Will diversification save regional economies after the exit of automotive production?

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Abstract

The concept of economic diversification is an often-prescribed policy panacea, both as a reactive remedy for regions in the aftermath of an economic shock and as a proactive strategy to promote regional growth and resilience in anticipation of disruptive events. This thesis examines the regional effects of deindustrialisation, which has resulted in substantial job losses and other impacts in regions that have hitherto depended on automotive and other manufacturing industries. The thesis adopts a critical realist perspective and uses a comparative case study, mixed methods research design to examine the interrelated determinants of agency, structure, institutions, discourse and positionality. Case studies include manufacturing regions in Australia and Canada, the satellite 'motor cities' of Geelong in the State of Victoria and Oshawa in the Province of Ontario, which have since diversified and forged new growth paths. This thesis challenges dominant atomistic, firm-centric, endogenous explanations for regional diversification, showing that state action or inaction remains central in shaping regional trajectories. It finds that 'local' diversification is determined primarily by exogenous structural, spatial and institutional factors. It finds that the capacity for actors to influence diversification trajectories resides primarily at the intermediate and central state levels, rather than the local, highlighting the importance of multi-scalar institutional analysis in diversification studies. This thesis shows that the relationship between diversification and socio-spatial polarisation means that the commonly proposed causal link between diversification and regional resilience must be reconsidered. Ultimately, this thesis argues that diversification research and policy should focus not on idealised industry composition typologies, but on the mechanisms that can alleviate the most damaging effects of industry decline.

Declaration

I declare that this thesis presents work carried out by myself and does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university. To the best of my knowledge, it does not contain any materials previously published or written by another person except where due reference is made in the text. Any paid or unpaid editorial and graphic design contributions have been duly acknowledged.

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List of Abbreviations

ABS: Australian Bureau of Statistics

ADP: Automotive Diversification Programme

AMGF: Advanced Manufacturing Growth Fund

APS: Australian Public Service

AUD: Australian Dollar

CAD: Canadian Dollar

CAW: Canadian Auto Workers

CMA: Census Metropolitan Area

ECC: Economic Council of Canada

FTP: Ford Transition Project

G21: G21 Geelong Region Alliance

GIIF: Geelong Investment and Innovation Fund

GM/GMC: General Motors/General Motors Canada

GRIIF: Geelong Region Innovation and Investment Fund

GROW: G21 Region Opportunities for Work

GTA/GTHA: Greater Toronto Area/Greater Toronto and Hamilton Area

ICI: Industrial, Commercial and Institutional (Real Estate)

IRSAD: Index of Relative Socio-economic Advantage and Disadvantage

LGA: Local Government Area

LIFT: Local Industry Fund for Transition

NGMIP: Next Generation Manufacturing Investment Programme

OECD: Organisation for Economic Co-operation and Development

P/ASID: (Positionality), Agency, Structure, Institutions, Discourse

RDA: Regional Development Australia/Regional Development Agency (Canada)

RDV: Regional Development Victoria

RGF: Regional Growth Fund

RJIP: Regional Jobs and Investment Packages

RJIF: Regional Jobs and Infrastructure Fund

SA: Statistical Area

TAC: Transport Accident Commission

UCL: Urban Centre and Locality

UOIT: University of Ontario Institute of Technology (Ontario Tech University)

WTO: World Trade Organisation

Chapter 1 - Introduction

Regions hit by major plant closures face numerous potential economic problems, including increased unemployment, lower labour force participation rates, decreased wage levels, and a general depression of local economic activity driven by outflows of retrenched workers and negative employment multiplier effects that impact both related and unrelated industries (Eriksonn et al. 2018; Gathmann et al. 2020; Huttunen et al. 2011; Pike et al. 2016). Plant closures are often punctuating events in global structural trends, which have caused disinvestment in regions dependent on industries such as automotive or steel manufacturing, that frequently culminate in long-term regional and urban economic decline (DiGaetano & Lawless 1999; Pavlínek & Ženka 2010; Safford 2009).

For decades, policymakers and academics have attributed the localised effects of these sectoral crises to regional over-specialisation (Massey 2007). From this perspective, the negative regional impacts of major plant closures or structural decline are a result of a region's over-reliance on a particular industry, which leaves them vulnerable to economic shock. Economic diversification has thus enjoyed a longstanding global 'intuitive appeal' (Kemeny & Storper 2015, p. 1004; see also Jackson 1984; Siegel et al. 1995) as a commonly prescribed regional policy panacea that 'conventional wisdom' holds will promote stability, resilience and economic growth (Wagner & Deller 1998, p. 542; see also Attaran 1986; Massey 2007). Policymakers continue to turn to economic diversification in order to manage existing crises or prevent them in the future (Barnes 2016; Siemiatycki 2013; Weller 2017; Weller & Tierney 2017; see also Cleave et al. 2016). The ubiquitous objective of economic diversification underpins not only the responses to automotive industry closures but remains one of the fundamental overarching goals of regional development policy in countries such as Canada and Australia (Australian Government 2017b; Canadian Government 2020; Collits 2014).

Therefore, it is fundamentally important that diversification, as a policy prescription, is critically interrogated rather than assumed to be an established policy fact. This requires more than a strategic analysis or critical appraisal of specific policy programmes, but rather an extensive investigation into how the concept of diversification

is constructed, the manner in which it is mobilised for divergent purposes, and the wider implications of its deployment as a catch-all solution in different regional contexts.

This need has been made more urgent by growing recognition that there is a dearth of knowledge on the endogenous and exogenous determinants of regional diversification trajectories, including the role of formal institutions and the state (Boschma 2017; Boschma et al. 2017; Cambridge Journal of Regions, Economy and Society 2018; Cortinovis et al. 2017; Martin et al. 2016). This means that there is also limited insight into the types of interventions that engender successful regional diversification and into the extent to which actors can navigate structural and spatial constraints to implement these interventions. Considering the high stakes for affected regions, it is imperative that research into regional diversification improves upon the significant limitations of the existing literature. This thesis seeks to fill these gaps in knowledge and inform future research on regional diversification.

In order to achieve this, this thesis conducts a comparative case study of the City of Greater Geelong in the State of Victoria, Australia and the City of Oshawa in the Province of Ontario, Canada, with the aim of analysing local, intermediate (state/provincial) and national responses to deindustrialisation while situating the places in their spatial, institutional and global production contexts. The case study sites were chosen because they were once the two most highly specialised manufacturing regions in their respective nations and have remarkably similar characteristics. Both have pursued diversification as a policy goal, and both have been considered examples of successful diversification (see Johnson et al. 2020; Siemiatycki 2013). The seeming resilience of both of these cities despite long-term manufacturing decline – punctuated by episodes of mass retrenchment – means that they are particularly suitable sites for investigating diversification.

The thesis will show that despite some parallels in diversification trajectories, these places have diverged in overall rates of growth. Geelong has seemingly been the more resilient of the two case study sites. By focusing on these two case studies, this thesis aims to identify causal mechanisms that contribute to both convergences and divergences in diversification outcomes, while asking if these outcomes really do represent diversification success.

This brief introductory chapter outlines the aims, approach and the structure of the thesis and provides a summary of its findings.

Aims

This thesis aims to contribute new knowledge that will inform future research on regional diversification. Considering the significant gaps in the diversification literature, the research identified four objectives:

(1) To examine the endogenous and exogenous determinants of regional diversification. This aim encompasses issues of regional path dependency and path creation and the respective roles of markets and the state in determining diversification outcomes.

(2) To critically appraise diversification policy approaches intended to ameliorate the impacts of the withdrawal or disinvestment of global automotive firms, with a particular emphasis on regional policy actions. This includes analysing the employment, business and social welfare outcomes in affected regions.

(3) To examine the merits of globally circulating regional development knowledges and discourses centred on contemporary ideas of diversification in the context of broader regional development problems.

(4) To position the goal of diversification in the context of uneven spatial development and regional empowerment.

These objectives translate into three research questions:

Research Question 1: How do endogenous and exogenous structural, institutional, spatial and discursive factors constrain or facilitate the ability of actors at various scales to influence diversification trajectories?

Research Question 2: What are the roles of markets and states in shaping diversification outcomes?

Research Question 3: What do divergent inter- and intra-regional outcomes reveal about successful approaches to diversification and regional resilience?

Approach

An extensive literature review indicated the need for multi-scalar, comparative case study and mixed methods approaches in regional diversification studies. In order to address these research gaps and answer the thesis's broad research questions, it was necessary to adopt a synthesised methodological framework. Accordingly, the research began with the intention to follow the ASID (Agency, Structure, Institutions, Discourse) framework developed by Moulaert et al. (2016), which applies a critical realist ontology and epistemology and approaches regional questions with a multi-scalar, relational lens. However, to overcome a methodological limitation within the ASID framework and to adequately account for different observed causal mechanisms in the two case studies, the ASID framework was extended by adding the crucial dimension of 'P' for 'positionality'. Positionality is defined by a place's 'position in relational space/time within the global economy' (Sheppard 2002, p. 307). The addition of this complimentary concept overcomes the ASID framework's inadequate treatment of place as a basis for comparative research, and offers an important distinction between processes that are conditioned by local characteristics and those that are not.

The case study sites of Geelong and Oshawa were selected because of their shared positionalities as automotive manufacturing centres situated within 'Anglo' market-oriented federations that both experienced the same crisis (deindustrialisation), and explicitly pursued the solution of diversification in response to this crisis. The value in comparing and contrasting two case studies with such striking parallels is that it can maximise explanatory power. Applying the PASID framework to the thesis's two case studies enabled causal mechanisms to be identified by focusing on the ability of actors to influence diversification paths, the structural constraints - spatially conditioned or otherwise - on these actors, the institutional factors that mediated the possibilities for path creation, and the discursive practices that shaped and revealed these interactions. The use of the PASID synthesis framework enabled the thesis to address several gaps in a complex field of literature.

Thesis Findings Summary

Using the PASID framework to analyse the two case studies, this thesis challenges the dominance of atomistic, firm-centric, endogenous growth-based explanations for regional diversification, showing that the state remains central in shaping regional trajectories. The analysis of the case study sites revealed that the primary mechanism driving divergent growth outcomes in Oshawa and Geelong was the level of spatially-targeted intervention by state and quasi-state actors. Geelong's more rapid growth reflected its advantageous position in a centralised institutional milieu more conducive to state-led diversification. In contrast, Oshawa was disadvantaged by its position in a decentralised, market-dominated and competitive regional context. Economic growth in both case studies was driven by fortuitous relational positionalities adjacent to growing core agglomerations – Geelong's proximity to Melbourne and Oshawa's proximity to Toronto.

Consequently, a key finding is that 'local' diversification is determined primarily by exogenous structural, spatial and institutional factors. The analysis reveals that the capacity for actors to influence regional diversification trajectories in the two case study locations resided primarily at the intermediate and central state levels, rather than the local level. This highlights the importance of multi-scalar analysis in diversification studies and reveals the inadequacy of methodologically atomistic explanations for regional change. Nonetheless, and reinforcing the importance of positionality in diversification research, the analysis shows that exogenous growth factors at both sites compounded serious underlying socioeconomic problems, suggesting that the social disruptions resulting from deindustrialisation were never solved. Instead, the analysis suggests an intrinsic link between diversification and increasing socio-spatial polarisation at the neighbourhood scale. This implies a need to reconsider the commonly proposed causal link between industrial diversification and resilience, with greater emphasis on intra-regional outcomes required. Ultimately, this thesis shows that diversification research and policy practice should be re-oriented to focus on the types of interventions that could alleviate the most damaging effects of the loss of industry specialisation, which suggests an enhanced role for spatially-targeted state intervention implemented by actors at all scales.

Thesis Structure

The thesis is structured as follows:

Chapter 2 provides a comprehensive review of diversification literature and establishes the policy context for diversification. The chapter focuses on diversification's discursive role as a 'fuzzy', 'vehicular idea' used to build consensus around a variety of divergent policy agendas. The chapter details the debate over economic diversification versus specialisation, and the sub-debate of unrelated-variety diversification versus related-variety diversification, which focuses on the relationship between industry composition and variables such as employment, wage growth or stability. It introduces the commonly espoused causal relationship between diversification and regional resilience. The chapter details the debates surrounding state or market-led diversification, including literature on market-based, spatially neutrality, 'competitive' regional frameworks, state spatial selectivity and global production networks. The chapter concludes that the existing literature is dominated by a quantitative 'micro perspective' oriented towards firm-centric or endogenous innovation theories of regional diversification, with only limited attention given to formal institutions, state-led diversification and external forces. This establishes the research focus on these issues in the next chapter.

Chapter 3 details the research design, linking identified gaps in the diversification literature to the thesis methodology. Deficiencies in the current literature include: the lack of knowledge on the role of formal institutions, the role of the state and the role of external (to the region) forces in shaping regional diversification. The absence of multi-scalar, comparative case study and mixed methods research on diversification forms the basis of the research design. This chapter introduces Moulaert et al.'s (2016) ASID framework, explains how it is embedded within a critical realist ontology and epistemology, and discusses its extension to PASID by including positionality. It outlines why the framework is appropriate for addressing the gaps in the diversification literature. This chapter also introduces a schematic for understanding 'successful' diversification.

Chapter 4 introduces the case studies of Oshawa, Ontario, Canada and Geelong, Victoria, Australia detailing their highly similar positionalities as comparably-sized, satellite city-regions roughly equal distance from major agglomerations (Toronto and

Melbourne respectively). It emphasises their shared histories as automotive centres and once the most specialised manufacturing cities in their respective nations. It also introduces the differing approaches to federalism, contrasting the decentralised Canadian system to the comparatively centralised Australian system. This provides the foundation for institutional discussions throughout the thesis. This chapter shows that both case studies pursued similar diversification strategies and have diversified in similar patterns, with both cities benefiting from significant public investment in health and education. This chapter reveals that both Geelong and Oshawa are considered examples of 'successful' diversification. However, this chapter shows that in labour market-terms, Geelong has been the more successful of the two regions. The remainder of the chapters will take this growth divergence as a central focus.

Chapters **5-9** focus on a particular thematic of the PASID framework, emphasising the role of a different constituent part as it shapes diversification outcomes.

Chapter 5 emphasises the way in which **institutional** differences mediate the interplay of agency and structural constraints in driving diversification. This chapter focuses on the concept of decentralisation, establishing that very different conceptualisations of this term intersect with state-led or market-led diversification in different institutional environments. It reveals that in Geelong, forms of decentralisation defined as geographic de-concentration and governance diffusion justified central and intermediate state intervention and a state-led diversification agenda. In Oshawa the dominant form of decentralisation was devolution, which justified state non-intervention by 'empowering' local municipalities. The abrogation of responsibility for managed regional structural adjustment at the higher tiers of government encouraged a market-oriented response at the local scale. These institutional determinants condition Oshawa's greater emphasis on market-led diversification detailed in **Chapters 6 and 7**. These chapters show that endogenous and market-based theories of diversification cannot explain why Geelong's growth has surpassed Oshawa's.

Chapter 6 analyses the role of **agency**, focusing on specific policies and programs that can influence diversification outcomes. This chapter details the targeted state-led approach to diversification in Geelong, which includes significant public sector investment and compares it with the more market-oriented, spatially neutral approaches in Oshawa.

These interventions explain Geelong's greater relative growth. Nonetheless, this chapter reflects on the failure of these programs to address the growing socio-spatial polarisation plaguing both cities.

Chapter 7 focuses on the ways in which diversification is deployed **discursively** to manage the crisis of deindustrialisation. This chapter shows how local actors protect their region's image and calibrate their messaging to reflect the spatially selective agendas of higher tiers of government. Consistent with their differing contexts, local Geelong actors focused on lobbying for public investment, while local Oshawa actors focused on attracting private investment. These different approaches are influenced by different institutional milieux and levels of regional competition. The chapter shows that the willingness to acknowledge growing socio-spatial polarisation is conditioned by the willingness of central and intermediate states to pursue a state-led diversification agenda.

Chapter 8 examines the relationship between manufacturing decline and growing socio-spatial polarisation. The primary underlying theme of this chapter is **structure** because it focuses on the effects of a global crisis (deindustrialisation) that local actors can only react to and highlights the effects of the sectoral crisis in both regional case study sites. It notes that social polarisation has increased significantly as a result of deindustrialisation, which has created clear spatial divisions between disadvantaged industrial areas and wealthy, newly developed areas that are largely unaffected by structural decline. The chapter argues that socio-spatial polarisation is not an unfortunate and accidental side-effect of diversification, but a necessary driver of it. It contends that the level of growth observed in Geelong and Oshawa was only achieved by building new residential spaces with housing and amenities suited to the skills and educations levels of new industries, but located well away from the neighbourhoods most affected by deindustrialisation.

Chapter 9 emphasises the importance of **positionality** by highlighting how diversification in the two case studies is driven in large part by their spatial proximities to adjacent core urban agglomerations (Melbourne and Toronto). These cities are rapidly expanding and experiencing agglomeration diseconomies, pushing residents towards Geelong and Oshawa. This chapter shows that Oshawa's and Geelong's perceived success in diversification can be attributed largely to their satellite city positionalities, which

enabled them to grow in spite of deindustrialisation. Growth has engendered housing stress, gentrification, and displacement in Oshawa's and Geelong's most disadvantaged suburbs. This chapter reveals that the approach in Geelong to 'locking in' investment has meant it has retained a healthier local jobs/labour force ratio than Oshawa, which has become a semi-commuter town, and discusses the negative implications of Oshawa's unbalanced, commuter-led growth. The chapter outlines why relying on this conurbation-driven source of growth is likely unsustainable and could lead to regional vulnerability in both case study sites.

Chapter 10 concludes the thesis. It reflects on the significance of the research for understanding the determinants of diversification and explains how future research could better approach the question of 'successful' diversification or resilience. The chapter reviews the PASID framework and discusses its value as a methodological tool for tackling complex fields of research. The chapter finishes by discussing the policy implications of the thesis.

Chapter 2 - Diversification in Theory and Practice

Introduction

This thesis is concerned with the concept of regional economic diversification. 'Diversification' has become a common-sense recommendation for addressing deindustrialisation and other economic shocks. This chapter will show how the term's multiple meanings can be moulded to reconcile with otherwise opposing theoretical perspectives and divergent policy prescriptions. This explains why diversification is attractive in policy practice, despite the concept being the subject of intense and longstanding academic debate, which remains unresolved. This chapter summarises the debates on economic diversification, introducing the 'diversification-specialisation binary', which centres on the relationship between diversification and variables such as economic growth or stability and its linkage to the concept of regional 'resilience'. This chapter introduces a fundamental limitation in this unresolved debate, namely that theories of regional diversification or specialisation are not sufficiently embedded within broader competing theories of regional economic development that focus on the role of both markets and the state. These understandings are needed to address the question of how state and non-state interventions can – or should – influence regional trajectories. This will provide a foundation for the next chapter, which shows how gaps in the diversification literature necessitate a comprehensive case study approach to understand the interplay between endogenous and exogenous drivers of economic diversification.

Economic Diversification as a Discursive Construct and Policy Goal

'Diversity' has become an increasingly problematic term in urban and regional studies because it is used to describe anything from ethnic or gender demographics, to 'bohemian neighbourhoods', to mixed-used spaces, to industrial composition – often simultaneously (Lees 2003). For Foster et al. (2016, p. 624), the concept of diversity remains both a 'convoluted term and often an unquestioned normative good', which is seen as an ideal outcome by policymakers in any usage it is employed, despite possible evidence suggesting the contrary. According to Lees (2003, p. 622), this means that it can be marshalled to suppress dissent and co-opt people into supporting questionable

policies: ‘like motherhood and apple pie, diversity is difficult to disagree with. Janus-like, it promises different things to different people’.

These issues are compounded by usages of the related term ‘diversification’. A definition of diversification is provided by Siegel et al. (1995, p. 262):

> ‘The verb diversify and the noun diversification refer to: (1) the process of making things more unlike, different, and varied (a dynamic and positive concept), and (2) the process of selecting assets to minimize risk (a dynamic and normative concept)’.

While the first definition is vague and descriptive, it is common for theorists and policymakers to conflate it with the second, more specific normative definition related to portfolio management, which helps explain its intuitive appeal as a risk reducing process (Siegel et al. 1995). While this second risk reduction definition informs some conceptualisations of economic diversification (Conroy 1975), the first definition has the opposite connotation, since diversification as making things ‘more unlike’ can be inherently risky (Boschma & Gianelle 2014; Porter 1998).

The terms ‘diversity’ and ‘diversification’ in regional development discourse are most often used to denote the empirical structure or composition of economic activity within a specified geographic scale. This is most commonly constructed as either a simple binary of diversification versus specialisation, or as one polarity at the end of a spectrum with specialisation signifying its obverse. In this conceptualisation, a specialised regional economy is one in which economic activity is relatively concentrated in a few industries, while a diverse economy is spread across multiple industries. This basic premise is operationalised and measured in a multitude of different ways (see **Table 1**). This relationship has been the subject of extensive empirical work since the 1930s (Rodgers 1957), with a focus on proving or disproving a hypothesis that one or the other end of the spectrum can be positively correlated with a broad range of desirable economic indicators, such as productivity growth or employment stability.

This binary has spawned new conceptualisations such as ‘diversified specialisations’ (Farhauer & Kroll 2012), or ‘specialised diversification’ (McCann & Oretega-Argiles 2015), as well as qualifications like ‘related variety’ and ‘unrelated variety’ diversification (Boschma 2017; Van Oort et al. 2015), which have further

complicated the literature. Moreover, while much of the literature has conflated industry 'diversity' – the static, cross-sectional snapshot of the level of economic diversity in a particular place – with industry 'diversification', the latter is fundamentally different as it represents the process of change in the composition of industry through time (Malizia & Ke 1993; Siegel et al. 1995; see also Malizia 1990). Given this conceptual complexity, the term 'diversification' can be characterised as an example of what Markusen (2003, p. 701) calls a 'fuzzy' concept, where a 'researcher may believe they are addressing the same phenomena but may actually be targeting quite different ones'.

Adding to the potential fuzziness is that while diversification commonly refers to *increased economic diversity*, the process of moving from one *specialisation* to another *specialisation* is still a process of *diversification* (see Toner & Douglas 2020). This means that proposed remedies for economic shocks in specialised regions – regardless of whether they advocate increased industrial diversity or re-specialisation in another industry – aim to achieve successful diversification, however this 'success' is defined.

The literature on industry composition prescribes a variety of competing policy objectives which nonetheless converge on the overarching concept of diversification. Evolutionary perspectives emphasise diversification as a gradual 'branching' process of regions continually moving into 'related' economic activity, with firms diversifying into unrelated activity seen as relatively rare and usually less successful (Boschma 2017; Boschma et al. 2017; Neffke et al. 2011, Neffke et al. 2018; see also Rigby 2015). From this perspective, policies should facilitate related diversification that builds on existing regional strengths rather than risky unrelated diversification (Boschma 2015, 2017; Frenken et al. 2007). However, Holm and Østergaard (2018) show that related industries are also affected by structural crises that engender diversification, notably deindustrialisation, leading to the loss of stable jobs and greater job polarisation, and thus argue that policy initiatives to promote diversification into unrelated industries should be considered. This is reinforced by MacKinnon (2017) who shows that related diversification is an inadequate solution for regions facing structural industry decline, as the majority of retrenched workers cannot be re-absorbed into a declining sector (see also Eriksson et al. 2018). Further, examples of regions that once specialised in particular economic activities, but later successfully altered their paths to eventually specialise in entirely unrelated industries (Glaeser 2005; Storper 2017), raise questions as to whether

diversification should ultimately aim to achieve economic diversity or economic re-specialisation (in a process that initially follows *unrelated diversification*). Thus, the policy goal of diversification satisfies processes that could aim to promote related branching or unrelated diversification that could result in either economic diversity or economic specialisation.

The result is that the deployment of the term 'diversification', in managing structural adjustment and regional transition initiatives, often finds near-unanimous support, but little uniformity in how stakeholders conceptualise what this term means in practice (Barnes 2016; Weller 2017; Weller & Tierney 2017). This enables stakeholders with significantly divergent policy goals and motivations to believe that the term supports their separate agendas. Thus, diversification is an example of a 'vehicular idea' (see McLennan 2004) that is deployed to manage structural adjustment problems by building consensus around certain projects, using a concept that is both flexible and accommodating of competing interests. However, diversification's practical appeal is only partially explained by its conceptual malleability. Diversification's primary – often conflated – relationship to growth and/or regional stability remains a source of both policy appeal and fierce academic debate.

Diversification as Risk Management and Growth

The Diversification-Specialisation Binary

The idea that economic diversification reduces the exposure to risk, and specifically the risk of exogenous economic shock, is a ubiquitous theme across a wide range of policy and academic literature (Attaran 1986; Attaran & Zwick 1987; Australian Government 2016a; Davies & Tonts 2010; Dissart 2003; Hassink 2010; Hudson 2010; Massey 2007; Naude et al. 2010). A comprehensive review of the regional plans of Australia's 55 Regional Development Associations (RDAs), conducted by the Australian Bureau of Statistics (2013), identified that the most frequently listed 'economic threat' to regions was a reliance on a small number of industries. Nonetheless, a commonly hypothesised dilemma in the empirical literature is that the stabilising effects of a diversified industrial composition are offset by the enhanced economic growth potential

of specialised regions (Dissart 2003; European Commission 2010; Wagner & Deller 1998). According to Beer and Clower (2009), Australian regions that increased economic specialisation have witnessed growth rates exceeding other regions. A comprehensive study by Brown and Greenbaum (2017) found that over a 35-year period, US counties with higher specialisation had lower unemployment during periods of economic stability, but were hit much harder by economic shock. However, multiple studies present opposing viewpoints, arguing alternatively that diversification increases growth, or that specialisation does not compromise stability (Dissart 2003; Kemeny & Storper 2015; see also Beer et al. 2020; Martin et al. 2016).

Another proposed trade-off is between employment and productivity growth, with a preponderance of articles suggesting that diverse regions correlate with the former and specialised regions with the latter (Farhauer & Kroll 2012; Frenken et al. 2007; Van Oort et al. 2015). In common with the first proposed trade-off, it is not difficult to find theorists claiming the opposite (Fotopolous et al. 2010; Sjoholm 1999). Simply, the diversification-specialisation binary remains 'inconclusive' (Toner & Douglas 2020; see also Beaudry & Schiffauerova 2009; Melo et al. 2009).

Nonetheless, Pike et al. (2010, p. 68) conclude that the 'longstanding binary of specialisation versus diversification remains influential in discussions of what kinds of regional and local economies might be prone to adaptation or demonstrate adaptability'. Similarly, Boschma (2015) contends that further understandings of how specialised and diversified regions respond to shock and create new paths for development is the most fundamental problem to be addressed in relation to regional resilience.

Diversification as Resilience

While sometimes simply postulated as a conceptual framework examining how regions 'react to and recover from adverse shocks' (Cellini et al. 2017, p. 308), theoretical explorations of resilience have expanded significantly in recent years. Resilience has become synonymous with concepts such as regional adaptability, transformation, revitalisation and path creation (see Boschma 2015; Sweeney et al. 2020). Like diversification, the concept of resilience is used in dozens of contexts with multiple different meanings (Yamamoto 2011) and is increasingly 'fuzzy' (Martin et al. 2016;

Pendall et al. 2010; Sweeney et al. 2020). For some theorists, resilience is a flawed construct that is inadequate for identifying multi-scaled, spatially complex determinants or describing processes which can be better understood through existing frameworks (Hassink 2010; MacKinnon & Derickson 2013) and is therefore only a useful heuristic for synthesising knowledges on regional outcomes (Martin & Sunley 2015). Its meaning is no less fluid than the meaning of diversification – regional resilience is the opposite of regional vulnerability, but what this means specifically can refer to any number of things.

However, resilience remains a core related concept to diversification in multiple disciplines, including fields as varied as ecology, psychology, engineering and the physical sciences (Pendall et al. 2010; Yamamoto 2011). In particular, ecological systems perspectives link resilience to notions of 'biodiversity' in a way that discursively constructs homogeneity, and thus specialisation, as an undesired state (see Bristow 2010; Hassink 2010).[1] Hence, regardless of the evidence in the empirical literature, it is clear which side of the diversification-specialisation spectrum remains more persuasive as a driver of resilience. Specifically, diversification is seen as being either synonymous with, or a necessary condition for, regional resilience (Bristow 2010; Pike et al. 2010; Simmie & Martin 2010; Wolfe 2010; see also Hassink 2010; Martin & Sunley 2015). For Hudson (2010, p. 18), simply, 'greater resiliency requires greater diversification'. This proposed relationship ignores the potential trade-off between stability and growth and establishes diversification as a process that can achieve both, which helps explains its policy appeal.

While much of the literature sees resilience and diversification as interchangeable, other theorists point to this being simplistic. What enables a region to avoid economic shock, may not be what enables it to best absorb one, which in turn may not be what best enables it to adapt (Boschma 2015; Hassink 2010; Pike et al. 2010). More importantly, the concept of regional resilience has not yet delivered a definitive model of economic planning that would enable regions to successfully avoid, absorb or adapt to an exogenous shock, while maintaining optimal growth (Boschma 2015; Courvisanos et al. 2016; Martin et al. 2016).

[1] Common measures of diversification, such as the Entropy and Hirschman-Herfindahl indices (see **Table 1**) are likewise based on models of biodiversity originating in the natural sciences (Attaran 1986).

Damage to a specific industry may cause greater harm to a specialised region, but a widespread economic shock impacting multiple industries will ensure an economically diverse region is exposed to a greater probability of being impacted (Boschma 2015). The opportunity costs of foregoing the potential benefits of specialisation in favour of a conservative risk management approach is a risk in itself, particularly if a diversification strategy is enacted at the expense of specialised industries that are capable of adapting to economic shock (Kemeny & Storper 2015). In addition, the benefits of cluster specialisation may make firms collectively more resilient to demand shocks by virtue of flexible production networks (Delgado et al. 2016), and in the event of a shock impacting one firm, others in a regional industrial cluster may absorb workers, protecting the region from extensive labour outflows (Saxenian 1996). Further, different economic activities are exposed to varying degrees of risk, and certain activities have more potential for adaptability than others, especially with regards to technology, labour and local knowledge bases (Coe 1997; Kenney & von Burg 1999; Rigby 2015). Specialised regions that have been able to attract a skilled labour force to adaptable industries may be better able to respond to crises (Bathelt 2013; Storper & Scott 2009).

This leads us to the overarching problem of whether increased economic diversity is in fact necessarily desirable. The economic successes of many global hotspots are a result of specialisation in particular industries or sectors, as opposed to diversity. Storper (2013, p. 32), pointing to examples such as the fashion industry in Milan or the finance hubs of New York and London, argues that specialisation is perhaps the single most important determinant of success. California's specialised, high-tech hub Silicon Valley is a region whose perceived success has led to countless attempts at replication (Boschma & Gianelle 2014; Kenney & von Burg 1999). Even if it could be established that diversified regional economies face reduced vulnerability, which the literature disputes, this could indeed involve a trade-off involving the sacrifice of potential higher growth possibilities of specialisation, which could lower total national growth or undermine comparative or competitive advantages, thus ultimately reducing overall national economic well-being. From a national perspective, the benefits of sub-national specialisation may create more competitive goods and engender more diversified national exports (Naude et al. 2010). Thus, regional specialisation is not incompatible with national diversification.

Finally, the problem with the intuitive appeal of diversification is that this literature is largely based on industry *diversity* and does not consider the risk involved in a region *diversifying* from an existing specialisation (Neffke et al. 2018; Siegel et al. 1995). Beer and Clower (2009, p. 385) present evidence that, while diversification can be 'high reward', it can also be 'high risk', as not all regions achieve the same results. This means that maintaining existing specialisations or attempting to find new specialisations may be desirable for some regions. Others argue that resilience is dependent on the 'relatedness' of diversification rather than on diversification *per se*, as risk is mitigated by new industries building on existing local capabilities (Boschma 2017; see also Frenken et al. 2007; Van Oort et al. 2015). Nonetheless, related diversification may not be able to overcome the negative effects of a pre-existing shock to a specialised region, because negative spillover effects continue to impact related industries (Holm & Østergaard 2018). The argument that a highly diversified (unrelated) regional industry structure is less vulnerable to a single industry shock than a specialised region remains sound. This impasse again reinforces the fundamental insight that resilience may not be related to *if* a region diversifies, but *how* it diversifies.

The way that popular discourse constructs the relationship between industry composition and resilience is therefore inherently problematic. The central problem with the diversification-specialisation binary is that, while it renders diversification quantifiable – and therefore amenable to insertion in evidence-based policy frameworks – these empirical frameworks are never appropriate as the basis for policy, because they do not identify any specific policy inputs that lead to particular outcomes (see Jackson 1984; Siegel et al. 1995). Dissart (2003, pp. 425-426) argues that measures of economic diversity are 'mistakenly accepted as guidelines for desirable changes in economic structure, while assuming that every region, regardless of resource advantage, infrastructural development, agglomeration economies, or factor endowment, should conform to that norm'. This means that the binary is divorced from the underlying theories of regional/urban development or socioeconomic well-being, which necessitates that the binary is embedded within other concepts, such as regional resilience, to give them explanatory value, but these concepts themselves may in turn remain 'fuzzy', contested and deficient. This core issue is compounded by the lack of consensus in the empirical binary literature.

However, as argued by (Martin et al. 2016), the diversification-specialisation binary remains fundamentally important for contributing to understandings of regional resilience despite these issues. As industry composition is shaped by regional characteristics, institutional milieux, intra-industry functional geographic specialisations, and regional and national policy factors, industry composition, in turn, is a potential determinant of negative of positive regional outcomes, regardless of how these outcomes are measured and conceptualised. Therefore, concepts such as diversification, resilience or adaptability must be analysed in relation to these complex determinants. These factors remain largely unexplored and require further case study research (Martin et al. 2016).

How do Regions Diversify?

The extent to which actors can influence the industrial composition of a region, either proactively, or in reaction to an economic shock, remains disputed. Brown and Greenbaum (2017, p. 1347) argue that 'local policymakers have little ability to affect industrial concentration in the short run'. However, depending on the institutional context, this may not always be the case. While some perspectives see regional trajectories as path dependent, evolutionary processes determined largely by structural and institutional factors (Simmie & Martin 2010), others privilege the strategic decision-making agency of actors in response to particular economic shocks, and highlight the capacity for regional path creation (Bathelt 2013; see also Massey 1995; Yeung 2003).

Debates in the diversification literature largely build upon and parallel this underlying debate. Path dependent, evolutionary economic geography perspectives argue that 'regions tend to diversify in new activities related to their existing activities, from which they draw and combine local capabilities' (Boschma 2017, p. 352; see also Neffke et al. 2011; Neffke et al. 2018; Rigby 2015). Yet, for Binz et al. (2016, pp. 173), this perspective's 'focus on technological relatedness downplays the influence of non-firm actors, institutions, and public policy in creating and/or renewing industrial development paths in a region'. Their approach focuses on the role of bottom-up entrepreneurialism. as opposed to 'rigid, top-down industrial policies' (Binz et al. 2016, p 193). Similarly, Dawley (2014, p. 109), argues that 'firm-centric' explanations have ignored the role of policy practitioners and institutions. However, for Dawley et al. (2015 p.258) this means

'redressing the relative neglect of the multiple roles of the state and policy in mediating the development of paths', which, building upon Martin and Sunley (2006) means analysing how top-down national policies impact path creation and thus diversification.

It has been widely recognised that while firms have received significant attention, the institutional and policy determinants of regional diversification remain poorly understood and largely fixated upon local policy actors (Binz et al. 2016; Boschma 2017; Boschma & Capone 2015; Boschma et al. 2017; Cortinovis et al. 2017; Dawley et al. 2015; Martin et al. 2016; Neffke et al. 2018; Van Oort et al. 2015). According to Cortinovis et al. (2017, p. 1180), 'it remains unclear what the exact role of regional institutions is for regional diversification'. While the potential role of institutions in relatedness is often acknowledged (Neffke et al. 2018; Van Oort et al. 2015), most relatedness perspectives have explicitly analysed diversification as a firm-driven process. Where institutions have been analysed in relatedness literature, this has been through the lens of a 'micro-perspective on regional diversification' (Boschma et al. (2017, p. 34), the purpose of which is 'to identify which are the regional factors that make local actors in some regions (as compared with other regions) more successful in inducing institutional change and in diversifying in new activities' Boschma (2017, p. 360) (see also Cortinovis et al. 2017; Neffke et al. 2018). Thus, the focus has remained primarily on firms, or endogenous regional actor networks, rather than exogenous factors.

Research on formal state institutional relationships with relatedness has been offered by Boschma and Capone (2015), who found that at the national scale, liberal market economies tended towards unrelated diversification, while 'coordinated market' economies tended towards related diversification, as interventionist institutions preserved path dependencies. However, Cortinovis et al. (2017) found no relationship between formal institutions and relatedness at the regional scale, and argued that quality of government institutions had little impact on a region's ability to successfully diversify. Instead, Cortinovis et al. (2017, p.1179) argued that 'institutions relevant for diversification in regions are predominantly informal in character rather than formal'. The role of the central state in determining local diversification outcomes has only recently begun to receive more attention. For example, Boschma et al. (2017) acknowledge that related diversification can result in detrimental lock-ins to existing (and possibly declining) industries, and accept that unrelated diversification can be influenced by state

intervention, not just external firms introducing new capabilities to regions. For Boschma et al. (2017), peripheral regions often depend on external actors to open new growth paths, which favours unrelated diversification. However, in general the diversification literature has either neglected the role of formal institutions and top-down state intervention or dismissed its importance.

Drawing upon Bailey et al.'s (2008) evidence from the MG Rover (MGR) automotive plant closures in the UK, MacKinnon (2017, p. 75) observes that industry branching hypotheses do not always align with labour branching outcomes. He notes the:

> 'limited degree of industrial or sectoral relatedness in the labour branching process … was insufficient to absorb the majority of displaced workers. Over 60% of those employed at wave three reported using different skills in their jobs from MGR, indicating that unrelated diversification was widespread'.

This evidence suggests that regions experiencing structural decline cannot rely on evolutionary, related branching to compensate for mass retrenchments in existing industry specialisations and instead have to rely on unrelated diversification to stabilise or rejuvenate the local labour market.

As such, a tenuous dichotomy has emerged from the relatedness literature, namely that related diversification can occur through market-driven processes, aided by complimentary market-oriented policies, while unrelated diversification may require significant state intervention to disrupt existing paths. Moreover, a further dichotomy emerges that, while related branching may be an optimal strategy for growth areas, unrelated diversification may be optimal for regions impacted by significant shocks and requiring structural adjustment. Yet, even if state intervention *can* engender diversification, this also raises the basic question of whether or not state intervention *should* engender diversification. As such, this requires re-embedding diversification frameworks in more fundamental debates about the role of the state in shaping regional economic development outcomes.

Theoretical Underpinnings – State-Led or Market-Led Diversification?

In the past, interventionist state-led structural adjustment initiatives – including regional, sectoral/industry or labour-focused interventions – have guided planned economic regeneration after industry shocks (Bailey et al. 2014; Beer 2014, 2015). Yet, these interventions are far from uncontroversial. Orthodox economic perspectives argue that intervening to address structural changes is misguided, because the 'best' solution is the one that will unfold as market forces play out as factors (labour, capital) adjust to equilibrium (Bailey et al. 2019a). There is thus significant debate as to whether central governments should intervene to engender regional diversification.

