation: Organization & Management*, 12(2), pp. 138-153.

Luna-Reyes, L. F. (2013) 'Trust and collaboration in interorganizational information technology projects in the public sector', *Gestion y Politica Publica*, 22(SPEC.ISS.1), pp. 173-211.

Lundvall, B. (2002 [1998]) 'The learning economy: challenges to economic theory and policy [Re-Print]', in Hodgson, G. M. (ed.) *A Modern Reader in Institutional and Evolutionary Economics*. Cheltenham and Northampton: Edward Elgar, pp. 26-47.

Lundvall, B. and Borrás, S. (2005) 'Chapter 22: Science, technology and innovation policy', in Fagerberg, J., Mowery, D. C. and Nelson, R. R. (eds.) *The Oxford Handbook of Innovation*. New York: Oxford University Press.

Lundvall, B. and Maskell, P. (2000) 'Nation states and economic development: from national systems of production to national systems of knowledge creation and learning', in Gertler, M. S., Clark, G. L. and Feldman, M. P. (eds.) *The Oxford handbook of economic geography*. Oxford: Oxford University Press, pp. 353-372.

Lynn, L. E. (1997) 'Innovation and the public interest', in Altshuler, A. A. and Behn, R. D. (eds.) *Innovation in American Government: Challenges, Opportunities, and Dilemmas*. Washington, D.C.: Brookings Institution Press.

MacKinnon, D. (2012) 'Reinventing the State: Neoliberalism, State Transformation, and Economic Governance', in Barnes, T. J., Peck, J. and Sheppard, E. (eds.) *The Wiley-Blackwell Companion to Economic Geography*. Chichester: Blackwell Publishing.

MacKinnon, D. and Cumbers, A. (2015) *Introduction to Economic Geography: Globalisation, Uneven Development and Place*. 2nd edn. Essex: Pearson.

MacKinnon, D., Cumbers, A. and Chapman, K. (2002) 'Learning, innovation and regional development: a critical appraisal of recent debates', *Progress in Human Geography*, 26(3), pp. 293-311.

MacKinnon, D., Shaw, o. and Docherty, I. (2008) *Diverging mobilities? Devolution, transport and policy innovation*. Oxford and Amsterdam: Elsevier.

MacLeod, G. and Goodwin, M. (1999) 'Space, scale and state strategy: Rethinking urban and regional governance', *Progress in Human Geography*, 23(4), pp. 503-527.

Mance, R. (2006) *Strategic Overview: Shared Corporate Services Reform*. Power Point Presentation Office of Shared Services, Government of Western Australia. [Online].

Available at:

[http://www.parliament.wa.gov.au/parliament/commit.nsf/\(Evidence+Lookup+by+Com+ID\)/166600C4231FDFAD48257831003C10F8/\\$file/ef.060821.Tabled+Paper,+Office+of+Shared+Services.pdf](http://www.parliament.wa.gov.au/parliament/commit.nsf/(Evidence+Lookup+by+Com+ID)/166600C4231FDFAD48257831003C10F8/$file/ef.060821.Tabled+Paper,+Office+of+Shared+Services.pdf).

Manwaring, R. (2018) *After 16 years, electoral dynamics finally caught up with Labor in South Australia* [Online]. Available at: <https://theconversation.com/after-16-years-electoral-dynamics-finally-caught-up-with-labor-in-south-australia-93553>.

- Martin, R. and Sunley, P. (2014 [1997]) 'The Post-Keynesian state and the space-economy', in Lee, R. and Wills, J. (eds.) *Geographies of Economies*. London and New York: Routledge.
- Martinus, K., Sigler, T. J., O'Neill, P. and Tonts, M. (2018) 'Global restructuring' two decades on: Australia's relational economy in the twenty-first century', *Australian Geographer*, 49(3), pp. 341-348.
- Maxwell, J. A. (2004) 'Using Qualitative Methods for Causal Explanation', *Field Methods*, 6(3), pp. 243-264.
- Maxwell, P. (2018) 'The end of the mining boom? A Western Australian perspective', *Mineral Economics*, 31(1-2), pp. 153-170.
- Mazzucato, M. (2013) *The entrepreneurial State. Debunking public vs. private sector myths*. Revised edn. London and New York: Anthem Press.
- McMahon, L. and Phillimore, J. (2013) 'State and Territory Government Strategic Plans: Exercises in Managing, Monitoring and Marketing', *Australian Journal of Public Administration*, 72(4), pp. 404-418.
- McMichael, P. (2012) *Development and social change: a global perspective*. 5th edn. Los Angeles: SAGE.
- Menzies, J. (2014) 'The culture of Commonwealth and state relations', in CEDA (ed.) *A Federation for the 21st Century [Report]*. Melbourne: The Committee for Economic Development of Australia, pp. 64-70.
- Mergel, I. (2018) 'Open innovation in the public sector: drivers and barriers for the adoption of Challenge.gov', *Public Management Review*, 20(5), pp. 726-745.
- Michel, J.-B., Shen, Y. K., Aiden, A. P., Veres, A., Gray, M. K., Brockman, W., Team, T. G. B., Pickett, J. P., Hoiberg, D., Clancy, D., Norvig, P., Orwant, J., Pinker, S., Nowak, M. A. and Aiden, E. L. (2011) 'Quantitative Analysis of Culture Using Millions of Digitized Books', *Science*, 331(6014), pp. 176-182.
- Mills, M. C. (2012) 'Comparative Research', in Given, L. M. (ed.) *The SAGE Encyclopedia of Qualitative Research Methods*. Thousand Oaks: SAGE Publications, pp. 101-103.
- Monteiro-Brandao, S. and Bruno-Faria, M. F. (2013) 'Research on public sector innovation: Analysis of scientific literature in national and international journals in the area of administration', *Revista de Administracao Publica*, 47(1), pp. 227-248.
- Moore, M. H. (1994) 'Public Value as Focus of Strategy', *Australian Journal of Public Administration*, 53(3), pp. 296-303.
- Morgan, J. (2010) 'Governance, Policy Innovation, and Local Economic Development in North Carolina', *Policy Studies Journal*, 38(4), pp. 679-702.
- Morgan, K. (1997) 'The learning region: institutions, innovation and regional renewal', *Regional Studies*, 31, pp. 491-503.

- Morgan, K. (2013) 'Path dependence and the state: The politics of novelty in old industrial regions', in Cooke, P. (ed.) *Re-framing regional development: evolution, innovation and transition*. London: Routledge, pp. 318–340.
- Morgan, K. (2016) 'Chapter 4 - Speaking truth to power: the political dynamics of public sector innovation', in Kyriakou, D., Palazuelos-Martínez, M., Perriáñez-Forte, I. and Rainoldi, A. (eds.) *Governing Smart Specialisation*. London and New York: Routledge, pp. 49-61.
- Moulaert, F., Martinelli, F., González, S. and Swyngedouw, E. (2007) 'Introduction: Social Innovation and Governance in European Cities - Urban Development Between Path Dependency and Radical Innovation ', *European Urban and Regional Studies*, 14(3), pp. 195-209.
- Moulaert, F. and Mehmood, A. (2011) 'Ch 18: Spaces of social innovation', in Pike, A., Rodriguez-Pose, A. and Tomaney, J. (eds.) *Handbook of Local and Regional Development*. Oxon and New York: Routledge, pp. 212-225.
- Moulaert, F. and Nussbaumer, J. (2005) 'The social region: Beyond the Territorial Dynamics of the Learning Economy', *European Urban and Regional Studies*, 12(1), pp. 45-64.
- Moulaert, F. and Sekia, F. (2003) 'Territorial Innovation Models: A Critical Survey', *Regional Studies*, 37(3), pp. 289-302.
- Mulgan, G. and Albury, D. (2003) *Innovation in the Public Sector - Discussion Paper*. Strategy Unit, Cabinet Office, UK Government.
- Nahan, M. (2013) *Media Statement: Shared Services another step towards closure*. Former Treasurer, Minister for Energy, Citizenship and Multicultural Interests; Government of Western Australia. [Online]. Available at: <https://www.mediastatements.wa.gov.au/Pages/Barnett/2013/12/Shared-Services-another-step-towards-closure.aspx>.
- Nahan, M. (2015) *Budget Speech 2015-16*. Perth: Department of Treasury, Government of Western Australia. [Online]. Available at: <http://www.ourstatebudget.wa.gov.au/Previous-Budgets/>.
- Nam, T. (2012) 'Citizens' attitudes toward Open Government and Government 2.0', *International Review of Administrative Sciences*, 78(2), pp. 346-368.
- National Audit Office (2006) *Achieving innovation in central government organizations*. London: Parliament of the United Kingdom. [Online]. Available at: www.official-documents.gov.uk/document/hc0506/hc14/1447/1447.pdf.
- National Library of Australia (1996-) *PANDORA, Australia's Web Archive*. Available at: <http://pandora.nla.gov.au/>.
- Nelson, R. and Winter, S. G. (1982) *An Evolutionary Theory of Economic Change*. Cambridge: The Belknap Press of Harvard University.

Norman, R. (2007) 'Managing Outcomes While Accounting for Outputs: Redefining "Public Value" in New Zealand's Performance Management System', *Public Performance & Management Review*, 30(4), pp. 536-549.

O'Mahoney, J. and Vincent, S. (2014) 'Critical realism as an empirical project', in Edwards, P. K., O'Mahoney, J. and Vincent, S. (eds.) *Studying organizations using critical realism: a practical guide*. Oxford: Oxford University Press, pp. 2-20.

O'Neill, P. (1997) 'Bringing the qualitative state into economic geography', in Lee, R. and Wills, J. (eds.) *Geographies of Economies*. London: Arnold, pp. 290-301.

O'Neill, P. (2008 [1997]) 'Bringing the qualitative state into economic geography', in Barnes, T. J., Peck, J., Sheppard, E. and Tickell, A. (eds.) *Reading Economic Geography*. Online: Wiley, pp. 257-270.

O'Flynn, J. (2007) 'From New Public Management to Public Value: Paradigmatic Change and Managerial Implications', *The Australian Journal of Public Administration*, 66(3), pp. 353-366.

OCPSE (2018a) *90-Day Projects* [Website]. Available at: <https://publicsector.sa.gov.au/culture/90-day-projects/>.

OCPSE (2018b) *South Australian Public Sector Innovation Lab* [Website]. Available at: <https://publicsector.sa.gov.au/culture/south-australian-public-sector-innovation-lab/>.

OECD (2010) *Measuring Innovation: A New Perspective*. Paris: OECD Publishing.

OECD (2014a) 'OECD Regional Statistics: Regional well-being (Edition 2015)'. Online: OECD. Available at: <https://www.oecdregionalwellbeing.org/assets/downloads/OECD-Regional-Well-Being-Data-File.xlsx>.

OECD (2014b) *Public Sector in Glossary of Statistical Terms*. Available at: <http://stats.oecd.org/glossary/detail.asp?ID=2199> (Accessed: July 2016).

OECD (2015) *How's Life? 2015 Measuring Well-being*. Paris: Publishing, O.

OECD (2017) *Embracing Innovation in Government Global Trends February 2017*. Paris: OECD Publishing.

OECD (2018) *Government at a Glance 2017*. Paris: OECD Publishing.

OECD and EC (2008) *Handbook on Constructing Composite Indicators: Methodology and User Guide*. Paris: OECD Publishing and European Commission.

Offe, C. (1984) *Contradictions of the welfare state*. Cambridge, Mass.: MIT Press.

Office for the Public Sector (2015) *90-Day Projects Evaluation Report*. Internal Document. Change@South Australia, Office for the Public Sector, Government of South Australia.

Osborne, S. and Brown, L. (2011) 'Innovation, public policy and public services delivery in the UK. The word that would be king?', *Public Administration*, 89(4), pp. 1335-1350.

- Osborne, S. P. (1998) *Voluntary organizations and innovation in public services*. New York: Routledge.
- Osborne, S. P. (2006) 'The New Public Governance?', *Public Management Review*, 8(2), pp. 377-387.
- Osborne, S. P. and Brown, K. (eds.) (2005) *Managing Change and Innovation in Public Service Organizations*. London: Routledge.
- Owen-Smith, J., Riccaboni, M., Pammolli, F. and Powell, W. W. (2002) 'A Comparison of U.S. and European University-Industry Relations in the Life Sciences', *Management Science*, 48(1), pp. 24-43.
- Painter, J. (2000) 'State and Governance', in Sheppard, E. and Barnes, T. J. (eds.) *A companion to Economic Geography*. Oxford: Blackwell Publishing Ltd, pp. 359-376.
- Parker, L. (2001) 'John Olsen resigns as SA premier', *PM Archive*edn), Friday, 19 October. [Online] Available at: <http://www.abc.net.au/pm/stories/s395625.htm>.
- Parker, L. D. and Guthrie, J. (1993) 'The Australian Public Sector in the 1990s: New Accountability Regimes in Motion', *Journal of International Accounting Auditing & Taxation*, 2(1), pp. 59-81.
- Parliament of Australia (2019) *Search Senators and Members* [Website]. Available at: https://www.aph.gov.au/Senators_and_Members/Parliamentarian_Search_Results?
- Parliamentary Library (2017) *State Statistical Bulletin 2017*. Canberra: Department of Parliamentary Services, Parliament of Australia. [Online]. Available at: http://parlinfo.aph.gov.au/parlInfo/download/library/prspub/5860803/upload_binary/5860803.pdf;fileType=application/pdf.
- Parliamentary Library (2018a) *South Australia state election 2018*. Department of Parliamentary Services, Parliament of Australia. [Online]. Available at: https://parlinfo.aph.gov.au/parlInfo/download/library/prspub/6091480/upload_binary/6091480.pdf.
- Parliamentary Library (2018b) *State Statistical Bulletin 2017-18*. Canberra: Department of Parliamentary Services, Parliament of Australia. [Online]. Available at: http://parlinfo.aph.gov.au/parlInfo/download/library/prspub/5860803/upload_binary/5860803.pdf;fileType=application/pdf.
- Parna, O. (2014) *Towards a systemic approach to understanding and managing innovation in the public sector: A comparative study of four EU countries* A thesis submitted in partial fulfilment of the requirements for the degree of Master of Philosophy in Science and Technology Policy Studies -Unpublished-. University of Sussex, available at http://sro.sussex.ac.uk/47330/1/P%C3%A4rna%2C_Ott.pdf.
- Parna, O. and von Tunzelmann, N. (2007) 'Innovation in the public sector: Key features influencing the development and implementation of technologically innovative public sector services in the UK, Denmark, Finland and Estonia', *Information Polity*, 12(3), pp. 109-125.