While state responses to regional economic shocks often include a variety of spatially neutral sectoral/industry, labour policies or small-firm enterprise assistance programs, it is place-based policies that remain the most controversial. This section outlines the arguments for and against higher tiers of government aiding sub-intermediate regions to diversify their economies through place-based policies. It works through these different theoretical takes in a roughly chronological order, from Keynesian, to equilibrium-based market perspectives, to institutions-based Schumpeterian innovation frameworks. It notes the attempts to reconcile spatially redistributive top-down, state-led diversification regimes with market-fundamentalist perspectives that prescribe no intervening role for the state, have now largely settled on limited state support for bottom-up regional development paradigms aimed at enhancing regional competitiveness and innovativeness.

This discussion draws out the spatial selectivities inherent in these different approaches, noting that even 'spatially neutral' policies can privilege certain geographies, by favouring particular industries or promoting the 'pull' effect of agglomeration economies. It notes that despite the proposed existence of linear 'paradigm shifts', these perspectives have tended to be enduring and overlapping. This will call attention to the need to focus on the differentiated and place-specific institutional determinants of diversification, not just prevailing knowledges of economic development. In this regard, market-led or state-led regional diversification is always dependent on spatially selective state policies.

Keynesian Approaches – State-Led Regional Diversification

Spatial Keynesianism is defined by a commitment to the reduction of spatial inequality and uneven development by: managing demand through the distribution and re-distribution of public sector jobs; the incentivisation of private industry to locate in specific geographies; localised stimulus in the form of targeted infrastructure programs; and the deployment of local employment schemes in response to economic crises (see Brenner 2004; Breathnach 2010; Faggio 2016; Faggio & Overman 2014). Spatial Keynesianism is thus defined by a commitment to 'place-based policies' (Rainnie et al. 2018), which specifically refer to targeted interventions by a 'senior level of government for a lagging region in its jurisdiction' (Partridge et al. 2015, p. 1320). This framework provides for a broad suite of top-down interventions to address the regional effects of economic shocks and envisages a central, coordinating role for the state in planned regional diversification.

'Spatial Keynesianism' stands in contrast to non-spatial institutional Keynesian macroeconomic management paradigms, which dominated developed economies until the 1970s. 'Non-Spatial' Keynesianism-Fordism focuses on stimulating a consistent level of demand across national populations by providing robust redistributive policies to equalise living standards across space, thus reducing the need for spatially-targeted policies (Brenner 2004; Higgins & Savoie 1994). However, non-spatial industry policies and jobs schemes can also inherently privilege certain geographies, dragging employment opportunities away from lagging regions, exacerbating spatial inequalities and thus undermining the effectiveness of non-spatial equalisation measures (see Brenner 2004; Jones 1997; Breathnach 2010). Brenner (2004) attributes territorial conflicts and peripheral demands for greater spatial equality with core areas, and the political difficulty in balancing core growth pole policies with this equalisation, as internal contradictions that helped lead to the 'hollowing out' of the top-down, bureaucratic Keynesian state, the rise of the competitive 'glocalization' era and the normalisation of uneven development (see Peck 2005; Peck & Jones 1995; Harvey 1989a).

Spatially-conditioned distributive and redistributive political tensions were present during Keynesian welfare state regimes and have endured since their ostensible dismantling (Jones & McLeod 1999; Klink et al. 2013). Support for place-based policies has

re-emerged as a way of reducing these enduring spatial asymmetries, but this does not mean there has been fundamental paradigm shift back towards Keynesian management.

Equilibrium-Based Market Approaches

As Keynesianism was supplanted by neoclassical perspectives, place-based programs became anathema to a new equilibrium-based spatially neutral orthodoxy that envisaged 'little role for geography, history, culture and institutions in regional development but, instead, view(s) self-correcting market forces as the sole means to achieve efficiency; free resource mobility and flexible labour markets are the key to economic convergence and equilibrium' (Bailey et al. 2019a, p. 319). This stood in direct opposition to place-based policies that 'redistribute' public investment with the intention of managing the spatial flows of labour and capital through localised 'multiplier' effects, including policies that attempt to prevent a local exodus of these factors in the aftermath of an economic shock (see Bailey et al. 2019a; Faggio & Overman 2014; Partridge et al. 2015).

Instead, adherence to classic general equilibrium models means allowing market forces to adjust the economy to a new equilibrium after an economic shock, where the price of factors reflects their new market value – thus 'clearing' the national labour market – or identifying policy interventions that could lead only to a Pareto improvement (where one section of the economy could be made better off without making any worse off) (Dee 1994; see also Productivity Commission 2001; Tobin 1975). In policy terms, allowing allocations to be determined by market forces calls for the removal of existing market distortions (such as wage protections) and their replacement by non-distorting 'laissez-faire' policies. From this perspective, the solution to regional economic transition is to not intervene, but rather accept economic shocks as inevitable and allow unencumbered market forces to solve the crisis. Here diversification is welcomed, so long as the diversification process is governed by market forces.

Regional general equilibrium models have been used to oppose place-based policy on the basis that public investment multiplier effects are negated by 'crowding out'

private investment at the local scale (Faggio & Overman 2014)[2]. Other equilibrium perspectives accept that place-based interventions can succeed in stimulating local labour demand, but contend that intervention, in turn, creates undesirable distortions in the broader functioning of markets. This includes the effects of place-based policies on housing prices and population mobility. According to Glaeser and Gottlieb (2008, p. 26), 'explicit spatial policies … are as likely to do harm as good'. This conclusion is predicated on spatial equilibrium, which assumes individual actors are mobile and indifferent to location, and that dynamic reallocation processes result in wages, prices and amenities offsetting each other (Glaeser et al. 2001). For Glaeser and Gottlieb (2008 p. 159-160), therefore, 'there is no natural redistributive reason to channel government support to poor places … the equilibrium's logic also suggests that governmental attempts to improve incomes in poor places will themselves create an equal and offsetting impact on housing prices'. From this perspective, place-based diversification initiatives can displace incumbent residents and perpetuate socioeconomic disadvantage by forcing low-income individuals to cluster in low-service areas.

However, the empirical basis for macro equilibrium theories opposing place-based policy, as part of regional structural adjustment initiatives, is tenuous. A literature review performed by Partridge et al. (2015, p. 1319) concludes that 'the SE (spatial equilibrium) view of regional economies is an imperfect representation of reality', a finding reinforced by Beenstock et al. (2018). A critical problem for equilibrium models is the empirically observable 'stickiness' of labour (Eriksson et al. 2018). The problem, as stated succinctly by Harvey (1989b, p. 19), is that unlike capital 'labour power has to go home every night' and cannot be treated as an interchangeable, equally mobile factor of production. Whether interventions to solve this problem should focus on increasing labour mobility or creating jobs in affected regions forms part of the 'people-based versus place-based' policy debate (see Eriksson et al. 2018).

Equilibrium-based perspectives remain persuasive in generating opposition to place-based diversification initiatives, particularly in technocratic policy circles. However, laissez-faire market fundamentalist approaches are challenged by a competing

[2] This is related to, but should not be confused with, the similarly equilibrium-based macroeconomic argument that government spending 'crowds out' private investment at the national scale by pushing up interest rates.

endogenous growth-based model which, while still rejecting redistributive place-based policies, does not outright reject defined state interventions to promote labour mobility and regional innovation

Endogenous Growth-Based Market Approaches – The 'People-Based' Orthodoxy

Place-based interventions are opposed by 'people-based' perspectives, which remain a globally circulating economic development orthodoxy. Institutions such as the World Bank (2009), promote policies that maintain the natural 'pull' of growing agglomeration economies, which is considered an inexorable market-driven process. The World Bank's (2009) prescription, as summarised by Rodriguez-Pose (2018, p. 192) is that 'policies should be to move people to places where there are opportunities, not opportunities to declining areas'. Thus, a people-based perspective recommends resolving regional economic shocks, in part, by encouraging the out-migration of workers, who cannot be re-absorbed immediately by the local labour market to places with better employment prospects (Productivity Commission 2017b). The continuation of place-based policies is described by critics as merely a function of politics as opposed to sound economics (Austin et al. 2018; Beer 2015; Productivity Commission 2017b).

Support for people-based policies is built on endogenous growth models rather than the exogenous growth processes of neoclassical models. For Romer (1994, p. 15), 'it is investments in human capital rather than physical capital that have spillover effects that increase the level of the technology', which according to Lucas (1993, p. 270) means that 'the main engine of economic growth is the accumulation of human capital – of knowledge' (see also Romer 1986; Lucas 1988). Endogenous growth theory, in turn, facilitated the resurgence of earlier Schumpeterian models, which focused on entrepreneurship and innovation as the drivers of economic growth (Romer 1994; Papageorgiou & Michaelides 2016; Vazquez-Barquero 2007; Vazquez-Barquero & Rodriguez-Cohard 2016).

Adherence to endogenous growth models provides a theoretical, market-based justification for a broader suite of policy interventions to aid regions after a shock, namely human capital and knowledge development in the form of re-training, upskilling and other education initiatives that improve occupational and spatial labour mobility (see

Beer 2015). It also justifies supply-side initiatives in the form of investment allocations for research and development or the provision of initial support for firms to diversify their operations, such as helping traditional manufacturing firms move into advanced manufacturing. These programs would form the backbone of policy responses to automotive industry decline in Australia (Barnes 2016) and Canada (Holmes et al. 2017), with the Australian Government's *Automotive Diversification Programme* and the South Australian Government's *Automotive Supplier Diversification Program* explicitly stating their diversification goals.

Moreover, endogenous growth models allow for placemaking initiatives in the form of infrastructure spending and other interventions to foster agglomeration externalities and spillover effects. This may include pursuing Jacobs-MAR-Porter localisation/agglomeration/cluster effects (see Beaudry & Schiffauerova 2009), or the creation of urban spaces required to foster dynamic 'Creative Class' knowledge economies (Florida 2014). Diversification strategies focused on transforming deindustrialised towns into education or cultural hubs is thus now a common policy response (Cleave et al. 2019; Johnson 2009; Siemiatycki 2013).

Importantly, while these perspectives allow for policy aimed at accelerating growth in urban growth areas, they reject place-based policy targeting lagging rural or regional areas on the grounds that doing so simply is an inefficient reallocation of jobs that could have greater spillover impacts in core urban areas (Daley & Lancy 2011; Glaeser & Resseger 2010). In this regard, endogenous growth-based, 'people-based policies' can actually be characterised as targeted 'anti-place-based policy', because they target some places for investment with the ultimate goal of pulling people away from other places and allowing them to decline (see World Bank 2009, p. 26). From this perspective, the improvement of human capital helps overcome the 'stickiness' of labour that makes laissez-faire solutions problematic and allows poverty to entrench and perpetuate (see Eriksson et al. 2018; Partridge et. al 2015).

Ultimately, opposition to state-led diversification through place-based policy is not based on a singular theory, but rather represents a point of agreement among different strands of mainstream economic thought that often co-exist uneasily. The four

fundamental arguments against place-based policies in the literature, which may invariably overlap or conflict, can be summarised as:

(1) They are an inefficient reallocation of resources and lead to sub-optimal outcomes at the macro national scale;
(2) They simply 'crowd out' private investment at the local scale, rendering them ineffective or counterproductive – they do not present a net 'barrier for exit' for local labour;
(3) The inflow of re-allocated investment disrupts existing spatial equilibrium, forcing housing costs to rise and the subsequent displacement of low-income residents;
(4) If spatially-targeted interventions are implemented to facilitate endogenous development or to harness the effects of agglomeration economies, they should be targeted at existing core growth areas, not lagging regions.

While the latter argument is not 'spatially blind', it is distinguished from the common conception of place-based policy, as it aims to promote uneven spatial development rather than remedy it through equalisation-focused interventions. The alignment between laissez-faire and people-based perspectives is that lagging regions should not be aided. The former perspective dictates that 'winners' and 'losers' cannot be chosen at all, while the latter suggests that only winners be chosen. Either way, loser places are to be forgotten.

The current orthodoxy thus has significant implications for regions facing decline. Enduring laissez-faire perspectives provide a general opposition to state intervention, although endogenous growth and people-based frameworks provide a framework to support both related diversification and unrelated diversification through labour retraining (suitable for unrelated diversification) or upskilling initiatives (suitable for related diversification), or supply-side industry support funds (suitable for either objective). However, these perspectives still proscribe state-led placemaking initiatives which could directly facilitate unrelated diversification, or indirectly support related diversification by ensuring that negative multiplier effects do not spread throughout supply chains after a shock and cause regional disinvestment in related industries.

The Resurgent Appeal of State-Led Development and Place-Based Policy

In recent years, the edifice of orthodox resistance to place-based policies has begun to shake. Theorists such as Rodriguez-Pose (2018) and McCann (2020) have highlighted that the 'geography of discontent' driven by uneven spatial development is making liberal democracies increasingly ungovernable as spatial inequalities lead to people in 'forgotten places' asserting their remaining political power, in ways that upend the interests of core growth areas and lead to a cycle of problems based on perpetuating spatially-based tensions. There is a growing political economy-based recognition that the proposed economics versus politics dichotomy for the existence of place-based policy is a false one, as politics cannot be separated from policy, governance and thus economics. McCann (2020) highlights evidence that individuals in 'forgotten places' tend to internalise their limited opportunities based on the prosperity of their inhabited place relative to others. The result is that 'higher interregional inequality is associated with higher nationwide interpersonal inequality, so these two dimensions of inequality cannot be separated' (McCann 2020, p. 257). Growing socio-spatial inequality can inhibit the growth of 'human capital' in a society and thus place-based diversification policies can be justified as a necessary people-focused solution in an increasingly knowledge-based society.

Moreover, as argued by Jones (1997), state spatial selectivity occurs with or without deliberate spatial planning, because shifts in ideology and national economic development priorities have spatial implications. Sectoral or industry policies privilege particular types of places and influence the 'pull' of core agglomeration economies and disinvestment in peripheral places. For Martin et al. (2017, p. 3), 'All government policy is necessarily geographical in its outcomes – whether intended or not'. Noting productivity outcomes diverge significantly within the same industry across places, for Martin et al. (2017) and Bailey et al. (2019a, 2019b), there is growing need to embed place as a primary consideration in industrial policies.

Some influential former critics of place-based policies have reversed their opposition (see McCann 2020). Faggio (2016, p. 26) found that place-based policies produced net positive 'Keynesian-type stimulus' and 'trigger the much sought after local multiplier effects' having previously presented evidence that similar place-based policies

produced net negative local 'crowding out' effects (Faggio & Overman 2014). Glaeser (in Austin et al. 2018, p. 2) called for 'reconsidering place-based policies', arguing that place-based policies in high-unemployment regions were more effective than programs targeting low-unemployment regions. Evidence that place-based policy can be both effective at the local scale and cost-efficient at the national scale counterbalances the major arguments deployed against it.

The spatial dimensions of self-perpetuating socioeconomic disadvantage means place-based policies may reduce the costs associated with having to deal with a greater problem later (Partridge et al. 2015; see also Glaeser & Gyourko 2005). Further, Partridge et al. (2015, p. 1320) note that 'beyond cost and feasibility considerations, people-based policies to increase mobility may simply be ineffective', which necessitates place-based intervention. For Eriksson et al. (2018, p. 1087) while there can be a 'trade-off between people-based policies and place-based policies' in the aftermath of a plant closure, ultimately a policy response should focus both on 'the parts of the workforce most in need of such efforts' (through people-based skills initiatives) while retaining 'a larger strategic diversification picture for regional development and structural change in mind'.

Resurgence in support for state-led regional development initiatives has not manifested in widespread support for top-down centralised planning initiatives. While there are longstanding heterodox Marxist (Harvey 1982) or post-Keynesian disequilibrium frameworks (Clower 1967; Leijonhufvud 1967; see also Barro and Grossman 1971) that reject mainstream economic orthodoxy, these are not the basis for current limited support for state involvement in regional development. Rather, regional policies and the deployment of structural adjustment programs still often largely conform to market principles and discourse (Beer 2015). Instead, support for limited place-based interventions is facilitated by widespread support for regional development paradigms that aim to enhance the *competitiveness* of regions, rather than the *equality* of regions.

Diversification Through Regional Innovation and Competition

In recent decades, bottom-up Schumpetarian 'entrepreneurial' approaches are claimed to have usurped top-down Keynesian 'managerialist' and bureaucratic approaches as the hegemonic approach to regional and urban economic development

(Harvey 1989a; Jessop 1993). The rejection of top-down planning follows the perspective that successful regional development requires 'greater moves from government to governance for the implementation of development strategies and a much greater resort to genuinely bottom-up policies, empowering individuals, encouraging voice and mobilizing all local institutional resources' (Rodriguez-Pose 2013, p. 1044). This perspective calls for the formation of innovative local institutional structures as an alternative to formal state bureaucracies (hence 'governance over government') to empower regions to manage local economic development endogenously.

While this approach to regional development is often premised on collaboration between different stakeholders *within* regions, it is also fundamentally defined by competition *between* regions. For Harvey (1982, p. 427), faced with the hollowed-out state, 'Interregional competition becomes the order of the day. And the relative strengths of different territorially based alliances become an important factor'. Schumpetarian approaches to regional development are thus viewed as an inexorable and necessary regional response to the nature of global capitalism.

Specifically, regional policy discourse in western market economies, such as Australia (Tomaney 2012; Tonts & Haslam-McKenzie 2005) and Canada (Bradford 2017; Conteh 2015), has become dominated by place-based theories of 'new regionalism'. New regionalism is ostensibly a departure from attempts at top-down spatial planning, but is also a rejection of spatially neutral market fundamentalism that saw governments largely withdrawing from regional policy (Bradford 2010, 2017; Collits 2014; Tonts & Haslam-McKenzie 2005). New regionalism is a bottom-up, market-oriented framework that rejects orthodox prescriptions calling for the complete policy abandonment of lagging regions, instead promising to empower them.

New regionalism is defined by two similar and yet, perhaps tellingly, contradictory mantras of 'local solutions for local problems' (Lynn 2018, p. 188), and 'joined-up solutions for joined-up problems', a term for the delivery of regional policy, through intra-governmental and other stakeholder partnerships that emerged during the Blair Labour Government period in the UK (Johnson 2017b, p. 22).

Often used interchangeably with 'competitive regionalism', new regionalism does not fully depart from standard, market-based paradigms as it applies neoclassical

assumptions and neoliberal principles to regional policy (Larner & Walters 2002; Lovering 1999; Mittelman 1996). Nevertheless, the inherent privileging of place, required by the paradigm, remains anathema to spatially neutral 'conventional wisdom'. In practical application, new regionalism advocates for devolution that allows regions to be organised along market principles in order to promote competition between them, which includes the creation of alternative local stakeholder (including business) networked governance structures (Larner & Walters 2002; Lovering 1999). While not literally extending methodological individualism to the logic of regions (see Lovering 1999, p. 387), it is instead predicated upon methodological atomism, with the same result: the individual is not the rational agent, but the place, which maximises its utility in competition with other places.

New regionalism is thus built upon, and developed in tandem with, the more explicitly institutional economics-based paradigm of endogenous development (Wilson 2016), which attempts to synthesise endogenous growth theory and a variety of other diffuse economic theories. The endogenous development concept of an entrepreneurial, innovative, collective regional 'actor' forms the basic foundation for the new regional institutional framework of competitive regionalism. Inspired by Romer-Lucasian endogenous growth and Schumpeterian growth theories, endogenous development is 'based on the hypothesis that the territory can be understood as the territorial community's network of interests and, therefore, can be perceived as an actor for local development' (Vazquez-Barquero 2007, p. 26). Endogenous development is based on the idea that regions can develop a distinct 'social capability' through the co-operation of regional stakeholders (Scott & Garofoli 2007, p. 11). Endogenous development is an explicitly neo-Schumpetarian institutionalism conceived of as a self-reinforcing, evolving symbiosis of entrepreneurs, shaping institutions that facilitate further individual innovation. Much like 'flexible' firms in the post-Fordist era, 'development actors' must dismantle 'rigid Fordist organizations' and create an 'innovative milieu' (Vazquez-Barquero 2007, p. 25).

The methodological atomism conceived of in new regionalism, or endogenous development, justifies qualified support for place-based policies with the goal of eliminating them. By empowering regions, it is hoped that Spatial Keynesian redistributionism can be avoided. According to Austin et al. (2018, p. 6) 'a belief in

individual upward mobility reduces the desire for income redistribution. Similarly, a belief in the upward mobility of regions limits the demand for place-based policies'. While these perspectives reject the notion that place-based policies can only be targeted at prosperous area, it aims only to aid the region in achieving its competitive potential and ultimately move towards a governance structure free of spatial redistribution.

Innovation and competition-led regional development perspectives, and related diversification policy prescriptions, form the basis of the European Union's supra-national 'Smart Specialisation Strategy (S3)' (Boschma 2017; Foray 2014). This framework seeks to synthesise regional and industry policy through collaborative governance, envisioning that regions are empowered to endogenously develop their own industrial strengths and strategies (Aranguren et al. 2017). Each region is to follow an 'entrepreneurial process of discovery' rather than a 'pre-conceived grand plan', through which 'the role of policy is one of monitoring and qualified support' (European Commission 2010, p. 44). Despite being formally embedded in European institutions, the S3 framework's promise of endogenous empowerment has seen it spread across the globe. This approach has been adopted as an official strategy by organisations such as Regional Development Australia Hunter (RDA Hunter 2017), which is particularly significant considering that the Hunter Region was once considered the Australian 'best practice' example of successful diversification (HVRF 2011; Weller & Tierney 2017). Influential regional stakeholders in Greater Geelong have proposed adopting the S3 framework (Correia & Denham 2016; Johnson et al. 2020).

However, the extent to which the S3 program departs from previous policies, advocates related diversification, continued specialisation or unrelated diversification, represents a sector-based or place-based program, and potentially favours prosperous regions over lagging regions, remain points of contention (Asheim 2013; Aranguren et al. 2017; McCann & Ortega-Argilés 2015). Moreover, the idea that a framework embedded within the supra-national European context can simply be transposed to a completely different institutional context would require significant research. Despite Smart Specialisation's emergence in Europe, in the 'Anglosphere' market economies, ill-defined 'diversification' remains the hegemonic discursive policy construct.

State-Led Diversification and the Veil of Bottom-Up Regionalism

New regionalism has promised to overcome traditional institutional barriers, such as overcoming constitutional restraints on federal government involvement in local economic development, with state and federal involvement framed as being part of a decentralised, locally-driven, bottom-up, consensus-building, collaborative exercise (Weller & Tierney 2017). By reframing regions as competitive actors, policymakers have been able to justify place-based interventions to improve what can be termed 'regional capital', in much the same way as they deploy 'human capital' interventions to improve labour competitiveness, while avoiding associations with redistributive Spatial Keynesianism.

Competitive stakeholder governance and market-based approaches to place-based policy have resulted in supply-side structural adjustment programs in the form of inward co-investment and enterprise assistance schemes coordinated by bespoke regional multi-level and networked governance committees (Beer 2015; Weller & Tierney 2017). Thus, even when launching employment programs targeted at disadvantaged areas, the solution is often portrayed as one that requires better collaboration with market participants. In the new regional and endogenous development era, the market seemingly remains king. However, if this was the whole story, then related diversification policies driven by bottom-up collaboration between local institutions and market participation should be expected to completely dominate structural adjustment episodes in market economies.

Instead, unrelated diversification policies, largely coordinated by formal state institutions, continue to be mobilised in response to crises in these same economies. While bottom-up networked governance models may appear to be driving diversification initiatives, these can often be veneers for diversification driven by actors firmly embedded within state bureaucracies (Weller 2017; Weller & Tierney 2017). The use of networked, multi-level advisory bodies may be a unique feature of new regional governance systems, but it does not mean these bodies necessarily represent a fundamental shift in the institutional power to determine regional development priorities. As argued by Swyngedouw (2005), the multi-level or networked stakeholder model may aim to build consensus around a particular development agenda, but this may

ultimately be a way of negating, rather than encouraging, political dissent. Consensus is built around the pre-existing agendas of those with the institutional power to discursively frame the problem and its available solutions.

Proposed 'paradigm shifts', in both general economic management and the management of regional crises, do not reflect the temporally chaotic nature of various regimes of governance and institutional changes. As argued by Jones and McLeod (1999, p. 308), '"the hollowing out" of the state is neither simple nor unilinear' (see also Klink et al. 2013). Even 'reflexively critical' perspectives on new regionalism mistakenly accept it as 'as a new form of economic democracy devoid of political geographic conditions and contexts' (Jonas and Pincetl 2006, p. 501). For Jonas and Pincetl (2006, pp. 487-488), regional governance institutions instead 'incorporate a variety of political rationalities relating to everyday material struggles around planning, growth, fiscal flows, economic development, land use and environmental protection, which are fought out in specific urban and regional settings'. Whether or not regional development and diversification can be facilitated through place-based interventions ultimately comes down to state spatial selectivity (Jones 1997), not necessarily a hegemonic paradigm. For diversification interventions to be deployed, policy actors must decide what gets done and where, conditioned by a variety of structural, institutional and political factors that may or may not cohere with any single 'paradigm'.

Dominant paradigms of economic management, regional development and crises response must necessarily be considered a strong determinant of state approaches to diversification, but cannot alone account for institutional action. Researchers must be aware these paradigms may overlap and represent competing approaches. Therefore, understanding how policymakers navigate paradigms opposing or favouring regional interventions, and their own institutional environment, becomes crucial for analysing diversification outcomes.

Conclusion: Problematising the 'Common Sense' Solution of Economic Diversification

Based on the above review of empirical and conceptual literature, this thesis points to several overarching problems with the intuitive remedy of 'economic diversification'.

The first overarching problem is that there simply is no consensus on whether regions experiencing industry shocks should pursue related diversification, unrelated diversification or ultimately aim to achieve economic diversity or re-specialisation. The second major problem is that there is no clear or widely-accepted definition of economic diversification. Inconsistent discursive use of the term by scholars and policymakers leads to confusion in policy design and, potentially, to poor or insufficiently place- or scale-sensitive policy choices. Diversification invariably encapsulates a range of different policy objectives, from variegating the sectoral or industrial composition of a regional economy through related or unrelated industries that can result in either economic diversity or re-specialisation; to targeting individual firms to aid them in developing entirely new products or innovating existing technological and production capabilities to produce similar, value-added products. The absence of conceptual clarity is not simply a theoretical problem – it presents a serious challenge for policymakers because it is difficult for any strategy to be successful without being articulated clearly. There is also a risk that in a region facing structural decline that diversification becomes a restatement of the problem masquerading as its own solution. If a dominant industry collapses, this will likely cause a regional economy to have a more diversified industrial composition, thus making 'diversification' a self-fulfilling prophecy impersonating a crisis response policy. Moreover, diversification, at a certain level of aggregation, may ignore issues faced by specific areas impacted the most, where targeted programs may be needed, by re-territorialising the scope of the 'diversification' problem to a scale, at which it solves itself (Weller 2017; Weller & Tierney 2017).

There are also significant issues that tie directly into gaps in the research, with the dearth of research into the role of the state, in both related and unrelated diversification, a glaring limitation. Clearly, even from market-oriented perspectives, analysing the outcomes of state interventions is of central importance. If 'economic diversification' is

taken to mean attracting new businesses to alter a region's existing industrial composition or attracting private capital to help existing businesses diversify their activities, this is easier said than done. If diversification depends on capital outlays from private firms, as is the expectation in a market-based economy, and these investment opportunities have not immediately been unlocked, a regional economy will not 'diversify' without state intervention. This further entails that any diversification strategy cannot be considered without regard to the wider socio-political, institutional and regional governance hierarchies that constrain or facilitate intervention. The absence of such understandings means that stakeholders still lack any real clarity on the inputs that lead to diversification outcomes.

The unique contexts of regions ensure that while one particular policy strategy may help one region, it may not be appropriate for others. 'Best practice' diversification strategies could potentially exacerbate rather than solve regional decline if the specific regional context is not considered (Jackson 1984; Martin et al. 2016). Common sense conceptualisations of 'diversification' and 'resilience' may in fact paradoxically undermine regional resilience in regions lacking the strategic infrastructure to recognise local impediments to imitating 'best practice' (see Gertler 2001; Temenos & McCann 2013). Peck and Theodore (2010) explain that, in reality, policies transmute from one region to another as they interact with local institutions, values and knowledge and thus produce unique effects in different locations. Further, as argued by Sheppard (2002, p. 326), regional power imbalances in a global economy mean that 'even if all places adopt the same approach, not all gain from it'.

Beer et al. (2020) suggest the existing literature has failed to properly consider how different typologies of local economic structures could be better served by different industry compositions. In their view, whether unrelated diversification, related diversification, or specialisation is an optimal regional development strategy depends on local characteristics, not a one-size-fits-all approach. Pike et al. (2016) have also applied this understanding in a relational manner, showing that satellite cities should pursue different industry compositions dependent on the effects of nearby agglomerations. These nuanced, spatially-cognisant understandings have begun to filter through policy knowledges (Victorian State Government 2017). Nonetheless, these additions to the literature remain nascent and embedded within the broader specialisation-diversification

debate. Any degree of academic consensus on the binary still remains elusive. This points to an inadequacy in how spatial determinants are understood in relation to regional diversification.

A further inadequacy in the diversification and resilience literature is that it fails to incorporate understandings of exogenous factors, such as the extent to which strategic decisions from external actors, embedded within global production networks, have an impact on local regional industrial composition (see Coe 1997; Martin et al. 2016; Massey 1995) or the impact of decisions made by external policymakers in higher tiers of government (Boschma 2017; Boschma et al. 2017). Regional economic development paradigms and institutions at the central or intermediate state-level may dictate the diversification strategies of sub-national regions. The idea of a 'competitive' region can be problematised simply in terms of existing institutional arrangements. In federations like Australia and Canada, local regions may lack the capacity to act as atomised, competitive units. Incorporating analyses of diversification and resilience into a broader critique of uneven development and the spatial division of labour may better engender perspectives that challenge the notion of an atomised 'region'. This would more comfortably situate the region as an interconnected node, whose path is determined by central or intermediate states, global production networks, institutions, actors and hegemonic discourse.

Fundamentally, an opportunity exists to generate a new theoretical perspective that can contribute to a broad body of literature in multiple disciplines, including economics, industrial geography, regional studies and public policy. This means the diversification literature needs to move away from simplistic binaries of specialisation versus diversification or unrelated versus related diversification to a nuanced understanding of the complex, intersecting determinants that impact different places at different scales and stages of development. The next chapter will introduce how these recognised gaps in the diversification literature can be addressed through a comprehensive comparative case study and mixed methods research design.

Chapter 3 - Methodology and Research Design

Introduction

There is growing recognition that contemporary understandings of regional diversification remain limited. According to an editorial statement in the Cambridge Journal of Regions, Economy and Society (2018, p. 2):

> 'In recent years, interest in understanding the sources, processes and determinants of economic diversification and the transformation of regions has been growing … (However) These fundamental dynamics still remain insufficiently understood, and vital questions remain unanswered regarding the relevant drivers, dimensions and determinants, as well as policy facilitation, of successful transformation. Diverse theoretical and methodological approaches are needed to build a comprehensive understanding of the complex real-world processes involved, which are a result of the conjoined operation of multiple causal mechanisms, presently probed separately in partial theorisations focusing on one or just a few dimensions'.

The dominant approach currently – quantitative analysis centred on the diversification-specialisation binary and its relationship to a myriad of economic variables – has generated inconclusive findings. This research has not moved beyond identifying and describing correlations and is deficient in terms of its capacity to identify the potential causal processes driving these interrelated phenomena.

There exists no standard measure of economic diversity and diversification and the dissimilarity in results generated by different measures are not trivial. **Table 1** summarises the major models and their differences (see also United Nations 2016). The various conceptualisations and empirical models investigating economic diversity generally distinguish between the abstract states of absolute homogeneity and absolute heterogeneity in economic activity, but this is where the coherence ends. Each model represents a specialisation-diversification spectrum, but each model reflects either a different conceptualisation of what the spectrum represents, a unique methodological approach to measuring it, or both. Simply, depending on the model employed, a region can be characterised as either specialised or diversified (Siegel et al. 1995). The results are often contradictory. For example, data presented in an Australian Bureau of Statistics

(2014) review of two commonly employed diversity indexes – the Entropy and Hirschman-Hirfendahl indices – reveals that not a single Australian region, determined to be in the top ten 'most diverse' regions using one model, is included in the top ten using the other index. In addition, re-scaling the unit of observation can have significant impacts on the data even when the model of diversity is kept consistent. For example, Attaran (1986) found a negative correlation between diversity and per capita income in US states, yet Attaran and Zwick (1987) found the opposite when applying the same model (Entropy) to Oregon counties. This also calls attention to the centrality of scale when researching economic diversity, as a highly specialised county can be situated in a highly diverse state or vice versa.

Table 1. Measures of Economic Diversity/Specialisation

Index Type	Commonly used to Measure	Limitations
▪ Ogive ▪ Entropy ▪ Gini (Dissart 2003; Siegel et al. 1995)	The evenness of a region's industrial composition across all, or a selected number, of its sectors. Economic activity spread evenly across all sectors would be absolutely diversified, and specialised if concentrated in a single industry.	The Ogive and Gini models weight smaller industries more heavily in determining specialisation. The addition of sectors with zero employment shares significantly impacts the degree of specialisation in the Ogive model, and cannot be included in Entropy and Gini models.
▪ Hirschman-Herfindahl ▪ Ellison-Glaeser (Siegel et al. 1995)	Is often modified to reflect Ogive and Entropy Indices but originally used to examine the spatial concentration of a sector as opposed to regional specialisation related to multiple industries, and can thus lead to different results.	Regions specialising in larger industries will be categorised as more specialised than the above indices, and this model is not impacted by the addition of sectors with zero employment share. Ellison-Glaeser adapt this model to base concentration in relation to a randomised dispersion of firms.
▪ Portfolio Variance (Conroy 1975; Dissart 2003; Siegel et al. 1995)	Primarily used to measure stability. Region as individual investor – regional industry composition equated to a portfolio. Individual industries yield returns in the form of employment or income, but also potential risk in the form of fluctuations.	While often used as a measure of diversity, portfolio variance is not actually measured independently of diversity. Specialised regions can be stable and so can disadvantaged regions.
▪ Hachman ▪ National Average ▪ Krugman Specialisation (Farhauer & Kroll 2012; United Nations 2016)	Relative specialisation of a nation/region's industry structure with reference to a broader international/national industrial structure.	Specialisation here entails how an industrial composition aligns with a reference point, it is not a measure of absolute industrial homogeneity within a nation/region. Reference point may not actually reflect a properly diversified industry structure.

The absence of any definitive answers on the diversification-specialisation binary, despite decades of research (Toner & Douglas 2020), is therefore unsurprising, as several meta-analyses have concluded that the diversification-specialisation binary cannot be 'solved' empirically because divergent findings can be attributed mainly to methodological differences (Beaudry & Schiffauerova 2009; Melo et al. 2009). Fundamentally, measures of industrial composition are supposed to be value-neutral conceptual tools aimed at investigating correlations with other socioeconomic indicators and not necessarily a binary that needs to be 'solved' (Dissart 2003). The misinterpretation of these empirical studies continues to present dangers for policymakers who do not consider all the region-specific factors that make these correlations inadequate for generalised 'best practice' policy (Jackson 1984; Siegel et al. 1995; see also Martin et al. 2016).

For Boschma (2017, p. 360), there are 'processes of diversification in regions that are very hard or impossible to grasp with a quantitative approach. The time has come to make a serious effort to apply and integrate mixed-methods into the study of regional diversification'. This research should also be 'multi-scalar', because diversification is a process that is 'contested by various interests at various spatial scales' (Boschma et al. 2017, p. 34). Martin et al. (2016 p. 580) echo this argument, stating that 'it seems inescapable' that a focus on the interplay of industry composition and regional resilience 'will require in-depth (comparative) case study research' that focuses not only on local 'fundamentals' but on how national policies and other non-local factors influence regional trajectories. For Boschma et al. (2017, p. 34), this means 'adopting a theoretical perspective that accounts for 'human agency' and 'the role of constraining factors', to build a framework in which 'regional diversification is conceptualized as a process based on the dynamic interplay between agency and its changing technological, institutional and spatial context'.

Further, it has been widely recognised that while firms have received significant attention, the institutional determinants of regional diversification remain largely unexplored (Cortinovis et al. 2017; see also Boschma 2017; Boschma & Capone 2015; Neffke et al. 2018; Van Oort et al. 2015). The limited research that has been undertaken adopted a mostly quantitative, methodologically individualist or atomised approach. The role of policy actors has generally been neglected in favour of structural and institutional

explanations in studies of regional industrial composition and resilience (Martin et al. 2016). There has not been comparative research that could illuminate the possible material impacts of different constructions and deployments of the discursive form of diversification (see Foster et al. 2016; Lees 2003). There remains little understanding of the way in which economic diversification is developed and disseminated as a technology of crisis management and regional/urban governance.

Essentially, authors have identified that the current diversification literature is lacking an understanding of:

1) agent capacity to engender diversification at various scales,

2) the structural and spatial constraints on these actors,

3) the role of institutions in driving diversification,

4) the effects of diversification's discursive construction and promulgation, and

5) the specific policy inputs that lead to certain outcomes.

A comprehensive, synthesised methodological framework is needed to investigate these issues.

To address these gaps, this thesis begins with the methodological framework of ASID - Agency, Structure, Institutions, Discourse (ASID) – as developed by Moulaert et al. (2016). ASID aligns with critical realist methods, albeit with greater attention to matters of discourse, and has the capacity to guide research addressing the recognised gaps in the diversification literature. By situating the ASID framework within a broader critical realist ontology and epistemology, this chapter will outline how the gaps in the diversification literature are addressed using a comprehensive, multi-dimensional framework. This chapter will describe the central pillars of this thesis's research design, explaining why each component informs the other to address the gaps in understandings of economic diversification. This chapter explains how this thesis:

- is informed by a critical realist ontology and epistemology,
- adopts and modifies the ASID methodological framework into the 'PASID' framework,
- uses a comparative case study approach focused on satellite cities, and
- employs a variety of mixed methods tools, including longitudinal analysis of census and other quantitative data sets, along with qualitative methods such as

hermeneutical analysis of media and policy documents, in-depth, semi-structured interviews and other field research techniques.

The chapter also examines the strengths and limitations of this approach as a basis for future research on the policy implications of diversification.

The ASID Framework

ASID concentrates on the interaction of agency and structure, as mediated by institutions and discourses. According to Moulaert et al. (2016, pp. 168-169):

> 'For an adequate account of socio-economic development, one must refer to the actions that steer or interfere with the development processes, the structures that both constrain and enable action, the institutions that guide or hamper action and mediate the relation between structures and action, and the discourses and discursive practices that are part of these interactions'.

Among other interconnections, just as 'structure is recognized as a product of path-dependent institutionalization and path-shaping (collective) agency, agency is seen in turn as discursively and materially reproduced and transformed' (Moulaert et al. 2016, p. 167). The ASID framework, applied to regional/urban analyses of industrial composition or resilience must consider both the structural limitations and the capacity for agency at all 'scales of action', not just the local scale (Moulaert et al. 2016, p. 174). It suggests that regional actors do not have the ability to 'diversify' or 'specialise' the industry structure of a region on a whim (see Brown & Greenbaum 2017), but both local and non-local actors can influence regional growth paths. This captures the friction between *path dependency* and *path creation*, which, as articulated by Wolfe (2010, p. 150), means acknowledging that each region is not 'completely captive to the past trajectories of economic development, but neither are they completely free of that legacy'. The ASID framework prescribes analysing institutions – understood as 'mediators' of structural constraints and agential opportunities – as a way of revealing the capacity for agency.