- Paül, V. and Haslam McKenzie, F. (2015) 'About time the regions were recognised: interpreting region-building in Western Australia', *Australian Geographer*, 46(3), pp. 363-388.
- Peck, J. (2001) 'Neoliberalizing states: thin policies/hard outcomes', *Progress in Human Geography*, 25(3), pp. 445-455.
- Peck, J. and Tickell, A. (2002) 'Neoliberalizing Space', *Antipode*, 34(3), pp. 380-403.
- Perren, L. and Sapsed, J. (2013) 'Innovation as politics: The rise and reshaping of innovation in UK parliamentary discourse 1960-2005', *Research Policy*, 42(10), pp. 1815-1828.
- Phelps, N. A. (2007) 'Gaining from Globalization? State Extraterritoriality and Domestic Economic Impacts—The Case of Singapore', *Economic Geography*, 83(4), pp. 371-393.
- Pike, A., MacKinnon, D., Cumbers, A., Dawley, S. and McMaster, R. (2016) 'Doing Evolution in Economic Geography', *Economic Geography*, 92(2), pp. 123-144.
- Pike, A., Rodriguez-Pose, A. and Tomaney, J. (2006) *Local and Regional Development*. Abingdon and New York: Routledge.
- Pike, A., Rodriguez-Pose, A. and Tomaney, J. (2017) *Local and Regional Development*. 2nd edn. London: Routledge.
- Pike, A., Rodríguez-Pose, A. and Tomaney, J. (2007) 'What Kind of Local and Regional Development and for Whom?', *Regional Studies*, 41(9), pp. 1253-1269.
- Polanyi, K. (1944) *The great transformation*. New York: Rinehart.
- Pollitt, C. (2011) 'Ch2 - Innovation in the Public Sector: An Introductory Overview', in Bekkers, V., J. E. and Steijn, B. (eds.) *Innovation in the Public Sector: Linking Capacity and Leadership*. Palgrave Macmillan, pp. 35-43.
- Pollitt, C. and Bouckaert, G. (2017) *Public Management Reform A Comparative Analysis—Into the Age of Austerity*. 4 edn. Oxford: Oxford University Press.
- Pollitt, C. and Hupe, P. (2011) 'Talking about government: The role of magic concepts', *Public Management Review* 13(5), pp. 641-658.
- Potts, J. and Kastle, T. (2010) 'Public sector innovation research: What's next?', *Innovation-management Policy & Practice*, 12(2), pp. 122-137.
- Premier's Circular (2017) *State Government Boards and Committees*. Perth: Government of Western Australia. [Online]. Available at: <https://www.dpc.wa.gov.au/GuidelinesAndPolicies/PremiersCirculars/Pages/State%20Government%20Boards%20and%20Committees.aspx>.
- Premier and Cabinet Circular (2014) *Establishment and Governance requirements for government boards and committees*. Government of South Australia. [Online]. Available at: <https://www.dpc.sa.gov.au/documents/rendition/DPC-Circular22-Establishment-governance-requirements-government-boards-committees.pdf>.

- Price, I. (2000) *Z-scores*. Available at: http://webstat.une.edu.au/unit_materials/c4_descriptive_statistics/z_scores.htm.
- Pugh, R. (2015) 'Beyond top-down recipes to connected innovative places', *Regional Studies, Regional Science*, 3(1), pp. 114-120.
- Ranga, M. (2018) *The Triple Helix concept* [Website, The Triple Helix Research Group, Stanford University]. Available at: https://triplehelix.stanford.edu/3helix_concept (Accessed: March 18, 2018).
- Ranga, M. and Etzkowitz, H. (2013) 'Triple Helix systems: an analytical framework for innovation policy and practice in the Knowledge Society', *Industry and Higher Education*, 27(3), pp. 237-262.
- Rann, P. M. (2002) *Public Sector Responsiveness Report*. House of Assembly, Government of South Australia. [Online]. Available at: http://webarchive.nla.gov.au/gov/20040503072350/http://www.premcab.sa.gov.au/dpc/publications_review.html.
- Raventós, C. (2003) '¿Hacia la ruptura de la relación entre legitimidad política y bienestar social?', in Villasuso, J. M. (ed.) *Procesos de cambio en Costa Rica: reflexiones al inicio del siglo XXI*. San Jose: Fundación Friedrich Ebert.
- Rhodes, R. A. W. (1997) *Understanding governance: policy networks, governance, reflexivity and accountability*. Bristol, Pa.: Open University Press.
- Ricard, L. M., Klijn, E. H., Lewis, J. M. and Ysa, T. (2017) 'Assessing public leadership styles for innovation: a comparison of Copenhagen, Rotterdam and Barcelona', *Public Management Review*, 19(2), pp. 134-156.
- Rodríguez-Pose, A. (2013) 'Do Institutions Matter for Regional Development?', *Regional Studies*, 47(7), pp. 1034-1047.
- Rodríguez-Pose, A. and Di Cataldo, M. (2015) 'Quality of government and innovative performance in the regions of Europe', *Journal of Economic Geography*, 15(4), pp. 673-706.
- Rodrik, D. (2004) 'Industrial Policy for the Twenty-First Century'. United Nations Industrial Development Organization. Available at: John F. Kennedy School of Government, Harvard University <https://drodrik.scholar.harvard.edu/files/dani-rodrik/files/industrial-policy-twenty-first-century.pdf>.
- Rogers, E. M. (2003) *Diffusion of Innovations*. 5 edn. New York: Free Press.
- SA_CPSE (2014) *About Us* [Website]. Available at: <https://web.archive.org/web/20140716211404/http://publicsector.sa.gov.au/> (Accessed: 16 July 2014).
- SA_DP&C (2013) *Better Together: Principles of engagement - a foundation for engagement in the South Australian government*. Adelaide: Senior Management Council, Department of the Premier and Cabinet, Government of South Australia. [Online]. Available at: www.yoursay.sa.gov.au/bettertogether

SA_DP&C (2014) *State of the Sector Report 2013-2014*. Adelaide: Department of the Premier and Cabinet, Government of South Australia.

SA_DP&C (2015) *Reforming Democracy: Deciding, Designing and Delivering Together*. Adelaide: Strategic Engagement and Communications, Department of the Premier and Cabinet, Government of South Australia. [Online]. Available at: <https://yoursay.sa.gov.au/reforming-democracy>.

SA_GRC (2007) *Punching above our weight*. Adelaide: Government Reform Commission, Government of South Australia. [Online]. Available at: [http://content.webarchive.nla.gov.au/gov/wayback/20080719084510/http://intra.sa.gov.au/Policies/cpe/docs/Government/Punching above our weight 20071120.pdf](http://content.webarchive.nla.gov.au/gov/wayback/20080719084510/http://intra.sa.gov.au/Policies/cpe/docs/Government/Punching%20above%20our%20weight%20071120.pdf).

SA_OESPI (2009) *State of the Service Report 2008-2009*. Adelaide: Office for Ethical Standards and Professional Integrity, Department of the Premier and Cabinet, Government of South Australia.

SA_OESPI (2010) *State of the Sector Report 2009-2010*. Adelaide: Office for Ethical Standards and Professional Integrity, Department of the Premier and Cabinet, Government of South Australia.

SA_OESPI (2011) *State of the Sector Report 2010-2011*. Adelaide: Office for Ethical Standards and Professional Integrity, Department of the Premier and Cabinet, Government of South Australia.