The ASID framework is a 'meta' framework that aims to overcome the challenge of analysing complex systems by establishing 'a set of epistemological and methodological protocols for studying the real world', rather than providing a set of specific inputs to

research (Moulaert et al. 2016, p. 175).[3] This means connecting the ASID framework to 'middle-range theories' such as 'endogenous regional development' (Moulaert et al. pp. 186-187). ASID provides a platform to analyse theoretical inputs that can be used to generate new theoretical outputs.

The ASID methodological framework is built explicitly from critical realist ontological and epistemological assumptions that 'regard the "real" world as ontologically prior to scientific inquiry into that world' (Moulaert et al. 2016, p. 175). The ASID framework is largely compatible with existing orthodox critical realist frameworks in its rejection of methodological individualism (Bhaskar 1989, 2013; Yeung 1997), although its emphasis on discourse is a point of possible contention, as is the absence of prescriptions for particular research methods. The ASID framework is informed by an understanding of the interplay between structure and agency central to (but not unique to) critical realism, which suggests that structure constrains or produces action but agents in turn shape structures (Bhaskar 1989, 2013; see also Giddens 1979; King 2010). The ASID framework builds upon Jessop (1982, p. 253), who defines structural constraints in relation to the reciprocal of 'conjunctures', which as interpreted by Moulaert et al. (2016, p. 172) represent a 'path-dependent set of path-shaping opportunities for strategic agency'. For Moulaert et al. (2016, p. 174), 'a strategic-context analysis must refer to actors' scope to make a difference in a given conjuncture'.[4]

The ASID framework provides a methodological lens for exploring the structure/agency divide by focusing on the role of institutions as a 'mediator' between them. As such, by examining the institutional determinants of regional diversification, then possible structuralist or agent-centric explanations can be analysed. Further, the ASID framework highlights crises – such as economic shocks in the form of plant closures leading to diversification – as 'especially important conjuncturally' because they represent a 'contingent moment when life cannot go on as before and choices must be made' (Moulaert et al. 2016, pp. 172, 176).

[3] ASID is the central model linking other thematics in Moulaert et al.'s broader DEMOLOGOS meta synthesis framework.

[4] Bhaskar's (2013, p. 100) succinct definition of agent-driven causality is '"making a difference" to the state of affairs that would otherwise have prevailed in the material world'. Conversely, structure, as defined by Moulaert et al. (2016, p. 173) 'refers to the aspects of social interaction and institutional articulation that cannot be changed by given agents within a given period or spatial context'.

In one important respect, the ASID framework represents a departure from classical critical realist perspectives with its incorporation of critical discourse/hermeneutic analysis. Fundamental to critical realism is the notion that agent-driven causal mechanisms must be understood with regard to explicit reasons and 'conscious intentionality' (Bhaskar in Buch-Hansen 2005, p. 64; see also Yeung 1997), which manifests itself in discourse (Sayer 2005). However, hermeneutics is often considered ontologically incompatible with critical realism due to its perceived rejection of materialist explanations of causal processes (Fairclough et al. 2002). Fairclough et al. (2002, pp. 2, 3-4) reject this dichotomy, arguing that the absence of semiosis (defined as the 'intersubjective production of meaning') in critical realism is a glaring omission, because while non-semiotic factors constrain the production of meaning, these structures are also shaped by discourse. For Sayer (2005, p. 8), 'The very point of discourse is to produce some kind of effect, whether it be maintaining some situation or transforming it'. Moulaert et al. 2016 (2016, pp. 175-176) consider the incorporation of discourse analysis 'implicit' and compatible with critical realist ontology and methodology. The incorporation of hermeneutics is thus considered fundamental to understanding how meaning making in policy and media documents influences outcomes associated with regional diversification. Ultimately, the ASID framework incorporates and synthesises multiple strands of critical realist theory.

Analytical Considerations: From ASID to PASID

The analysis of diversification needs to take into account a number of practical issues. These include the unit of analysis/observation, the incorporation of endogenous and exogenous forces, and positionality.

Units of Analysis: What is a 'Region'?

Any academic literature focusing on regional diversification, specialisation or resilience involves implicit claims about place, space, scale and time. Identifying the level of diversification/specialisation in a place involves a tacit claim as to why a particular place – whether or not this is a town, city, agglomeration, region, state, province or nation – is a legitimate object or subject of inquiry, and why this place can be isolated,

distinguished from, compared with and contrasted to other places. Therefore, selecting appropriate units of analysis/observation is a crucial starting point for practical research. This is not straightforward. Industry composition is inexorably defined by scale; a comparatively diversified suburb can exist in a comparatively specialised city in a diversified metropolitan region in a specialised province in a diversified country and so on. While a 'region' is traditionally conceived of as a subnational unit, it is also used to refer to entire continents and any space in between (Scott 1998). Further, the concept of economic diversification is inherently temporal. While much of the literature has conflated industry 'diversity' with industry 'diversification', the latter is fundamentally different as it represents change in the composition of industry through time (Malizia & Ke 1993; Siegel et al. 1995; see also Malizia 1990).

In their longitudinal analysis of the relationship between industry diversity and unemployment/stability, Malizia & Ke (1993) recognise that the question of appropriate comparative scale and place typologies are an often-disregarded feature in the diversification literature – with comparative analysis focused on various taxonomic groupings (diversification in 'capital cities', 'manufacturing towns', etc.) without proper consideration to the actual appropriateness of the unit of analysis or observation (see also Yin 2003). However, the authors also inadvertently highlight another key limitation with comparative analysis in diversification studies within their own selected units for longitudinal analysis. Using US census metropolitan areas Malizia & Ke (1993, p. 224) acknowledge having to exclude numerous areas whose 'definition changed radically over the study period'. This is an admission that many of the remaining study units were not geographically constant, which has significant implications for the use of industry composition as the core variable. Even at the neighbourhood level, spatial boundary changes impact longitudinal analysis of census data (Allen & Taylor 2016). In essence, taxonomic constructs, as defined by authoritative institutions, are often necessary as a basis for comparative analysis of economic diversification in different places, but can also present serious methodological problems, because they often represent consistent labels only, rather than consistent spatial units to be analysed over time. These issues are perhaps reflected in the fact that most studies focus on cross-sectional industry diversity, not longitudinal diversification (Siegel et al. 1995; Malizia & Ke 1993). Any analysis that

fails to consider institutional or spatial re-configurations may actually be comparing two very different places across time periods, despite them having the same name label.

Endogenous and Exogenous Forces

Even more potentially problematic than the issue of scale is the extent to which dominant explanations for regional change are built on conflicting accounts of endogenous and exogenous causal mechanisms. In the empirical literature focusing on both diversification and regional resilience, regions are almost exclusively conceptualised as atomised – their interlinkages are not considered, and they are analysed as if they are a closed system. For Downward and Mearman (2007, p. 87), 'Ontologically speaking, a closed system is assumed such that causes act in a consistent manner … isolated from other causes'. These conceptualisations, necessarily, dictate how theories of industrial composition are approached and informs their discursive construction. With the diversification literature largely fixated upon endogenous capabilities (Boschma et al. 2017), this construction is also embedded in paradigms such as endogenous development and new regionalism, which build upon methodological individualism to present the foundation for methodologically atomised conceptualisations of endogenously-driven diversification (see **Chapter 2**). These teleological conceptualisations of regions frame them as conscious actors in competition with other regional actors. The dominance of atomistic, 'competitive' understandings has very real practical implications, being the potential basis for 'best practice' diversification policy transfer, which suggests that regions can improve outcomes by following a model of regional diversification based on another 'successful' region without regard to the structural, institutional and discursive contexts in which these policies are mobilised (Weller 2017; Weller & Tierney 2017).

For Massey and Meegan (1985, pp. 139), this focus on 'regional performance' is built upon a fundamental epistemic fallacy (see Bhaskar 2008, 2013; Downward & Mearman 2007) or the tendency to confuse 'the spatial location of the operation of processes, with the processes themselves – of mixing up effect with cause'. For Downward and Mearman (2007, p. 87), a fundamental feature of 'deductive, inductive-positivist, or hypothetico-deductive' frameworks is that 'events, our empirical description of them, and the causes of the events are conflated'. In critical realist ontology and

methodology, regions are considered parts of open systems (Bhaskar 2008, 2013; Sayer 1992, 2000) in which the 'real' (causal mechanisms) and the 'actual' (events generated by causal mechanisms) may or may not endure across space, and may or may not be empirically perceived in the same ways.

The 'region', as a self-organising, isolated entity responsible for its own industrial composition and 'resilience', is distinct from the region conceived of as an entity in which places and regions are not insular place-based networks or containers of social relations, but are nodes in intersecting global networks cross-cut by flows of knowledges, technologies, people and objects (Coe et al. 2004; Yeung 2003). From this perspective, diversification cannot be explained by endogenous capabilities, since the industrial composition of regions is also determined by a complex array of exogenous forces, including flows of private capital in global production networks (Martin et al. 2016; Coe 1997; Massey 1995). Moreover, endogenous perspectives cannot account for the involvement of higher tiers of government actively attempting to manage local diversification (Barnes 2016; Weller & Tierney 2017). The ASID framework facilitates these understandings, rejecting methodological individualism/atomism to instead adopt a spatially 'relational' understanding of various structural constraints on collective regional agency, while nonetheless accepting that local actors can influence path creation. In this regard, both endogenous and exogenous determinants of diversification are considered.

Positionality

The ASID framework's 'relational' framework lacks an explicit conceptualisation of place. This presents a methodological challenge for distinguishing one region from another in a coherent manner that would allow for comparative analysis. To overcome this limitation, this thesis follows Sheppard's (2002) complementary framework by contending that regions can be conceived of in terms of their global 'positionality', including their geographical characteristics, interconnected internal and external institutions and governance hierarchies, locally hegemonic intersubjective modes of discourse, and the wider cultural, legal and socio-political context in which they are situated. This necessarily conditions the possibilities for action within them. Most importantly, it highlights understanding places, not in terms of their local conditions, but

in terms of their relationship to other specific places. This means understanding places as distinct units of observation, but not methodologically atomised units (Peck 2015; Sheppard 2002).

Incorporating the concept of positionality reconfigures the ASID framework towards a more cohesive place-focused application and draws attention to an important distinction between causal mechanisms that transcend local conditions and those that are inherently embedded within them. For Sheppard (2002, p. 319), 'Processes that connect distant places more closely … reduce differences in their positionality' yet at the same time, places experience 'inequalities that show remarkable persistence and path dependence, notwithstanding the new possibilities that globalisation supposedly creates for all'. This is clear with structural processes such as deindustrialisation, which transcend national borders and produce similar effects in geographically diffuse locations. However, these effects are also conditioned by local characteristics that may influence widely divergent subsequent growth trajectories. This highlights that a place's positionality may be of central or marginal relevance dependent on the causal process under investigation. Separating processes that are seemingly unique to a place's positionality from those that are not provides greater methodological clarity and explanatory power. Combining ASID and the concept of positionality allows for a nuanced understanding that accepts a place can be a 'real' object of inquiry because of its unique characteristics, but can also be a label without inherent meaning. Therefore, this thesis extends the ASID framework by creating a 'PASID' framework that locates positionality as shaping potentials for agency, structure, institutions and discursive frameworks.

In the next chapter, this thesis will introduce case studies of two cities – Geelong and Oshawa – which can be defined as satellite cities/regions that form conurbations or semi-conurbations with larger agglomerations (Melbourne and Toronto) in Australia and Canada. Despite a disputed taxonomy, the constructs of 'satellite city' or 'edge city' are based on common attributes that such places share and that are intrinsic to their positionalities (see Bowen & Kimble 1997; Garreau 1991). Any account of diversification and resilience in satellite cities must necessarily include a relational approach that is cognisant of the way their growth trajectories are influenced by neighbouring core urban agglomerations. This requires accepting that replicating processes inherent to the relational positionality of a 'satellite city-conurbation' may be informed by this 'type' of

urban positionality, not just the specific local characteristics of such a city (see Peck 2015).

Ultimately, this positionality-focused, relational approach to regional diversification and transition will focus on both exogenous and endogenous determinants. It will be used to show that the complex potential drivers of diversification require a greater focus on intra-regional disparities and contradictions.

The Comparative Case Study Approach

Being a 'meta' framework, the ASID framework does not prescribe specific methods of inquiry. However, it is inherently compatible with comparative case study research and mixed methods. A positionality-based analysis is compatible with an extended case method, which involves analysing events in particular places in the context of their extensive connections (Burawoy 1998). Comparative case studies are the preferred approach in urban-oriented economic geographies, because they have the capacity to take into account the global best practice comparisons and 'policy mobilities' that inform development at multiple sites (Peck 2015; Peck & Theodore 2012). Using an embedded comparative case study design is justified with reference to broader debates in critical realist and other literature, as well as the 'PASID' methodological framework. This section will outline why a comparative case study research design, and the use of mixed methods, are necessary to effectively address the gaps in the diversification literature, cohere with the methodology, and overcome the limitations of using particular methods in isolation. It justifies the selection of case studies sites, establishes a growth-based success criterion and explains the use of qualitative and quantitative methods.

Case Study Selection

The case studies have been selected because of their interlinkages in global production networks, similar institutional contexts, similar crises (deindustrialisation), and a similar overarching solution to these crises (diversification). The purpose of identifying two case studies with such similarities is to maximise the extent to which each case study can symbiotically enhance knowledge of the other.

For Peck (2015, pp. 162, 178), a positionality-cognisant comparative approach must be built on a 'relational ontology' that focuses on 'recurrent processes', as opposed to popular 'contrastive' methods that attribute causal mechanisms only to local 'particularities'. Only by identifying potential replicating processes can a critical inspection of the effects of their differences be achieved. Further, for Peck (2003, p. 229), the expansion of globally circulating regional knowledges in the modern age, means that '"local" policy development now occurs in a self-consciously comparative and asymmetrically relativized context'. In the literature review, it was observed that 'best practice' policy is often based on identifying desirable regional structures or direct policy transfer. Considering that direct interlinkages between regions determine mutual evolution, in this milieu, no region forges its own growth path in isolation (Ward 2010). This means that comparative case study research should reject methodological atomism and instead focus on 'relational comparisons that use different cities to pose questions of one another' (Ward 2010, p. 480).

By adopting this approach, the lessons learned in one regional context can inform understandings of processes in another, which can in turn be re-applied to the first. This approach will enhance analytical generalisability.

The Criteria of 'Success': Diversification and Resilience

Notions of 'resilience' and 'successful' economic diversification, as presented in academic and popular discourse, imply a form of diversification related to economic growth outcomes. A necessary component of this research, therefore, is to quantify growth, while also recognising other quantitative indicators that could problematise this growth perspective.

In the literature review, it was shown that economic diversity has often been presented as either synonymous with regional resilience or a necessary condition for it, yet the concept of 'resilience' has become increasingly disjointed and convoluted. Attempting to salvage the resilience heuristic from becoming overly 'fuzzy', Sweeney et al. (2020, p. 132) summarised and simplified the concept, stating it 'has three necessary, sequential conditions: (1) a shock or disruption, (2) a response by stakeholders, and (3) a sustainable trajectory of growth'. They also introduce the inverse of resilience –

'resistance' – which describes regions (or industries) which only satisfy the first two conditions and cannot achieve growth. Missing from the diversification literature is a similar simple schematic that shows the relationship between diversification and growth.

Despite being a common policy goal, the process of diversification can either be driven by growth or decline – it is not inherently a growth phenomenon. By definition, any place with a high level of specialisation will diversify if a major economic shock hits its dominant industry and causes significant employment decline. Growth and decline by default refer to labour market change, as this is the primary metric on which models of industry composition are based, although it can be used as a schematic for other forms of growth. Diversification away from a particular dominant industry in a specialised region can be driven by a hierarchy of growth or decline processes. These are presented below.

1. Industry and Regional Growth-Led Diversification
    1.1. Diversification via continued growth in the dominant industry, but faster relative growth in other industries;
    1.2. Diversification through stagnation in the dominant industry and growth in other industries;
2. Industry Decline and Regional Growth-Led Diversification
    2.1. Diversification through decline in the dominant industry offset completely by higher growth in other industries (in this thesis's terms, this is *Resilience*);
    2.2. Diversification through decline in the dominant industry offset partially by growth in other industries, but not commensurate with dominant industry losses;
3. Industry and Regional Decline-Led Diversification
    3.1. Diversification through decline in the specialised industry and stagnation in other industries;
    3.2. Diversification through decline in other industries, but faster relative decline in the dominant industry.

Clearly diversification is not synonymous with, nor a necessary condition for, resilience. Any strategy to diversify a region as a goal, in and of itself, in response to a declining dominant industry will succeed, but this does not prohibit disaster for a local economy, as in the third scenario. However, the first scenario is missing the prior economic shock, which is a necessary condition for resilience (Sweeney et al. 2020). A

resilient region is a formerly specialised region that has overcome a significant decline in its formerly dominant industry to achieve sustained growth in other industries, leading to overall economic growth in a region. Therefore, 'successful diversification', for the purpose of this thesis, is the nexus of resilience and diversification described in scenario 2.1 above. Applying the above schematic, the thesis's case study sites have 'successfully' diversified – that is, they now satisfy the conditions of resilience in scenario 2.1 – by continuing to grow despite experiencing severe economic shocks in the form of long-term deindustrialisation, punctuated by mass retrenchments.

While this abstract schematic can place quantitative value on growth, it gives no insight into the types of industries or quality of jobs that are growing or declining, and offers little insight into the future socioeconomic sustainability of this growth. Even in the optimal diversification scenario (1.1), diversification may be occurring as the dominant industry is growing, but only because wage rates have been reduced, or because growing industries offer precarious, low-wage employment. Quantitatively, the local labour force might be growing and diversifying, while qualitatively, economic well-being may be regressing. This effect might manifest in declines in other quantitative indicators (such as median income). The purpose of introducing this schematic is to provide a benchmark for inter-regional, atomistic comparisons. However, this thesis will ultimately show that it is inadequate for understanding real-world resilience, once intra-regional divergences are considered.

The different ways in which diversification may occur highlights a key methodological issue with comparative, cross-sectional economic diversity-specialisation binary studies. Without first considering how a city came to be diversified initially – be it a thriving metropolis or a deindustrialised ghost town – the subsequent analysis of associated and correlated economic phenomena could be misleading. It is also important to note the possibility of different growth outcomes in different places within the same region. Critical perspectives highlight that socioeconomic success is often defined without regard to sub-groups within a unit of observation (see Pawson 2006). To avoid this limitation, the spatially relational and holistic approach taken in this thesis is cognisant of scale and allows for the potential for intra-regional divergences. Using a multi-scalar perspective, this thesis will explore the implications of this growth-based criteria for successful diversification.

Mixed Methods

The use of mixed methods requires justification. While the qualitative versus quantitative 'paradigm wars' (see Bergman 2008; Bryman 1988; Pierce 2008) ensure the use of mixed methods research designs remain controversial, there has been an emerging acceptance in industrial geography and even economics of the value of triangulating methods (Downward & Mearman 2002, 2007; Massey & Meegan 1985; Piore 2006; Starr 2014). Establishing a distinction between qualitative data-driven *intensive* and quantitative data-driven *extensive* research designs, Sayer and Morgan (1985, pp. 152-153) highlight the main limitations of each: intensive research lacks representativeness and generalisability, while an extensive design 'lacks explanatory penetration' and can only establish formal relations of 'similarity, dissimilarity, correlation, etc., rather than substantial causal relationships of connection' (see also Schrank 2006). Thus, triangulating and synthesising a diverse range of data sources and using a mixed methods research design overcomes many of the deficiencies of a singular qualitative or quantitative design (Johnson & Onwuegbuzie 2004).

Considering that the PASID methodological framework involves investigating causal mechanisms, then it is important to justify the use of quantitative methods in the first instance. Sayer and Morgan (1985) criticise the emphasis of quantitative methods in economic geography on ontological and methodological grounds. While agreeing that in principle mixed methods research designs can be complementary, they argue that there must be a linear relationship if a researcher adopts a critical realist ontology, suggesting that qualitative methods are required to identify causal mechanisms first. For Yeung (1997, pp. 57), 'qualitative methods such as interactive interviews and ethnography are necessary to abstract the causal mechanisms of which quantitative/statistical methods are oblivious'. As highlighted by Schrank (2006), corollary quantitative evidence can have multiple potential underlying causal mechanisms, making any deduction derived from it inadequate.

However, central to critical realist methodology is 'retroduction', defined by Sayer (1992, p. 107) as a 'mode of inference in which events are explained by postulating (and identifying) mechanisms which are capable of producing them'. In order to identify causal mechanisms, quantitative techniques focused on identifying and describing certain

patterns or correlations may be required (Maxwell 2010, p. 479). Downward and Mearman (2007) reject non-critical realist perspectives that suggest qualitative evidence can be 'validated' through the addition of quantitative evidence, but also reject the rigidity of Sayer's (1985, 2000) 'intensive' versus 'extensive' dichotomy, positing instead that mixed methods are fundamentally justified by the need for retroductive inference in critical realist ontology, rather than simply a matter of practicality or convenience. They argue 'the concept of cause in critical realism is tied to emergence from the interaction of human agency and institutions or structures', thus identifying the complex determinants of each component 'clearly requires different methods of analysis' (Downward & Mearman 2007, p. 91). Fundamentally, 'retroduction requires the "triangulation" of research methods' (Downward & Mearman 2007, p. 78). As such, this thesis employs quantitative 'extensive' methods, including detailed census analysis, to search for patterns, before linking them to generative mechanisms in a process of retroduction. Quantitative research in this thesis uses basic techniques, such as frequency tables, shift-share analysis and formulas of economic diversity to highlight patterns and correlations.

Nonetheless, the research design is necessarily in large part 'intensive', in that it uses 'less formal, less standardised' interview techniques and other forms of qualitative techniques (Sayer & Morgan 1985, p. 150). This approach was necessary given the methodology and gaps in the literature. Case study interviews and other qualitative methods, such as text analysis, are commonly understood as being necessary to provide 'explanatory power' (Winchester 1996, p. 120) and identify causal mechanisms, because they 'reveal the actual logic of decision making' (Clark 1998, p. 73; see also Piore 2006).

The emphasis on an intensive research design still leaves the problem of generalisability, which is partially addressed through comparative case studies. An intensive qualitative or mixed methods comparative case study design can achieve a degree of 'analytical generalisability' (Johnson & Onwuegbuzie 2004; Maxwell 2010; Whittemore et al. 2001; Yin 2013). Research should reveal 'practically adequate' explanations that 'work in other contexts' (Sayer 1992, p. 70; see also Yin 2013, p. 325). The use of mixed methods provides for enhanced 'practically adequate' explanations through triangulation, while a comparative (as opposed to singular) case study design strengthens analytical generalisability (Yin 2013). There is no pretence that this thesis will

generate findings that are universally generalisable, but it will provide a degree of generalisability that can form the basis for future research.

The application of these considerations led the project to combine three primary qualitative and quantitative methods, including:

1. Review and analysis of relevant policy documents and media reports;
2. Semi-structured, open-ended interviews with key stakeholders;
3. Analysis of census data from the Australian Bureau of Statistics and Statistics Canada, complemented by a range of other quantitative data sources.

Data analysis concentrated on thematic analysis of semi-structured, in-depth interviews, reinforced by inferences from quantitative data, then cross-checked against policy documents and further validated by a comprehensive review of relevant literature. Themes identified through each method were cross-referenced throughout the research process.

Semi-structured, face-to-face and phone interviews targeted government actors, firm representatives, policy analysts, local academics, union representatives, labour adjustment managers, business lobby groups, unemployment service providers and other local stakeholders (see **Appendix C** for interview codes). All interviews followed a common theme and included open-ended questions following techniques described by Zeisel (1981). While the analysis of open-ended interviews necessarily requires a degree of 'intuition and instinct' (Piore 2006, p. 3), interview data analysis follows the contrasting and comparative techniques outlined by Miles and Huberman (1994). Interview data was collected from tape recorded sessions, as well as extensive handwritten notes taken in interviews, for when participants either refused to be recorded or when audio recording was not available. No quotations from handwritten notes have been included in this thesis. Audio recordings were partially transcribed and complimented by contemporaneous notes taken during interviews using an approach described by Davidson (2009) and Halcomb and Davidson (2006). Given that full transcription places significant strain on resources (Halcomb & Davidson 2006), it was determined that doing so was unnecessary and could be detrimental to the ability to conduct further research. Transcription was still nonetheless extensive and each interview was analysed multiple times.

Policy and media text analysis is informed by the Critical Discourse Analysis framework of Fairclough (2013; see also Fairclough et al. 2002). Policy document analysis also specifically incorporates the 'problematisations' framework of Bacchi (2012; see also Bacchi 1999), which means focusing on how the discursive construction of problems by policymakers not only reveals actor priorities, but draws attention to other potential courses of action that are deprioritised or ignored.

Field research is informed by the approach of 'being there' (Barnes et al. 2007) and Burawoy's (1998) notion of the extended case study, wherein informal discussions with locals, including cab drivers, café workers, pub patrons, etc., provide important background and context about a place. This approach helps the researcher understand certain spatial dynamics and other local characteristics that remain hidden to a distant observer. It provides a sense of how locals perceive their positionality in each case study site.

Quantitative methods used in this thesis include straightforward frequency tables of census data, complemented by two analysis tools, shift-share and the Hachman Diversity index. Shift-share analysis is a tool capable of 'decomposing change' (Loveridge & Selting 1998, p. 37) that allows for 'the computation of geographical changes in economic evolution' (Mayor et al. 2007, p. 550). The 'regional' or 'competitive' effect revealed by shift-share analysis provides useful insight into how total regional or industry-specific growth in a region compares to a higher scale (in this specific case both the nation and the state/province), which provides a benchmark for whether or not average growth expectations are being exceeded. Shift-share provides greater analytical clarity than simple, absolute measures of growth or decline, because it accounts for structural changes in national economies. While shift-share analyses are often misused to portray growth or decline as necessarily an indicator of endogenous-driven 'performance' (Massey & Meegan 1985), it remains a useful tool for analysing relative growth, regardless of the underpinning causal mechanisms. Complementing this inter-scalar analysis, the Hachman Diversity Index is used to measure economic diversity in each case study area relative to its respective national or provincial/state scales. This index was selected as the most appropriate for this research, because an absolute measure of economic diversity in a sample size of two case studies would hold little explanatory value (see **Table 1**). Comparisons are 'vertical', rather than inter-place 'horizontal' comparisons.

Secondary sources, applying indices of economic diversity to the case studies, are also included to add additional analytical value.

Opportunities and Limitations of the PASID Approach for Policy Analysis

As the policy implications of regional diversification remain largely unexplored by comprehensive research designs, diversification policy is necessarily informed by research designs that privilege particular types of evidence. Highlighting the propagation of particular types of selective quantitative data in regional studies, Massey and Meegan (1985) argue that dominant ontological, epistemological and methodological frameworks focused on 'regional problems' serve to perpetuate particular policy rationalities based on atomistic, endogenous explanations. Narrow comparative quantitative research is used to frame socioeconomic problems observed in regions as an issue of competitive 'regional performance' driven by local firms and policy actors, which reinforces notions of regional 'deficiency' and in turn justifies policies that 'blame the victim' (Massey & Meegan 1985, pp. 139-140). Conversely, the PASID framework's relational, multi-scalar lens draws attention to the potential role of external forces and actors, including policymakers in higher tiers of government, in influencing local diversification outcomes.

While diversification may be shaped by a variety of spatially-neutral sectoral, industry or labour policies, it is place-based policies that represent direct attempts by higher tiers of government to shape regional trajectories. Difficulties in evaluating the impacts of place-based policies have been noted in both Canada (Burstein & Tolley 2011) and Australia (Crimeen et al. 2018; Victorian Government 2020a). Issues include poor evaluation design, methodology and implementation (Crimeen et al. 2018), but more generally it can be challenging to isolate place-based program inputs and outputs from other causal processes in complex systems. As argued by Heery et al. (2018, p. 100), place-based policies 'are difficult to evaluate in the traditional sense'. The PASID synthesis framework cannot overcome these inherent issues with direct policy/program evaluation.

However, the PASID framework incorporates the understanding that policy solutions reflect the interests of those with the power to define the problem (see Bacchi 1999; Marston & Watts 2003). Identifying 'what works' in policy requires asking what evidence works for who, when and in what particular circumstances (Parsons 2002). As

such, while it is difficult to evaluate the success of individual programs in a dynamic socioeconomic context, the nature of the interventions reveals how problems are defined and prioritised, which reveals why problematisations that were not privileged may be linked to various sub-optimal socioeconomic outcomes. This highlights the need for robust hermeneutical and discursive analysis to identify how certain problematisations are privileged over others.

Conclusion: The PASID framework

Central to this thesis's methodology is extending the ASID framework to include the crucial conditioning effects of positionality. The PASID methodology focuses on the interplay of positionality, agency, structure, institutions and discourse, with a view to understanding underlying causal mechanisms. The chapters in this thesis are each designed to focus on either one or two of the core thematics, although other pillars of the PASID framework are present in each chapter as well. Often, each pillar can only be analysed with reference to another – agent opportunity can only be analysed relative to structural constraints. According to Sayer (1992, p. 119, 235) analytical 'disaggregation, as a step towards explanation of the whole … presents no problem', as long as processes that are the result of the 'emergent powers', which only exist through the combination of causal mechanisms, are not reduced to monocausal explanations. Thus, the emphasis on different PASID pillars in different chapters represents a process of analytical disaggregation and reaggregation, rather than a process of analysing each pillar separately. The PASID framework enables the development of a multi-faceted understanding of regional diversification that can incorporate understandings of both endogenous and exogenous determinants and address several recognised gaps in the diversification literature.

Chapter 4 - Comparing Oshawa and Geelong

Introduction

This chapter introduces the two case studies of Oshawa and Geelong and outlines each city's positionality relative to institutional and governance contexts, adjacent places and global production networks. It begins by comparing and contrasting federalism in Canada and Australia, which provides the institutional context for each case study and anchors more detailed interrogations of each case study in subsequent chapters. It then documents Oshawa and Geelong's developmental histories as places once specialised in automotive manufacturing, which made each city the most specialised in manufacturing in their respective nations. It then establishes their common goal in response to deindustrialisation to diversify their economies, observing that the economies of both places have diversified considerably as manufacturing job losses have been replaced by substantial increases in service sector employment. The chapter concludes by highlighting that Geelong and Oshawa have both 'successfully' diversified, but notes Geelong's significantly higher growth. This difference will be a central focus of the thesis, with subsequent chapters aimed at identifying why the two cities diverged so significantly, despite their otherwise striking similarities.

Federalism and Local Economic Development in Canada and Australia Compared

The role of government in promoting regional diversification depends on the evolution of macro-structural arrangements. This section explains how differences in the Canadian and Australian federations condition competing approaches to local economic development in the two case studies. It notes that Australian commentators have, in recent times, looked to Canada as the best practice exemplar for federalism. However, Canadian commentators argue that its 'competitive' double-devolved system has placed significant fiscal burdens on municipal governments and is accompanied by increased socio-spatial polarisation at the sub-provincial level. These institutional differences shape the degree to which regional diversification can be driven endogenously or exogenously through place-based policy at the state/provincial or federal level.

According to Higgins and Savoie (1994, p. 1), Canada and Australia's geographic, cultural and socioeconomic similarities 'cry aloud for comparison'. In both jurisdictions, federalism is defined by a hierarchy of federal, intermediate and municipal governments, although municipal governments are constitutionally the 'creatures' of the intermediate tiers – the provinces in Canada and the states in Australia (Conteh 2011; Ryan & Woods 2015). State and provincial governments in both countries (and by extension municipal governments) are responsible for significant functions, including in the domains of health, education, social services, public safety, public transport and infrastructure provision, and hold primary responsibility for sub-intermediate economic development. The Constitution of Canada explicitly requires the Canadian Federal Government to reduce disparities between provinces, while the constitutional basis for Australian equalisation is less clear, but nonetheless federal governments in both nations are committed to equalisation measures (Productivity Commission 2018)

Although the 'Anglo federations' of Canada, Australia and the United States are superficially similar, they 'range from the fiscally quite decentralised Canadian case to the highly fiscally centralised Australian one' (Fenna 2010, pp. 10, 11). Canadian and Australian federalism contrast in regards to both 'vertical' federalism (the hierarchical relationship between tiers of government) and 'horizontal' federalism (the relationship between states and provinces). According to Smith (2010, p. i), Canada has a unique vertical-horizontal dynamic, because: 'Unlike other Anglo-American federations to which it is often compared, Canada's is a double federation of cultures *and* territory' (emphasis in original). In contrast, Australia's federalism is territorial, but with a very limited cultural component (Hodgins 1978). Paradoxically, in the infancies of their respective federations, increased centralisation was pursued in the Canadian polity, while Australian policymakers favoured decentralisation (Hodgins 1978; Lecours 2019). That each federation was pulled in the opposite intended direction is generally considered a reflection of the heterogeneity of Canadians and the relative cultural and social homogeneity of Australians (Fenna 2007; Higgins & Savoie 1994; Hodgins 1978; Lecours 2019). Hodgins (1978, p. 5) concludes that 'In Canada the subordinate federalism of 1867 has been transformed into coordinate federalism and an uneven development of provincial rights. In Australia, the coordinate federation of 1901 has been transformed into state subordination or structural federalism'.

The Canadian polity's commitment to a devolutionary form of decentralisation was solidified in 2006, when an authoritative report by the External Advisory Committee on Cities and Communities (Canadian Government 2006, p. x) argued that regional resilience would be engendered by 'double devolution, shifting responsibilities and resources from the federal government to the provincial and territorial governments, and then from the provincial and territorial governments to the local level'. The extent to which this has actually occurred in practice has been uneven, with the decentralisation and re-centralisation of certain functions across the three tiers. Nonetheless there has been a general trend towards to the devolution of federal functions to provinces, and provincial functions to municipalities, which has made Canada unique among global federations, as most have experienced a trend towards centralisation (Lecours 2019; see also Eidelman et al. 2020). 'Double devolution' has been notable in functions such as social housing (Hackworth & Moriah 2006; Leone & Carroll 2010).

Canada's decentralised system means that there is a far greater degree of polarisation in governance regimes between provinces than can be found between Australian states, particularly in regard to Quebec. Decentralisation in Canada means Francophone language, cultural, political and legal differences have also manifested themselves in significantly different sub-provincial regional/urban governance regimes. This can lead to significant regional differences in policy orientation. For example, Boudreau et al. (2007, p. 50), observe a strong contrast between Montreal's 'state-led' development regime that is restrained by a 'social-democratic, interventionist, but also more dirigiste Quebec government', and Toronto's arrangements, which they consider to have 'an actively neoliberalized governance apparatus' that 'pushes into the urban region and aggressively involves state, business, and civil society actors in building a new regional consensus around growth'. This highlights the relative autonomy of provincial governments. Canada's institutional decentralisation means that ultimately municipal governments in Ontario have been given responsibility for funding and delivering significant functions, such as providing police, fire, ambulance, public housing and other social and health services, while administering (currently primarily provincially-funded) social assistance programs in the form of employment, training, welfare and disability services (Eidelman et al. 2020).

In contrast, there is general consensus that Australia's federation is 'unusually centralised' (Hooghe et al. 2010, p. 102; see also Fenna 2007). Moreover, in contrast to Canada, according to Brown and Deem (2016, p. 1157), 'federal–state relations are almost universally described as having become progressively more centralized since the 1950s, through informal but major and lasting changes in fiscal and constitutional arrangements'. Devolution of spending mandates in Canada, on the other hand, has occurred gradually but steadily. In the early 90s, the Canadian Federal Government was responsible for a larger share of total expenditure than the provinces/territories but this has since been inverted (Kitchen & Slack 2006). In 1990, federal government operating expenditure as percentage of GDP was 24% in Canada compared to 22% in Australia. By 2011, Australia's federal government operating expenditure was 26% of GDP compared to 18% in Canada (Ortiz-Ospina & Roser 2016).

Importantly, Australia is not just fiscally centralised in federal-state relations, but is doubly centralised with respect to municipal government. State and local government expenditure combined in Australia accounted for 40% of total government expenditure in 2017, which was roughly equivalent to the same level a decade earlier, after centralising between 2007 and 2015 (OECD 2019). Local government taxation accounts for roughly 3.6% of total tax revenues in Australia and local government represents 5% of total government expenditure, which is significantly less than many other OECD nations, including in the Anglo unitary states of the United Kingdom and New Zealand (Jackson et al. 2016; OECD 2019; Productivity Commission 2017a). In contrast, in Canada, municipal, provincial and territorial governments accounted for 68% of total government expenditure in 2017 and 2018, with municipal governments comprising 21% (OECD 2019; see also Jackson et al. 2016). This is only slightly lower than non-social security federal government spending at 25%. The only taxes levied by Australian local governments are property taxes (ALGA 2020; see also Slack 2006). Canadian Federal Government transfers account for a significant portion of provincial government revenue and equalisation payments remain the subject of political debate. However, Canadian provincial governments, by virtue of their control over natural resources revenue and flexible taxation powers, raise more direct revenue relative to the central government than any other nation in the OECD (OECD 2019).

According to some viewpoints, Canadian federalism has empowered Canadian municipal government to drive economic development, despite municipalities being constitutionally beholden to provinces (Bradford 2008; Conteh 2011). For some, the Canadian federal system is understood to 'represent the textbook best-practice system of fiscal federalism' (Boadway 2007, p. 99). On the other hand, in Australia, it is widely acknowledged that the expectations and responsibilities placed on local government far exceed local governments' fiscal capabilities and resources (Ryan & Woods 2015). In contrast with Canadian jurisdictions, most basic social services (health, policing, community services, etc.) are the responsibility of state governments, not municipalities. Australian municipalities were traditionally only assigned basic functions related to maintenance of roads, waste, parks and gardens, planning permissions and land use (Tierney et al. 1975).

While municipal government amalgamations have been implemented to expand their service functions and capacity for driving regional economic development, the desire to empower Australian local governments has clashed with a distrust of their capacity to manage devolved powers. This is reflected in a 2013 statement by the Victorian Parliament's Economic Development and Infrastructure Committee (Parliament of Victoria 2013a, p. 2), which maintains that 'The Committee is of the view that local government should be well-placed to drive local economic development' but also found that 'with some notable exceptions, in the Committee's investigations local government was regularly seen as a barrier to local economic development'. This has meant that local government's role in regional development has often been relegated to lobbying efforts aimed at higher tiers of government (Beer 2011). For this reason, Australia's peak economic advisory body, the Productivity Commission (2017a, p. 207, 71-72), has offered support for governance diffusion in local areas by advocating 'local-level engagement' and the establishment of 'consultative committees' and 'special community taskforces'. However, it has cautioned against devolving too much responsibility to local governments. The Commission (2017a, p. 206), notes that: 'The increase in scope of activity has raised concerns about the capacity of local governments to perform their roles'.

The linkage between the over-burdened local government sector and the creation of new diffused regional governance structures has been both a 'bottom-up' and 'top-

down' phenomenon. Tierney et al. (1975, pp. 61-62) noted that local government capabilities in Victoria were commonly and mistakenly equated with UK local government capabilities and were subsequently delegated responsibilities they were not equipped to handle. Tierney et al. (1975) show that these burdens led to greater co-operation among municipalities and the emergence of new regional governance arrangements, from which would emerge consultative regional planning committees. Nonetheless, these bespoke municipal alliances have traditionally been embedded within state government-administered apparatuses, including bespoke regional commissions formed in priority areas, with the states preferring to use these municipal alliances in advisory roles rather than devolving significant responsibilities to them (Higgins & Savoie 1994).