SA_OPE (2006) *State of the Service Report 2005-06*. Adelaide: Office of Public Employment, Government of South Australia. [Online]. Available at: <https://web.archive.org/web/20070831095514/http://www.cpe.sa.gov.au/default.asp?idL1=20&idL2=1640&idL3=1661> (Accessed: Jan 2018).

SA_OPE (2007) *State of the Service Report 2006-07*. Adelaide: Office of Public Employment, Department of the Premier and Cabinet, Government of South Australia. [Online]. Available at: <http://webarchive.nla.gov.au/gov/20080719084510/http://intra.sa.gov.au/Policies/cpe/standards.asp#State>.

SA_OPER (2012) *State of the Sector Report 2011-2012*. Adelaide: Office of Public Employment and Review, Department of the Premier and Cabinet, Government of South Australia.

SA_OPER (2013) *State of the Sector Report 2012-13*. Adelaide: Office of Public Employment and Review, Commissioner for Public Sector Employment, Government of South Australia.

SA_SMC (2017) *Working Together: A Joined-Up Policy Guide*. Adelaide: Senior Management Council, Department of the Premier and Cabinet, Government of South Australia. [Online]. Available at: http://www.dpc.sa.gov.au/_data/assets/pdf_file/0005/16664/Working-Together-Joined-Up-Policy-Guide.pdf.

Sariego-Kluge, L. (2017) 'Top ten tips for doing overseas fieldwork'. Available at: <http://www.pgf.rgs.org/for-overseas-fieldwork/>.

- Sayer, A. R. (1992) *Method in social science: a realist approach*. 2nd edn. London: Routledge.
- Sayer, A. R. (2000) *Realism and Social Science*. London: SAGE Publications Ltd.
- Schumpeter, J. (2010 [1942]) *Capitalism, Socialism and Democracy*. Routledge.
- Scott, A. (1988) *New Industrial Spaces: Flexible Production Organisation and Regional Development in North America and Western Europe*. London: Pion.
- Service Priority Review (2017) *Working together: One public sector delivering for WA (Final Report to the Western Australian Government)*. Western Australia: State of Western Australia.
- Shin, S. (2015) 'Regional research and technology organization and some challenges in Korea', *Regional Studies, Regional Science*, 2(1), pp. 424-431.
- Smailes, P., Griffin, T. and Argent, N. (2016) 'Spatial Concentration in Australian Regional Development, Exogenous Shocks and Regional Demographic Outcomes: a South Australian case study', *Australian Geographer*, 47(4), pp. 527-545.
- Smith and Taylor (2014) 'Approaches to reform in the Federation', in CEDA (ed.) *A Federation for the 21st Century [Report]*. Melbourne: The Committee for Economic Development of Australia,, pp. 8-18.
- Snelling, H. J. J. (2011) *2011–12 Budget Speech (Budget Paper 2)*. Adelaide: Government of South Australia. [Online]. Available at: <http://www.ourstatebudget.wa.gov.au/Previous-Budgets/>.
- Snelling, H. J. J. (2013) *2012–13 Budget Speech (Budget Paper 2)*. Adelaide: Government of South Australia. [Online]. Available at: <http://www.ourstatebudget.wa.gov.au/Previous-Budgets/>.
- Sorensen, E. (2017) 'Political innovations: innovations in political institutions, processes and outputs', *Public Management Review*, 19(1), pp. 1-19.
- Sorensen, E. and Torfing, J. (2011) 'Enhancing Collaborative Innovation in the Public Sector', *Administration & Society*, 43(8), pp. 842-868.
- Sorensen, E. and Torfing, J. (2012) 'Introduction: Collaborative innovation in the public sector', 17(1), pp. --.
- Sorensen, E. and Torfing, J. (2015) 'Ch7. Enhancing Public Innovation through Collaboration, Leadership and New Public Governance ', in Nicholls, A., Simon, J. and Gabriel, M. (eds.) *New Frontiers in Social Innovation Research (Open Access)*. Basingstoke: Palgrave Macmillan, pp. 145-169.
- Sorensen, E. and Triantafillou, P. (2009) 'Ch1 - The Politics of Self-Governance: An Introduction', in Sorensen, E. and Triantafillou, P. (eds.) *The Politics of Self-Governance*. Surrey: Ashgate, pp. 1-22.
- Sotarauta, M. and Heinonen, T. (2016) 'The Triple Helix model and the competence set: human spare parts industry under scrutiny', *Triple Helix*, 3(1), p. 8.

South Australian Labor (2018) *Standing up for South Australia: Our Plan for South Australia* [Website]. Available at: <https://web.archive.org/web/20180226053949/https://sa.alp.org.au/> (Accessed: 26/02/2018).

Spoehr, J. (2017) 'The search for an economic solution for South Australia' *The Conversation*. January 31, 2017 7.04pm GMT. Online. Available at: <https://theconversation.com/the-search-for-an-economic-solution-for-south-australia-71332>.

Stake, R. E. (1995) *The art of case study research*. Thousand Oaks: Sage Publications.

Stansbury, C. and Barre, A. (2011) 'Modernising Public Sector Management: Recent Reforms in Western Australia', *Ethos*(9), 14 Jun 2011.

Storper, M. (1997) *The regional world : territorial development in a global economy*. New York: Guilford Press.

Storper, M. (2011) 'Why do regions develop and change? The challenge for geography and economics', *Journal of Economic Geography* 11(2), pp. 333-346.

Storper, M. and Scott, A. (1988) 'The geographical foundations and social regulation of flexible production complexes', in Wolch, J. R. and Dear, M. J. (eds.) *The Power of geography: how territory shapes social life*. Boston: Unwin Hyman, pp. 21-40.

Strumpf, K. S. (2002) 'Does Government Decentralization Increase Policy Innovation?', *Journal of Public Economic Theory*, 4(2), pp. 207-241.

Swanborn, P. (2010) *Case study research: What, why and how?* London: SAGE.

TACSI (2018) *About - The Australian Centre for Social Innovation* [Website]. Available at: <https://www.tacsi.org.au/about/>.

Teorell, J., Kumlin, S., Dahlberg, S., Holmberg, S., Rothstein, B., Pachon, N. A. and Svensson, R. (2019a) 'Functioning of Government Indicator 2005-2017' Freedom House in *The Quality of Government OECD Dataset, version Jan19*. University of Gothenburg: The Quality of Government Institute. Available at: <http://www.qog.pol.gu.se> <http://10.18157/qogoecdjan19>.

Teorell, J., Kumlin, S., Dahlberg, S., Holmberg, S., Rothstein, B., Pachon, N. A. and Svensson, R. (2019b) 'Legal Structure and Security of Property Rights 1970-2015' Institute, F. in *The Quality of Government OECD Dataset, version Jan19*. University of Gothenburg: The Quality of Government Institute. Available at: <http://www.qog.pol.gu.se> <http://10.18157/qogoecdjan19>.

Teorell, J., Kumlin, S., Dahlberg, S., Holmberg, S., Rothstein, B., Pachon, N. A. and Svensson, R. (2019c) 'Percentage with Tertiary Schooling, Female and Male, 25+ 1950-2010' Lee, B. a. in *The Quality of Government OECD Dataset, version Jan19*. University of Gothenburg: The Quality of Government Institute. Available at: <http://www.qog.pol.gu.se> <http://10.18157/qogoecdjan19>.

- Tewdwr-Jones, M. and Lord, A. (2009) 'Regional Actors', in Kitchin, R. and Thrift, N. (eds.) *International Encyclopedia of Human Geography*. Amsterdam: Elsevier, pp. 151-155.
- The Gallup Organization (2011) 'Innobarometer 2010: Analytical Report, Innovation in Public Administration'. Available at: http://ec.europa.eu/public_opinion/flash/fl_305_en.pdf.
- Tiffen, R. (2008) 'Media and Politics', in Gilligan, B. and Roberts, W. (eds.) *Oxford Companion to Australian Politics*. Oxford University Press.
- Tonts, M., Martinus, K. and Plummer, P. (2013) 'Regional development, redistribution and the extraction of mineral resources: The Western Australian Goldfields as a resource bank', *Applied Geography*, 45, pp. 365-374.
- Tönurist, P., Kattel, R. and Lember, V. (2017) 'Innovation labs in the public sector: what they are and what they do?', *Public Management Review*, 19(10), pp. 1455-1479.
- Trenorden, M. (2012) *Report - Public Discussion Paper: Public Sector Reform*. Perth: Parliament. [Online]. Available at: [http://www.parliament.wa.gov.au/Parliament/commit.nsf/\(Report+Lookup+by+Com+ID\)/753BCF414011E33A48257AB5000C1554/\\$file/pc.poj.121113.rpf.016.xx.pdf](http://www.parliament.wa.gov.au/Parliament/commit.nsf/(Report+Lookup+by+Com+ID)/753BCF414011E33A48257AB5000C1554/$file/pc.poj.121113.rpf.016.xx.pdf).
- UNDP (2018) 'Table 2. Human Development Index Trends, 1990-2017' United Nations Development Programme *Human Development Reports*. Available at: <http://hdr.undp.org/en/composite/trends>.
- Unearthed Solutions (2016) *Unearthed* [Website]. Available at: <https://unearthed.solutions> (Accessed: 02 April 2018).
- Uyarra, E., Edler, J., Garcia-Estevez, J., Georghiou, L. and Yeow, J. (2014) 'Barriers to innovation through public procurement: A supplier perspective', *Technovation*, 34(10), pp. 631-645.
- Vále, M. (2011) 'Ch 34: Innovation networks and local and regional development policy', in Pike, A., Rodríguez-Pose, A. and Tomaney, J. (eds.) *Handbook of local and regional development*. Oxon and New York: Routledge, pp. 413-424.
- Valkama, P., Bailey, S. J. and Anttiroiko, A.-V. (2013) 'Contexts and Challenges of Organizational Innovation in Public Services', in Valkama, P., Bailey, S. J. and Anttiroiko, A.-V. (eds.) *Organizational Innovation in Public Services: Forms and Governance*. Basingstoke and New York: Palgrave Macmillan, pp. 3-12.
- Vázquez-Barquero, A. (2002) *Endogenous development: networking, innovation, institutions and cities*. London: Routledge.
- Veenswijk, M. (2005) 'Cultural Change in the Public Sector: Innovating the frontstage and backstage', in Veenswijk, M. (ed.) *Organizing Innovation: New Approaches to Cultural Change and Intervention in Public Sector Organizations*. Amsterdam: Washington, DC: IOS Press, pp. 3-14.

Vigoda-Gadot, E., Shoham, A., Schwabsky, N. and Ruvio, A. (2008) 'Public sector innovation for Europe: A multinational eight-country exploration of citizens' perspectives', *Public Administration*, 86(2), pp. 307-329.

WA (2012) *State of the sector 2012*. Perth: Public Sector Commission, Government of Western Australia.

WA (2013) *State of the sector 2013*. Perth: Public Sector Commission, Government of Western Australia. [Online]. Available at: https://publicsector.wa.gov.au/sites/default/files/documents/state_of_the_sector_report_2013.pdf.

WA (2014) *State of the sector 2014*. Perth: Public Sector Commission, Government of Western Australia. [Online]. Available at: <https://publicsector.wa.gov.au/document/state-wa-public-sector-2014-measuring-full-report>.

WA (2015) *State of the sector 2015*. Perth: Public Sector Commission, Government of Western Australia.

WA (2016) *Western Australian Innovation Strategy* Perth: Office of the Government Chief Information Officer, Government of Western Australia.

WA (2018) *Our Story: Landgate - Western Australia Land Information Authority* Western Australian Land Information Authority: Government of Western Australia. [Online]. Available at: <https://www0.landgate.wa.gov.au/about-us/our-story>.

WA Budget Speech (2003). Perth: Hon Eric S Ripper MLA; Deputy Premier, Treasurer, Minister for Energy; Western Australia Government. [Online]. Available at: <http://www.ourstatebudget.wa.gov.au/Previous-Budgets/>.

WA_DP&C (2003) *Better Planning, Better Services: A Strategic Planning Framework for the Western Australian Public Sector*. Perth: Department of the Premier and Cabinet, Government of Western Australia. [Online]. Available at: <http://webarchive.nla.gov.au/gov/20040216024949/http://www.dpc.wa.gov.au/psmd/pubs/pubs.html>.

WA_DP&C (2004a) *People making a difference: The Public Sector Strategic Directions*. Perth: Department of the Premier and Cabinet, Government of Western Australia. [Online]. Available at: https://web.archive.org/web/20060213090957/http://www.dpc.wa.gov.au/psmd/pubs/psrd/people/people_making_a_difference/FinalReportInternet.pdf.

WA_DP&C (2004b) *A Voice for All: Strengthening Democracy - Western Australian Citizenship Strategy 2004-2009*. Perth: Citizens and Civics Unit, Department of the Premier and Cabinet, Government of Western Australia. [Online]. Available at: https://web.archive.org/web/20060920084829/http://www.citizenscape.wa.gov.au/documents/citizenship_strategy.pdf.

WA_DP&C (2006a) *Better Planning, Better Futures: A Framework for the Strategic Planning Western Australian Public Sector*. Perth: Department of the Premier and Cabinet, Government of Western Australia. [Online]. Available at:

<http://webarchive.nla.gov.au/gov/20040216024949/http://www.dpc.wa.gov.au/psmd/pubs/pubs.html>.

WA_DP&C (2006b) *Working together: Involving Community and Stakeholders in Decision-Making*. Perth: Office of Citizens and Civics, Department of the Premier and Cabinet, Government of Western Australia. [Online]. Available at: <https://web.archive.org/web/20070830160843/http://www.citizenscape.wa.gov.au/documents/FullColourlowresolution.pdf>.

WA_Legislative_Council (2012) *Report 16. Public Discussion paper: Public sector reform*. Western Australia: Standing Committee on Public Administration, Legislative Council, 38th Parliament, Government of Western Australia.

Wagner, B. and Fain, N. (2017) 'Regulatory influences on innovation in the public sector: the role of regulatory regimes', *Public Management Review*, pp. 1-23.

Walker, R. M. (2008) 'An Empirical Evaluation of Innovation Types and Organizational and Environmental Characteristics: Towards a Configuration Framework', *Journal of Public Administration Research and Theory*, 18(4), pp. 591-615.

Walker, R. M. (2014) 'Internal and External Antecedents of Process Innovation: A review and extension', *Public Management Review*, 16(1), pp. 21-44.

Walker, R. M., Jeanes, E. and Rowlands, R. (2002) 'Measuring innovation - Applying the literature-based innovation output indicator to public services', *Public Administration*, 80(1), pp. 201-214.

Weatherill, J. (2013) *2013-14 Budget Speech (Budget Paper 2)*. Adelaide: Government of South Australia. [Online]. Available at: <http://www.ourstatebudget.wa.gov.au/Previous-Budgets/>.