This process of centralisation has had a significant impact on Australia's vertical fiscal imbalance, which means that there is a misalignment between revenue generating powers and constitutional obligations for service delivery at the state level. However, whether the solution is more centralisation or decentralisation is disputed (Eccleston & Smith 2015, p. 438). Those favouring the latter solution look to the Canadian model (e.g. Fenna, 2008; Productivity Commission 2018; Twomey & Withers 2007). Twomey and Withers (2007, p. 49) add that equalisation measures between states, which in Australia 'exceeds the pattern in all other comparable federations', would have to be reduced in order to address vertical imbalance. In 2018, the Australian Productivity Commission viewed Canada as a model for both vertical and horizontal fiscal equalisation (equalising the fiscal capacities of states/provinces). According to the Productivity Commission (2018, p. 18), Canada's model was more desirable than Australia's, because it only intended to achieve '"reasonably comparable" levels of public service' between the provinces 'rather than the same'. In essence, the PC viewpoint saw Australia's long-standing policy goal of horizontal equality as inefficient, and that Australia should move towards a more differentiated (and therefore unequal) growth agenda. In order to facilitate this shift, one of the Productivity Commission's (2018, p. 44) key recommendations was fiscal decentralisation. According to these viewpoints, if Australia is the problem, then Canada is the solution.

However, Canadian-based authors highlight the problem with idealising the more 'competitive' model of Canadian federalism, pointing to greater socio-spatial polarisation. Simply, for Ray et al. (2013, p. 426) relative to the rest of the OECD, sub-provincial Canada

'must contend with some of the greatest (socio-economic) disparities'. For Canadian-based authors Higgins and Savoie (1994, pp. 4, 6), social equalisation measures are a strength of the Australian federation, because unlike Canada 'there never have been serious (state) gaps' and Australia had to a greater extent managed to avoid the 'Canadian disease' of the 'politics of (state/provincial) envy'. Higgins and Savoie (1994) argue that a greater commitment to social equalisation is one of the primary reasons why, despite largely ignoring place-based policy itself, sub-intermediate regional development outcomes were better in Australian than Canada. Moreover, the idealisation of the Canadian system overlooks the fact that fiscal imbalances are duplicated down to the municipal level (Slack 2006). Despite revisions to provincial-municipal relations between 2006 and 2018 (Dachis 2018), a small increase in share of government revenue was matched by an equivalent increase in expenditure (OECD 2009, 2019). In 2017-2018, municipal governments collected 12% of total revenues, while spending 21%, which is a substantial fiscal imbalance (OECD 2019; see also Jackson et al. 2016). Importantly, Canadian municipal governments are legally prohibited from using debt to fund operating costs – although they can use debt to fund capital projects – which constrains their fiscal manoeuvrability and their capacity to respond to crises (Siegel 1997).

Ultimately, municipal governments in a more 'competitive' Canadian institutional milieu are empowered by devolution, but also burdened by extra services, leaving them fiscally imbalanced. In Australia municipal governments are marginalised, but there is less tolerance for socio-spatial disparities at the federal and state levels. These fundamental institutional differences condition how government-led diversification efforts are driven endogenously by local and regional government or exogenously by state/provincial and federal governments. These differences also condition how state and federal governments respond to regional crises.

Satellite City Positionality

As highly comparable mid-sized satellite city regions, Oshawa and Geelong are consistent with typologies that other authors have used to compare economic development and industrial composition strategies of areas with similar characteristics

(Beer et al. 2020; Pike et al. 2016). Their comparable size, geographic characteristics, and historical specialisations in manufacturing are also complimented by other phenomena that mean they have remarkably similar positionalities and development histories. However, this chapter also documents some institutional, governance and territorial differences that may at first glance seem trivial, but may ultimately inform why the city regions have had divergent growth trajectories.

The municipal government areas of the City of Oshawa and the City of Greater Geelong encompass the eponymous mid-sized urban areas of Oshawa, Ontario, Canada and Geelong, Victoria, Australia. Oshawa was incorporated as a village in 1850, a city in 1924, and its current boundaries have remained consistent after its merger with an adjacent northern rural municipality (the Township of East Whitby) in 1974. Geelong as a city region has a similar age, being incorporated as a town in 1849 and a city in 1910, although the City of Greater Geelong is a relatively recent institutional construct, forming from a 1993 amalgamation of the Cities of Geelong, Geelong West, Newtown and South Barwon, the Shire of Corio, and the Rural Shire of Bellarine, and parts of the Shires of Bannockburn and Barabool.

The majority of the population of both municipal governments reside in urban areas, although each municipality extends to include sparsely populated rural areas. Although the City of Greater Geelong had a population of roughly 233,000 in 2016, Geelong's core urban centre[5] (see **Figure 2**) was roughly the same size (157,000), in population terms as the City of Oshawa (159,000) (ABS 2017; Statistics Canada 2017). However, as defined by the Australian Bureau of Statistics (ABS) and Statistics Canada, the Oshawa Census Metropolitan Area (CMA), which includes the neighbouring Town of Whitby and the Municipality of Clarington (see **Figure 4**), formed the more populous metropolitan area at 380,000 compared with the Geelong Statistical Area 4 (SA4)[6] at 279,000 (ABS 2017). However, as detailed below, these 'metropolitan' distinctions are somewhat arbitrary and problematic as each city forms either a conurbation or creeping-

[5] Defined by the Australian Bureau of Statistics as the Geelong Urban Centre and Locality (UCL) (ABS 2017).
[6] The Australian Bureau of Statistics' geographical framework defines metropolitan regions according to labour market interlinkages rather than municipal boundaries (ABS 2017).

conurbation[7] with an adjacent agglomeration. Oshawa and Geelong are equal commuting reach (roughly a one-hour train or car commute) of a 'global' urban centre, with these cities being Toronto and Melbourne respectively (see **Table 5**).

Territorial Hierarchies

Both Geelong and Oshawa are positioned in a nested hierarchy of territorial divisions based on various institutional, governance and regional planning modalities. In both cases, the boundaries for census, administration and political representation are not fully aligned. To guide the discussion of these differences, **Table 2** compares the territorial hierarchy in 2018, highlighting each region's positionality within broader institutional, governance and regional planning contexts. These arrangements – and the relative powers they allocate to the local level – will be an important issue for the case studies.

Table 2: Territorial Hierarchies in Oshawa and Geelong

State Governance and Regional Planning Institutions	Oshawa	Geelong
Country	Canada	Australia
Intermediate Government (State/Province)	Ontario	Victoria
Municipal Government	City of Oshawa	City of Greater Geelong
Regional Government	Region of Durham	(none)
Municipal Government Regional Alliance	(none)	G21 Geelong Region Alliance
Census Metropolitan Region	Oshawa Census Metropolitan Area (CMA)	Geelong Statistical Area 4 (SA4)
Functional Metropolitan Region	Greater Toronto Area (GTA) – Also sometimes with the addition of Hamilton (GTHA) Overarching Regional Plan: Growth Plan for the Greater Golden Horseshoe (Toronto-centred)	Geelong Overarching Regional Plan: G21 Regional Growth Plan (Geelong-centred)
Federal Regional Development Agency	Federal Economic Development Agency for Southern Ontario (stylised as FedDev Ontario)	Barwon South West Regional Development Australia Committee
State/Provincial Regional Development Area	Greater Toronto Area Golden Horseshoe	Barwon (Part of Barwon South West)

(Source: Author)

[7] A conurbation, as defined by Friedmann and Sorenson (2019, p. 1) is two or more urban areas that 'through population growth and physical expansion, have merged to form a continuous urban and economically developed area'.

As summarised in **Table 3**, municipal governments in Victoria are single-tier, unlike Ontario, which has a mixture of single-tier municipalities and multi-tiered regional governments. Ontario's dual system is evident in the Greater Toronto Area, where the core of the city is administered by the single-tier City of Toronto, which is in turn surrounded by the multi-tiered regional governments of Peel, York, Halton and Durham that encompass the rest of the metropolitan space. The Region of Durham represents a higher-tier regional government, with Oshawa and its neighbouring municipalities forming lower-tier municipalities within the hierarchy.

Table 3: Comparing Regional Positionalities - Oshawa and Geelong

Regional Positionality	Oshawa	Geelong
Is a Standalone Metropolitan Centre for Census Purposes	Yes	Yes
Is a Standalone Metropolitan Core for Regional Planning and Branding Purposes	No	Yes
Positioned Within a Multi-Tiered Federal System, with Powers Distributed Between Federal, Intermediate (State/Provincial) and Municipal Governments	Yes	Yes
Formal Tiered Regional-Local Municipal Governance Structure	Yes	No
Single-Tiered Regional Collaborative Regional Governance Alliance	No	Yes

(Source: Author)

Conversely, the G21 Geelong Region Alliance (G21) is not a formal, hierarchical regional government, but rather a horizontal collaborative body which, as the name reflects, is centred on Geelong. With a total 2016 population of 308,000, Greater Geelong comprises over three quarters of the total G21 alliance population. The City of Oshawa, like Geelong, is also the largest municipality in the Region of Durham, but it only comprises a quarter of the Region's population of 646,000 (see **Table 4**).

Table 4: Municipalities in the Region of Durham and the G21 Geelong Region Alliance

G21 Geelong Region Alliance Municipalities	2016 Population (nearest '000)	Region of Durham Municipalities	2016 Population (nearest '000)
City of Greater Geelong	233,000	City of Oshawa	159,000
Surf Coast Shire	29,000	Town of Whitby	128,000
Golden Plains Shire	22,000	Municipality of Clarington	92,000
Colac Otway Shire	21,000	City of Pickering	92,000
Borough of Queenscliffe	3,000	Town of Ajax	120,000
		Township of Scugog	22,000
		Township of Uxbridge	21,000
		Township of Brock	12,000
G21 Total Population	308,000	Durham Total Population	646,000

(Sources: ABS 2017, Statistics Canada 2017)

That Greater Geelong is conceived of as central to a broader 'Geelong Region' reflects the fact that it is considered a separate region from Melbourne, for census and regional planning purposes, across all levels of government. Conversely, while Durham was initially conceived of as the 'Oshawa-centred region' (see below), the Region of Durham's municipal headquarters is located in neighbouring Whitby. Oshawa's positionality relative to its larger neighbouring agglomeration has been made complex by more integrated conurbation. While Oshawa is still a distinct metropolitan area for census purposes, it, and Durham's other municipalities, are considered part of the Greater Toronto Area (GTA) or Greater Toronto and Hamilton Area (GTHA) by provincial planners. Its 'region', for federal government planning purposes, is Southern Ontario, which contains most of Ontario's population.

The Province of Ontario (2016 population 13,448,000) in total has more than double the population of the State of Victoria (2016 population 5,927,000) and includes Canada's capital, Ottawa. While the City of Toronto remains the dominant core, the GTHA is a relatively polycentric agglomeration, with multiple built-up commercial and industrial centres. Aside from its two poles resulting from conurbation with once-separate cities, Hamilton and Oshawa itself, the GTHA agglomeration also includes population centres like Mississauga (2016 population 722,000), a bustling urban area in its own right, located 30km away from Toronto, as well as the cities of Brampton, Burlington and Markham, which are all more populous than the City of Oshawa (Statistics Canada 2017). Oshawa is only the 6th-12th largest city in Ontario, depending upon whether the comparison is between census population centres, city-tier municipalities or metropolitan areas. It is one of more than a dozen mid-sized cities in the province (Statistics Canada 2017).

This is a markedly different situation to Greater Geelong, which is the second largest city in Victoria, being more than twice the size in terms of population of Victoria's third and fourth largest cities (Bendigo and Ballarat). The City of Greater Geelong is also the second most populated municipality in the state after the City of Casey in Melbourne's outer-eastern suburbs (ABS 2017). While Melbourne has formed a conurbation over time with smaller, once-distinct regional centres (such as Dandenong, Box Hill and Melton), the city remains relatively monocentric. Thus, for planning purposes Geelong is informally considered to be Victoria's 'Second City' (Correia & Denham 2016). Thus, despite being similarly positioned as mid-sized satellite cities, Geelong is considered

to be a separate 'region' from Melbourne and holds a privileged status in Victorian planning regimes, while Oshawa is simply one of dozens of comparably-sized urban areas in Ontario and is subsumed by Toronto. This thesis will show that these seemingly superficial differences in institutional positionality may be significant determinants in divergent diversification outcomes.

Geelong in Context



Figure 1: G21 Municipalities and Greater Melbourne

Consistent with Australian and Victorian institutional preferences, the City of Greater Geelong and its surrounding smaller municipalities are linked for planning and regional development purposes. These Geelong-centred regional bodies have evolved over time: entities in the post-war period included the Barwon Regional Committee (1949-1973), the Geelong Regional Planning Authority (1969-1977), the Barwon Regional

Council for Social Development (1973-1977) and the Geelong Regional Commission (1977-1993) – the latter of which was comprised of the councils that would form the City of Greater Geelong (Higgins & Savoie 1994; Tierney et al. 1975). The current regional body, the G21, expands the conceptualisation of the Geelong region beyond the City of Greater Geelong to include surrounding municipalities. **Figure 1** shows the position of Greater Geelong relative to Greater Melbourne and the other G21 municipalities. Formed in 2003, the G21 Geelong Region Alliance is a regional policy, planning and advocacy agency. The board of directors includes the mayors and CEOs of the five constituent local governments, but also includes five directors who are elected at annual general meetings, for which all constituent members vote. Membership consists of hundreds of institutions, representing almost every major stakeholder group in the region from local, state and federal government, planning agencies, regional lobby groups, and businesses, but most of these entities operate mainly in forum participation and advisory roles.



Figure 2: Urban Centres and Localities in Greater Geelong

The G21 is recognised as a planning authority by the Victorian State government, but is not a formal regional government, with the five local government areas retaining autonomous municipal authority over their respective jurisdictions. In effect, the G21 operates as a permanent multi-level (both horizontal and vertical), networked structure built on the logic of new regional collaborative stakeholder governance. It is funded through constituent municipalities, supplemented by occasional grant funding from the Victorian Government and the hundreds of non-government public and private sector member organisations, who retain voting rights at annual general meetings (G21 2021). The G21 Alliance took on more importance as a regional advocacy institution in recent years as the Geelong City Council was removed – for alleged incompetence – and temporarily replaced by Victorian State Government administrators (Victorian Government 2016a, 2016b). The sacking of the Geelong City Council highlights the subordination of local government to state governments in Australia.

Geelong remains a 'regional city', which is a term used in Australia to describe urban areas outside the nation's major capital cities (Brown & Deem 2016), in Victorian Government (2020b) discourse. This emphasises its positionality outside Greater Melbourne for state and federal planning and regional development purposes (see **Table 2**). Although Geelong is closer to the centre of Melbourne than some other regions contained within the definition of Greater Melbourne (particularly on the other side of Port Phillip Bay on the Mornington Peninsula), it does not form a contiguous built-up conurbation with Melbourne. However, as shown in **Chapter 9** urban expansion into Melbourne's west in the City of Wyndham and into Greater Geelong's north is rapidly eroding existing greenfield borders. In a functional division of space, Geelong is not integrated within Melbourne's metropolitan train network, with commuters between Melbourne and Geelong using the 'regional' network (V/Line) that also services Victoria's more remote and distant towns, reinforcing this 'regional' identity.

Oshawa in Context

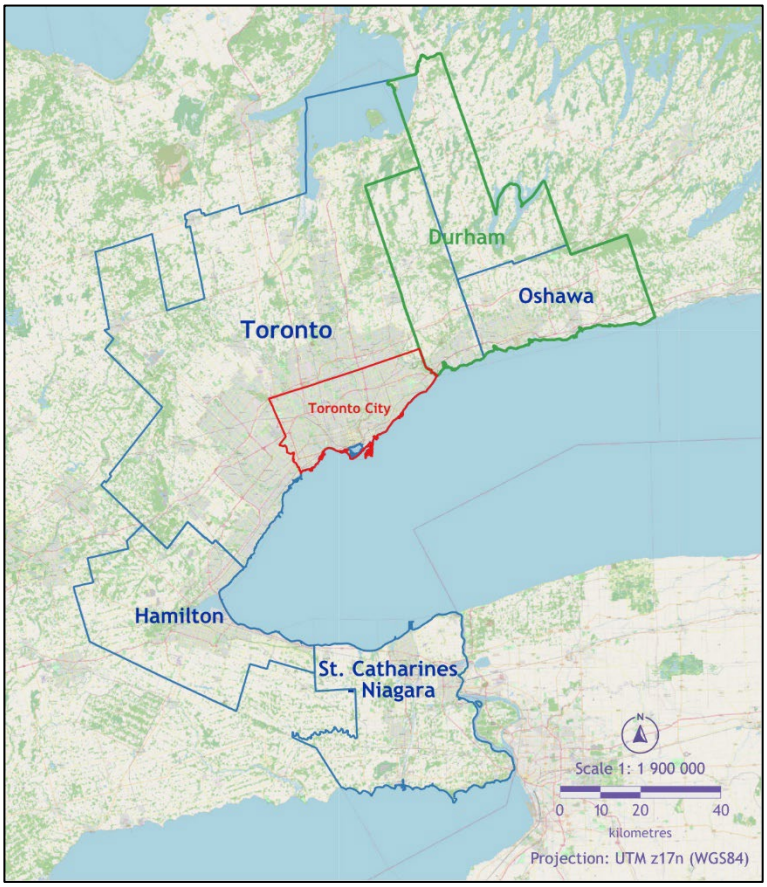


Figure 3: Oshawa CMA, the Region of Durham and the other CMAs in the Golden Horseshoe

This section traces Oshawa's and Durham's evolution from being a standalone city region to forming a conurbation with Toronto and becoming the eastern anchor of the Greater Toronto Area (GTA).

Oshawa is located in the Region of Durham and positioned to the north-east of Toronto. The Region of Durham, formed in 1974, includes the City of Oshawa, the Town of Whitby, the Municipality of Clarington, the City of Pickering, the Town of Ajax, and the Townships of Scugog, Uxbridge and Brock. **Figure 3** shows the position of the Oshawa Census Metropolitan Area and Durham in relation to the City of Toronto, and the other three Census Metropolitan Areas in the Golden Horseshoe. **Figure 4** shows the City of Oshawa in the Oshawa CMA.

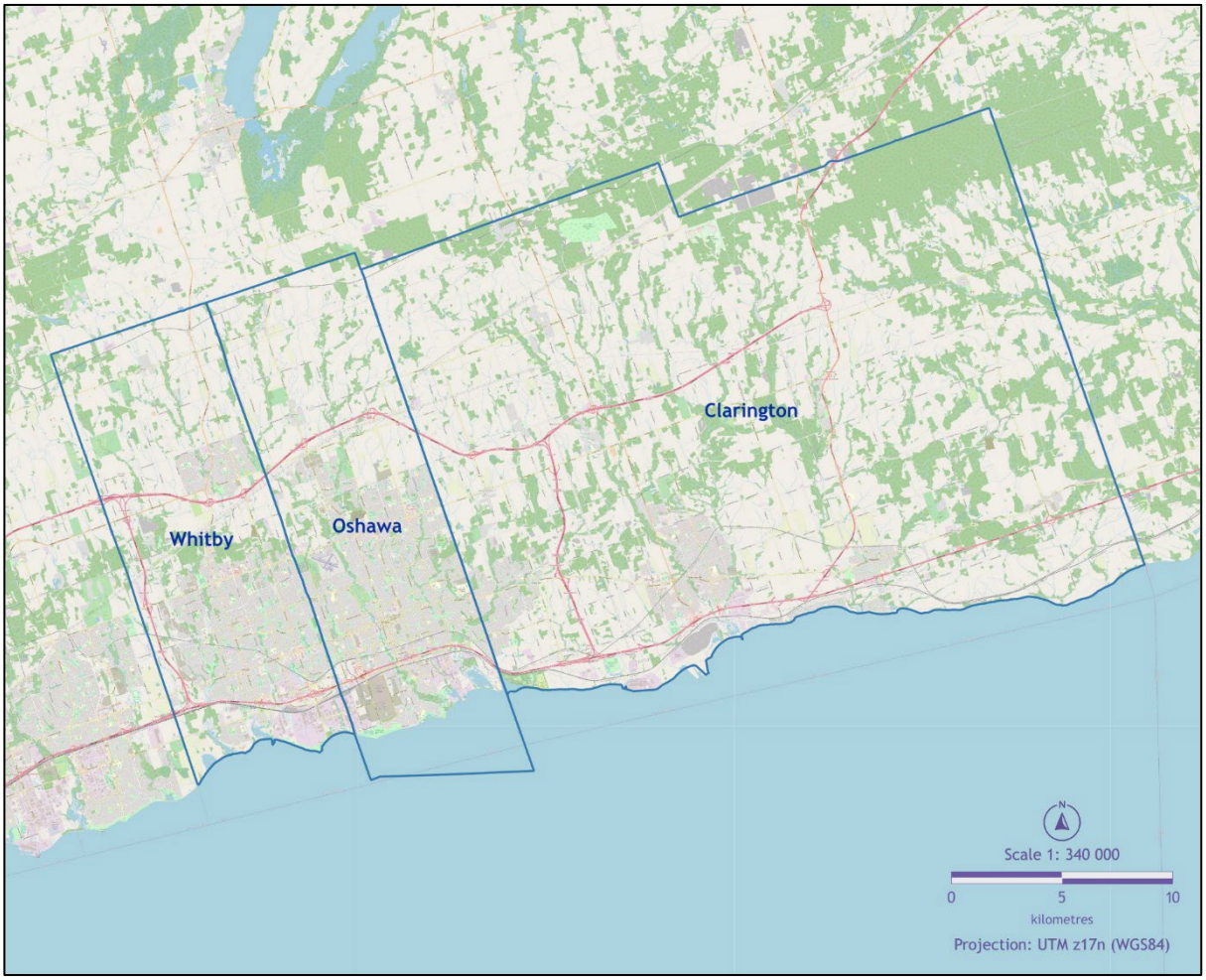


Figure 4: The City of Oshawa in the Oshawa CMA

Unlike the G21 Alliance, the Durham Region's relationship to its constituent municipalities is a formal, hierarchical, tiered-municipal relationship. The Durham Regional Council is comprised of a directly elected Regional Chair, as well as the eight constituent municipal mayors and doubly-elected councillors representing their individual lower-tier municipalities, of which Oshawa has the highest representation. The lower-tier municipalities and the Durham Region are responsible for different government services and these are not necessarily uniform across the municipalities. An example of this split service provision is that the Region of Durham provides police services and the City of Oshawa provides fire services. This also points to the expanded scope of municipal government in Ontario compared with Victoria.

Oshawa developed as a distinct urban centre independently from Toronto (Taylor & Nostrand 2008). The Region of Durham, established in 1974, was initially conceived of

as the 'Oshawa-Centred Region' outside the metropolitan boundaries of the 'Toronto-Centred Region' (see Canadian Government 1972; Rose 1972, White 2007). However, conurbation – driven by urban expansion into the once sparsely populated areas between Toronto and Oshawa – has formed a contiguous urban agglomeration (see Wang et al. 2015). This has made the concept of an 'Oshawa-centred' metropolitan space largely arbitrary and obsolete (Sancton 1994; see Hodge & Robinson 2001). As stated by Hodge and Robinson (2001, p. 246), in 2000, Oshawa CMA was one of only two of the then twenty five CMAs in Canada without 'some form of metropolitan governance and planning mechanism'. According to Sancton (1994 pp.3-4) the Oshawa CMA 'is too obviously a satellite of Toronto to be considered an entity on its own'.

The historical positionality of Oshawa and Durham within a broader conceptualisation of a 'greater' Toronto region is complicated, because the construction of a metropolitan Toronto space itself has been temporally fluid, given that the history of regional planning in this area between has long been considered contradictory and 'confusing' (White 2007, p. 32). Oshawa had been conceptualised as part of an extended Toronto-centred spatial construct in planning regimes as early as the 1960s, but remained outside the scope of the Metropolitan Toronto Planning Board Area (White 2007). Whether or not Oshawa was the centre of its own region or the eastern fringe of a Toronto metropolitan space in planning practice has been relatively unclear for some time.

The messy evolution of Oshawa's and Durham's positions relative to the GTA highlights that it is important not to overstate the autonomy of Ontarian municipal governments, despite their size and fiscal capacities. The current incarnation of the City of Toronto is the result of a fiercely contested amalgamation of municipalities that once comprised the planning area of Metropolitan Toronto. Seventy five percent of voters in the targeted municipalities rejected the merger (Frisken 2007). The Durham municipality of Pickering had voted to be incorporated in the Metropolitan Toronto region to avoid being subsumed into the 'Oshawa-centred Region' that would become Durham (Rose 1972). The Province of Ontario simply ignored both votes. This shows that while Ontario's municipalities may have greater autonomy than Victoria's municipalities, they are ultimately both 'creatures' of intermediate tiers of government.

In recent years, Oshawa's subordinated position in the GTA has become more entrenched. For transport and other regional planning purposes, Oshawa is now authoritatively considered part of the metropolitan Greater Toronto Area (GTA) by the Government of Ontario, as codified in the overarching regional planning regime of the 2005 *Places to Grow Act* and the subsequent 2006 *Growth Plan for the Greater Golden Horseshoe* (White 2007; see also Parliament of Victoria 2013b). The Greater Golden Horseshoe encompasses several mid-sized cities, but nonetheless is built around the GTA. In practice, the extension of the metropolitan train line (Lakeshore East) to Oshawa Station in 1995 can be considered a punctuating moment that more fully incorporated Oshawa into the Toronto metropolitan region. For federal regional planning purposes, Oshawa is considered part of southern Ontario along with Toronto. Nonetheless, the legacy of Oshawa's fluid, conurbation-driven position, relative to Toronto, continues to have important policy implications.

Commuting and Conurbation

Another key point of difference between Geelong and Oshawa is commuting patterns. Both cities are within daily commuting reach of their adjacent major centre. Train commute times from central Geelong to central Melbourne are essentially the same (roughly an hour) as a commute from central Oshawa to central Toronto, and even less to and from Greater Geelong's northern areas to Melbourne (see **Table 5**). Each city has leveraged their satellite city positionalities to take advantage of relatively inexpensive real estate to capture population overflows as Torontonians and Melburnians have been displaced into the peripheries of their metropolitan areas (see **Chapter 9**).

Table 5: Satellite City Commuting

Commuting Indicator	City of Oshawa	City of Greater Geelong
Median Train Commuting time (Monday-Friday, Trains Departing Between 6.00am-8.30am)	60 mins: Oshawa - Union Station	49 mins: Lara - Southern Cross Station 54 mins: Corio - Southern Cross Station 61 mins: Geelong - Southern Cross Station
Part of Integrated Metropolitan Train Network	Yes	No

(Source: Author calculations based on Effective 05/12/2020 GO Transit Lakeshore East timetable and Effective 31/01/21 V/Line Geelong Line timetable)

As shown in **Figure 5**, in 2006 78% of Geelong's residents lived and worked in Geelong, while 22% commuted to other locations, mainly to Melbourne. Geelong did not experience a significant transformation of its commuting patterns with 75% of its commuting workforce still travelling to work within the municipal limits in 2016. In the City of Oshawa, on the other hand, only 46% of Oshawa's commuting workforce commuted within municipal limits in 2006, and this proportion had fallen to 38% in 2016, signalling a slide towards Oshawa becoming a Toronto commuter town. This means that the perceptions of Oshawa, as increasingly part of Toronto and Geelong, as part of its own region, are reflected in functional labour market differences, not just in institutional designations of regions. This issue is discussed in detail in **Chapter 9**.

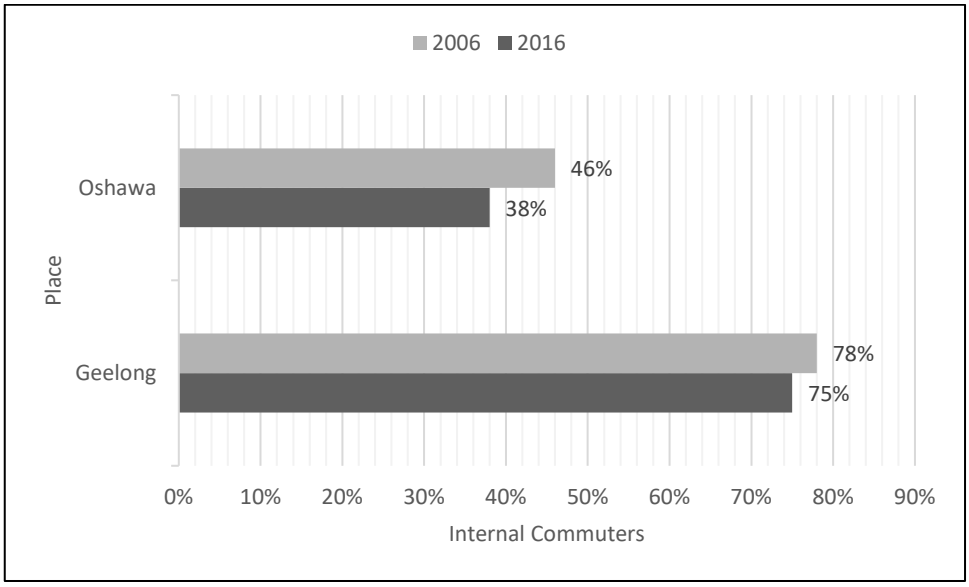


Figure 5: Internal Commuters in Greater Geelong and Oshawa, 2006, 2016

Note: Shows the percentage of commuting labour force commuting to work within the municipality. Excludes residents working from home, residents with no fixed workplace address and workers with a usual place of work outside Canada/Australia. (Sources: ABS 2007, 2017; Statistics Canada 2007, 2017)

This data is indicative of changing positionalities relative to the nearby capital cities. On initial glance, whether or not Geelong and Oshawa are considered part of Toronto and Melbourne may not seem important. However, the difference in the way spatial identities and relationships relative to Toronto and Melbourne are constructed and governed has significant implications for understanding the 'success' of Geelong's and Oshawa's diversification.

Parallel Industrial Histories

Oshawa and Geelong were both cities highly specialised in automotive and other manufacturing industries. In both places, there has a been long decline in the proportion of manufacturing jobs, the details and impacts of which will be revealed in subsequent chapters. This section provides an introduction to their shared histories.

Oshawa's Industrial Trajectory

With automotive assembly operations dating back 100 years, the City of Oshawa was long known as 'Canada's Motor City' (Hood 1968). Oshawa is the headquarters of General Motors (GM) Canada and also houses GM research and development facilities, some which are independent and some operating in collaboration with the local university, The University of Ontario Institute of Technology (UOIT) (Wolfe & Goracinova 2017). The massive Oshawa 'Autoplex', operating since 1953, once consisted of multiple assembly plants, including two car plants, a truck plant, and various parts manufacturing operations. At its peak in 2003, it was the largest automotive production facility, by volume, in North America, producing 950,000 vehicles per annum. By 2017, output had fallen to less than 150,000 units following the cessation of production of the Chevrolet Equinox and Buick Regal models after Chevrolet Impala Limited production ended in 2016 (see Desrosiers Automotive in Jackson 2018; GM 2019).

In 1951, more than two thirds of Oshawa's entire labour force were employed in manufacturing industries and four out of ten employed people were employed in motor vehicle and parts manufacturing (Statistics Canada 1952). **Figure 6** and **Figure 7** highlight how specialised Oshawa's male labour force was in both motor vehicle manufacturing and total manufacturing in 1951, compared with even the next most specialised manufacturing city in Canada, Kitchener, the largest automotive manufacturing city, Windsor, and other historical manufacturing cities like Canada's 'Steel City', Hamilton.[8]

[8] In 1951, males comprised 80% of the labour force (Statistics Canada 1952)

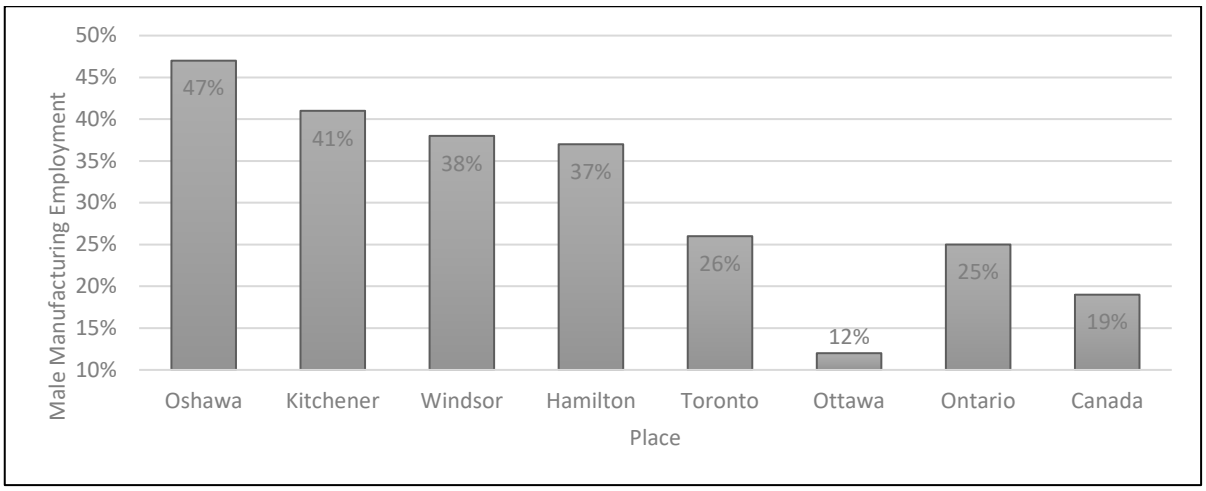


Figure 6: Male Manufacturing Employment, Selected Canadian Cities, 1951

Note: Shows the percentage of Male Labour Force in Manufacturing or Mechanical Occupations. (Source: Statistics Canada 1952)

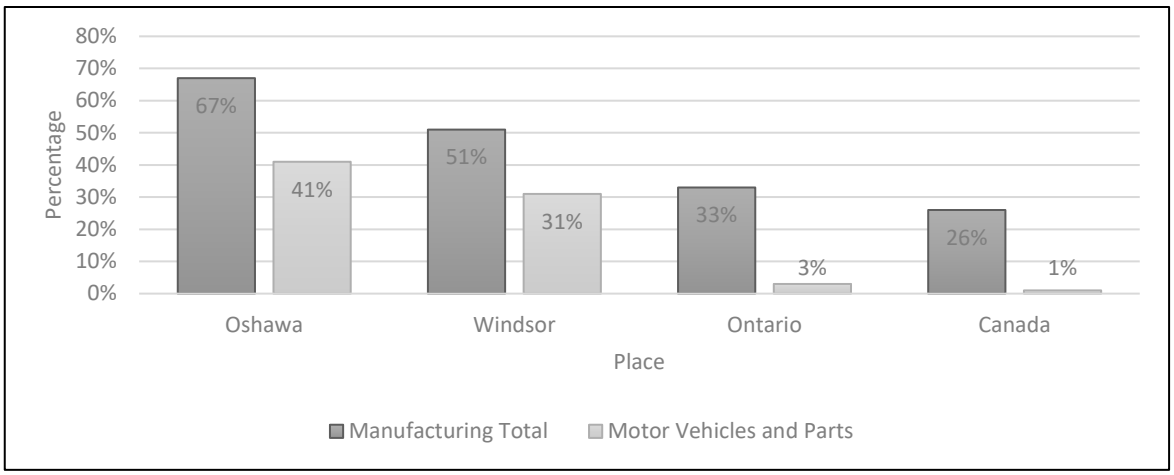


Figure 7: Automotive and Total Manufacturing Employment in Oshawa & Windsor, 1951

Note: Shows the percentage of the labour force employed in the motor vehicle and parts and total manufacturing industries. (Source: Statistics Canada 1952)

Common estimates place GM Oshawa's peak employment at around 23,000 in the mid-1980s (Gee 2018), while data from the local automotive union Unifor Local 222 (formerly Canadian Auto Workers (CAW) Local 222) showed that more than 16,000 unionised GM workers were employed in Oshawa in 1989 (Fairweather 2018, p. 125). In 1986, the City of Oshawa's population stood at only 123,651 (Statistics Canada 1987), highlighting the extent to which the plant dominated the local labour market. Oshawa, as stated by Durham Federal MP, current leader of the Conservative Party of Canada, and former GM Oshawa employee Erin O'Toole (2018), 'epitomised the concept of a "company town"'.

In November 2018, GM (2018) announced that future motor vehicle assembly operations would cease in Oshawa. The Oshawa closure announcement was not an isolated occurrence, as GM (2018) simultaneously announced the closure of four other plants (two assembly and two propulsion) in the United States, including two in Michigan, one in Maryland and one in Ohio. The multiple concurrent announcements showed that Oshawa was simply one node in GM's global supply and production networks and in the supra-national North American automotive industry cluster (Rutherford & Holmes 2008, 2013). The full closure of the assembly plant was initially expected to result in the loss of 2,900-3,000 direct GM jobs in Oshawa (Porter et al. 2018; Wayland 2018).

The 2018 closure announcement had flow-on effects across the supply chain. This was made clear when Martinrea International, in the nearby City of Ajax, almost immediately announced the closure of its plant to coincide with GM's closure announcement in Oshawa (CBC 2018b). Previously, production declines and layoffs at GM Oshawa in 2007 led to the loss of 350 jobs at Lear Seating in the adjacent Town of Whitby. This mass retrenchment event was significant enough to require a structural adjustment intervention (Durham Region News 2007) (see **Chapter 6**). The importance of GM Oshawa to the eastern Ontario economy was reflected by these negative multiplier effects.

GM would completely reverse course in November of 2020, announcing a $1 billion+ investment in the facility, the construction of new assembly infrastructure and the anticipated hiring of 1,400-1,700 workers (GMC 2020). However, most of these workers would likely be new hires (it was estimated that only 175 laid off workers would be recalled), who would be on significantly lower wages than senior employees, and many would be employed under flexible, precarious labour conditions with little of the employment protections that previous GM Oshawa workers enjoyed (Balakrishnan 2020; Unifor Local 222 2020). This came after prior rounds of labour negotiations had already significantly degraded wages and conditions for new hires (Siemiatycki 2012). Furthermore, the majority of retrenchments at GM Oshawa were felt before the 2018

closure announcement and the anticipated new jobs would represent less than 10% of GM Oshawa's peak employment.[9]

Overall, the decline of automotive manufacturing in Oshawa was a process that occurred over the course of several decades, as opposed to a single economic shock. Net job losses at Oshawa's 'Autoplex' over more than 30 years resulted from a combination of shift cuts, transitions to different types of production (such as the Consolidated line's repurposing as a truck line), as well as employee re-assignments and technological innovations that led to gradual attrition. These changes were punctuated by multiple large-scale shocks in the form of assembly closures. The larger shocks include the 1997 closure of the North Fabrication plant and the dual shocks of the closure of Oshawa Plant 1 (to be converted into the Flex Assembly line) in 2008, and a truck plant in 2009 (Fairweather 2018). Closures in 2008 and 2009 occurred despite Oshawa assembly having the highest labour productivity of any plant in North America in 2007 (Plunkett 2007), while GM (2019) acknowledged that the plant was the 'most decorated' and 'most complex facility in North America'.

As shown in **Figure 8**, by 2016, Oshawa was no longer so dependent on its automotive specialisation and had converged with the national and provincial scales, in terms of manufacturing employment as a proportion of labour force. By the 2016 Census, the manufacturing component of Oshawa's labour force was 10% for the City of Oshawa and 9% for the wider Oshawa Census Metropolitan Area, roughly equivalent to the proportions in Ontario (10%) and Canada (9%) (Statistics Canada 2017). By 2016, manufacturing was only Oshawa's third largest industry of employment after health and retail (see **Figure 9**).

[9] Importantly, research on the impact of automotive retrenchments in Oshawa for this thesis commenced long before the 2018 closure announcement. Thus, while timeline of events influenced certain aspects of the research, the fundamental focus on structural manufacturing decline and diversification in Oshawa was not impacted.

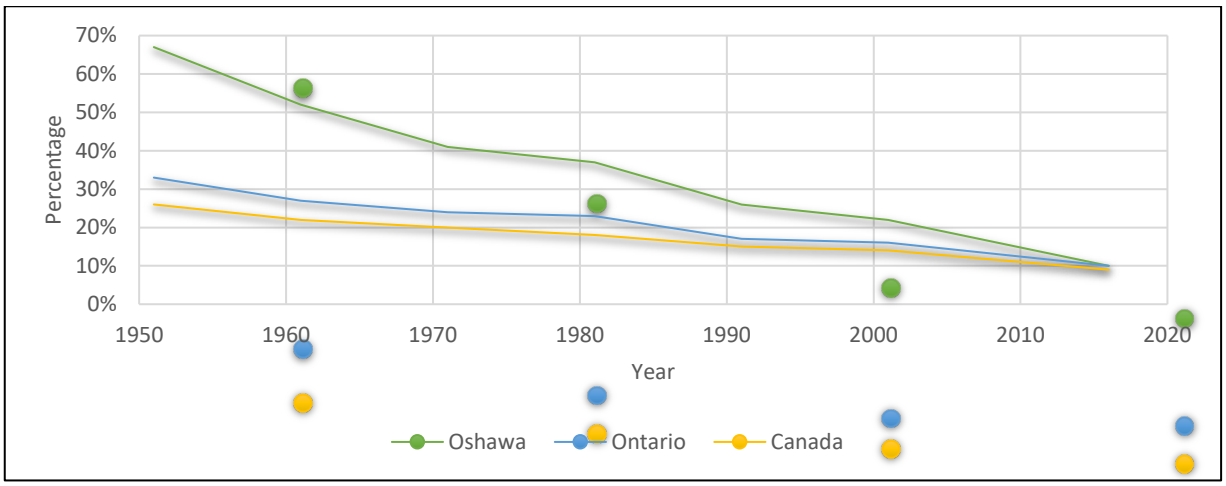


Figure 8: Manufacturing as a Percentage of Labour Force in Oshawa, 1951-2016

(Sources: Statistics Canada 1952, 1962, 1972, 1982, 1992, 2002, 2017)

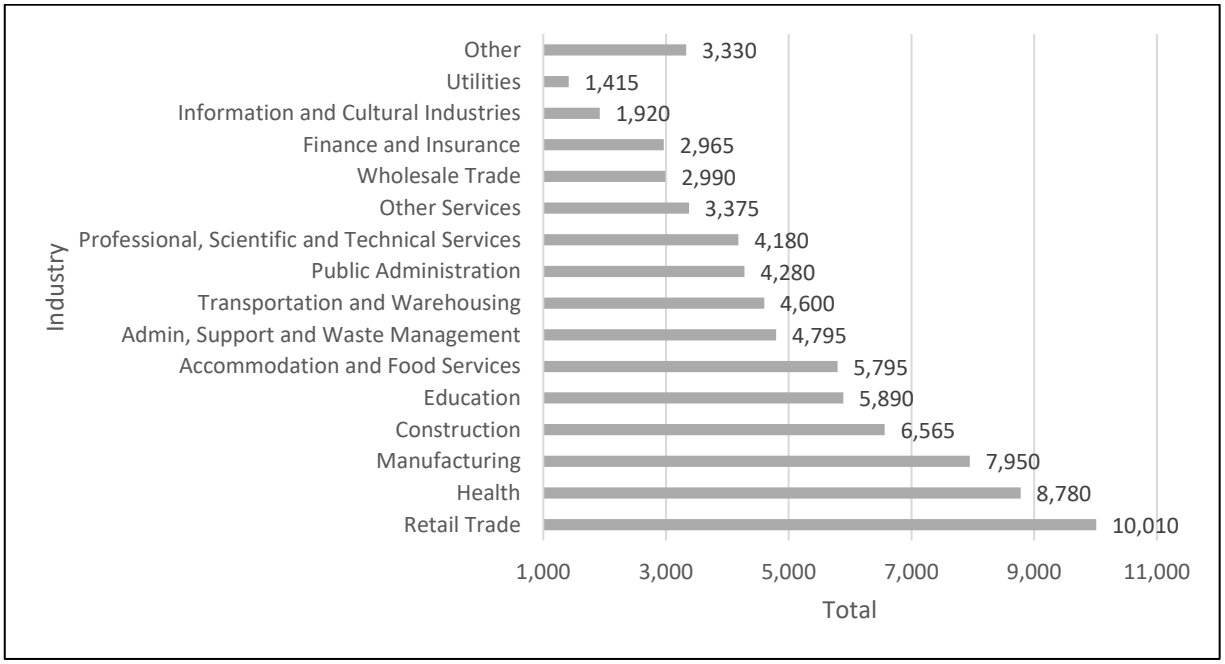


Figure 9: Labour Force by Industry, City of Oshawa, 2016

(Source: Statistics Canada 2017)

Moreover, Oshawa is now one of the most diversified metropolitan areas in Canada. The Conference Board of Canada in 2017 (Arcand et al. 2017a, 2017b) using a Hachman index, ranked the Oshawa CMA marginally below another former industrial city, Hamilton, but far above Windsor, the other major historical automotive manufacturing hub in Ontario, in terms of economic diversity (**Figure 10**).

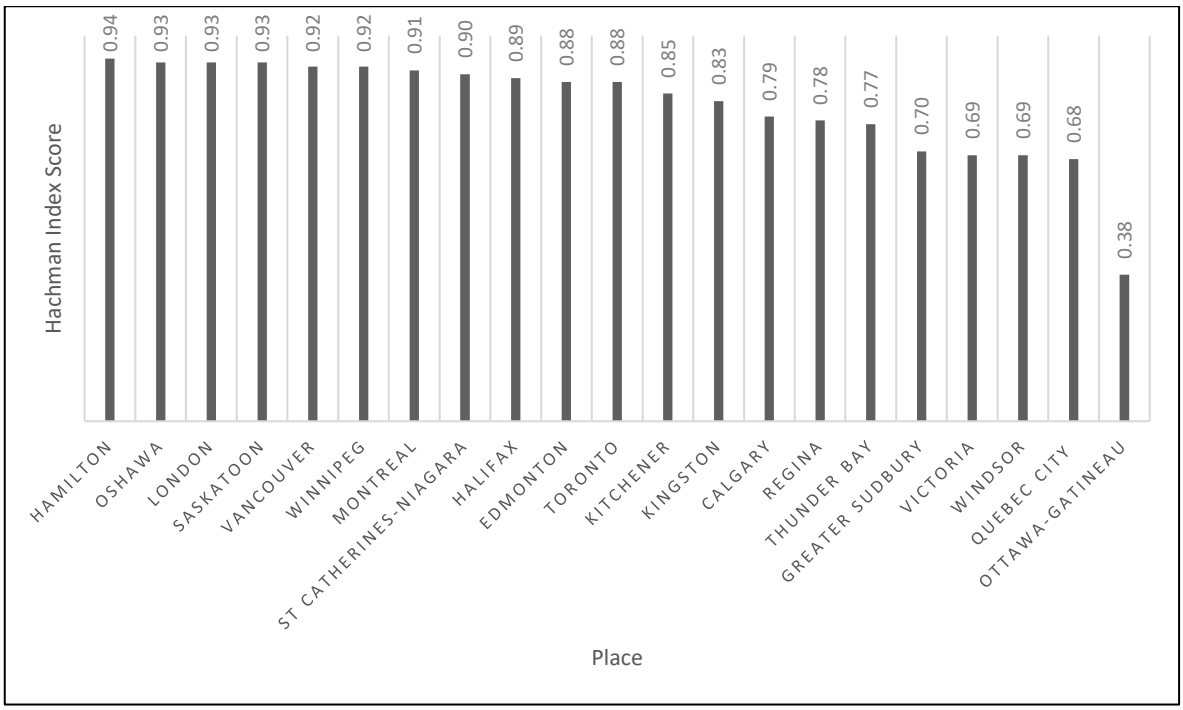


Figure 10: Economic Diversity (Hachman Index) in Selected Canadian Census Metropolitan Areas

(Sources: Arcand et al. 2017a, 2017b)

Geelong's Industrial Trajectory

Like Oshawa, Geelong is an historical automotive manufacturing city. In 2016, Geelong experienced the closure of engine and stamping plants operated by the US-based Ford Motor Company (Ford), signalling the end of automotive manufacturing in the city (Barnes 2016). Operations were originally established as a subsidiary of the Ford Motor Company of Canada, before falling under the umbrella of the Detroit-based US parent. Geelong served as the Ford Motor Company of Australia's headquarters until the 1960s, when the company's Australian head office was moved to nearby Melbourne (Wilkins & Hill 2011). Just as Oshawa was once 'Canada's motor city', so too Geelong has been referred to as Australia's 'motor city' (Visit Melbourne 2019), along with the informal moniker 'Geetroit' (see Creative Geelong 2018). Geelong had initially boomed by the mid-19th century as a wool and gold export hub – and was once locked in a fierce rivalry with Melbourne to become Victoria's dominant commercial centre – before transitioning to manufacturing and heavy industry in the 20th century (Gray & Novacevski 2017).

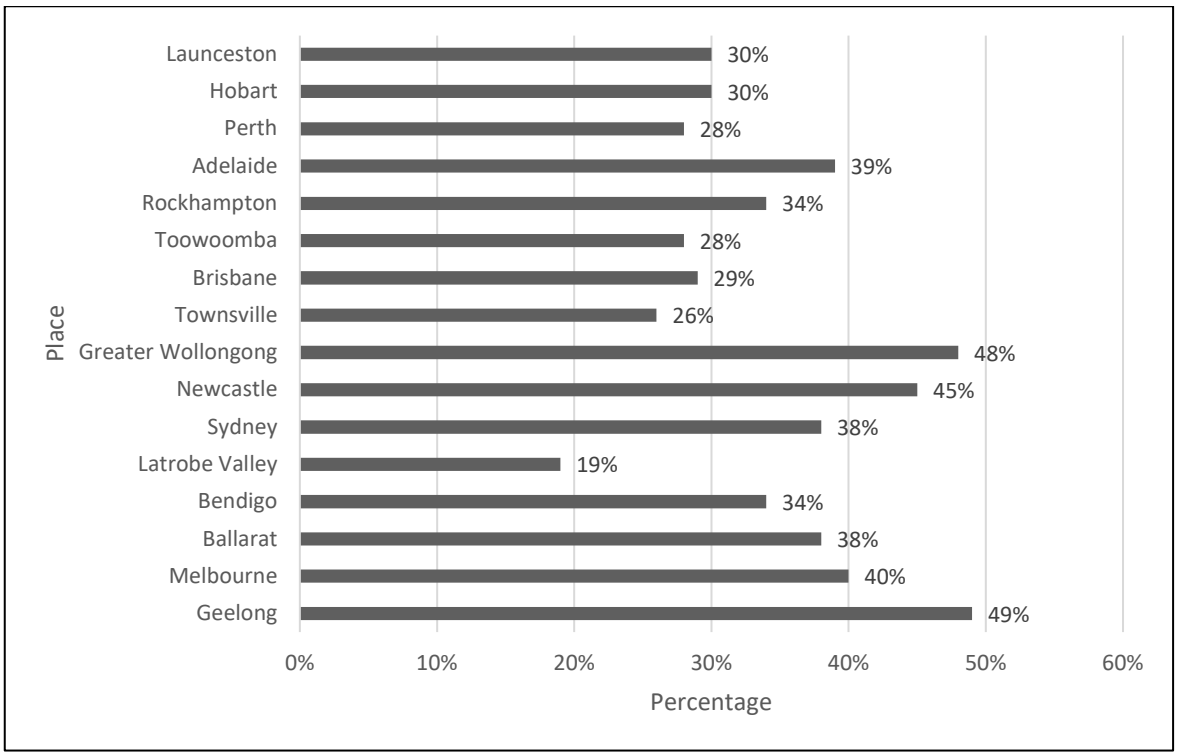


Figure 11: Percentage of Male Labour Force in Manufacturing, Selected Australian Cities, 1954

(Source: ABS 1955)

With just under half (49%) of Geelong's male workforce and 46% of its total workforce employed in manufacturing in 1954, the Geelong urban area was the most manufacturing specialised urban area in Australia, ahead of the urban areas of Greater Wollongong (48% male, 45% total) and Newcastle (45% male, 41% total) in New South Wales (ABS 1955) (see **Figure 11**).

Geelong's industrial base was never dominated by Ford to the same degree as GM dominated in Oshawa – it was never truly a 'company town'. Ford Geelong employment peaked in the mid-1980s with 4,249 workers (Lannen 2016). Many of these Ford jobs were lost during the years of the 'Button Plan' rationalisation of Australia's automotive industry (1988-92). This meant that the closure of the Ford plant, part of the demise of Australia's car manufacturing industry, did not represent a completely new shock. Plans for closure in 2007 were averted after direct government financial assistance to Ford. It was estimated that this temporarily saved 600 jobs, which represented a fraction of the peak employment in the 1980s (Productivity Commission 2012). Ultimately, 453 workers across Ford's Geelong and Broadmeadows (in Melbourne) plants were case managed out

of employment between 2014-2018 as part of the Ford Transition Project (Skills & Jobs Centre 2018).

However, automotive closures were only part of wider, gradual and multi-faceted process of deindustrialisation in Geelong. Other major manufacturing plant closures include International Harvester in 1982 (agricultural equipment and vehicles), Federal Woollen Mills (textiles) in 2001, Pilkington Glass in 2009 and the Alcoa aluminium plant in 2014, as well as numerous automotive supply firms (Northern Futures 2019; Victorian Government 2010). These would be accompanied by significant job losses as a result of restructuring at Boral cement in 2013, from the sale of the Shell oil refinery in 2014, as well as the cessation of Qantas/Forstaff heavy maintenance operations at Avalon Airport also in 2014 (Callan & Bowman 2015). The physical legacy of Geelong's even older heavy industries also remains. The distinct façade of the coal-fuelled Geelong Power Station A, located in the Central Business District and closed in the 1960s, is clearly visible as the facility was repurposed as part of city's major shopping mall, Westfield. The Power Station B in North Geelong, closed not long after Station A in the 1970s, remains abandoned.

Despite the historical dominance of manufacturing, power generation or other heavy industry, Geelong's economy has historically been characterised by more diversity than Oshawa's. It has long been a significant retail hub, with its largest private sector firm being Cotton On, a major global fashion retailer, which is a homegrown Geelong business that remains headquartered in the city (City of Greater Geelong 2018). Outside the City of Greater Geelong, but within the Australian Bureau of Statistics' metropolitan definition of Geelong (Statistical Area 4) in the beach town of Torquay, Surf Coast Shire is the birthplace of two of the 'Big 3' global surf fashion brands, Rip Curl and Quicksilver, with the former still headquartered in Torquay. The existence of such a strong surfing brand identity in the region underscores another element of Geelong's diversity, tourism, as the coastal areas of the region are the gateway to one of Australia's major tourist attractions, the Great Ocean Road. This is an asset that the City of Greater Geelong recently leveraged to receive hundreds of millions of dollars from the Australian and Victorian Governments to boost the local economy (Prime Minister of Australia 2019). Geelong's diversity has, therefore, also left it vulnerable to shocks in other industries. Until 2018, Geelong was also the birthplace and headquarters of Target, a major department store chain. It

relocated to a western Melbourne suburb (although within commuter distance to Geelong), in the process shedding hundreds of jobs in Geelong since 2013 (ABC 2016).

Nevertheless, waves of retrenchments at Geelong's Ford facility, in particular, have been the primary catalyst for crisis responses and broader placemaking interventions by the Victorian and Australian Governments in Geelong, highlighting the real and symbolic importance of Ford to Geelong's economy. Ford's decision to leave Geelong would be followed by GM Holden and Toyota announcing closures, leading to a complete cessation of motor vehicle assembly in Australia in 2017. Direct job losses from frontline automotive and supply chain workers, as a result of the closure of the Australian car industry amounted to roughly 14,000 within 12 months of the final assembly closure, according to Australian Government estimates (Barnes & Weller 2020). This meant the crisis of the Ford closure in Geelong was part of an event considered to be of national, rather than just regional, significance.

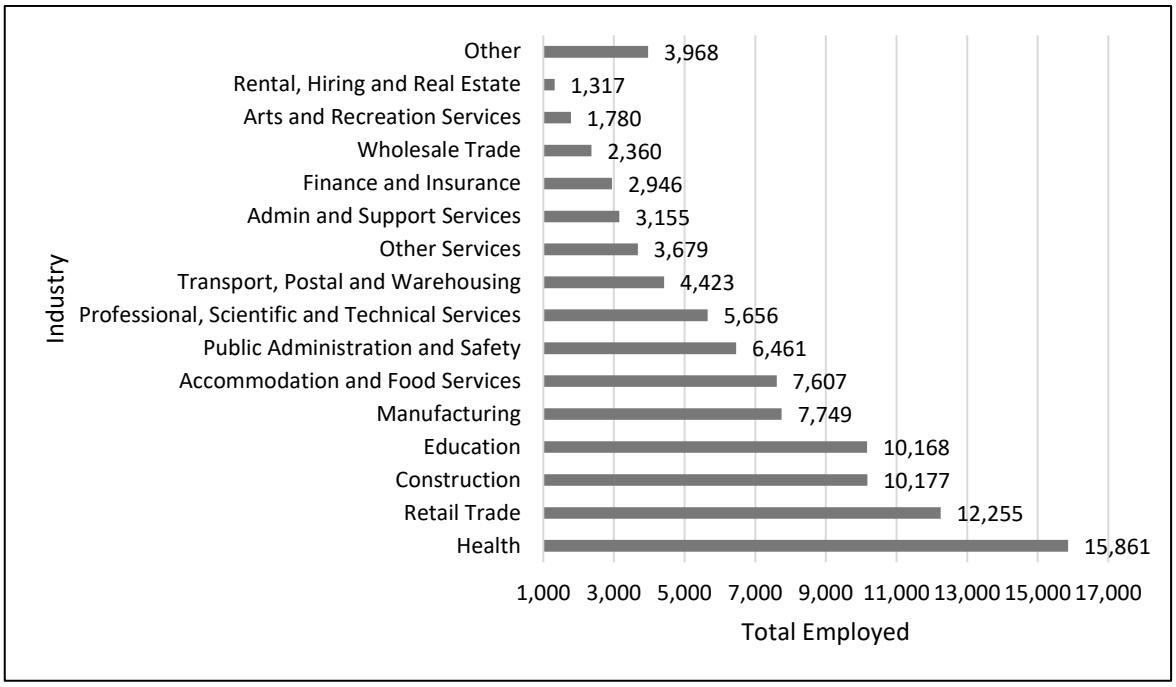


Figure 12: City of Greater Geelong Employed Labour Force by Industry, 2016

(Source: ABS 2017)

By 2016, the proportion of Greater Geelong's labour force in manufacturing (7.5%) was lower than Victoria's (7.8%). By 2016, manufacturing was only the 5th largest industry in Geelong (see **Figure 12**). Geelong's economy now ranks among the most diverse regions in Australia according to various sources (ABS 2014; RAI 2017). Furthermore, the

Australian Productivity Commission's (2017b, p. 8) 'adaptive capacity index' ranked Geelong 5th in Australia, which made it the most adaptive non-capital (state or federal) city.

Diversification as the Response to Deindustrialisation in Oshawa and Geelong

Diversification is an inevitable outcome of structural decline in a specialised region. However, the overarching goal of economic diversification has explicitly underpinned policy responses to deindustrialisation and the specific crisis of automotive disinvestment in both Oshawa and Geelong (Barnes 2016; Siemiatycki 2013). This section shows that Oshawa and Geelong have pursued, superficially, similar policies oriented to diversification.

The first specific economic development policy listed in the City of Oshawa's *Official Plan* (2018b, p. 236) promotes diversification as both a long-term strategic goal, and as a direct structural adjustment response, stating:

> 'The City shall encourage the expansion and diversification of the City's economic base in order to maximize the number and type of employment opportunities and to stabilize the impacts of cyclical and long-term economic trends in various industrial and commercial sectors upon the City and its residents'.

The City of Oshawa's (2015) *Strategic Plan 2015-2019* lists 'Build and Diversify our Economy' as one of its primary 'themes', while its specific strategy was detailed in the policy document *Developing a Winning Formula for Economic Diversification* (City of Oshawa 2016a). Likewise, economic diversification would become a central pillar in the updated 2013 Geelong *Regional Growth Plan* (2013). Of the nine 'principles for regional growth', 'diversify the G21 economy' would be listed first under the 'build our economy' principle, while 'employment diversity' would be listed under the principle 'diversity, innovation and knowledge'. Multiple structural adjustment initiatives that would be launched in Geelong, such as the Geelong Region Innovation and Investment Fund (GRIIF) and the Regional Jobs and Investment Packages (RJIP), identified diversification as the primary objective of the program (see **Chapter 6).** Diversification was not simply on the local Geelong agenda, but the term was omnipresent in policy discourse surrounding responses to the end of Australian car manufacturing (Barnes 2016).

Diversification was one of two key terms mobilised as an economic development branding message in response to plant closures in both Geelong and Oshawa. The other was the related concept of resilience. Throughout the closure crises in both locations, politicians, policymakers, and the media paired the concepts of diversification and resilience together. In this dominant discourse, diversification, or the transition from automotive manufacturing to new industries, produces resilience.

In response to the Ford closure in 2013, then Victorian Premier Denis Napthine linked the two concepts, stating that Geelong had changed: 'It is *more resilient, more diverse* and has got a more positive future' (Nine News 2013, emphasis added). Likewise, Bernadette Uzelac of the Geelong Chamber of Commerce responded to the Geelong Ford closure by stating: 'Ford is synonymous with Geelong but we are a *strong resilient town'* (cited in Langmaid & Hurley 2013, emphasis added). The City of Greater Geelong (2020) maintains that: 'Our vision is that in 2030, Geelong is internationally recognised as *one of the world's most resilient cities'* (emphasis added).

In a brochure published by the *Canadian Business Journal* (2015), the City of Oshawa declared: 'About 20,000 automotive jobs were lost in a short period of time, but through its *resiliency* and *diversification* of business opportunities, the future looks bright' (emphasis added). In an interview with a Durham labour expert (Interview Code XYX47), these concepts were intertwined in causal relationship: 'I think *diversification is what will build resilience* in our community' (emphasis added). These examples suggest that diversification is sometimes deployed as a synonym for, and sometimes the means to achieve, regional resilience in response to deindustrialisation.

In response to deindustrialisation, and as part of general placemaking agendas, policymakers in Oshawa and Geelong pursued broadly similar economic development goals and used many of the same strategies policies to pursue them. Public investment in the higher education industry, in particular, provided a locus for three major objectives: fostering unrelated regional diversification; pursuing related diversification in the manufacturing sector by encouraging the transition from traditional to advanced operations; and aiming to revitalise of the cities' downtown cores into 'creative urban' spaces (see City of Greater Geelong 2013a; City of Oshawa 2014b; Deakin University

2015; G21 2007, 2013; Johnson 2009; Parliament of Victoria 2013b; Siemiatycki 2013; UOIT 2012; Wolfe & Goracinova 2017).

Whereas GM and Ford were once the economic focal point of each cities' regional brands, now efforts were made to make Oshawa and Geelong's major universities, UOIT (now publicly branded as Ontario Tech University) and Deakin University respectively, the focal points of the new economies (with Durham College in Oshawa and Gordon TAFE in Geelong also key institutions), as they aspired to become 'Smart Cities' (City of Greater Geelong 2013a; City of Oshawa 2020). A report into the economic impact of UOIT (2015, p. 22) on Oshawa noted that 'Students, business owners and residents acknowledge that UOIT is a driving force behind the revitalisation of Oshawa's downtown core' (see also City of Oshawa 2014b; Siemiatycki 2013). Similarly, the City of Greater Geelong (2013a, p. 10) made integrating 'opportunities for expansion of the Gordon and Deakin campuses with the revitalisation of Central Geelong' a core objective. Advanced manufacturing research and development initiatives, driven through collaborations between federal and provincial/state governments, universities and industry, included the Automotive Centre of Excellence at UOIT (Wolfe & Goracinova 2017) and Carbon Nexus at Deakin University (Deakin University 2015; Parliament of Victoria 2013b). These partnerships complimented related diversification-focused enterprise assistance programs initiated by national and state/provincial governments that were available to local automotive and other manufacturing firms (Barnes 2016; Holmes et al. 2017; Wolfe & Goracinova 2017).

State-led investment in the education, health and public administration sectors, as well as direct state support for firms, meant that both Oshawa and Geelong eschewed the firm-centric explanations for diversification that dominate the existing literature. Eight of Oshawa's top ten largest employers in 2019 were in the public sector, with GM and Concentrix, a business services firm, the only private sector firms (Region of Durham 2019b). Likewise, in 2018, the top five employers in Geelong were in the public sector (City of Greater Geelong 2018). Lakeridge Health in Oshawa and Barwon Health in Geelong were the largest employers in each region, each employing over 4,000 people, reflecting the healthcare industry's growth.

Despite these overtly similar strategies, the subsequent chapters in this thesis will explore some key differences, including the intensity of state-led support for diversification that can potentially explain divergent diversification outcomes.

Divergent Growth Outcomes: Employment Change in Geelong and Oshawa

Whilst there is a similar experience of deindustrialisation in Oshawa and Geelong, the outcomes have been different. Geelong's growth has exceeded Oshawa's, reflecting that Geelong has had a much higher rate of job growth and Oshawa has had a steeper decline in manufacturing employment. Geelong and Oshawa's growth trajectories have diverged significantly in the last 30 years. In the 1991 Census, the City of Oshawa had only a slightly lower employed labour force (at roughly 64,000) than the then newly formed City of Greater Geelong did in 1996, the first Census after the formation of Greater Geelong (ABS 1997; Statistics Canada 1992). In 1996, Geelong had a workforce of approximately 69,500; by the 2016 Census, Greater Geelong had added nearly 33,000 jobs to its labour force, an increase of 47% (ABS 1997, 2017). Conversely, Oshawa had added fewer than 10,000 from 1991 (an increase of 13%) and fewer than 14,000 since 1996 (an increase of 21%) (Statistics Canada 1992, 1997, 2017). Between 1996-2016 Oshawa's population increased by approximately 25,000 (a 19% increase), while Greater Geelong's increased by roughly 54,000 or (a 30% increase) (Statistics Canada 1997, 2017; ABS 1997; 2017). **Table 6** summarises overall employment change in the two case study sites between 1996-2016.

Table 6: Employment Change in Greater Geelong and Oshawa, 1996-2016

Employed Labour Force	1996	2016	Change 1996-2016 %
City of Oshawa	60,760	73,470	21%
City of Greater Geelong	69,470	102,460	47%

Note: City of Oshawa based on Place of Usual Residence, City of Greater Geelong based on Place of Enumeration.
(Sources: ABS 1997, 2017: Statistics Canada 1997, 2017)

Figure 13 shows that Geelong has generated far more new jobs than Oshawa across most industry sectors with the performance in the health, education and government services sectors stand-out differences.

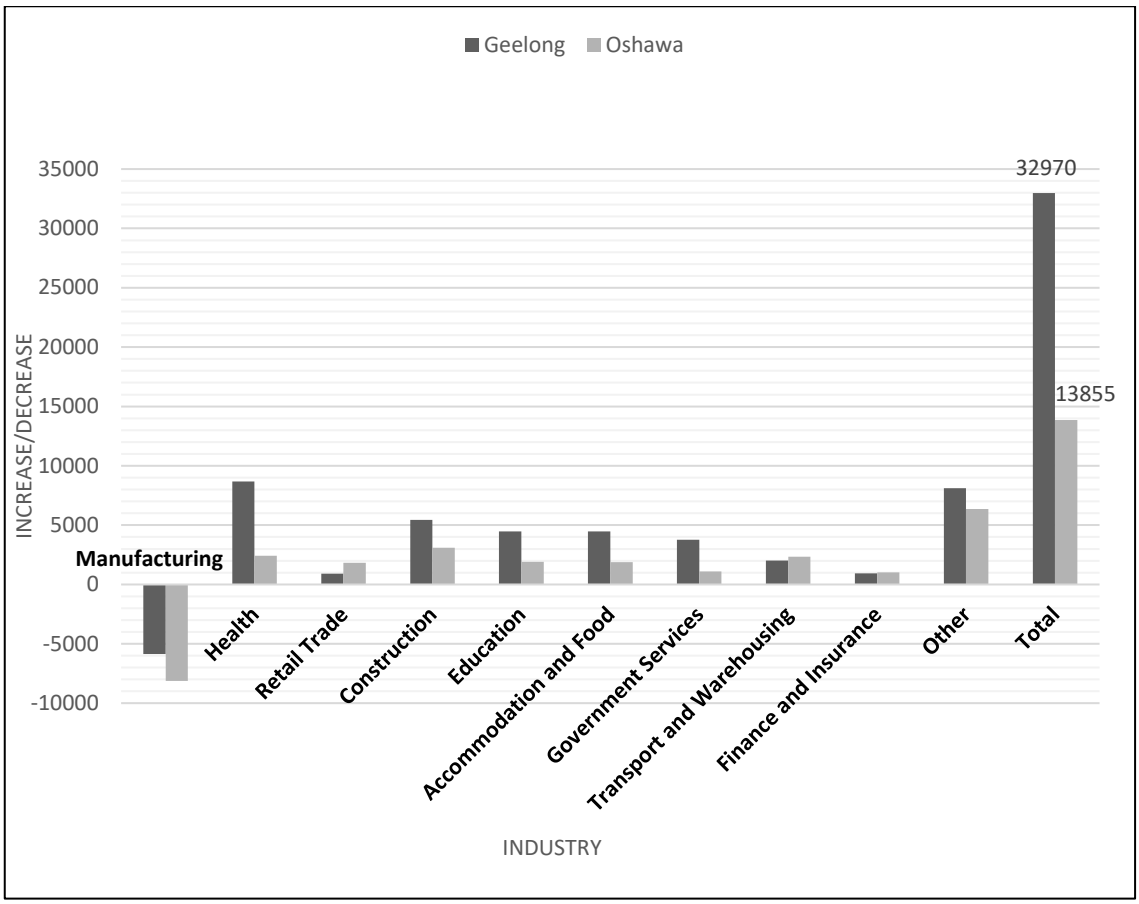


Figure 13: Employment Growth by Industry in Greater Geelong and Oshawa, 1996-2016

Note: City of Oshawa based on Place of Usual Residence, City of Greater Geelong based on Place of Enumeration. (Sources: ABS 1997, 2017; Statistics Canada 1997, 2017)

Importantly, Oshawa experienced a more significant manufacturing decline, losing roughly 9,350 net manufacturing jobs, between 1986 and 2006 (Statistics Canada 1987, 2007). The core urban area of Geelong lost less than half that amount, at approximately 4,200, while the broader Greater Geelong area shed roughly another 1,000 (ABS 1987, 2007). Thus, the 'company town' of Oshawa was under far more immediate labour force pressure leading into 2006 than Geelong, even if the latter's own challenge was significant. However, between 2006 and 2016, both municipalities experienced roughly the same aggregate impact of deindustrialisation in terms of manufacturing job decline (**Figure 14**). In Greater Geelong, manufacturing employment stood at 12,360 (15% of industry composition) in 2006 compared to 12,765 (17% of industry composition) in Oshawa. Geelong saw the loss of 4,606 manufacturing jobs between 2006 and 2016, while Oshawa lost 4,815 manufacturing jobs, leaving Geelong's manufacturing

employment at 7,752 in 2006 (8% of industry composition) and Oshawa's at 7,950 (10% of industry composition).

In both places the losses were concentrated spatially. The Geelong Urban Centre (UCL) absorbed three quarters (roughly 3,500) of Greater Geelong's losses. Moreover, the two disadvantaged areas surrounding each city's automotive manufacturing plants were hit almost identically, with the south Oshawa neighbourhood of Lakeview (population roughly 18,500) losing 830 jobs and the northern Geelong suburbs of Corio-Norlane-North Shore (population roughly 21,000) losing 831 (ABS 2007, 2017; Statistics Canada 2007, 2017). The southern Geelong suburbs surrounding the Alcoa plant also registered significant losses (see **Chapter 8**). Thus, in this period, both municipalities were facing a very similar crisis.

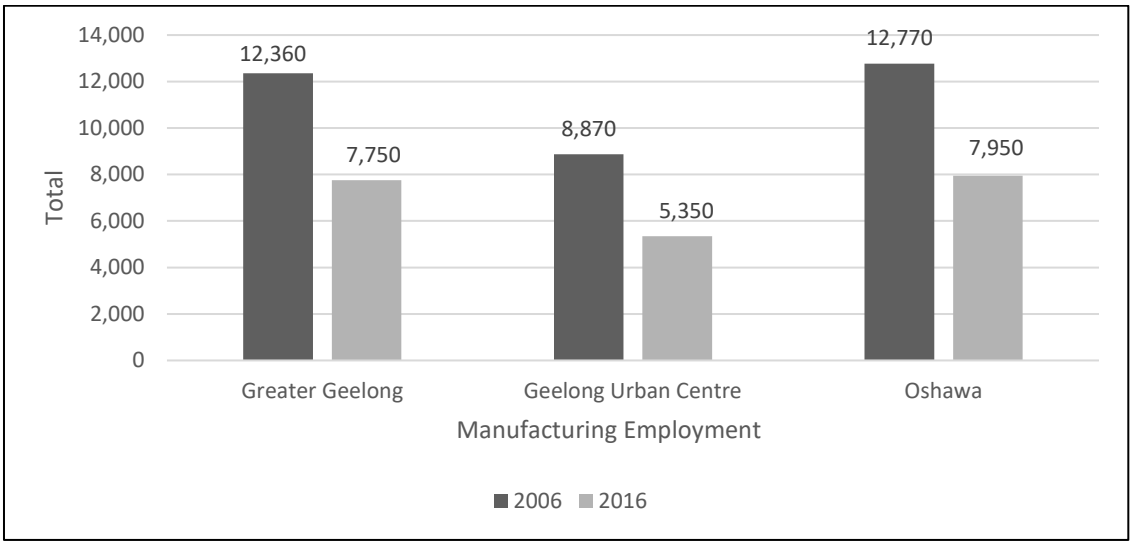


Figure 14: Manufacturing Decline in Geelong and Oshawa, 2006-2016

Note: City of Oshawa, Greater Geelong and Geelong UCL all based on Place of Usual Residence. (Sources: ABS 2007, 2017; Statistics Canada 2007, 2017)

A shift-share analysis presented in **Figure 15** highlights that since 1996, Greater Geelong's employment growth has outstripped the Victorian state scale, while the City of Oshawa has lagged significantly behind Ontario.

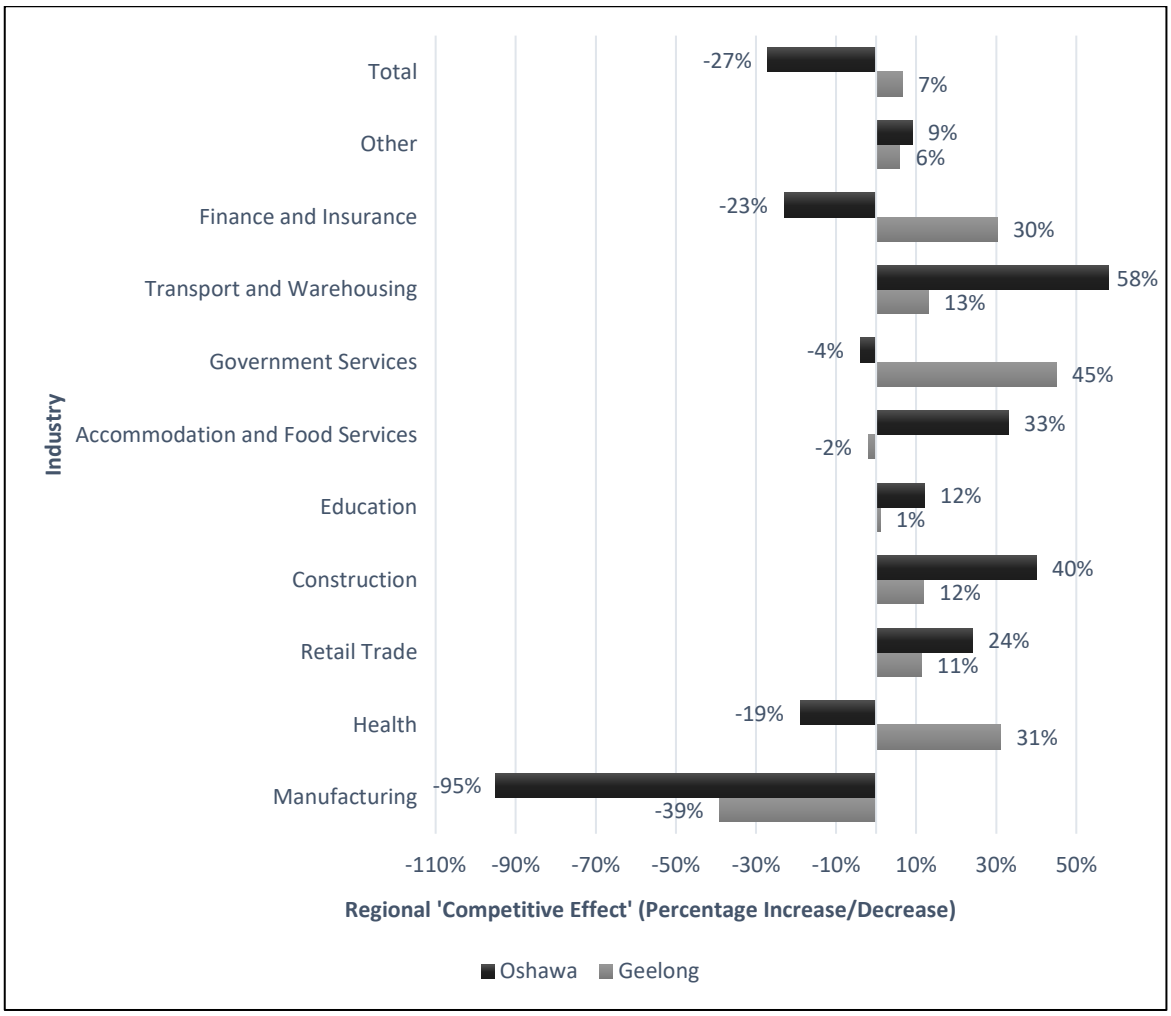


Figure 15: Shift-share Regional 'Competitive Effect' in Greater Geelong and Oshawa, 1996-2016

Notes: Shows the 'competitive effect' as a percentage (increase/decrease) relative to state/provincial scale. Oshawa based on Place of Usual Residence, Greater Geelong based on Place of Enumeration. Shift-share analysis of Oshawa is benchmarked to Ontario, Geelong to Victoria (Sources: Author's calculations from ABS 1997, 2017 and Statistics Canada 1997, 2017)

Ultimately, Oshawa and Geelong are both examples of quantitatively resilient regions, as they have avoided the regional economic decline and depopulation commonly associated with automotive disinvestment. Yet, Geelong has seemingly diversified more 'successfully' than Oshawa because it has achieved significantly greater growth. The following chapters will provide insight into the causal mechanisms driving this divergence. However, the following chapters will also detail how inter-regional growth comparisons can obscure the reality of continuing and entrenched disadvantage in localities most affected by plant closures in both case study sites.