Wiltshire, K. (2014) 'Criteria for assigning roles and responsibilities in the Federation', in CEDA (ed.) *A Federation for the 21st Century [Report]*. Melbourne: The Committee for Economic Development of Australia, pp. 102-114.

Windrum, P. (2008) 'Innovation and entrepreneurship in public services', in Windrum, P. and Koch, P. (eds.) *Innovation in Public Sector Services: Entrepreneurship, Creativity and Management*. Cheltenham and Northampton: Edward Elgar, pp. 3-20.

Windrum, P. and Koch, P. (2008) *Innovation in Public Sector Services: Entrepreneurship, Creativity and Management*. Cheltenham and Northampton: Edward Elgar.

Yeung, H. W.-c. (1997) 'Critical realism and realist research in human geography: A method or a philosophy in search of a method?', *Progress in Human Geography*, 21(1), pp. 51-74.

Yin, R. K. (2014) *Case study research: design and methods*. Fifth edn. Los Angeles: SAGE.

Zhao, Q. (2012) 'The regional disparities in Chinese provincial government innovation', *Innovation: Management, Policy and Practice*, 14(4), pp. 595-604.

Zukauskaitė, E., Tripl, M. and Plechero, M. (2017) 'Institutional Thickness Revisited', *Economic Geography*, 93(4), pp. 325-345.

Appendix A. Data for the Quadrant Scatterplot

Public Sector Innovation (PSI)	First Year (Y1) (2012)			Last Year (Y2) (2016)		
	Prop. Innovators	Z-score	Z-Score, Excl. ACT	Prop. Innovators	Z-score	Z-Score, Excl. ACT
New South Wales	46.200	-0.571	-0.424	40.600	-0.602	-0.444
Victoria	47.300	-0.126	0.036	43.300	0.141	0.556
Queensland	49.400	0.722	0.913	43.000	0.058	0.444
South Australia	50.000	0.964	1.163	45.800	0.829	1.482
Western Australia	45.900	-0.692	-0.549	38.200	-1.262	-1.333
Tasmania	49.100	0.601	0.787	43.600	0.224	0.667
Northern Territory	42.600	-2.025	-1.927	38.100	-1.290	-1.371
Australian Capital Territory	50.400	1.126		49.700	1.902	
Mean/Average	47.613			42.788		
Standard Deviation	2.476			3.634		
Mean (Excl. ACT)	47.214			41.800		
Standard Deviation (Excl. ACT)	2.395			2.700		

Economic development (<i>sum of z-scores from indicators below</i>)	First Year (Y1)				Last Year (Y2)			
	Sum Z-Scores	Sum Excl. ACT	Z-score	Z-Score, Excl. ACT	Sum Z-Scores	Sum Z-Scores Excl. ACT	Z-score	Z-Score, Excl. ACT
New South Wales	-1.980	-0.686	-0.660	-0.314	-2.011	-0.441	-0.722	-0.247
Victoria	-1.170	-0.608	-0.390	-0.278	-0.525	0.266	-0.188	0.149
Queensland	-1.357	-0.401	-0.452	-0.184	-0.713	0.104	-0.256	0.058
South Australia	-1.475	-0.993	-0.492	-0.455	-2.758	-2.408	-0.990	-1.352
Western Australia	0.561	2.831	0.187	1.297	0.014	1.833	0.005	1.028
Tasmania	-3.052	-3.489	-1.017	-1.598	-1.794	-2.185	-0.644	-1.226
Northern Territory	1.306	3.346	0.435	1.533	1.054	2.832	0.378	1.589
Australian Capital Territory	7.166		2.389		6.734		2.417	
Mean	0.000				0.000			
Standard Deviation	3.000				2.786			
Mean (Excl. ACT)		0.000				0.000		
Standard Deviation (Excl. ACT)		2.184				1.782		

Household disposable income per capita (AUD\$)	First Year (Y1) (2012)			Last Year (Y2) (2016)		
	HIC Score	Z-score	Z-Score, Excl.ACT	HIC Score	Z-score	Z-Score, Excl.ACT
New South Wales	44488	-0.223	0.421	50806	-0.017	0.846
Victoria	39378	-0.615	-0.782	43259	-0.644	-0.741
Queensland	41988	-0.415	-0.168	43851	-0.595	-0.617
South Australia	39877	-0.577	-0.665	43959	-0.586	-0.594
Western Australia	48879	0.115	1.455	50146	-0.071	0.708
Tasmania	36458	-0.840	-1.470	40665	-0.860	-1.287
Northern Territory	47839	0.035	1.210	54796	0.315	1.686
Australian Capital Territory	80151	2.519		80554	2.458	
Mean	47382.250			51004.500		
Standard Deviation	13006.972			12020.995		
Mean (Excl. ACT)	42701.000			46783.143		
Standard Deviation (Excl. ACT)	4247.030			4752.782		

Access to services (Broadband) (%)	First Year (Y1) (2011)			Last Year (Y2) (2016)		
	AS Score	Z-score	Z-Score, Excl.ACT	AS Score	Z-score	Z-Score, Excl.ACT
New South Wales	79.20	0.067	0.487	82.50	-0.089	0.285
Victoria	78.60	-0.061	0.307	83.70	0.251	0.773
Queensland	79.10	0.045	0.457	83.70	0.251	0.773
South Australia	75.70	-0.681	-0.559	80.60	-0.627	-0.488
Western Australia	81.40	0.537	1.144	85.10	0.648	1.342
Tasmania	70.30	-1.834	-2.173	78.00	-1.363	-1.545
Northern Territory	78.70	-0.040	0.337	79.00	-1.080	-1.139
Australian Capital Territory	88.10	1.968		89.90	2.007	
Mean	78.888			82.813		
Standard Deviation	4.682			3.531		
Mean (Excl. ACT)	77.571			81.800		
Standard Deviation (Excl. ACT)	3.346			2.459		

Long term unemployment (%)	First Year (Y1) (2012)			Last Year (Y2) (2016)		
	LTU Score	Z-score	Z-Score, Excl.ACT	LTU Score	Z-score	Z-Score, Excl.ACT
New South Wales	1.150	0.631	0.483	1.339	0.113	-0.086
Victoria	0.931	0.084	-0.089	1.155	-0.295	-0.529
Queensland	0.947	0.123	-0.048	1.411	0.271	0.086
South Australia	1.160	0.656	0.509	1.926	1.409	1.322
Western Australia	0.519	-0.945	-1.165	1.265	-0.052	-0.265
Tasmania	1.636	1.843	1.750	1.907	1.367	1.277
Northern Territory	0.413	-1.209	-1.441	0.623	-1.470	-1.805
Australian Capital Territory	0.424	-1.182		0.679	-1.345	
Mean	0.898			1.288		
Standard Deviation	0.401			0.452		
Mean (Excl. ACT)	0.965			1.375		
Standard Deviation (Excl. ACT)	0.383			0.417		