Conclusion

This chapter has introduced the principal similarities and differences between the two case study sites. While there are many uncanny similarities between Oshawa and Geelong, the most fundamentally important one is that these were not simply two automotive towns, but they were both once the most manufacturing specialised cities in their respective nations. The strategic objective of diversification, in response to deindustrialisation, was thus seemingly more challenging in these two places than any other city in Canada or Australia. This is demonstrated by changes in industrial composition. However, as established, a deindustrialising, specialised manufacturing city will necessarily diversify as its core specialisation declines. What matters is how they diversify.

The following chapters provide insight into why Geelong and Oshawa's growth trajectories may have diverged so significantly, despite facing the same problem between 2006 and 2016. However, in order to understand this, it is important to understand that Geelong and Oshawa, with similar experiences of deindustrialisation, are also extremely similar in another important regard, i.e. relative positionality as satellite cities of large, expanding metropolitan areas. It will be shown in the following chapters that state-led development initiatives, particularly efforts to decentralise population and employment growth from Melbourne to Geelong, can help explain different growth outcomes in the two case study sites. By focusing on relational, spatio-temporal and institutional differences, the constraints and opportunities for agency (policy) in regards to influencing growth trajectories in each place becomes more evident. This allows us to move towards an understanding of how regions diversify by focusing on the fundamental determinant of relative positionality as opposed to treating these regions as atomised and isolated, where path dependence or creation is necessarily endogenously determined.

Chapter 5 - Diversification through Decentralisation

Introduction

This chapter addresses the argument that decentralisation facilitates regional diversification and enhanced economic growth (Vazquez-Barquero & Rodriguez-Cohard 2016). It contrasts the case study of Geelong, in the 'unusually centralised' Australian federal system, with the case study of Oshawa, in the global 'best practice' decentralised Canadian federation (see **Chapter 4**). The key thematic of this chapter is **institutions**, as it highlights the way in which different institutional environments condition how agents perceive their capacity for agency. It focuses on overlapping or competing conceptualisations of decentralisation to explore the role of institutions, governance regimes and policies in driving diversification, growth, and (un)even socio-spatial development. This chapter identifies four major modalities of decentralisation as they apply to the two cases studies. They are:

1. Institutional Decentralisation, involving the fiscal devolution and the downloading of service provision to municipal governments;
2. Geographical Decentralisation, characterised by the de-concentration of public sector employment to disadvantaged regions to engender employment multipliers and stimulate economic growth;
3. Governance Decentralisation, or vertical and horizontal diffusion of governance hierarchies across both government and non-government institutions to facilitate collaborative stakeholder administration;
4. Discursive Decentralisation, the discursive function of decentralisation as a consensus-building tool of governance.

This chapter compares the different mobilisations of decentralisation to engender diversification in each jurisdiction. It focuses on how different conceptualisations of decentralisation influence different approaches to diversification, namely, the relationship between institutional decentralisation (devolution) and market-led diversification in Oshawa, and geographical decentralisation (de-concentration) and state-led diversification in Geelong. It also explores the Janus-like role of governance decentralisation to facilitate either market-led or state-led diversification approaches dependent upon institutional milieux. It comments on how the discursive form of

decentralisation can be used to satisfy both market-led and state-led development agendas.

The comparative case study reveals how governments create public sector employment through de-concentration initiatives as an anchor for private sector investment, which acts as a key diversification lever. This chapter shows that the sub-optimal growth outcomes in Oshawa are associated with less-interventionist, market-led diversification strategies that are in turn associated with devolved institutions, as the central and intermediate governments abrogate responsibility for diversification to municipal government. It identifies a possible misalignment between municipal fiscal resources, service responsibilities and the capacity of deindustrialising places to initiate interventions that lead to optimal outcomes.

This chapter also shows that diversification theories based upon regional competitiveness cannot explain growth divergences in Geelong and Oshawa/Durham, as the latter should be more 'competitive' based on its greater autonomy and fiscal capabilities as a result of institutional decentralisation. Reformulating the proposed dichotomy between centralised 'low-growth' redistributive regimes aimed at spatially even development and 'high-growth' decentralised regimes aimed at economic competitiveness, the evidence presented in this chapter reveals that central and intermediate government can facilitate regional adaptation through state-led structural adjustment and growth strategies by using the ambition to reduce socio-spatial inequality as justification for public investment. These state selective strategies can enhance the competitiveness of a place by overcoming regional lock-ins and building growth trajectories on paths that diverge from the established local industrial structure.

Background: Decentralisation, Competition and Uneven Development

The paradigm of endogenous development posits that bottom-up, autonomous regional institutional capacity drives economic development and diversification. According to Vazquez-Barquero and Rodriguez-Cohard (2016, pp. 1135, 1143):

> 'Endogenous development strives to obtain self-sustained development in urban and rural areas and argues that institutions that facilitate the introduction of innovations leading to diversification of productive

> activities and market access are key to the process … Local actors and organizations will lead development initiatives as long as laws, rules, and governance allow for decentralisation and the transfer of competences to municipalities and regions'.

Hence, for the endogenous development framework, successful diversification requires the decentralisation of state institutions to the local or regional level. In this context, decentralisation usually refers to the tangible devolution of institutional powers to lower tiers of government, be they existing or newly created. For Faguet and Pöschl (2015, p. 3) this conceptualisation of decentralisation is synonymous with devolution:

> 'Decentralisation is the devolution by central (i.e. national) government of specific functions, with all of the administrative, political, and economic attributes that these entail, to regional and local (i.e. state/provincial and municipal) governments that are independent of the centre within given geographic and functional domains'.

The terms devolution and decentralisation, while given specific distinctive meaning in particular contexts, are often used either synonymously to describe processes that represent the opposite of centralisation (see Eccleston & Smith 2015; Fenna & Hollander 2013; Rimmer 2012; Twomey & Withers 2007). The 'new regionalism' approach points to institutional devolution and governance decentralisation as the cornerstone of institutional reconfiguration driving regional economic development.

Critics see this process as a means to dismantle or 'hollow out' redistributive national welfare regulation. Pointing to the US example of decentralising the provision of welfare services from the federal level to the state level, Lovering (1999, p. 392) maintains that 'the growing decentralisation of economic governance is to a large extent a process of policy transfer' (from the US federal system) that 'assists the use of geography to dismantle national redistributive structures and hollow out the democratic content of economic governance, not least under the guise of constructing new regional structures'. For Lovering (1999, p. 392), the creation of these institutions and the overall new regional paradigm shift is not a bottom-up movement, but 'the effect of top-down policies to replace the "imagined community" at the national level with an "imagined unit of competition" at the urban/regional level'. Indeed, among new regionalism's proponents, instilling inter-place competition as a growth driver is a central motivation

for decentralisation, as expressed in the notion of 'competitive federalism' (see Faguet & Pöschl 2015; Rimmer 2012).

The issue of socio-spatial standardisation is fundamental to the centralisation/decentralisation dichotomy, with the ideals of regional competition, local political accountability, collaboration and empowerment tempered by the potential for both inter-regional and intra-regional uneven growth. The assertion that there is a general trade-off between the capacity for enhanced relative economic growth of individual regions in competitive, decentralised systems and equitable socio-spatial distribution of resources in centralised systems underpins much of the literature and is acknowledged by both critics and proponents of each approach (Eccleston & Smith 2015; Eidelman et al. 2020; Morgan 2006; Productivity Commission 2018; Twomey & Withers 2007).

In an abstract sense, that there is a trade-off between potential growth and spatial equity is an entirely uncontroversial proposition. An empowered decentralised region may surpass or fall behind its competitors in both aggregate economic growth, and measures of equitable socioeconomic advancement, or may experience an internal decoupling of these phenomena as local decisions facilitate internal social polarisation. Simply, through an emphasis on competitiveness, there are multiple permutations through which growth in an empowered decentralised region can diverge from the mean, as opposed to a region in a centralised system with a development agenda based on spatially-standardised growth and spatial equalisation.

However, in practice the dichotomy between growth policies and spatial equalisation policies does not map directly onto a unitary-federalist divide, but can manifest in any number of configurations within different federal and unitary institutional frameworks (Eccleston & Smith 2015; Fenna & Hollander 2013). The line between centralisation and decentralisation is often itself obfuscated, which further complicates understandings of the relationship between growth and socio-spatial equity.[10] Even when there is consensus on a problem, there may be no consensus as to whether the solution is more centralisation or decentralisation (Eccleston & Smith 2015). These complications

[10] For example, some authors (Twomey & Withers 2007, p. 41) point to the unitary Nordic states as models of fiscal decentralisation, while others argue that these arrangements are simply examples of state delegation (Lotz, 2012)

explain why little consensus is ever reached on how centralisation shapes the growth-equity trade-off. As Faguet (2004) explains, there are numerous unitary regimes where the periphery is neglected at the expense of powerful cores, a condition he attributes to an absence of local political power. This suggests that is nothing intrinsically equitable about centralised unitarism. Equalisation results from certain policies and institutional arrangements associated with it, not from the consolidation of power. This means that while the relative centralisation or decentralisation of state institutions condition the extent to which regional economic development regimes are oriented towards socio-spatial equalisation or competitive (uneven) growth, it does not necessarily constrain or facilitate policy agendas pursuing either goal.

A Framework for Analysing Decentralisation

Another issue is that the term 'decentralisation', like many of the key words in regional development, refers to different processes depending on the theoretical framing. In popular conceptualisation, decentralisation refers to market-oriented processes aimed at reducing central state control over institutions and involvement in the economy (Bardhan 2002). Decentralisation might be a synonym for devolution, delegation, or de-concentration, the latter of which refers to central state management of economic outcomes (Faguet 2004). To deal with this complexity, this chapter draws on categorisations introduced in Bardhan (2002), Faguet (2004) and United Nations (1999) to distinguish four major modalities of decentralisation. They are:

1. Institutional Decentralisation

   This refers to the formal transfer of both fiscal powers (including revenue raising and expenditure) and responsibility for the provision of certain services, vertically down to lower tiers of government. This may be accompanied by the creation of new formal state institutions to administer devolved powers.

2. Geographic Decentralisation

   This refers to the deliberate policy of de-concentration of employment to peripheral areas outside core urban agglomerations either to promote growth in these areas or to alleviate agglomeration diseconomies in core spaces (see Garcia-Lopez & Muniz 2010; Meijers & Romein 2003). State-led development agendas have made use of a specific policy lever involving diverting public sector jobs to lagging areas. Such a policy is aimed at creating job multipliers (both construction and permanent), yet it is

only a Spatial Keynesian, place-based policy if it is aimed at reducing spatial inequalities (Faggio 2016).

3. Governance Decentralisation

This refers to the dispersal of governance responsibilities both vertically within government and horizontally across government to other stakeholders. Although related, unlike 'Institutional Decentralisation' it does not necessarily involve the formal reconfiguration of state fiscal or institutional powers. It may involve the simple delegation of tasks to another body within a unitary system (known as functional decentralisation) or may involve complex arrangements involving the simultaneous downloading and uploading of service provisions and the disintegration or re-integration of governance hierarchies.

4. Discursive Decentralisation

Decentralisation is a unifying concept for more traditional laissez-faire market perspectives that oppose centralised public bureaucracies but also non-market perspectives that conceive of local capacity-building as protection against market failures (Bardhan 2002). Here, the word 'decentralisation' becomes a governance tool, wherein the malleability of its meaning engenders support from otherwise competing interest groups for different policies and institutional reconfigurations.

If decentralisation drives diversification, then different decentralisations drive different diversifications. Therefore, the task is to assess how tangible differences, in state structures and policies, generate different outcomes and lead to differentiated patterns of diversification and resilience. The empirical sections of this chapter focus on contrasting the devolutionary and geographic modes of decentralisation. The chapter also addresses networked governance and discursive modalities of decentralisation, which are discussed further in subsequent chapters.

The Case Study Evidence

According to Higgins and Savoie (1994), there are two primary distinctions in approaches to local economic development between Canada and Australia: 1) Canada is a more market-oriented jurisdiction with less emphasis on social equalisation and 2) whereas Canada's spatial politics are more heavily dominated by inter-provincial rivalries, Australia's are more focused on rural/urban divides – or more specifically, between the six mainland state and federal capitals (particularly Melbourne and Sydney) and

everywhere else. For Higgins and Savoie, this means that the Canadian polity has been more reluctant to initiate geographic decentralisation policies (specifically attempting to divert growth from Toronto and Montreal to other places) than in Australia. Thus, Canada provides a contrast to the relatively centralised, more state-led diversification Australian context. This highlights the intersection between modalities of decentralisation and economic paradigms, and provides a basis for exploring how institutional factors converge and interact with approaches to economic development.

Oshawa and Geelong have different experiences of decentralisation. In the Oshawa case, the dominant form is 'institutional decentralisation' via the 'downloading' of fiscal power and responsibility, operating in a largely market-based context. In Geelong, positioned within the far more centralised Australian institutional environment, a state-led 'geographic decentralisation' approach to diversification was initiated, in part, through the de-concentration of public sector agencies. This was justified in part as a response to spatial inequalities, and was thus a Spatial Keynesian policy.

The Oshawa Experience

Canada follows an institutional decentralisation model distinguished by the devolution of fiscal powers and service responsibility to municipal governments. Empowering municipalities to drive economic development endogenously is envisioned as a way of achieving more 'resilient' communities (Canadian Government 2006). Canada's devolved governance structure should, in theory, grant a place like Durham/Oshawa far greater capacity to facilitate local diversification than a place like Geelong. Thus, a core question that this thesis asks, is 'if Durham and Oshawa have so much extra fiscal capacity and service autonomy compared with Greater Geelong, why are they not experiencing enhanced growth?'

Institutional Decentralisation

The greater local fiscal and decision-making autonomy in Canada should – if endogenous growth theories hold – translate into greater competence and greater capacity to influence diversification trajectories amongst local policymakers. Apportioning the Region of Durham's 2018 expenditure to the City of Oshawa based on its proportion of Durham's population as of the 2016 Census, it is clear that the two-tiered municipal

structures combined have far more fiscal capacity than Greater Geelong. Durham/Oshawa's 2018 expenditure was 57% larger than Greater Geelong's to cover a population 32% smaller (author calculations based on City of Greater Geelong 2019; City of Oshawa 2018a; Region of Durham 2018).

Ontarian municipalities have significant fiscal power in the form of tax revenue streams. However, they are required to deliver many social and community services and often must use internal revenue to provide mandated services. In Ontario, on top of services that municipal governments in Victoria provide, such as road, park, waste and water management, there are significant outlays on services that municipal governments in the more centralised Australian system largely avoid. In Ontario, police and fire services are funded almost exclusively through municipal revenues, while municipal governments provide 77% of funding for social housing, 78% for transit, 59% for ambulance services, 54% for long-term care, 28% for social assistance services, alongside significant outlays on other services (Eidelman et al. 2020).

While municipal governments in Ontario have superficially significant fiscal capabilities relative to Victorian municipal governments, spending is 'locked-in' to mandatory essential services than can come at the expense of other functions, such as economic development planning. Slack (2006) highlights that between 1988-2003, municipal expenditure on housing, social services, health and protective services increased significantly across Canada. At the same time, regional planning expenditure dropped from 2.1% to 1.7% of total municipal spending as market-oriented policies gained ascendancy.[11] The Region of Durham (2018) reported that it allocates only 1.4% of property tax revenue to economic development and planning. In 2018, the City of Oshawa gives a direct figure of $4.7 million for 'planning and development' services, compared with Greater Geelong, which lists a 'planning, design and development' budget of over $25 million (City of Greater Geelong 2019; City of Oshawa 2018a). Simply, when mandatory extra services are accounted for, there is no evidence that Oshawa-Durham

[11] This overall change conceals increasing disjunctures between provinces as differences emerged between the market-led development jurisdictions like Ontario and the state-led jurisdictions like Quebec (see Boudreau 2007). In both Ontario and Quebec regional planning expenditure was 1.9% of the total in 1988. In Ontario, by 2003 that proportion had fallen to 1.1%, whereas in Quebec it actually increased to 2.1% (Slack 2006).

has a significant fiscal advantage over Greater Geelong for economic development and planning services.

The burden of extra service provision means that municipalities like Durham and Oshawa remain fiscally imbalanced. As part of the market-based 'Common Sense Revolution' under Ontario's Progressive Conservative Harris Government (1995-2002), the agenda of municipal amalgamations and the 'downloading' of service provision to municipalities (including healthcare and social services, while also 'uploading' other services, such as in education) was combined with a general commitment to tax reduction and the dismantling of large swathes of the public service (Deber et al. 2006; Hackworth & Moriah 2006). This meant that municipalities in Ontario were not necessarily comfortable with their new powers. According to Siegel (1997, p. 145) 'the downloading of certain provincial responsibilities onto local governments have imposed significant financial problems'. It produced a scramble from municipalities to receive more support (Deber et al. 2006). Although some of the Harris Government reforms were reversed to enable the Province to grant more funding to municipalities (Dachis 2018), in 2018 then Durham Regional Chair Gerri Lynn O'Connor stated that: 'Many Ontario municipalities have still not recovered from the impact of downloading in several key areas' (cited in Flaherty 2018).

Under these devolved arrangements, the diversification of Oshawa's economy has been a local government responsibility. Yet, when asked: 'Do you think municipal government in Canada is adequately resourced to drive diversification in a region?', a local City of Oshawa official (Interview Code FGH32) responded in a way that views diversification as primarily a market responsibility, aided by some major public investments at the federal and provincial scales:

> I would say no … what I've learned over the years is that what we really need from the senior levels of government to do is probably to help deal with more of our fundamental … pieces, and not so much kind of the 'economic diversification' piece. You know, Canada is very much a market-driven kind of country, so we're looking at the private sector to do that (diversify). … The feds have just been absent for most of my adult life in terms of municipal support other than the odd infrastructure program that comes up … We don't have a national transportation strategy; we don't have a national housing strategy; we don't have a national urban development strategy, that sort of thing. The feds have been quite absent

> from that. I mean sure every now and then, there's some economic grants, paying for some infrastructure stuff. But when we start looking at some of those key fundamentals, that's where we really start to lag. I mean, I put the province in the same boat.

For this informant, the lack of support from the higher tiers of government and inadequate resources for municipal governments conditioned the view that diversification in Canada was a market-driven process. The assertion that support from higher tiers of government was limited was justified. When asked if Oshawa would be receiving targeted place-based provincial and federal support (as opposed to people-based programs) to deal with deindustrialisation, an Ontario Provincial Government official made the answer clear (see also **Chapter 6)** (Interview Code ABA12):

> I think Oshawa is going to be – not left to its own devices – but left to figure out how they manage and negotiate and manoeuvre the existing sort of programs and incentives that are in place to reignite, revitalize and essentially re-define their economy.

Devolution has meant that municipalities should be 'empowered' to deal with emerging problems locally. However, ultimately, by its own admission, the Region of Durham has fallen short of neighbouring municipal governments in reaching Ontario's population, business and local employment-population ratio targets (Region of Durham 2019d). Further, Oshawa has lagged significantly behind a similar positioned city in Geelong.

The case of Oshawa highlights that devolution may not engender resilience or provide municipalities with the resources to successfully drive diversification, because the burden of extra service provision and their inability to raise progressive taxes inhibits the capacity for positive path creation. Durham/Oshawa does not appear to have any significant 'competitive advantage' over a place with less autonomy and fewer fiscal resources like Greater Geelong.

Market-Led Diversification in Oshawa

Since Canada is a market-based system, local actors in Oshawa tend not to question the perspective that diversification is a market process and seldom embrace an explicit state-led development agenda. When asked who was driving diversification in

Oshawa, firms or government, a Durham labour market expert (Interview Code XYX47) replied that it was a result of private investment:

> I do think the firms are leading the charge.

When asked the same question, a local business expert's response (Interview code QWQ24) was that it was municipal government's role to facilitate private investment:

> I think it plays all those parts. I think it's us being in good constant contact with the economic development (department) and mayor and council to let them know that we want to see them grow and diversify. And stop building so many houses and start pushing on the business piece … to encourage and to attract business and find incentives to bring them to Oshawa'.
>
> When asked 'What sort of incentives?'
>
> Maybe development charges, maybe showing a shift in that. And maybe, whatever that may look like …I think it all comes down to money for development. And I think, so for instance the development charges, maybe they do a reduction.

From this viewpoint, the municipal government had a role in facilitating diversification, not through state-led initiatives, but from lowering taxation to enable municipal government to get out of the way of the market and to ensure that the allocation of land for residential real estate did not crowd out productive capital investment.

Yet, the importance of direct public investment to Oshawa is also clear, even when framed in 'competitive' terms. Fierce intra-regional competition between Oshawa and Whitby over the location of a future hospital is a testament to an implicit understanding among Oshawa stakeholders that public investment generated potential employment multipliers (Szekely 2019). Oshawa framed its claim to the hospital around enhanced linkages with the local university, which meant it was leveraging prior public investment to compete for more (Szekely 2019). As outlined in **Chapter 4**, the recent diversification of Oshawa's economy has been facilitated to a large degree by public sector investment in health and education. The Oshawa City official (Interview Code FGH32) acknowledged that the city was, in fact, reliant on public sector investment,

which had helped stabilise the economy, even if private investment attraction was the current overarching strategy:

> I think that being a little bit too reliant on the public sector is – I'm not sure it's a threat – but it's not as healthy as it could be, you know, just put it that way. … What we've done is add a whole lot of stability. Now it's really, from my perspective (about) how do we re-gear and gear up on the private sector side. 'Cause, you know, that's the real opportunity for us. Provincially or federally we're probably gonna be a little on the flat side, in terms of public investment, for a while.

Again, this market perspective was underpinned by the perception that public sector investment in the future would be limited, meaning that a focus on private capital investment was not a purely endogenous 'choice'. Market-led growth is not necessarily preferred by local actors, but they see it as the only realistic option in a context devoid of centralised development policies. The emphasis on market-based diversification suggests that local actors are responding to the expectation of limited support from higher tiers of government, given existing institutional realities in the devolved Canadian context, rather than being opposed to top-down, central or intermediate state-led diversification initiatives in principle.

State-led Geographical Decentralisation in Oshawa

The contemporary structure of the Oshawa economy still reflects the effects of Spatial Keynesian de-concentration policies from an earlier era. In 2019, one of the largest employers in Oshawa (with 1,000-1,250 employees) was the headquarters of the Ontario Ministry of Finance (formerly the Ministry of Revenue), which relocated from Toronto to Oshawa in 1982 (Region of Durham 2019b). At the time, this brought 1,600 jobs into the Oshawa community (Hicks & White 2015). This structure exists because Oshawa was subject to Ontarian state-led geographical decentralisation policies. These 1980s de-concentration policies had been sponsored under the 'Go East' policy of the Davis Progressive Conservative Government (1971-1985). The Finance Ministry relocation decision had been tied to the formation of the Durham Region and born of 'some pretty hardnosed bargaining' described at the time by an Oshawa official (Legislative Assembly of Ontario 1983) as follows:

> 'If the province wanted a regional government in that area, the province had damn well better come across with some incentives locally. Out of that

> was born the concept of Go-East. One of the first series of discussions was around the movement of some government offices out of downtown Toronto into that region and it was finally arrived at that it would be a Revenue building'.

The physical relocation of government offices would later become a core policy agenda of the Liberal Peterson Government (1985-1990) and the NDP Rae Government (1990-1995). The broadly Keynesian spatial equalisation measures of these successive initiatives targeted disadvantage in Northern Ontario, but also included various ministry and departmental relocations to deindustrialising or peripheral areas in Southern Ontario, such as Peterborough, Guelph, St. Catharines, Bradford and Orillia (Hicks & White 2015; White 2000).

However, it is important to note that throughout the period the relocation of the Ministry of Revenue was being discussed, planned and built, Oshawa remained a booming automotive hub. The total number of manufacturing jobs did not decline until after the 1986 Census, and Oshawa's unemployment rate was relatively low compared to other areas of the province (Government of Ontario 1976). The 'Go-East' policy dynamic in Oshawa was not an imperative related to short-term, crisis circumstances, but rather to manage long-term growth.

When asked if public sector growth, including growth in the health and education sectors in recent years, responded to deindustrialisation, a City of Oshawa official (Interview Code FGH32) replied:

> I think it was … not related in many ways to economic shifts. There's always a sense of the east is ignored, right? There's a certain chip on Durham Region's shoulders, I think. And so, when we look at sort of growth patterns across the GTA (Greater Toronto Area), they've always tended to have more of a western focus. And then you could make some claim with some validity that … it's infrastructure investments and public investments have always shifted more west than east. So, in many ways, I think a lot of those concerted efforts were more of a fair share kind of play than it was in response to any economic imperative.

In other words, public sector relocation in the form of the 1980s 'Go East' policies or more recent investments in Oshawa's health and education sectors, was driven, in part, by regional equity considerations, but not by crisis considerations.

Physical decentralisation, as a Keynesian spatial equalisation measure, first came under budgetary constraints during the Rae Government and the policies would be completely abandoned by the Harris Government's 'Common Sense Revolution' of 1995 to 2002 (White 2000). The Harris Government, instead, focused on further strengthening the Toronto core (Addie 2013). According to Boudreau et al. (2007, p. 47), 'despite an extensive history of Spatial Keynesianism, Ontario has also at times been known for its voters' fear of big government, something that was particularly exacerbated during the years of aggressive neoliberalism under Mike Harris'. This meant that state-led diversification agendas fell out of favour at the provincial level. Similarly, while Keynesian spatial equalisation policies dominated Canadian federal policy agendas in the 1960s, by the mid-1980s, these policies would largely be abandoned, including the policy of relocating federal public sector jobs (Savoie 2003).

In recent times the Government of Ontario outlined growth and density targets in the *Growth Plan for the Greater Golden Horseshoe*, but there has been no major push to relocate ministries or agencies to disadvantaged or peripheral areas. Movements to decentralise from Toronto and Montreal, while periodically persuasive, have not endured, because Canadian policymakers are still wary of acting contrary to market and agglomeration forces. As Higgins and Savoie (1994, p. 3) put it, 'most people have been leery of killing any geese that were laying any golden eggs'.

The Geelong Experience

In contrast to Oshawa, Geelong has benefited significantly from continued Federal and State geographic decentralisation initiatives that have sponsored the establishment of multiple public sector agencies in the area. This section seeks to put the State's actions into historical context and demonstrate how the interventionist, state-led diversification path gained legitimacy.

State-led Geographic Decentralisation in Geelong

Geographic decentralisation has come under significant attack from influential market perspectives in Australia (Daley & Lancy 2011; Productivity Commission 2017b). Yet, this is the form of decentralisation that the conservative Australian government has used to drive regional diversification. The overarching regional plan for the coming

decade, *Regions 2030: Unlocking Opportunity* (Australian Government 2017b, p. 8) declares, 'the Australian Government's commitment to the structured decentralisation of Australian Government jobs from Sydney, Melbourne and Canberra will benefit regional Australia through the creation of local jobs and career paths, increased economic diversification and the stimulation of economic growth'. This has received bipartisan support. The Victorian State Labor Government has also embraced the same policy of locating public sector jobs outside Melbourne in order to 'diversify local economies' and 'revitalise towns' (RDV 2020b). This decentralisation agenda would later be considered a cornerstone of Geelong's 'successful' diversification and overall resilience in response to deindustrialisation (Johnson et al. 2020).

At the Victorian State level, geographic decentralisation has become a political imperative. The legitimacy of the approach hinges on events of more than 20 years ago, when in 1999 the market-fundamentalist Kennett Government (1992-1999) was defeated unexpectedly. The Kennett Government's perceived neglect of regional and rural areas resulted in a number of regional seats swinging against the Coalition government in the 1999 election (Correia & Denham 2016). The swing concentrated in the regional towns of Geelong and the Latrobe Valley, where the Kennett government's policies of privatisation and laissez-faire structural adjustment were blamed for poor socioeconomic outcomes (Weller & Tierney 2017). This laid the foundation for subsequent regional development policy.

The incoming Bracks Labor administration (1999-2007) adopted a policy of geographical decentralisation. A series of overarching State-wide plans – including *Moving Forward: Making Provincial Victoria the Best Place to Live, Work and Invest; Melbourne 2030* and *Melbourne @5 Million* – entrenched this policy and the State's commitment to create a 'networked cities' model. It would promote growth in the satellite or peripheral cities of Geelong, Ballarat, Bendigo and the Latrobe Valley, while easing service pressures on them through coordinated planning. This model continued into the successor Brumby Labor Government (2007-2010), with plans such as the *Ready for Tomorrow: A Blueprint for Regional and Rural Victoria* (Correia & Denham 2016). Agglomeration diseconomies (congestion, rising land prices, inadequate infrastructure etc.) resulting from Melbourne's rapid growth have underpinned these decentralisation

initiatives, which were aimed at diverting growth from the central core (Parliament of Victoria 2013b).

The Bracks Government's implementation of geographical decentralisation included the relocation from Melbourne to Geelong of the government's Transport Accident Commission (TAC), announced in 2005. A former advisor to the Bracks Government (Interview Code RER29) explained the purpose of these decentralisation initiatives was to instil regional 'resilience' in response to potential economic shocks.

> Creating those decentralised structures provided a level of resilience in those communities. So that … you knew you'd have economic downturns and there would be changes in industries that would occur, and always had. If you can decentralise some of the government functions then you've got jobs and a string of income coming into that community that builds a resilience to be able to continue in the downturn times, and reshape itself in terms of upturn for new forms of employment.

The advisor noted that this was a Spatial Keynesian policy, despite a neoliberal approach to local economic development ostensibly being the dominant paradigm at the time:

> What we witnessed is the tension between the broadly Keynesian approach of stimulus with the new liberalism – neoliberalism … In some ways it is quite remarkable that the more Keynesian view has lasted as long as what it did. It manifests in a range of ways … trying to get government agencies out of the capital city to locate the Transport Accident Commission down at Geelong, those sort of moves. … (It) makes a very big difference to the viability, and the way in which it creates a multiplier effect in those communities.

Linking the logic of decentralisation to using health and education jobs to create multipliers, the former advisor also suggested that these Bracks Government policies amounted to 'positive discrimination', which aimed to enhance spatial equality.

> When you take all of the human service investments that have been made, education and health being the two largest obviously, then you can really influence broader economic development opportunities and ways in which then you can get other industries to move into those communities. … There was positive discrimination in all sorts of ways. The TAC (relocation to Geelong) being a very clear example, where that was opposed by everyone, from the people that worked for the TAC, to people who

> thought “this is a silly way of subsidising industries or government departments to move out”, but really it’s been acclaimed as a great success.

While for Canadian policymakers, devolution was advocated to engender resilience and market-led diversification, the policy of the Victorian government in Geelong was to use the de-concentration of public sector services, as well as investments in health and education, to promote regional resilience and diversification. The relocation of the TAC to Geelong subsequently became an ‘anchoring’ enterprise that attracted other insurance, health and disability-related services. On top of the TAC, Geelong would acquire WorkSafe Victoria, the National Disability Insurance Agency (NDIA) and the Australian Bureau of Statistics’ (ABS) Data Acquisition Centre.

Geelong enjoyed uninterrupted, bipartisan decentralisation support from successive governments on both sides of politics. The Napthine Coalition Government (2013-2014) sponsored the establishment of the newly formed (federal) NDIA in Geelong and Napthine later praised the Bracks Government’s earlier decentralisation efforts (Napthine 2018). The NDIA is a Federal Government agency. Its location in a regional area bucked the recent trend, since the relocation of Australian Public Service (APS) jobs outside the nation’s capital cities had decreased since the election of the Abbott Coalition Government in 2013 (APSC 2019). In December 2013, there were 21,929 APS employees located outside the nation’s eight state and territory capitals, but by December 2019, this had shrunk by 8% to 20,272, while the total public service contracted by 11% (APSC 2019). In Victoria, the number of APS jobs increased by 713 jobs in the same period (APSC 2019). Since 2004, APS jobs in regional Victoria had increased by 58%, or 1,569 jobs, while APS jobs increased by only 12% nationally (APSC 2019). Geelong gained 1,147 APS jobs, representing 73% of Victoria’s net increase. APS jobs in Geelong essentially doubled between 2015 (810) and 2016 (1,615). In April 2016, the new (federal) ABS Data Acquisition Centre opened in Geelong, creating an additional 300 jobs.

The Napthine Government also extended state-led geographical de-centralisation in its 2014 *Plan Melbourne*, which called explicitly for redirecting part of Melbourne’s booming growth to regional cities (Victorian Government 2014). Geelong’s *G21 Regional Growth Plan* was coordinated with this document (Correia & Denham 2016). *Plan Melbourne* framed excessive Melbourne-centric growth as an urgent planning problem,

pushing decentralisation further than previous plans, in which regional initiatives had complimented Melbourne-driven growth. In essence, it pursued a decentralised, polycentric approach to managing Victoria's growth.[12] The incoming Andrews Government (2014-present) modified the Plan in 2017 to temper the expectations of regional growth in some areas, but Geelong remained a priority (Correia & Denham 2016; Victorian Government 2014, 2017).

The Australian Federal Government embraced the decentralisation approach in 2017 with the launch of its 'decentralisation agenda'. It encouraged the establishment of a Parliamentary Select Committee on Regional Development and Decentralisation, with terms of reference including to report on the 'decentralisation of Commonwealth entities or functions, as a mechanism to increase growth and prosperity in regional areas' (Parliament of Australia 2018, p. xiii). Although the terms of reference required that the Select Committee (Parliament of Australia 2018, p. xiv) consider 'different models of decentralisation', these primarily related to the process of spatially relocating public service departments and facilitating firms to relocate. The report's first sentence makes it clear what is on the agenda (Parliament of Australia 2018, p. iii):

> 'As Australia battles to deal with its centralised population and the congestion caused by having over 40 per cent of its population living in its two biggest cities, the realisation is stark; we have to take a different approach to growing our regions if we want to achieve a different outcome'.

The argument was clear – Australia's two major cities are becoming overpopulated, and a method of fostering population growth in lagging regional cities was to direct public sector away from the core cities and into the periphery of regional cities.

The Select Committee Report (Parliament of Australia 2018, p. 78) chose Geelong as one of its case studies of merits of decentralisation, in the process labelling Geelong a 'social insurance' hub and noting it has used this cluster to advocate for the relocation of other similar agencies (Parliament of Australia 2018, p. 78).

[12] In Australia migration is federal responsibility, and Federal governments since the Global Financial Crisis have encouraged migration and the international student industry centred in Melbourne. State government have no capacity to control the inflow but are responsible for accommodating growing populations.

Most importantly, decentralisation efforts in Geelong were not framed as simply about planning or equitable growth, as they were in Oshawa, but were tied by politicians to plant closure crises such as Ford and Alcoa. Premier Napthine explicitly promoted decentralisation as a policy response to the Ford closure, by contending that 'Now with this (Ford) decision it makes it more imperative that the Federal Government support the headquarters of the (NDIA) here' (cited in Langmaid 2013).[13] Napthine responded directly to concerns that the NDISA wouldn't provide jobs directly to retrenched workers by stating that it would be a 'shot in the arm for Geelong at this difficult time' and arguing that the relocation would create multiplier jobs throughout the economy (cited in Donovan 2013). Then Labor Prime Minister Julia Gillard would sign off on the establishment of the NDIA headquarters in Geelong within two weeks of the Ford closure announcement, telling Geelong residents 'You deserve it' (cited in The Sydney Morning Herald 2013). The move was supported by then Federal Opposition Leader Tony Abbott, who also accepted the logic of decentralisation to aid Geelong, noting 'The people of Geelong have been through a lot lately…There's the impending Ford closure, there's the risks to Shell and Alcoa' (cited in the Sydney Morning Herald 2013). The bipartisan commitment to geographic decentralisation would later be credited by Napthine (2018) for helping Geelong recover from the two major manufacturing plant closures (Ford and Alcoa).

Institutional Decentralisation and Market-Led Diversification in Geelong

The Parliamentary Select Committee on Regional Development and Decentralisation viewed Geelong as 'a successful case study of decentralisation', which it linked to locally instigated diversification: 'Having previously been a manufacturing centre, Geelong has *successfully transformed itself*' (Parliament of Australia 2018, p. 78, emphasis added). This framing of endogenous-driven diversification – which belies the report's central focus on the impacts of top-down, redistributive, geographic decentralisation – highlights the curious usage of the term 'decentralisation' as a synonym for state-led regional development in Australia, despite the term usually referring to bottom-up, market-oriented development agendas (Bardhan 2002).

[13] At this time the NDIA was referred to as the program it administers, the NDIS (National Disability Insurance Scheme).

In reality, there is limited evidence to support the idea that endogenous forces are responsible for Geelong's success (see **Chapter 6**). In Victoria, there has been minimal devolution of fiscal power or service responsibilities, although council amalgamations under the Kennett Government saw local governments, such as Greater Geelong, achieve increased fiscal capacity through increased scale.

That Geelong's growth success appears to have occurred independently of its local municipal capacities is reinforced by the fact that the Victorian State Government declared it essentially incompetent before replacing it in 2016. After allegations of dysfunction within Geelong City Council, the Victorian State Government pushed through legislation to sack the entire Council. In part, this responded to allegations of a culture of bullying and harassment, but it was also justified because the Council was 'lacking the leadership required to manage Geelong's major economic challenges' (Victorian Government 2016b). An independent Commission of Inquiry into Greater Geelong City Council report, which formed the basis of the Victorian Government's (2016a, p. 9) decision, further cited socioeconomic disadvantage as a reason for intervention:

> 'The City has a number of strengths, including a large and diversified economy, quality health and education services, good innovation and research capabilities and transport accessibility. However, the City has been hard hit by closures in its manufacturing sector, has significant structural transition issues, pockets of socio-economic disadvantage and high levels of youth disengagement'.

The Victorian Government used the socio-spatial polarisation that had emerged in Geelong (and by extension, the state), as a result of the city's diversification away from manufacturing, as grounds for top-down intervention.

Regardless of the merits of allegations of dysfunction, this assertion ignored that Greater Geelong's relative fiscal and institutional powers gave it minimal capacity to address entrenched structural socioeconomic problems. The State Government's ability to simply remove and replace the council highlights its lack of autonomy. Nonetheless, the intervention can be understood as a tacit admission that, from the Victorian State Government's perspective, addressing industrial structural change and socio-spatial disadvantage in Geelong was a State and Federal Government responsibility. Even if it could initially blame the lower tier for the problem, this performance licensed the State to

engage in its own state-led agenda to engender a more 'successful' diversification, which, in part, would be facilitated by its own conceptualisation of decentralisation.

The awareness of a top-down, state-led diversification agenda in Geelong means local actors appear to have internalised place-based competition through a 'competitive lobbying' agenda for public funds rather than one focused on private capital. Geelong's bottom-up lobbying agenda aims explicitly to capture increased public sector investment by fusing local aspirations to Victorian State Government and the Federal Government policies priorities and decentralisation agendas. Inward investment attraction strategies have taken on a different form than those of Oshawa, where potential lobbying was stifled by the lack of interest from higher tiers of government and thus more focused on market-oriented private capital attraction (see **Chapters 6 and 7**)

In 2013, the Geelong City Council approved the formation of a new economic development unit named Enterprise Geelong. Its main purpose was investment attraction, and the investment it was seeking was heavily geared towards vertical lobbying. Enterprise Geelong portfolio holder Cr Bruce Harwood stated that the division 'will work hard to attract state or federal government agencies based on the successful model of the TAC relocation' (City of Greater Geelong 2013b). He also highlighted government investment at Avalon Airport and the Geelong Port as key goals. The NDIA announcement a few weeks later could be claimed as a successful implementation of the 'TAC model'.

Thus, Geelong has integrated into a state-led development paradigm by matching bottom-up lobbying with the top-down state planning agenda. This is made clear by a section on the G21 website, simply titled 'Our Achievements' (G21 2018), which lists off major infrastructure projects, including a $370 million Federal and State Government 'City Deal' and other state and federally funded initiatives. There is no mention or caveat that these programs may have been part of existing top-down agendas (even though Victorian State Government stakeholders are represented in the G21). That private firms are represented in this concerted lobbying effort shows that the regional growth coalition has a consensus on capturing increased public sector investment. While lobbying for public investment is part of the story, it ignores that these investment decisions are ultimately

made by higher tiers of government that are pursuing their own regional development agenda in Geelong. As noted by a local analyst (Interview Code JKJ67):

> There was this sense that Geelong has this very long history as an autonomous place, that it's going gangbusters now, with its own initiatives. Even though they think they are their own initiatives – (but) they're not, they're obviously state and federally funded. There's so much government intervention. So, one of the reasons Geelong is doing really well at the moment has got very little to do with what Geelong has done, I mean this is actually stuff from outside, but it is also a consequence of successful Geelong lobbying.

As identified by Weller and Tierney (2017), vehicles of new regional governance, such as the G21, do not stand in contrast to top-down, technocratic spatial planning, but are often integrated into it. The G21 represents an example of 'governance decentralisation' superficially, but in reality, this body operates in conjunction with the agendas of the Victorian State Government. This highlights that while 'governance decentralisation' can represent a form of legitimate decentralisation, this is dependent on the degree to which 'institutional decentralisation' has occurred.

Some Geelong stakeholders appear perfectly attuned to the fact that de-concentration efforts have been central to the city's diversification and adaptation. When asked: 'When you think of economic diversification from a regional perspective, what would you say that would mean?', a local Geelong labour expert (non-Government) (Interview Code IOI88) said:

> Well the growth. … I can speak about Geelong because Geelong's a huge growth area now … probably the fastest growing in Australia at the moment. The diversification by the State Government to underpin the growth – and yes, there's gaps and there always will be with infrastructure et cetera. But really, bringing down (to Geelong) Worksafe, NDIS(A) – obviously we were the pilot area, bringing down the head office there – TAC, the new Epworth hospital, the huge construction industry, and the rail infrastructure building, which is to come, and Avalon (airport). They are all positive moves to help … Geelong (move from) being a blue-collar manufacturing area to become a people-centred service industry city.

From a local perspective, the state-led, de-concentration efforts were clearly a success.

The 'Imagined Unit of Competition'

If the optimal approach to regional development is empowering local actors, then the only explanation for divergent growth outcomes in Geelong and Oshawa could be that Geelong possessed some qualities that made it more 'competitive' than Durham-Oshawa. The limited evidence that can be drawn upon leads to the opposite conclusion. This research found no evidence that individual competence or collective actor networks at the municipal/regional level can explain Oshawa's lack of growth relative to Geelong. Siemiatycki (2013), who although critical of the policy 'orthodoxy' displayed by officials at the Region of Durham and the City of Oshawa, nevertheless found local and regional development actors to be professional and strategically sophisticated. This research found no evidence to dispute this assertion. Non-government stakeholders in Oshawa were largely satisfied with regional/local government performance, instead suggesting that it was provincial and federal engagement and leadership in the region that was lacking. A Durham region labour expert (Interview code XYX47) explained,

> With respect to local levels of government municipal and regional it's much more of a partnership but at the provincial level it's much more parental where they just need to tick a box off. But they really don't want to sit down and, you know, have a frank conversation about where we need to go, and that's disappointing.

When asked 'is there any particular tier (of government) that is more helpful?', a local labour official (Interview Code DYT39) drew a distinction between the proactive stance of local officials and the reactive orientation of provincial and federal officials.

> Leading into 2016, so we went through … one big collective bargaining round. … Leading up to that the City of Oshawa was a big supporter of moving and trying to attract General Motors to build electric vehicles, (to) make a future investment here. … We were prepared to be a place to do that. Provincially, and federally it seems that they're responding.

Moreover, this research found that the 'orthodoxy' evident in the local development agenda in Oshawa was indeed in part due, as Siemiatycki (2013) suggests, to the willing embrace of prevailing economic development paradigms. However, this can more accurately be characterised as a function of structural, spatial and institutional determinants that engendered conformity in economic development priorities (see

Chapter 7). Ultimately, local stakeholders were constrained in their policy options by Oshawa's position within an Ontarian competitive regional milieu.

Geelong, on the other hand, saw its entire council sacked after being accused of incompetence by the Victorian State Government. Some Geelong informants made a point of stressing the difference between the incompetence of the (elected and unpaid) local councillors and the competencies of (unelected but well-paid) development professionals at the City of Greater Geelong and the G21, but critical perspectives remained. Instead, perceptions of local government were negative while perceptions of Victorian State Government initiatives were relatively positive (see **Chapter 6**). Governance decentralisation and stakeholder collaboration is more evident in Geelong than in Durham/Oshawa. While local stakeholders in Oshawa do collaborate on certain crisis initiatives – such as local government and business representatives banding together to 'calm the waters' after private capital flight was threatened after the (initial 2018) GM closure – more formal collaborative taskforces to address specific development problems are notably absent (see **Chapter 6**). Moreover, while actor networks in Geelong worked hard to brand the region and attract private investment, this research has found local networks to a large extent coalesced around a strategy of lobbying higher tiers of government for public investment. The overall bottom-up regional development strategy was in fact largely a process of integration with a top-down state government placemaking agenda.

Ultimately, institutional decentralisation has not made Oshawa more 'competitive' than a region such as Geelong, despite the latter's relative lack of autonomy and fiscal capacity. This was not due to Geelong's internal competencies, but in spite of them. This shows that reducing the two regions to 'imagined units of competition' (Lovering 1999, p. 392) would divorce them from real-world, institutional realities and falsely attribute exogenous causal mechanisms to endogenous causes. This suggests that endogenous development and competitive regional explanations for divergences in regional growth patterns are fundamentally inadequate.

Outcomes: State-Led Diversification

The histories of geographical decentralisation have important implications for patterns of employment growth in Geelong and Oshawa. While the extent of multiplier effects may be disputed (Faggio 2016; Productivity Commission 2017b), what is indisputable is that geographical decentralisation by definition has brought additional public sector jobs, and this has coincided with significant employment growth in other industries in Geelong compared with Oshawa. Between 2006 and 2016, public administration employment among Greater Geelong's usual residents increased by 1,615 jobs. In Oshawa, by contrast, only 200 additional public sector jobs were created among the City of Oshawa's usual resident labour force in the same period (ABS 2007, 2017; Statistics Canada 2007, 2017). The shift-share analysis in **Figure 16** highlights that direct public administration growth in Geelong far exceeded expected growth relative to Australia and Victoria, while the opposite is the case for Oshawa relative to Ontario and Canada. Oshawa has fallen significantly behind the province and national rates of growth of these jobs. This would suggest that public sector activity has been a crucial determinant of the different growth trajectories in the two locations.

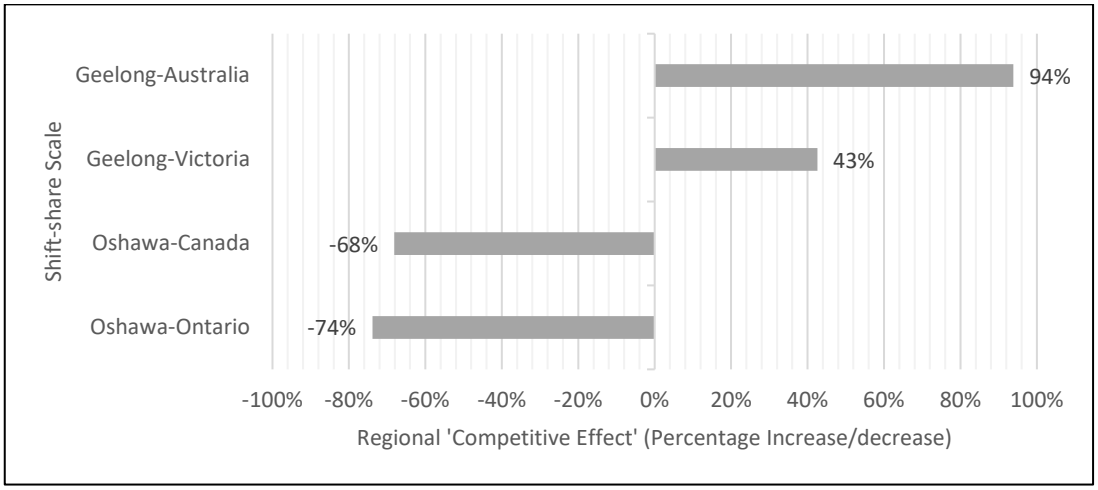


Figure 16: Shift-share Public Administration, Oshawa and Greater Geelong, 2006-2016

Note: Shows the regional 'competitive effect' (percentage increase/decrease) on public administration employment in Geelong and Oshawa relative to federal/intermediate scales. (Sources: ABS 2007, 2017; Statistics Canada 2007, 2017)

In Geelong, even the 10 most socioeconomically disadvantaged suburbs (see **Chapter 8** for definition) have seen public administration job growth exceed Australia-wide rates, as shown in **Figure 17**.

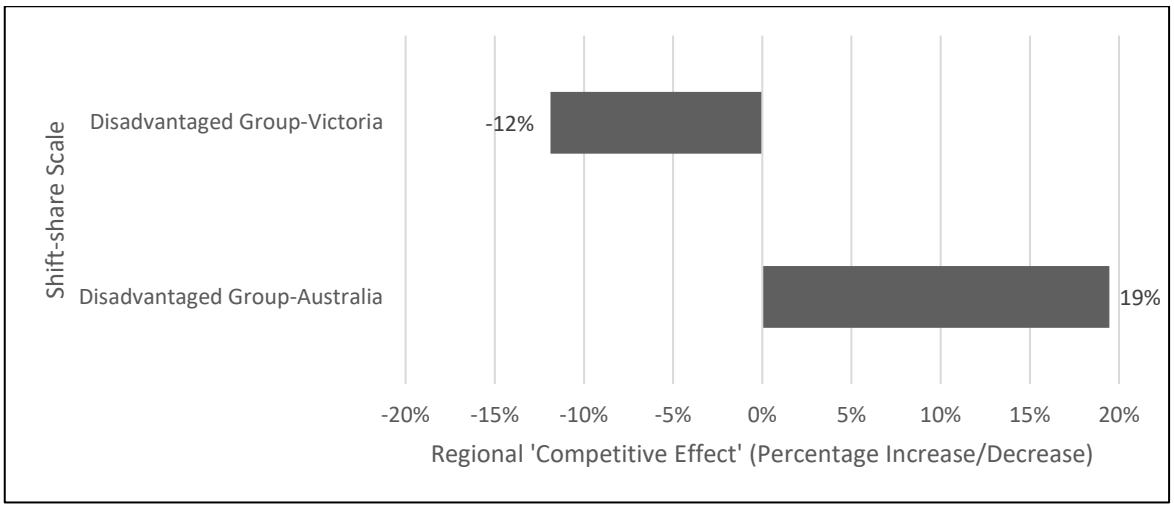


Figure 17: Shift-share Public Administration in Geelong UCL Disadvantaged Suburbs, 2006-2016

Note: Shows regional 'competitive effect' (percentage increase/decrease) on change in public administration employment in Geelong's 10 UCL IRSAD 1 suburbs (see Appendix B). (Sources: ABS 2007, 2017)

Overall, geographical decentralisation has been associated with sustained employment opportunities and growth in both locations. Devolution has failed to deliver identifiable growth benefits in Durham and Oshawa, while de-concentration has occurred in tandem with, and stimulated, significant growth in Geelong. De-concentration is associated with more successful diversification and resilience than devolution. The unevenness of this growth, and the implications of resource-constrained state selectivity, will be discussed in the next chapter.

Conclusion

The concept of decentralisation has institutional, discursive and policy significance. This chapter identified four modalities of decentralisation and examined the contrasting ways they manifest in Oshawa and Geelong. The discussion demonstrated that in Oshawa decentralisation involved a shift in *responsibility for* government services, whereas in Geelong decentralisation referred to the *physical relocation of* government services. The chapter has demonstrated that locally these outcomes reflect quite different understandings of the role of the public sector in development. These differences had material effects on diversification of each place.

Oshawa's diversification process has officially, and superficially, followed the 'orthodoxy' of endogenous development and market-led change. The combination of

devolved structures of government (i.e. institutional decentralisation) that are supposed to empower municipal governments to facilitate their own economic trajectory, a commitment to market orthodoxy and competitive regionalism where a degree of socio-spatial divergence is tolerated, and a reticence of higher tiers to government to deploy place-based policy initiatives, all work to limit Oshawa's capacity to expand a public sector economy. Nonetheless, the city has been dependent on public investment in health and education to facilitate its transition from automotive manufacturing.

Geelong, in contrast, has been the beneficiary of major initiatives by higher levels of government. The Australian and Victorian Governments have deployed neo-Spatial Keynesian stimulus and demand-centric placemaking approaches as part of a top-down, state-led decentralisation and diversification agenda. However, these practical interventions are often couched in the language of the dominant frameworks of market orthodoxy, endogenous development or competitive new regionalism. **Chapter 6** reveals that supply-side initiatives in the form of direct enterprise assistance and subsidies to private firms still dominate other aspects of the crisis-response, highlighting that this state-led diversification agenda exists uneasily within market-dominated discourse.

Ultimately, this chapter finds that place-based, de-concentration initiatives can be a means to promote diversification. This suggests that the divergence in growth outcomes between Oshawa and Geelong might, in part, be attributed to the differing levels of central and intermediate state intervention in the form of geographic decentralisation. However, the next chapter reveals that these de-concentration initiatives were only one aspect of state-led diversification in Geelong.

Chapter 6 - Crisis as an Opportunity for State-Led Diversification

Introduction

This chapter focuses on the various assistance schemes that were deployed as direct responses to mass retrenchment crises, and the extent to which they can explain divergent economic growth trajectories in Oshawa and Geelong. The key thematic of this chapter is **agency** as it explores how different policy approaches to diversification can determine different outcomes. The two places produced different combinations of spatially neutral 'people-based' interventions, such as labour adjustment programs, and spatially focused 'place-based' interventions, such as public infrastructure investment and reallocating public sector employment. Whilst policymakers in Oshawa and Geelong both pursued placemaking agendas through public investment in education, health, advanced manufacturing, research and development, and transport infrastructure, and both implemented similar labour adjustment programs in response to automotive transition, Geelong received far more direct investment from higher levels of government.

The evidence presented in this chapter suggests that place-based interventions can aid labour market recovery and growth in response to economic shocks. This adds further support to the growing literature questioning the 'conventional wisdom' of orthodox, spatially neutral policy prescriptions, highlighting the value of more active state involvement and place-based policies (Bailey et al. 2019a). This chapter highlights the flaws in orthodox arguments against place-based policy. Its analysis shows that whilst 'people-based' re-training and upskilling initiatives may be effective at the individual level, without sufficient regional capacity to absorb retrenched workers, these programs are correlated with declining regional jobs-to-population ratios and outmigration (as retrenched workers migrate or commute elsewhere for work).

To develop these arguments, the next section introduces the different approaches to place-based policy in Australia and Canada. The third section considers the case of Oshawa, where place-based policies were largely absent. The fourth section documents the multiple place-based interventions in Geelong. The conclusion is that Geelong's approach, characterised by significant public investment and place-based interventions, was more effective in facilitating regional diversification than Oshawa's market-oriented

and ‘people-based’ approach. Nonetheless, Geelong’s scattershot approach to structural adjustment and placemaking failed to address – and possibly exacerbated – the core underlying issue of deindustrialisation, namely socio-spatial polarisation. This suggests a need for more policy experimentation and research to identify best practice interventions.

Place-Based Policy in Australia and Canada

Australia and Canada both embrace ‘place-based’ policy settings in a limited sense. This section draws out the main similarities and differences in approach. This task is complicated, from the outset, by differences in governance arrangements and different understandings of regional development.

In Australia, the term ‘region’ refers almost exclusively to sub-intermediate (that is, sub-state) spaces (Brown & Deem 2016), and the term ‘regional city’ refers to a non-capital city. In Canada, the term ‘region’ often refers to multiple provinces combined (Higgins & Savoie 1994). Hodgins (1978, p. 7) points out that ‘no Australian state or group of states is a region in the North American sense of the term’. This difference is exemplified in the structure of federal regional development agencies of each country, where three of the six Canadian Regional Development Agencies (RDAs) encompass multiple provinces or territories, whereas none of the 52 Australian Regional Development Australia (RDAs) Committees traverse state/territory boundaries. This difference makes what Australians refer to as ‘regional development’ essentially synonymous with place-based equalisation policies aimed at peripheral regions outside the core growth areas of capital cities. RDAs are considerably more generously funded in Canada than Australia.[14] The Canadian and Australian national regional development contexts are both conditioned by global institutions, in particular the World Trade Organisation’s (WTO) proscription of subsidies to industry (both Australia and Canada joined the WTO in 1995). Regional development programs are potentially subject to the

[14] This includes $640 million in planned spending by FedDev Ontario alone in 2016-2019 (Bradford 2017), while the total federal funding for Australia’s 52 separate Regional Development Australia Committees (RDAs) amounted to less than $18 million in 2015-2016. For Victoria, the federal sum allocated was less than $3.5 million to service the state’s then nine RDAs (Australian Government 2016b).

same WTO scrutiny as federal industry programs (WTO 2019), which can constrain placed-based agendas as well as spatially-neutral industry policies.[15]

Both Australia and Canada have embraced 'new regionalism' as the overarching approach to sub-intermediate economic development. New regionalism was a response to the 'economic rationalism' of the 1980s and 1990s that in Australia saw the Federal Government largely withdrawing from regional policy and state governments, often spurning even token measures to respond to regional economic shocks (Collits 2014; Tonts & Haslam-McKenzie 2005). New regionalism in Canada similarly emerged after a market-based revolt against top-down government planning and was in turn tempered by growing support for place-based policies and the types of coordinated, collaborative 'bottom-up' regional planning and adjustment programs characteristic of the later new regional era (Bradford 2010, 2017).

The Australian Government's support for place-based policies has ebbed and flowed with changes from Labor to Coalition governments. People-based Keynesianism dominated post-World War 2 conservative Australian federal governments until the 'neoliberal' turn, although certain Spatial Keynesian policies were implemented, particularly during the Whitlam Government (1972-75) and early years of the Hawke government (1983-1991) (Beer 2015; Caunce 2017; Collits 2014; Cook 2008; Higgins & Savoie 1994). The new regional policy agendas favoured by Coalition governments, which have been in power since 2013, are consistent with the recommendations of both regional and economic policy agencies that pay lip service to 'place-based policy', but focus on enhancing regional competitiveness rather than top-down interventions (see Productivity Commission 2017b).

The 'conventional economic wisdom' (Aither 2014, p. 49) in Australia – espoused consistently by Australia's Productivity Commission and influential policy think tanks, such as the Grattan Institute (Daley & Lancy 2011) – maintains that place-based government-led interventions in regions impacted by structural change do not produce identifiably positive outcomes, that they are inefficient, and that they represent a distortionary,

[15] Nonetheless, direct financial assistance to automotive firms has been used extensively in Australia and Canada (including billions of dollars in bailout funding for GM provided in 2009 by the Canadian and Ontario governments) to encourage private investment, or respond to potential crises of disinvestment, with both national and local implications (see Productivity Commission 2012, 2014; Siemiatycki 2012).

inequitable re-allocation of resources. The Productivity Commission (2017b, p. 9), invariably influenced by general equilibrium or Romer-Lucasian endogenous growth models (Dee 1994; Gordon et al. 2015; Gretton 2008; Productivity Commission 2001), instead champions person-focused and place-neutral policy settings for places facing deindustrialisation. The Commission has derided various interventionist Australian structural adjustment programs, claiming that they are simply 'buying off opposition to policy change' (Productivity Commission 2001, p. xix).

The Commission (2017b, p. 9) further insists, following the World Bank's (2009) orthodoxy, that inter-regional migration is the optimal means of managing change. Underpinning this spatially-neutral policy recommendation, is an overarching commitment to methodological individualism and a strict utilitarianism that prioritises aggregate national economic impacts over regions specifically impacted by economic shocks. For Beer (2018, p. 434) the Productivity Commission was 'a key agent in the creation of a policy environment in which the closure of the Australian automotive industry was, arguably, inevitable' and that this was in fact a 'desired outcome' based on the Commission's advocacy of competitive global markets' (see Productivity Commission 2014).

The Canadian technocratic sphere, on the other hand, is committed to place-based policy in theory, but not in practice. The number one policy recommendation of the 2006 External Advisory Committee on Cities and Communities (Canadian Government 2006, p. viii) is 'that all governments in Canada adopt a place-based approach to policy-making'. Moreover, unlike the consistent, enduring opposition to place-based policy, promulgated by Australia's Productivity Commission, its historical equivalent Canadian statutory independent economic advisory agency (disbanded in 1993), the Economic Council of Canada, had by 1990 already offered emphatic, if qualified, support for place-based local economic development initiatives. Like the Productivity Commission in Australia today, the Economic Council was once 'long sceptical' of place-based policy (Bradford 2010, p. 5), yet it reversed this scepticism, in a short publication delivered as a declarative 'statement', summarising its findings from a multitude of previous research (ECC 1990, pp. 10, 12). It recognised industry-specialised communities as a primary cause of concern, where 'prospects for revitalization are obviously poorer than in communities with a more diverse local economy' and recommended interventions to help communities

'seek market opportunities to diversify their activities'. Thus, Canada has long seen the value of competitiveness-focused place-based structural adjustment programs in driving regional diversification.

Nonetheless, Canada's inertia in embracing place-based policies is well-documented, with a report commissioned by the Government of Ontario (McMurtry & Curling, p. 142) admitting that 'the place-based concept has been slow to arrive in Canada'. For Ray et al. (2013, p. 426, see also Bradford 2008), sub-provincial policy has been largely ignored at the Federal level, while at the provincial level approaches to local economic development and responses to local labour market shocks have been primarily 'sector-based, not place-based'. Canadian structural adjustment policies echo this provincial and sectoral focus. For example, the $35 million, allocated in 2018, to the Canadian Taskforce for Just Transition for Canadian Coal Power Workers and Communities, was directed to 'support skills development and economic diversification activities' across four provinces (Canadian Government 2018a, p. 15).[16] The effective absence of place-based policies means that, in practice, regional change is governed by market forces, which has meant that socioeconomic disparities at the sub-provincial level are greater in Canada than in comparable developed nations (Ray et al. 2013). These disparities are leading to increasing sub-provincial spatio-political tensions between peripheral and core areas, as opposed to the more traditional inter-provincial tensions (Taylor 2019; see Higgins & Savoie 1994).

Despite the Economic Council of Canada (ECC 1990, p. 18) espousing support for all tiers of government to be involved in place-based policy, the Canadian constitution dictates that the federal government pursue equalisation *between* provinces rather than *within* them, which the ECC accepted as prescribing that the federal government should have the least involvement of the three tiers in the management of sub-provincial inequality. This model implies considerable variation between provinces in their approaches to local economic development (Boudreau et a. 2007). While the embrace of new regionalism has seen some movement towards multi-level governance initiatives

[16] This is modest funding and a broad focus compared to the hundreds of millions of dollars allocated for similar skills and economic diversification initiatives just for the small coal-based urban area of the Latrobe Valley in Victoria (Asher 2018; Weller 2017; Weller & Tierney 2017).

(Bradford 2017), Yates (2015, p. 9) contends that Canada continues to fall behind in the 'capacity to coordinate multi-level government initiatives'.

Higgins and Savoie (1994, p.20) compare the Australian and Canadian models and attribute the better sub-national outcomes in Australia, in part, to less pronounced disparities between Australian states compared with Canadian provinces. They further conclude that, compared to Australians, 'Canadians have always had more faith in the market and more reluctance to intervene in it'. However, market perspectives remain prevalent in Australia with commitments to place-based, people-based or industry/sector-based policies tracking the political complexions of governments, which has made policy temporally contingent (Beer 2015). However, Australian support for (mainly sectoral) structural adjustment programs has been bipartisan (Beer 2015). Further, people-based programs remain abundant; a 2011 Canadian study (Centre for Workplace Skills 2011, p. 10) comparing labour and industry adjustment programs in Canada, the US, the UK and Australia, found Australian interventions were more numerous and more generously funded.

These different approaches were evident the two case studies. Geelong combined person-, place-, and industry-targeted interventions, but Oshawa was largely restricted to person-based programs and place-neutral interventions. **Figure 18** shows where respective responses to major plant closures in Oshawa and Geelong sit in relation to funding bodies. As highlighted in **Chapter 4**, in some important respects, general placemaking agendas have been similar in Oshawa and Geelong, with development strategies centred on unrelated diversification into higher education, healthcare industry and services; related diversification into advanced manufacturing and the pursuit of creative urbanism (see City of Greater Geelong 2013a; Deakin University 2015; Johnson 2009; Siemiatycki 2013; UOIT 2015; Wolfe & Goracinova 2017). However, deindustrialisation-focused crisis responses in the two cities have been markedly different.

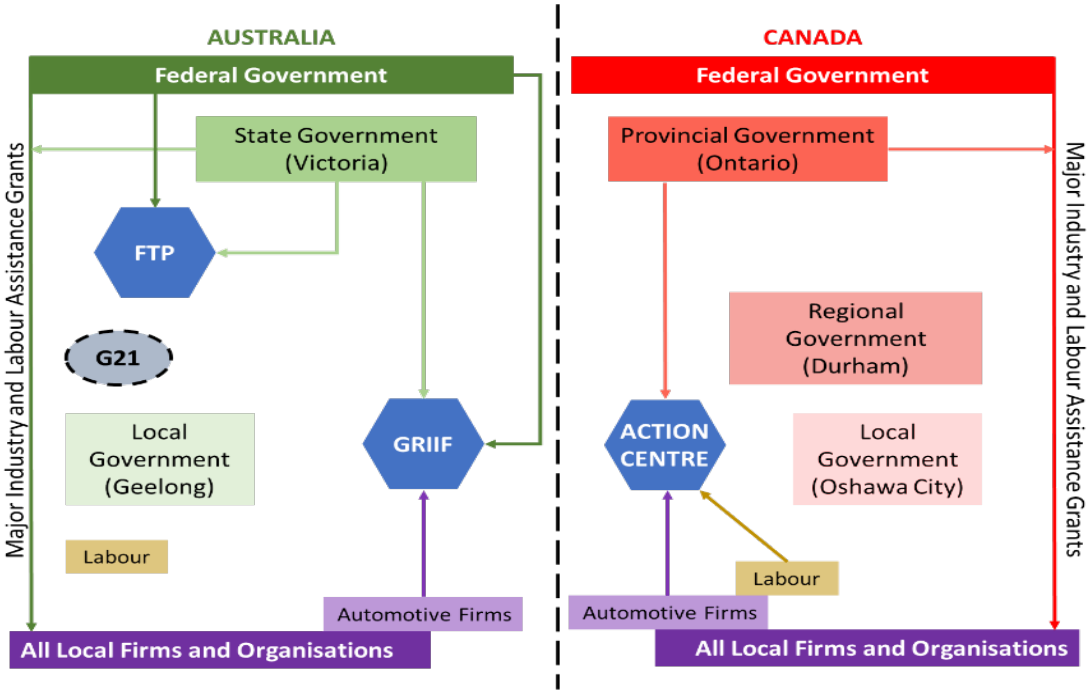


Figure 18: Funding Sources for Adjustment Programs and Major Assistance Grants

(Source: Author)

'Scattergun' Policy in Geelong

The response to Geelong's deindustrialisation crisis saw a range of interventions, mostly instigated by higher levels of government with bipartisan support (Barnes, 2016). The first of these is the policy of de-concentrating public sector jobs. The second major pillar is the creation of 'new regional' vehicles of multi-level governance to deliver structural adjustment programs. Bespoke, networked stakeholder governance taskforces, to manage transition and drive diversification, have been the favoured structural adjustment approach in Australia regardless of party-political affiliation since the late 1990s (Weller & Tierney 2017). These packages can be place-based, people-based or industry-based, depending on the circumstances, and can involve such diverse approaches as inward co-investment schemes, re-training programs and enterprise assistance. According to Beer (2015, p. 22), such is the proliferation of these 'ad hoc' programs – usually implemented in response to a specific crisis – that they serve as 'de facto regional policy for Australia'. These interventions focus on the regional scale and promote regional adjustment, whereas in the past mass retrenchments were considered only to be an industry and labour adjustment problem (Weller & Tierney 2017). Thus, the integration of place-based and industry policies, advocated by Bailey et al. (2019a),

already occurs in Australia in an uncoordinated fashion. Geelong was a recipient of these ad hoc interventions, benefiting from a combination of firm-based, place-based and people-based policy responses.

As Geelong faced the closure of the automotive sector, there was a concerted effort by the State and Federal governments to intervene to prevent the city's decline. This approach was significantly more interventionist than the actions taken in Oshawa, where a limited people-based crisis response prevailed. This section discusses the components of the Geelong interventions that were targeted responses to crisis. **Appendix A** provides an extensive, but far from exhaustive, account of individual programs, highlighting the billions of dollars invested in the city since the early 2000s. This section will explain that these state-led investment projects launched in Geelong have coincided with Geelong's seemingly impressive resilience and adaptability. It will analyse why specific people- and place-based interventions in Geelong may have helped overall growth but have failed to positively impact the city's increasing socio-spatial polarisation, discussed in **Chapter 8**. It concludes that the crisis assistance was spread too wide geographically, and that while funding succeeded in creating new jobs, insufficient support was given to retrenched manufacturing workers and disadvantaged residents of industrial suburbs.

Geelong's Success Story

Geelong's growth trajectory in recent years has not only been strong relative to an international case study in Oshawa, but also relative to all other cities in Australia. An analysis, published in June 2020 by Polis Partners (2020, p. 7), found that of Australia's 101 'Significant Urban Areas' (as defined by the ABS), of any urban area with a population of 10,000 or more, 'Ballarat and Geelong were the strongest performing cities last year by quite a margin'. Geelong ranked third nationally for economic growth – a metric including labour market, business, population and construction growth – behind the rural city of Ballarat and the satellite city of Melton, both also to the west of Melbourne. It also ranked second for 'inclusive' growth, which assessed unemployment and government transfers. That the top three economic growth areas in Australia were all western satellites or semi-satellites of Greater Melbourne, in various stages of conurbation or

intensification of labour market linkages with Melbourne and pillars of Victorian Government's westward expansion and diversification plans, is significant. The fourth fastest growing area in Australia according to this analysis was the New South Wales urban area of Newcastle-Maitland, the site of the 'best practice' place-based diversification program that laid the foundation for future Australian structural adjustment programs (Weller & Tierney 2017) and which directly influenced Geelong's own diversification-driven response to the Ford closure (Gordon 2013).

Geelong's allocation of funding, under the State's flagship regional development fund between 2015-2018, was second only to Ballarat (Victorian Auditor-General 2019), which was also the recipient of similar public sector de-concentration initiatives (RDV 2020). Geelong received $70 Million from Regional Development Victoria's (RDV's) Regional Jobs and Infrastructure Fund (RJIF) in the closure years of 2015-2018, and $43 million in the pre-closure period 2011-2015 via RDV's (then) Regional Growth Fund (RGF). For comparison, Ballarat received $79 million in 2015-18, a massive increase from the $15 million it received between 2011-2015. The emphasis on larger regional centres, such as Ballarat, Geelong, and to a lesser extent the Latrobe Valley and Bendigo, seemingly mirrored a shift in focus as part of the Victorian Government's agenda to relieve population pressure and congestion in Melbourne. It came at the expense of smaller and more remote centres, which had received far more funding under the previous government's RGF (see **Table 7**). These flagship regional development funds supported a variety of infrastructure, firm-focused and people-focused interventions.

Table 7: Funding for Regional LGAs in Victoria, 2011-2018

Selected Victorian Regional Local Government Areas	Index of Relative Socioeconomic Advantage and Disadvantage (5 = most advantaged, 1 = most disadvantaged)	Funding under the Regional Growth Fund (2011-2015)	Funding under the Regional Jobs and Investment Packages (2015-December 2018)	Funding Increase/ Decrease %
Greater Geelong	4	$33 Million	$70 Million	+111%
Ballarat	3	$15 Million	$79 Million	+416%
Mildura	2	$29 Million	$8 Million	-72%
Swan Hill	2	$11 Million	$4 Million	-64%
Pyrenees	2	$15 Million	$2 Million	-90%
Central Goldfields	1	$8 Million	$4 Million	-42%
South Gippsland	3	$20 Million	$2 Million	-90%
Horsham	3	$10 Million	$3 Million	-68%
Victoria Total	N/A	$570 Million	$500 Million	-12%

(Source: Author calculations based on Victorian Auditor-General 2019)

Firm-focused Initiatives

Numerous programs providing direct financial support accessible to Geelong firms, included: Geelong Region Innovation and Investment Fund (GRIIF); Regional Jobs and Investment Packages (RJIP); Advanced Manufacturing Growth Fund (AMGF); Automotive Diversification Programme (ADP); and the Next Generation Manufacturing Investment Programme (NGMIP). In documents submitted to the WTO (2019), the AMGF, and the ADP were listed as manufacturing industry support schemes, while the GRIIF, the RJIP and even the NGMIP were listed as 'regional development' programs, the latter seemingly on the basis that it was limited to South Australian and Victorian businesses. However, in function, there were only marginal differences between the 'regional' or 'industry' implications of these schemes, as most of the RJIP and a large portion of GRIIF funding went to manufacturing firms in much the same way as the industry funds (see also Barnes 2016).

The GRIIF was a direct response to the Ford closure and aimed explicitly to 'diversify Geelong's regional economy' (AusIndustry 2013, p. 1). However, like other programs, it had no requirement that businesses hire ex-automotive workers and spread funds to places unaffected by the crisis. The degree to which these interventions followed a consistent conceptualisation of economic diversification is questionable. The GRIIF was a $27 million program (originally allocated $30 million) and was funded jointly by the Federal Government, State Government, Ford and Alcoa. It provided a competitive, co-investment grants program (essentially enterprise assistance). This funding was additional to the $24 million allocated under the preceding GIIF. The GRIIF Consultative Committee was a broad-based regional stakeholder group, with representation from local government, the regional local government alliance, state government, federal government, unions, Ford and Alcoa, and various other stakeholders. The only notable absence was any representation from the local Regional Development Australia committee. Nonetheless, the title 'Consultative Committee' was indicative, with ultimately all funding decisions approved by the federal government in consultation with the state government (AusIndustry 2013). This was networked, collaborative consultation but not collaborative authority.

Of the $27 million allocated to the broader G21 region, roughly $19.5 million was allocated to firms located in Greater Geelong. With $11.7 million also allocated to Greater Geelong firms as part of the Advanced Manufacturing Growth fund, $3.4 Million from the Next Generation Manufacturing Investment Program, roughly $2 million from the Automotive Diversification Programme, and $11.2 million from the RJIP, a total of roughly $48 million in direct capital investment grants was distributed to private firms in Greater Geelong between 2014-2017 alone (see Barnes 2016; Australian Government 2019a, 2019b). In addition, funding was allocated for a $2 million infrastructure project from the RJIP, along with an additional $14 million for co-investment and infrastructure projects in the broader 'Geelong region' from these same funds, much of which would find its way to local contractors. This was complimented by $5.2 million for the Ford Transition Project (FTP), which provided assistance to retrenched workers (ACIL Allen and Wallis Consulting 2017). Overall, Federal funding for the Geelong region exceeded the Victorian State Government's entire Automotive Transition Plan of $46.5 million (not including the $4.5 million it contributed to the GRIIF), which included the Victorian Automotive Supply Chain Training Initiative and the Victorian Automotive Supply Chain Transition Program, and covered all impacted areas in the state affected by the exit of the three major automakers. Co-investment funding in Geelong continued through the Local Industry Fund for Transition (LIFT), which directly replaced the GRIIF.

The allocation of funding, under the three rounds of the GRIIF, highlights the problem of 'mission creep' in a spatial sense, and also the potentially confused objectives of programs that were presented as targeted place-based, diversification-focused structural adjustment programs in response to a specific economic shock impacting a specific industry. While the GRIIF was presented as a 'regional diversification' fund in response to manufacturing shock and allocated funding to unrelated industries, in practice it served more as a related variety manufacturing industry support fund. Fifty-four percent of funding went to manufacturing firms, including twenty-five percent of funding for auto parts manufacturing firms. More than a quarter (27%) of the available GRIIF funding went to businesses in the rural town of Colac, a town nearly 90 km drive from the Ford plant in Norlane, and another quarter (25%) went to businesses in Waurn Ponds, Geelong's highest income suburb 20km from Norlane, where knowledge industries cluster adjacent to Deakin University. The diversion of funds to Colac highlights the trade-

off between expanded regional scales: it may enhance regional lobbying efforts through collaboration by multiple municipal governments by scaling up resources, but collaboration requires reciprocity and in certain episodes can thus divert resources from where they may be needed.

The RJIP, a federal government initiative, lists its principal objective as being to 'diversify regional economies' (Australian Government 2019b). Unlike the GRIIF, it was a national program targeting 10 vulnerable regions and not a bespoke structural adjustment program developed in response to a specific shock impacting a specific area. Yet, areas in the 'Geelong region' outside Greater Geelong received 34% of the locally-allocated RJIP funding – not dissimilar to the proportion allocated beyond Geelong under the GRIIF. For the RJIP, 90% of the funding for co-investment in the Greater Geelong area went to manufacturing firms. The GRIIF, the RJIP and the AMGF all provide support for the innovative success story of Geelong's Deakin University-centred, advanced carbon fibre cluster. Funding was allocated to firms such as Quickstep, Lemond Composites and Carbon Revolution, and they would also be supported by direct grants outside these programs. Quickstep, for example, was provided extra funding to relocate research and development operations from Germany to Geelong (RDV 2015).

Manufacturing grants were mostly for capital intensive projects. Two auto industry supply manufacturers in Waurn Ponds, which received grants of $6.8 million combined from the GRIIF, were expected to add 138 jobs combined, while for half that amount, the expansion of retail giant Cotton On's head office was expected to add more than double the number of jobs (300) (Barnes 2016). As such, interventions focused on cultivating advanced manufacturing employment could not support the same level of employment commensurate with what was lost in traditional manufacturing. They were not nearly as cost-effective as interventions aimed at unrelated diversification. Ultimately, the Australian Government (2017a, p. 6) estimated that more than 800 jobs were created through the GRIIF. However, there is no way to ascertain if some firms would not have ultimately invested their own private capital in these projects anyway, nor is there any guarantee that these jobs will remain in Geelong long-term.

Ultimately, the two funds that were aimed explicitly at regional diversification (the GRIIF and the RJIP), became barely distinguishable from manufacturing industry support

funds. In practice, they largely morphed into funds aimed at consolidating and engendering related diversification among firms from Geelong's historically specialised industry, by promoting the city's university-centred advanced manufacturing cluster. While the program aims of the GRIIF never made a distinction between related or unrelated diversification, its existence as a separate intervention from industry-focused structural adjustment programs and its partial implementation as an unrelated diversification program shows that, on some level, it was conceived of as such. The focus on firm-centred product and market diversification may have had some positive impacts, but it did not provide for the 'unrelated' mode of regional diversification needed to address the structurally declining manufacturing sector. Such programs do little to cushion against further rounds of manufacturing-wide shock. In practice, the GRIIF funded a scattershot array of private business expansion plans in a broad geographic space. Thus, if the solution is taken as a means to understand how stakeholders perceived the underlying problem (Bacchi 2012), the GRIIF program reframed the initial set of problems implicit in the program goals – of economic shock, regional over-specialisation, the inability of the labour market to self-adjust, and the resulting socioeconomic damage within a particular sector contained in a specific geographic space – into a problem of insufficient private capital investment.