Palma Ratio	First Year (2012)			Last Year (Y2) (2016)		
	PR Score	Z-score	Z-Score, Excl.ACT	PR Score	Z-score	Z-Score, Excl.ACT
New South Wales	1.104	1.193	1.110	1.148	1.792	1.657
Victoria	1.064	0.410	0.222	1.043	0.426	0.294
Queensland	1.088	0.864	0.738	1.018	0.098	-0.034
South Australia	1.021	-0.439	-0.740	1.021	0.136	0.004
Western Australia	1.096	1.036	0.933	1.058	0.615	0.482
Tasmania	0.968	-1.465	-1.904	0.872	-1.796	-1.924
Northern Territory	1.038	-0.102	-0.358	0.984	-0.349	-0.479
Australian Capital Territory	0.966	-1.497		0.940	-0.923	
Mean	1.043			1.011		
Standard Deviation	0.051			0.077		
Mean (Excl. ACT)	1.054			1.021		
Standard Deviation (Excl. ACT)	0.045			0.077		

Appendix B. List of Interviewees

ID	Location	Jurisdiction	Role	Interviewee	Date
1	WA	State	Academic/Researcher	Professor, School of Agriculture and Environment, University of Western Australia	07/02/2017
2	WA	State	Public Official	Public Service Commissioner, Public Service Commission	09/02/2017
3	WA	State	Academic/Researcher	Co-Director, Centre for Regional Development, University of Western Australia	09/02/2017
4	WA	State	Public Official	Principal Analyst, Director, Research and Direction Setting, Department of Regional Development	10/02/2017
5	WA	State	Academic/Researcher	Associate Professor, Political Science and International Relations, University of Western Australia	15/02/2017
6	WA	State	Public Official	Chief Information Officer for State Development, Transport, Innovation; Department of the Premier and Cabinet	16/02/2017
7	WA	State	Business	Economic Policy Advisor, Chamber of Commerce & Industry WA	17/02/2017
8	WA	State	Union	Organising and Strategic Research Officer, UnionsWA; former research officer at Community & Public Sector Union	20/02/2017
9	WA	Regional	Public Official	Directorate level, a Regional Development Commission	22/02/2017
10	WA	State	Academic/Researcher	Department of Planning and Geography, Curtin University	22/02/2017
11	WA	State	Academic/Researcher	Director, Bankwest Curtin Economics Centre (BCEC), Curtin University	22/02/2017
12	WA	State	Public Official	WA Regional Development Trust; Adviser to Minister of Regional Development; Advisor to University of Western Australia	22/02/2017
13	WA	State	Public Official	Manager role, Department of State Development	23/02/2017
14	WA	State	Public Official	General Manager role, Department of State Development	23/02/2017
15	WA	State	Public Official	LANDCORP, member of Public Sector Innovation Network	23/02/2017
16	WA	State	Public Official	Policy Research Officer, Department of Finance	23/02/2017
17	WA	State	Business	CEO Construction Contractors Association of Western Australia Inc	23/02/2017
18	WA	State	Public Official	Principal Policy Adviser at Department of the Premier and Cabinet of WA	24/02/2017
19	WA	State	Public Official	Executive Director, ICT Policy & Governance, Premier's office	24/02/2017
20	AUS	Regional	Academic/Researcher	Major Research Projects, Economist, Regional Australia Institute	28/02/2017
21	AUS	Federal	Academic/Researcher	Associate Professor of Innovation and Entrepreneurship, Federation Business School	28/02/2017
22	AUS	Regional	Researcher	Regional Australia Institute	01/03/2017
23	AUS	Regional	Academic/Researcher	General Manager Policy and Research, Regional Australia Institute	02/03/2017
24	AUS	Federal	Public Official	Executive Director at the Department of Infrastructure and Regional Development	06/03/2017

25	AUS	Federal	Public Official	Manager at the Department of Infrastructure and Regional Development	06/03/2017
26	AUS	Federal	Public Official	Head of Bureau, Bureau of Infrastructure, Transport and Regional economics (BITRE)	06/03/2017
27	AUS	Federal	Public Official	Manager at Regional Economic Policy, Policy and Research Division, Department of Infrastructure and Regional Development	06/03/2017
28	AUS	Federal	Public Official	Manager at Regional Jobs and Investment Packages, Department of Infrastructure and Regional Development	06/03/2017
29	AUS	Federal	Public Official	Director at the Department of Infrastructure and Regional Development	06/03/2017
30	AUS	Federal	Public Official	Adviser, Productivity Commission	06/03/2017
31	AUS	Federal	Public Official	Researcher, Productivity Commission	06/03/2017
32	AUS	Federal	Public Official	Researcher, Productivity Commission	06/03/2017
33	AUS	Federal	Academic/Researcher	Professor, Faculty of Business, Government and Law, Australia National University	07/03/2017
34	AUS	Federal	Academic/Researcher	Economist, Committee for Economic Development of Australia	07/03/2017
35	WA	State	Academic/Researcher	Professor & Head of School of Agricultural and Resource Economics, University of Western Australia	08/03/2017
36	AUS	Federal	Public Official	Governance and Policy Adviser, Commonwealth Scientific and Industrial Research Organisation	09/03/2017
37	AUS	Federal	Public Official	Head of Division, National Innovation and Science Agenda Delivery Unit	09/03/2017
38	AUS	Federal	Public Official	Public sector official, National Financial Intelligence Centre, Australian Transaction Reports and Analysis Centre	10/03/2017
39	AUS	Federal	Union	Director, Community and Public Sector Union	10/03/2017
40	SA	State	Public Official	Senior Engineer, Office of the State Coordinator-General, Department of Premier and Cabinet	14/03/2017
41	SA	State	Public Official	Deputy Chief Executive, Primary Industries and Regions Department	15/03/2017
42	SA	Local	Public Official	Strategic Adviser, Local Government Association of South Australia	15/03/2017
43	SA	State	Public Official	Executive Director, Cabinet Office, Department of the Premier and Cabinet	16/03/2017
44	SA	State	Public Official	Manager, Department of State Development	16/03/2017
45	SA	State	Public Official	Office for the Public Sector, Department of the Premier and Cabinet	16/03/2017
46	SA	State	Public Official	Director, Strategic Economics and Policy Coordination, Department of State Development	17/03/2017
47	SA	State	Public Official	Department of Planning, Transport and Infrastructure (DPTI)	20/03/2017
48	SA	State	Public Official	Deputy Chief Executive, Department of Treasury and Finance	20/03/2017
49	SA	State	Academic/Researcher	Vice Chancellor and President, Professor at UNISA; Member South Australia Economic Development Board	21/03/2017
50	SA	State	Public Official	Office for the Public Sector, Department of the Premier and Cabinet	21/03/2017

51	SA	State	Public Official	Acting Deputy Chief Executive, Primary Industries and Regions Department	21/03/2017
52	SA	State	Public Official	Former Director at Department of State Development	22/03/2017
53	SA	State	Academic/ Researcher	Dean of Research and Innovation, Business School, University of South Australia	22/03/2017
54	SA	Local	Public Official	General Manager, a Local Government	22/03/2017
55	SA	State	Union	Senior Industrial Officer, Public Service Association	23/03/2017
56	SA	State	Public Official	Director, Technologies and Creative Industries, Investment Attraction South Australia, Office of the Chief Executive	23/03/2017
57	SA	State	Academic/ Researcher	Professor, Deputy Vice Chancellor, Member South Australia Economic Development Board, UNISA	23/03/2017
58	SA	State	Public Official	A Director, Department of the Premier and Cabinet	24/03/2017
59	SA	State	Public Official	High level, retired public official.	27/03/2017
60	SA	State	Public Official	Manager, Planning Reform at Department of Planning, Transport and Infrastructure (DPTI)	27/03/2017
61	SA	Local	Business	Industry and Government Engagement, Business SA	27/03/2017
62	SA	State	Public Official	High level executive, Primary Industries and Regions Department	28/03/2017
63	SA	State	Business	Real State Developer, UNISA Advisory Committee	28/03/2017
64	WA	Local	Public Official	Deputy CEO, Western Australia Local Government Association (WALGA)	30/03/2017
65	WA	Local	Public Official	Chief Economist, Western Australia Local Government Association (WALGA)	30/03/2017
66	WA	Local	Public Official	Manager, Strategy & Association Governance, Western Australia Local Government Association (WALGA)	30/03/2017
67	SA	State	Public Official	Advisor, Cabinet Office, Department of the Premier and Cabinet	16/03/2017

Appendix C. Informed Consent Letter for Interviewees

Research Project Title: Innovation beyond the market? A contribution to the understanding and explanation of public sector innovation and its relationship with economic development.

Data collection date and place: 06/02/2017 – 03/04/2017 - Perth, Canberra, Adelaide in Australia.

Ph.D. Researcher: Laura Sariego-Kluge, Centre for Urban and Regional Development Studies (CURDS), Newcastle University, Newcastle upon Tyne, UK. *E-mail:* l.s.sariego-kluge@newcastle.ac.uk / laura.sariego@ucr.ac.cr *Mobile in Australia (up to April 3, 2017):* 0434 014 100 / *Skype:* LauraSariego

Dear Interviewee,

I would like to thank you for taking your time to participate in this interview. Above is my contact information in case you may wish to get in touch for any questions or concerns you might have. In the following lines, I explain what the interview consent is about. First, you may ask questions about the project and your participation at any time. Moreover, because you have voluntarily agreed to participate in the interview, you may withdraw at any time without giving reasons and that will not be penalised, nor will you be questioned about it. The interview should not last more than one hour. Second, we have appropriate procedures regarding strict confidentiality. Data from the interview will be used only for academic purposes. If you authorised the recording of the interview, it will be kept safely. The transcription will be anonymised and its key will also be kept safely. By default, the anonymised transcript will be used in research and academic publications. However, you will have the option below to decide whether you would not mind if your name is used in the research outputs.

I, the undersigned, confirm that (please tick box as appropriate):

Please tick only one of the following:	<input type="checkbox"/>
<ul style="list-style-type: none"> • I would like my name used and understand what I have said or written as part of this study will be used in reports, publications and other research outputs so that anything I have contributed to this project can be recognised. 	<input type="checkbox"/>
<ul style="list-style-type: none"> • I do not want my name used in this project. 	<input type="checkbox"/>

I have read and understood the information about data storage and use. I, along with the Researcher, agree to sign and date this informed consent letter.

Name of Participant	Signature	Date
Name of Researcher	Signature	Date

Appendix D. Semi-Structured Interview Questions

QR1: 'How is public sector innovation conceptualised and operationalised in the public sector?'
1. <i>[Conceptualisation + Time shifts]</i> What is PSI? How is it conceptualised in the public sector? Has this changed over time?
2. <i>[Operation + Time shifts]</i> From your perspective, how does PSI operate at different levels of government? How does this contrast with how 'things used to be'?
3. <i>[Time shifts]</i> Do you consider that Public sector innovation has changed over time? Why? How? Where?
4. <i>[Perception of other sector's perspectives]</i> Does this view match with your organisation's or your sector's views?
5. <i>[PSI – measurement]</i> How has PSI been measured since the interest for it began?
6. <i>[PSI examples]</i> Any recent examples of PSI that you can think of in WA? In SA? PSI failures? In the context of ED?
7. <i>[Operation + ED]</i> How is the nature and operation of PSI understood in terms of its role in economic development in the State public sector? Has it changed over time? Why? How?
QR2: How do internal processes with the State shape public sector innovation?
8. <i>[PSI formal + Time shifts]</i> Are you aware if there are formal mechanisms, processes, spaces that are set in place, for innovation in the public sector? / What are the different means by which PSI is formalised? Has this changed? How? Why?
9. <i>[PSI informal]</i> What about informal mechanisms for innovation in the public sector? Which are more important and when?
10. <i>[PSI + interscalar relations, local governments]</i> How long has the local government association existed, how has it changed over time and how has been its relationship with the State government over time in terms of public sector innovation?
11. <i>[PSI + interscalar relations, Federal government]</i> Are there differences with how the Federal government relates to each of the states? How do you account for them?
12. (See also general questions)
QR3: In what ways do external forces outside the State influence public sector innovation?
13. <i>[Engaging external sectors + influence]</i> Are there formal spaces or processes to participate in the provision and generation of knowledge and ideas together with the government? What are the formal mechanisms by which the [Research centre /

<p>Department / sector] can and does participate in advocating, influencing or constructing together knowledge that may result into public sector innovations? Which formal mechanisms are more important and when? What are your perceptions surrounding these efforts? What are some weaknesses and strengths?</p>
<p>14. [<i>Engaging external sectors + Time shifts</i>] Thinking about how it used to be, have you noticed a change in relation to these spaces? Their availability? Flexibility? Outcomes? Have you noticed differences in relation to preferences or favour certain types or contents of ideas or knowledge over others?</p>
<p>15. [<i>Institutions - Norms</i>] If you think empirically about people's mindsets, and how 'things are done' in WA/SA, how do you find these influence the organisation's and other actors' actions in regards to PSI?</p>
<p>16. [<i>ED + Alliances</i>] Are you aware of any key alliances formed between actors in relation to economic development in WA? Why? Where? Is this a change from before? If yes, why, where?</p>
<p>General – Answers could fall into more than one question – Open</p>
<p>17. [<i>ED</i>] How is ED understood in this State/agency?</p>
<p>18. [<i>PSI priorities + ED</i>] Thinking about economic development in the State, what would you say <i>have been</i> the key priorities for innovation in the public sector and why?</p>
<p>19. [<i>PSI obstacles + ED + Other sector's perception</i>] Thinking about economic development, what would you say <i>should</i> be the key priorities for innovation in the public sector and why? Do these align with other actors' views?</p>
<p>20. [<i>PSI drivers/obstacles + Time shifts + internal/external processes and forces</i>] What top three factors would you say make innovation in the public sector easier nowadays than before? More difficult? And top three obstacles?</p>
<p>21. [<i>PSI drivers/obstacles + internal/external processes and forces</i>] What would you consider are the top three difficulties for introducing new ways of doing things, new processes, new policies, new ways of organising government, or taking new directions for economic development in the State?</p>
<p>22. PSI [<i>Mechanisms + Internal/External processes and forces + ED</i>] How do ideas that might have an impact in economic development get picked up, developed, or dismissed?</p>
<p>23. [<i>General question for triangulation of perceptions</i>] How does this contrast with other states such as SA / WA? (e.g. federal-state and state-local relations, conditions for PSI, examples of PSI)</p>

<p>24. [<i>PSI + Informal relations</i>] What is the role of informal relations in innovation in the public sector for economic development?</p>
<p>25. [<i>PSI + Relations</i>] Which actors would you say are driving PSI or opposing PSI and why?</p>
<p>26. [<i>PSI role + ED</i>] If you were to consider PSI as the general public sector -not including public companies- implementing new or significantly improved services, communication methods, processes, new or improved ways of organisation and that all of these may include the range of incremental innovations through to major disruptive, fundamental transformations: Do you consider that in the past decade innovation in the public sector has or has not played a role in relation to economic development in Australia in general and in this State specifically and why?</p>