In sum, despite these funding programs nominally being designed to achieve different goals, in practice they largely supported the same economic development priorities focused on related diversification. Both the GRIIF and RJIP spread funds well beyond the epicentre of plant closures. The windfall to firms in Waurn Ponds was even more apparent in programs outside the GRIIF, as firms located in the suburb received 63% of the funds allocated to the Greater Geelong area under the Advanced Manufacturing Growth Fund (AMGF), and 60% of the funds allocated to firms in the Greater Geelong area under the RJIP. Overall, crisis funding streams primarily benefited businesses in the wealthy southwest part of Geelong, where Geelong's future population growth around the Armstrong Creek area is also located, as opposed to the socioeconomically disadvantaged north and inner-southeast, where the two major closures occurred.

People-focused initiatives

Programs targeted at firms to stabilise Geelong's labour market were complemented by people-based efforts to re-train retrenched workers (Callan & Bowman 2015). However, these programs were not linked and there was no expectation that the anticipated jobs created by enterprise assistance programs would re-absorb the retrenched manufacturing workforce. Instead, the implicit assumption was that the market would adjust to provide jobs for these re-trained workers.

A comprehensive workforce transition program, the Ford Transition Project (FTP), focused on affected auto workers. The FTP was an innovative model, having been outsourced to a private company before being integrated with the Victorian State Government's Skills and Jobs program. For Snell and Gekara (2020, p. 723) the FTP represented 'one of the most comprehensive assistance schemes for supporting retrenched workers in Australian history' and was widely acknowledged as a success (see ACIL Allen & Wallis Consulting 2017; Callan & Bowman 2015). An interview participant, involved with the delivery of the FTP (Interview Code IOI88), compared the program favourably with perceived outcomes for retrenched workers at Geelong's Alcoa aluminium plant.

> I think if you look at retrenchments from a history point of view and if you looked at Alcoa, I think, in Geelong, you would usually find a third get work from retrenchment, a third retire and a third struggle. … So with the Ford Transition Project at the moment, because of what we've been able to do, and the lead in it's over four years now the figures we've got would tip the model I've just expressed on its head. We've got probably over 90% employment … and that's because of the investment of resources, time.

This informant also argued that the firm-targeted programs were flawed in that they were not designed to mitigate the direct effects of mass retrenchment:

> The GRIIF … don't work with individuals, they are either applied for and/or handed out through applications. … If you don't lock in through jobs the opportunity for the retrenched workers to apply, and perhaps corral a number of jobs in that area, then you've lost an opportunity because (otherwise) you don't know who is going to apply for those roles and they're not necessarily retrenched people. So, if you don't corral a percentage (of the jobs funded by programs like the GRIIF) for the retrenched workers … (then) they're not really targeted programs.

Despite being place-based programs aimed at a localised shock, these interventions did not require that recipient firms hire retrenched workers or even local workers. According to participants interviewed by Barnes (2016, p. 30), by mid-2016 only an estimated 10% or fewer of GRIIF-created jobs had gone to retrenched Ford and Alcoa workers. Callan and Bowman (2015) also raised concerns that projects funded under the program were not suited for retrenched workers.

According to a status report from the Geelong Skills and Jobs Centre in April 2018 (Skills and Jobs Centre 2018), of the 111 Geelong Ford workers initially retrenched in October 2016 and the 53 workers retrenched since January 2017 that had found new employment, the largest number (39), or roughly one quarter, had moved into other manufacturing occupations. The next largest cohorts of workers moved into warehousing (18), health and community services (18), driving (16), construction (12), trade (12) and cleaning services (10). This showed that a large cohort of retrenched workers were reliant on new manufacturing employment and the majority were not gaining employment in the growing 'knowledge' sector jobs. Nonetheless, this evidence reinforces the finding of MacKinnon (2017) that related diversification cannot absorb the majority of retrenched workers in regions experiencing mass retrenchments. This also meant that retrenched workers were vulnerable to further structural manufacturing decline. Evidence presented by Barnes and Weller (2020) suggests that many retrenched workers who found employment in unrelated industries, often found themselves in precarious, lower-wage jobs.

Of the 258 workers tracked by the FTP, only 6% were unemployed and looking for work in April 2018 – which compared favourably with 18% across the Australian automotive sector (ACIL Allen and Wallis Consulting 2019) – with a further 5% looking for more hours (Skills and Jobs Centre 2018). However, in total, only 64% of workers were in new employment and only 58% were in employment and not looking for more hours. This reflects age demographics, but also highlights that these lost jobs are not easily replaceable even with significant interventions such as the FTP.

In addition to programs targeting retrenched workers, people-based programs in Geelong focused on residents of the city's disadvantaged industrial suburbs. The Neighbourhood Renewal and New Norlane suburban revitalisation programs targeted

public housing residents in northern Geelong and Northern Futures focused on job skills and education programs. As early as 2005, the Neighbourhood Renewal project, which was launched in 2002, was being touted by then Victorian Housing Minister Candy Broad as 'a tremendous success in Corio and Norlane' (Victorian Government 2005b), while then Victorian Premier Steve Bracks (Victorian Government 2005a) claimed 'Statistics show the existing Neighbourhood Renewal programs are turning the areas around'. However, the success of these programs is questionable, considering that negative socioeconomic outcomes in Geelong's most disadvantaged neighbourhoods have compounded over the duration of the programs. Johnson (2017a, p. 8; 2017b, p. 21), argues that without these programs, 'the social polarisation associated with restructuring in this city could well have been worse' but ultimately 'the pattern of socio-spatial disadvantage in the area has continued to worsen. Clearly, there is a need for other and perhaps different interventions to progress social inclusion'.

Discussion: Defining 'Successful' Diversification in Geelong

The Geelong case highlights that 'successful diversification' is a matter of how this success is defined. If the problem was reducing the potential impact of deindustrialisation on future regional growth, then interventions in Geelong were associated with relative success. If the problem was increased socioeconomic disadvantage resulting from deindustrialisation in Geelong's most disadvantaged suburbs, then the interventions were a failure (Johnson 2017a, 2017b).

By design, place- and industry-focused components of the Australian and Victorian Government's interventions in Geelong were never intended to aid the residents of disadvantaged suburbs or Geelong's recently retrenched manufacturing workers, but simply to stabilise the regional economy and labour market and prevent the area's major closures from undermining the viability of other businesses. In 2013, when Victorian Premier Napthine was asked how the establishment of the NDIA headquarters in Geelong would help retrenched workers, Napthine acknowledged that the problem under consideration was only the broader labour market: 'when you add to the economy you create jobs right throughout the economy and those jobs will provide opportunities for a range of people in Geelong into the future' (Nine News 2013). The Victorian Government

(2010, 2016a) would eventually acknowledge that 'success' in Geelong's economic growth and diversification has not been followed by success in reducing socio-spatial polarisation and that these disadvantaged communities remained depressed.

The limitations of these programs were not unforeseeable. A 2013 report, commissioned by the G21 (Burkett 2013, p. 9), on using place-based policies to address socio-spatial disadvantage in Geelong warned that 'without intentional action, investment focused on generating jobs actually flows around disadvantaged communities and towards people and localities that are already more advantaged'. Burkett (2013, p. 9) maintained that supply-focused 'more jobs policies' would be ineffective in addressing disadvantage. Instead, Burkett (2013) argued that effective intervention needed to combine direct demand-led policies with jobs programs in disadvantaged areas, targeted directly at disadvantaged jobseekers. Ultimately, Burkett (2013, p. 18) argued that without these targeted interventions, 'generalised jobs growth in the region is unlikely to lead to substantial changes in the levels of disadvantage in those localities'. However, it is notable that even this prescient advice did not link socioeconomic disadvantage specifically to mass retrenchment episodes.

Nonetheless, there is some evidence that overall employment growth driven by state-led, place-focused policy in Geelong has positively impacted the labour markets of the most disadvantaged areas to some degree. Shift-share analyses of local employment, presented in **Figure 17** and **Figure 39,** highlight that while the labour markets of Geelong's ten most disadvantaged suburbs were significantly worse off than the Geelong region as a whole, in most industries relative to Victoria, growth was still relatively strong in sectors driven by public investment, namely public administration and health, and in some services industries. Nevertheless, growth in the education sector has not provided significant benefits to disadvantaged areas despite being the cornerstone of the city's diversification project. Overall, the labour markets of the disadvantaged suburbs have been devastated over the last thirty years. The mismatch between skills in disadvantaged areas of Geelong, and the growth of knowledge industries in the advantaged areas of Geelong, has meant that even with labour re-training and upskilling programs, these have not had a major effect on improving the labour market outcomes of people in disadvantaged suburbs. Moreover, with gentrification an increasing concern, the level to

which these few positive areas of labour market growth represent a net positive to incumbent low-income residents would require further investigation.

There are grounds for being cautious about attributing Geelong's success to enterprise assistance schemes that comprised a significant portion of regional development funding. Consecutive Victorian Auditor-General reports into RDV's regional development funding streams, stated first in 2015 that deficient evaluation efforts meant 'RDV is unable to demonstrate that the fund achieved its objectives and outcomes' (Victorian Auditor-General 2015, p. viii), while the follow up report (Victorian Auditor-General 2019, p. 7) reiterated that 'RDV still cannot reliably determine whether their grants have improved economic or social outcomes directly or indirectly, or whether any benefits have been sustained beyond the immediate injection of funds into a community'. The Victorian Auditor-General (2019, p. 51) 'found no consistent relationship between RJIF distribution and unemployment or job growth'.

An Australian Auditor-General Report (Australian National Audit Office 2019), into the RJIP scheme, highlighted the potential for political imperatives to determine flows of public investment. Although the Coalition held only 53% of the 32 electoral divisions covered wholly or partially by the program nationally, over 75% of the $221 million total funding went to Coalition areas, which accounted for 63% of funding applications and 70% of the total amount of funding requested. The $20 million allocated to Geelong under this program displayed the same pattern, with only 26% of the funding awarded to businesses located in the areas directly impacted by the Ford and Alcoa closures, which are in the safe Labor seat of Corio. The bulk of the funding was directed towards businesses located in Geelong's affluent southwest suburbs and the Surf Coast, which are found in the electorally contested swing seat of Corangamite. This seat was held by the Coalition during the program period, but was subsequently lost to Labor by a narrow margin. The remainder of the funds found their way to rural areas outside Geelong, such as Colac, in the safe Coalition seat of Wannon.

For Callan and Bowman (2015, p. 42), 'there is strong evidence of a coordinated and consistent effort by a wide range of people, agencies, businesses and Governments to committed to helping displaced workers obtain new jobs and ensuring that the Geelong region moves onto the next stage of its successful regional development'.

Seemingly, this combination of firm-based, people-based and place-based intervention has accompanied Geelong's regional resilience and adaptability. However, the extent to which these programs were coordinated and represented a coherent strategy in Geelong is disputable.

Interventions in Geelong followed a general pattern of ad hoc crisis management in Australia, and this approach has its flaws. According to Beer (2015), industry-focused interventions in Australia are often little more than band-aids on long-term structural problems, which ignore the impacts on affected communities, and engender path dependencies and lock-ins to specific specialised industries. Direct enterprise assistance schemes can prop up failing firms at the expense of innovative competitors, exacerbating these lock-ins. Labour adjustment programs that are decoupled from job creation programs cannot guarantee the absorption of retrenched workers, and retraining programs face significant hurdles, when the types of skills required by growth industries are fundamentally different from the type of skills possessed by the retrenched workforce. Moreover, 'place-based' investment, in practice, often leaks outside the affected community. It substitutes for private investment that would occur anyway, and suffers from a lack of 'embeddedness' in the local community (Beer 2015). Recipient firms often relocate operations soon after receiving place-based grants. In addition, Weller (2017) and Weller and Tierney (2017) document that in Victoria, previous structural adjustment initiatives have been accompanied by rescaling the territorial object of policy intervention, so enabling the diversion of funding to wealthier, less affected areas. In theory, place-based intervention should fill the gaps in industry or labour programs that lead to uneven socioeconomic development. In practice, in Geelong as in other places, investment tended to flow around the problem as a result of both deficiencies in program design and territorial rescaling.

Contrary to Callan and Bowman's (2015) assertion that responses to crisis in Geelong were highly coordinated, this chapter has revealed that many of the issues Burkett (2013) warned would result from a lack of coordination came to fruition. Public investment tended to flow around the core areas of concern and assistance to firms and training for workers did not respond directly to the initial problem of concentrated job losses. While place-based policies were driven by an overarching goal of 'diversification', as identified by Barnes (2016), the reality is that this never manifested in a coherent

vision. Socio-spatial disadvantage was understood as a legacy of deindustrialisation, but the people-based programs did not ensure that affected workers and communities would find new employment. Place-based interventions could help plug the gaps in Geelong's labour market indirectly, but they were not designed to mitigate the immediate impacts of the closures. Deploying a wide variety of structural adjustment programs in an uncoordinated fashion didn't compensate for the limitations of each type of intervention.

Ultimately, the flurry of uncoordinated interventions in Geelong amounted to a policy of experimentation. However, while this appears to be a highly critical perspective, it acknowledges that experimentation led to some positive outcomes. Compared with the Oshawa case study, policymakers in Geelong were far more willing to invest in numerous place-based and people-based interventions and Geelong's labour market has grown far more than Oshawa's since these interventions were launched. While it remains difficult to ascertain exactly which aspects of these programs positively impacted Geelong's growth, the evidence suggests that state interventions aid regional labour market recovery and diversification in response to economic shock. It is unclear exactly what works. However, the evidence is pretty compelling as to what doesn't.

People-based Interventions in Oshawa

In Oshawa, there is a clear separation between the 'people-based' interventions related to the plant closure, national programs for economic diversification, and specific 'place-based' interventions by regional development agencies. In general, Oshawa has much less experience of purposeful intervention than Geelong, and the interventions that have occurred have been more oriented to working with market forces.

The primary Ontario government response to the closure of the Oshawa GM assembly plant was the establishment of an Action Centre funded jointly by GM, Unifor and the Ontario government and supported by Durham College. This followed the model of major emergency responses implemented in prior rounds of mass retrenchment at the Autoplex. Workers were offered 'enhanced' retirement packages, redundancy payments based on seniority and education/training allowances, as part of the agreement between GM and Unifor.

The establishment of an action centre is required under the Ontario government's Rapid Re-employment and Training Service (RRTS) scheme for any mass retrenchments impacting more than 50 workers. Following a tiered system, layoffs that are anticipated to cause significant damage to the economy of the affected community require a Local Adjustment Committee made up of the representative union, the firm and other local stakeholders, led by an independent chair, to develop a Service Action Plan, which appoints an action centre coordinator. The action centres operate as a combined service delivery centre to coordinate services for retrenched workers that may otherwise be separately administered by various employment, education and training agencies (OECD 2016).

The OECD has directly, and favourably, contrasted Ontario's coordinated, structured approach with Australia's usage of ad hoc structural adjustment programs – and thus the establishment of bespoke models like Geelong's FTP. The OECD (2016) cites evidence from employers preparing for retrenchments, who have complained about the lack of coordination among Australian government agencies, which has left them unable to give proper advice to employees. However, the OECD (2016) also noted that Ontarian legislation did not require firms to contribute a fixed amount to fund the centre, as required by similar legislation in Quebec, which obligates firms to contribute 50% of funds.

In Oshawa, most Action Centre funding was provided by the union, Unifor, and GM, with the Ontario government contributing only $531,000 to the GM Oshawa Action Centre and later $758,000 to the Independent Parts Supplier Action Centre (Government of Ontario 2019, 2020) for supply chain workers. The major limitation of the Ontario RTTS program was that specific local crisis responses were dependent upon commitment to the program across the province, funding for which dropped from a total of $18.4 million, in 2009, as a response to the Global Financial Crisis compared with $1.1 million in 2016 (Mojtehedzadeh 2018). This amounted to barely a fifth of the funding for the FTP for an entire provincial-wide program

A Durham Region unemployment specialist (Interview Code VBV07) argued there is a significant flaw in the requirements under the RRTS, in that it does not specifically

require unions and firms to engage specialist employment service providers, even if they may choose to engage them. For the unemployment specialist:

> … what the union reps felt was, well, they know the best what their employees are doing, but, you know, do they know the most about what other employment opportunities are there? How to package the person to best promote (him/her)? And all the other government and community services available?

Nonetheless, interviewees in this research, with detailed knowledge of the similar CAW Action Centre (CAW 2009) established after previous rounds of retrenchment at GM, had relatively positive viewpoints regarding this specific incarnation of the Action Centre. An informant (Interview Code ZSZ64), involved in delivering the program, explained that because individuals were dealing with trauma, the policy was to bring other service providers in rather than send people out to them. In the informant's view, retrenched workers:

> … are still dealing with what I would call psychological trauma from, you know, permanent job dislocation. So the Action Centre served as a place of still building that community and supporting individuals as they moved out.

For this expert, success was defined as 'moving on', regardless of material losses:

> Anecdotally, and it's not with any … absolutely anecdotally, individuals that I worked with at the Action Centre have by and large moved off on to other things. They found other jobs – they might not have necessarily replaced the wage because the wage was significant, but they have moved on to other things.

A Durham labour leader (Interview Code DYT39), involved in the Action Centre, thought the program was positive, but highlighted that many workers left the area in search of work:

> I think (the Action Centre) could have been better but I was very happy that it actually happened. I know that it made a huge difference in that transition period. What employment people found after that is, you know, a few people did much better. They're happy with what they're doing now as a change in what they do for a living. But many people did not find work that was similar in terms of, like, their wages and benefits and such … Other people just left. They just moved to other provinces. So, there was

like a big rush of people that went to Fort McMurray or the tar sands development and such like that. So, people did flee the community'.

Indeed, Siemiatycki (2013) detailed that wages in many of Oshawa's growth occupations have failed to match manufacturing wages. It is not surprising, therefore, that Oshawa experienced a significant exodus of retrenched workers, who were displaced by a lack of re-employment opportunities. This is consistent with a general axiom, accepted by both equilibrium and disequilibrium models alike, that as capital disinvests and invests elsewhere, labour will also 'surely be tempted to move wherever the material living standards are the highest' (Harvey 1982, p. 417).

The Absence of Place-based Policy in Oshawa

The capacity for Oshawa to draw funding, from higher levels of governments, was constrained by its position in both federal and provincial regional development hierarchies.

Formally, Oshawa is a part of the Greater Toronto Area (GTA), which in turn is a part of Southern Ontario. The main federal regional development funding agency for this region is FedDev Ontario. FedDev Ontario was established in 2009, more than twenty years after similar arrangements in other parts of Canada – such as Western Economic Diversification Canada (WEDC), Atlantic Canada Opportunities Agency (ACOA) and its Northern Ontarian counterpart (FedNor) – and its very existence remains controversial (Bradford 2010). Unlike these other agencies, it has not been assigned a dedicated minister, is more integrated with broader federal departments, and has strategic goals that are aligned more closely with the Ontario Provincial Government (Bradford 2017). Moreover, FedDev's funding per capita in Ontario is significantly lower than its counterparts in other regions. Spending allocated for 2016-2019 was almost 30% lower than the ACOA, despite Southern Ontario having more than five times the combined population of the Atlantic Provinces (Bradford 2017).

In a nation where horizontal equalisation is highly politicised (see Higgins & Savoie 1994), the idea that federal government would use funds, hitherto earmarked for lagging regions, to help a region perceived as an economic powerhouse (Southern Ontario) is controversial. Within Southern Ontario itself, any expectation that Toronto would benefit

the most from this assistance is also a source of political tension (see Taylor 2019). For example, when a leaked internal 2012 FedDev Ontario evaluation showed that the majority of funding from various FedDev programs was directed to Toronto, the journalistic criticism focused on the fact that 'Canada's biggest city pulled in the largest share of money and jobs from the regional fund anyway — a far cry from the days when economic development agencies helped remote, sparsely populated regions with hard-scrabble economies' (CBC 2013). FedDev Ontario's close alignment with the Provincial Government priorities, in practice, limits the flow of provincial funds to Oshawa.

This was confirmed in interviews with an Ontario government official (Interview Code ABA12), who did not expect Federal support to help Oshawa adjust to the GM closure announcement:

> I don't see, you know, any of the federal agencies sort of coming in and coming to the rescue of a place like Oshawa.

This is partly because, since Oshawa is a part of the GTA, the FedDev framework does not recognise Oshawa as separated from Toronto. A local business expert (Interview Code QWQ24) explained:

> I think if the Feds would recognise us … as separate (from Toronto) it would help to strengthen our business case.

Another factor may be that Ontario had not created the diffused networked structures of governance favoured by the endogenous development and new regional paradigms. As a result, the cooperation and united voice, of state agencies, local labour and capital interests, to promote regional competitiveness or address specific issues is largely absent. When asked, 'how has your engagement with local unions been?', the Oshawa business expert (Interview Code QWQ24) explained:

> I've had none really. No, I can't say that I've sat down with a union and had a conversation with them. We really have not engaged, to be honest.

When asked whether anyone in local government has ever spoken to them about specific programs in the Priority Neighbourhoods (see **Chapter 8**), the expert replied:

> No, I would say no.

The absence of regional cooperation was confirmed by a Durham labour expert (Interview Code XYX47), who explained that within the region, the two tiers of government:

> … don't work together as effectively as I think they could.

Nonetheless, firms in Oshawa were able to access funding from a variety of sources. The Canadian and Ontario governments established multiple sector-based manufacturing and automotive industry-based transition funds (Holmes et al. 2017; Rutherford & Holmes 2008; Wolfe & Goracinova 2017). Canadian federal assistance was targeted principally at the automotive industry, with funding for the Automotive Innovation Fund, the Automotive Supplier Innovation Program, Automotive Partnerships Canada, Auto21 and the Program for Strategic Industrial Projects. The Ontario Provincial Government also launched the automotive-specific Ontario Automotive Innovation Strategy, and also provides manufacturing support through the Advanced Manufacturing Investment Strategy, the Next Generation of Jobs Fund and the broad-based Jobs and Prosperity Fund (Holmes et al. 2017). These funds encourage upgrading and industrial diversification within the automotive sector.

However, place-based regional development funding, specific to Oshawa, has been scarce despite its deindustrialisation crisis. At the Federal Level, in 2009, Oshawa was one of many Canadian cities receiving place-based stimulus funding for infrastructure projects from the Community Adjustment Fund, but this only amounted to $3.5 million dollars (FedDev Ontario 2009). Since then, FedDev Ontario's support for Oshawa has primarily focused on projects related to UOIT or ad hoc infrastructure projects through streams such as the *Canada 150 Community Infrastructure Program* (Canadian Government 2018b; The Oshawa Express 2016; UOIT 2012).

Oshawa has received very little place-based support from the Provincial Government, which in Canada is the traditional provider of place-based programs. Oshawa has received support for minor projects through the Provincial Government from the Ontario Trillium Foundation and the *Local Poverty Reduction Fund* (Durham Workforce Authority 2018a, 2018b). Yet, because of its positioning in the Greater Toronto Area, Oshawa is not able to access to the two major Southern Ontario regional enterprise assistance funds (Southwestern Ontario Development Fund (SWODF) and the Eastern

Ontario Development Fund (EODF). A Provincial Government official (Interview Code ABA12) explained:

> Oshawa is seen as part of the GTA for better or for worse. If that means they're not eligible for funding that's supposed to go to external regions, so be it.

Thus, the official highlighted that Oshawa's location, close to Toronto, made it hard to justify extra intervention. Further, the official argued that Oshawa's positional advantage over more remote depressed areas made it less of a priority:

> They have a benefit that (a place like) Owen Sound just doesn't have. And Owen Sound is going through a lot of the same issues that Oshawa is. So how do you square those things? I think Oshawa is reasonably well-positioned all things being equal.

However, the justification for denying Oshawa place-based attention because of its proximity to Toronto is nevertheless curious considering that Ottawa, the nation's prosperous capital, is eligible for such assistance, as are multiple mid-sized cities, including Ontario's other major historical automotive city of Windsor, which forms a cross-border conurbation with the large US city of Detroit.

When asked, 'do you think government should have a role in directly incentivising businesses through enterprise assistance?', the response of a local Oshawa business expert (Interview Code QWQ24) suggests that current efforts were lacking:

> Sure, I don't see why not. I think it would help, especially the Provincial Government. We need to do a lot of work there to encourage businesses to settle in Ontario period. And they've got a lot of work to do.

For some analysts, a market-led growth agenda, focused on Toronto and Ottawa, has manifested in increasing spatio-political polarisation in Ontario (Taylor, 2019, see also Boudreau et al. 2007). For Taylor (2019: 99), the 'Toronto region risks choking on its own success while the hinterland continues on its trajectory of relative decline'. In this context, with an increasing awareness of the need for more spatial equalisation, the impetus is for Ontario's place-based equalisation policies to be directed away from Toronto, not towards it. The effect is that Oshawa is to be ignored, given its positionality within the GTA. This perspective appears to have gained traction within the Province, which is willing to target place-based initiatives at lagging regions outside the GTA, but

not to those within it. While Oshawa benefited from some people-based and sector-based interventions, the lack of place-based policies meant that GM retrenchments in Oshawa were never truly conceived of as an Oshawa crisis, only an individual and industry crisis.

Conclusion: Crisis, State Spatial Selectivity and Diversification

In Australia, structural adjustment programs are deployed reactively to crises in places and do not necessarily represent proactive placemaking agendas, although they may be accompanied by them. Similar interventions are deployed in Canada, but are less widespread. As such, the major difference between Australia and Canada is not attitudes to place-based policy, but place-based crisis management. Australian governments have been more willing to experiment to aid regional diversification. While some of these experiments were flawed, others may have been successful. For example, although the Ontario action centre model provides the structural consistency and certainty that the OECD (2016) finds lacking in Australia, a comparison with the FTP does not suggest the Geelong people-based response was inferior.

This chapter has explained that Geelong's labour market diversification was driven by a top-down, state-led development agenda, which relied significantly on a scattergun approach of using multiple different types of people-, industry- and place-based interventions. The response in Oshawa was far less interventionist and in effect more beholden to market forces. Both Geelong and Oshawa simultaneously inhabit core-peripheral spaces, yet these contradictions have contributed to opposite effects in each case study. The broader institutional context in Victoria meant that Geelong could benefit from a state placemaking and crisis response agenda, with actors empowered to experiment with various programs. Conversely, the institutional and political dimensions of Oshawa's proximity to Toronto in Southern Ontario restricted the level of support available to it. This highlights the continued importance of state spatial selectivity – and thus collective agency – in determining diversification outcomes.

Chapter 7 - Diversification as Regional Rebranding

Introduction – The Discursive form of Diversification

Like other 'key words' (Williams 2015), the term 'diversification' is discursively polymorphic and its specific conceptualisation, in any given context, depends on malleable and subjective individual understandings. Divergent and overlapping conceptualisations of diversification have been mobilised to manage both the immediate crisis of plant closures (Barnes 2016; Weller 2017; Weller & Tierney 2017) and the long-term impacts often associated with deindustrialisation, such as socio-spatial polarisation and urban decline (Foster et al. 2016; Lees 2003). This means that diversification is not just a descriptive term for industry composition, but also a performative construct. The concept of diversification is a mechanism of governance that can be mobilised to manage the crisis of deindustrialisation both discursively and concretely. That is, it can be either an aspirational regional development goal, based on influencing the real composition of regional industry, or a rhetorical tool to temper the political or policy fallout of real socioeconomic impacts of crises or satisfy a variety of divergent agendas. However, these are not mutually exclusive, as the potential positive economic development effects of the discursive form of diversification are also clear. Local actors can respond to crises by reshaping regional identities in order to sustain or attract private or public investment, which in turn influences the manner in which a region actually diversifies (see Pike 2015). It is with this understanding that the importance of diversification as regional (re)branding emerges.

This chapter addresses the deployment of diversification as regional rebranding in Oshawa and Geelong. It explores how the **discursive** construction of place influences perceptions and responses to lingering socioeconomic crises, notably socio-spatial polarisation. By examining the discursive deployment of diversification as a synonym for the transition from 'old' industries to 'new', in particular, the emergent higher-education focused 'knowledge clusters', it highlights how newer urbanised outgrowths of the city are privileged at the expense of the older industrial areas associated with the cities' manufacturing pasts. It documents how this construction licences urban revitalisation

efforts targeting city centres that fuel gentrification processes and normalise socio-spatial polarisation.

It further reveals that the differences in local branding efforts are influenced by state-led or market-led diversification strategies determined by (non-)intervention from higher tiers of government. It acknowledges that while local policy actors can implement endogenous, agency-driven strategies to change perceptions of a city and influence growth trajectories, these efforts and their associated outcomes are largely conditioned by exogenous factors. In doing so, it highlights that the discursive modality of diversification can have as much influence on real-world socioeconomic outcomes as the industry composition modality.

Following from relevant scholarship in this area (Cleave et al. 2016; Pike 2015; Short 1999; Warnaby & Medway 2013), this chapter looks at the way in which the problem of socio-spatial polarisation associated with Oshawa's diversification was mostly ignored or whitewashed. Meanwhile, in Geelong, the issue was given a level of prominence by local and external stakeholders, with the latter using it as a justification to intervene in the city's economic development. Differences in place branding reveal fundamental differences in the ways regional crises are managed, through top-down state interventionist or bottom-up, market-oriented diversification strategies.

This chapter focuses on the issue of place branding and its implications for lobbying at the regional scale, highlighting the different approaches taken by regional stakeholders. This chapter will show that Oshawa has mobilised 'diversification' as a regional brand, as much as a coherent development strategy, and that this implies both the normalisation and discursive erasure of the city's socio-spatial inequalities. With a focus on attracting private investment, Oshawa has downplayed the enduring socioeconomic disadvantage in its former industrial areas and – out of concern for damaging the city's brand – has therefore not been able to leverage these problems to lobby for public investment. This is a response to relative disinterest in addressing uneven development in Oshawa at the provincial and federal scale, but also has the effect of justifying this lack of intervention. In essence, Oshawa has exemplified an urban development orthodoxy that normalises socioeconomic inequality (Siemiatycki 2013; see also Peck 2005). In Geelong, there are important underlying differences: it pursued the

same strategy of higher education-led creative urbanism and a diversification brand, but in this case higher-tier governments used disadvantage to justify a state-led development agenda.

The chapter is organised as follows: The next section discusses diversification in its discursive form, as a central concept in rebranding efforts for deindustrialising places. Section two considers the 'New Oshawa' and the implications for 'whitewashing' increasing socio-spatial polarisation in the city. Section three details Geelong's more materially-grounded rebranding efforts and the more widespread acknowledgement of the city's problems. The concluding section discusses the implications of the discursive form of diversification.

Place Branding and Urban Boosterism

In practice, 'diversification' plays a role in place branding efforts to signal the active production of new pathways (Pike 2015). For Harvey (1989a; see also Anttiroiko 2014; Harvey 1982; Short 1999), the transformation of well-meaning local economic development officials into local boosters, promoting the interests of private capital, is not a result of local factors, but rather can be attributed to the parallel global processes of deindustrialisation and the facilitation of inter-urban competition as a governance model. For Harvey (1989a, p. 5), globalisation means investment increasingly 'takes the form of a negotiation between international finance capital and local powers doing the best they can to maximise the attractiveness of the local site as a lure for capitalist development'. This means, as stated by Short (1999, p. 37), 'Urban boosterism has become part of the civic culture of capitalism'. These processes impel places to compete with each other for resources and interest.

Attracting resources requires an attractive brand. For Cleave et al. (2016, p. 210), place branding 'is an attempt by local and regional governments, through policy intervention, to compete against other local and international markets by actively shaping how their locale is perceived by potential consumers'. In the globalised era of aggressive inter-place competition, place branding is an intrinsic part of building a competitive advantage over other places and attracting investment because regional differentiation cannot be built without it (Boisen et al. 2011; Cleave et al. 2016). In this regard, place

branding has become a fundamental technology of modern urban governance (Peck 2005).

Built on the logic of the private sector (Anttiroiko 2014), place marketing serves to commodify space by cultivating perceptions of geographies, as if they were sellable products. Yet, there is an important distinction between place marketing and place branding. While place marketing can refer to relatively superficial aesthetic approaches to local boosterism (such as highlighting local tourist attractions), image marketing is only part of building a city's brand (Kavaratzis 2004). Marketing is a series of tactical movements, while branding is the overarching strategic goal that seeks to establish a particular perception about a place in the minds of potential investors. It refers to a deeper combination of interrelated local economic development strategies and image-building. For Cleave et al. (2016), this represents 'high-road' branding, which seeks to harness existing place advantages and create an image in line with strategic policy objectives, that stands in contrast with 'low-road' branding, which attempts to 'whitewash' local problems. Coordinating economic development goals within the regional brand often manifests in 'industrial branding', which according to Anttiroiko (2014, p. 139), is a 'special brand', because 'it both feeds and relies upon brand identity'. In the case of a city building its brand around higher education, for example, 'the role of branding is to support this image and the symbiotic relationship between the university and its host city' (Anttiroiko, 2014, p. 141).

The ability to rebrand in response to economic shocks is crucial if the changed context makes a region's initial branding and brand interlinkages untenable. This can be understood as the 'diversification' of the place's industrial brand as the profile of its economy evolves. This is especially important in places that have been associated with a particular industry or firm. As Pike (2015, p. 188) observes, 'As with other forms of economic specialisation, when the fortunes of specific local and regional economies are closely tied to those of certain brands in spatial and temporal market settings they can be vulnerable'. For Pike (2015, pp. 188-189), 'a lack of diversification' means that places get 'a reputation for being good at something (which) can pigeonhole territories and constrain the creation of new and future development paths'. Pike (2015, p. 171) shows that while a specialised brand identity may initially be seen as an asset, through which to leverage further investment, when the brand relationship fails it becomes a liability to be

'ignored and written out of the story told of what the place is about and what the actors in it are able to do'. This means that industrial rebranding aims not only to attract inward investment centred on the new brand, but manage the problems associated with the old brand.

However, while Pike's analysis focuses on commodity branding and rebranding, this chapter suggests that the concept of diversification has become a regional brand in and of itself. Although knowledge clusters and advanced manufacturing remain core components of marketing endeavours in each case study, in Oshawa in particular, the emphasis has been as much on what the city isn't, as opposed to what it is. When diversification is the brand, then protecting the 'successfulness' of this brand means potentially minimising its 'unsuccessful' components. The aim is to convince potential investors that a city is already 'successfully diversified'. Regional industrial rebranding means pushing the old industry out of the story, and thereby diverting attention from the lingering problems associated with it. Following Short (1999, p. 40), the problems associated with the original industry's decline must be 'contained, controlled, or ignored', lest they compromise the 'successfulness' of the city's diversification brand. Successful diversification, in part, depends on the ability of actors to discursively influence perceptions that the region has already diversified.

This chapter will contend that despite superficial similarities, a key divergence in Oshawa and Geelong was policy-makers' attitudes towards socio-spatial polarisation. The issue was studiously ignored in Oshawa, while in Geelong policymakers decided to contain the issue. It will be shown that rather than this difference being attributable to the strategies of local actors, it reflected the state-led and market-led development strategies of higher tiers of government. In Geelong and Oshawa, actors responded to their unique positionalities rather than developing their branding strategies in isolation. The next section details this process in the case of Oshawa, the following section then considers the same issues in Geelong.

The 'New' Oshawa

When in November 2018, General Motors (GM) announced the closure of motor vehicle manufacturing in Oshawa, one Oshawa resident emphasised the importance of

GM to Oshawa's economy and image when he told *The Guardian* newspaper that 'This place has always thrived because of the plant. GM is Oshawa. That's who we are' (cited in Cecco & Elk 2018). Being a resident of Canada's 'motor city' was not just a slogan, but for many people, a part of their identity. Yet at the same time, this identity had been disputed. Local elites had long wanted Oshawa to transcend its association with GM, as GM's dominance of the local economy waned, and wanted Oshawa to instead be regarded instead as a diverse, cosmopolitan, advanced technology, health and education hub (Siemiatycki 2013).

In late 2016, for example, the City of Oshawa hosted a Conference in which stakeholders were asked to 'share in the spreading of the story of the "*new Oshawa*"' (City of Oshawa 2016b, emphasis added). For the City of Oshawa's economic development director, the message was simple – the *new Oshawa* was diversified.

> 'We are no longer a one-industry town and haven't been for a while. When we start talking about the *new Oshawa* we are talking about a balanced economy' (City of Oshawa 2016b).

Then Oshawa Mayor and now Durham Regional Chair John Henry was key in driving this message:

> 'Oshawa is an exciting place and we make a lot of cars here, but our diversification is immense' (City of Oshawa 2016a).

This was not just a public message, but something most local stakeholders internalised and espoused even before the GM closure. As a local Oshawa business expert (QWQ24) succinctly stated in an interview conducted before the closure was announced,

> We are no longer a GM town. We're already there.

Siemiatycki (2013) details the influence of Richard Florida's theories on creative urbanism on Durham Region development officials, and how his ideas influenced the devising of their diversification-focused economic development and branding strategy. This process began as early as 2005, when an Oshawa policy document, the *Downtown Action Plan*, committed the city to rebranding and prescribing that 'City staff and politicians need to sell themselves and the Downtown as being open and encouraging to

development opportunities … The City's rebranding exercise should remain a priority' (cited in Siemiatycki 2013, p. 1774).

University-led branding was noted by a local Oshawa business expert (QWQ24), who argued that Oshawa's higher education sector provided a tangible way to differentiate itself from other intra-Durham municipalities:

> I think people recognise Oshawa as having the largest campus in Durham Region, as far as Durham College and UOIT sharing a campus. It's quite a large campus and it's here in Oshawa, so I think that has helped us change our brand somewhat.

Notable in this answer was not just that Oshawa was building its brand on the higher education sector, but rather this sector had helped change its brand from something else, i.e. 'Canada's Motor City' (Hood 1968).

For Siemiatycki (2013) the seminal moment in the rebranding of Oshawa – when its diversification-led restructuring efforts where incorporated into the brand – was its 2006 slogan change from 'Oshawa the City in Motion' to 'Oshawa Prepare to be Amazed'. This was the first time an Oshawa official slogan did not allude to the city's automotive town image. Siemiatycki (2013, p. 1774) saw the rebranding as far more than an 'advertising pitch' to overcome the city's negative working-class image, positing instead that it amounted to a sophisticated enjoinment of branding and economic development goals, linked specifically through the diversification trope (see also Cleave et al. 2016). Oshawa's drive towards economic diversification is an explicit and central part of its policy objectives and not a branding gimmick. It is part of a 'high-road' strategy.

The effectiveness of the rebranding could be seen in its media profile. For example, a 2017 *The Globe and Mail* article (Johne 2017), proclaiming Oshawa to be an 'Ontario Success Story', cites an Ottawa-based municipal studies expert who 'sums up Oshawa's success story in two words: economic diversification'.

Unsurprisingly, when the closure of Oshawa's plant was announced in 2018, the discourse of a diversified economy remained the consistent branding message. In response to the announcement, outgoing Oshawa Mayor and incoming Durham Regional Chair John Henry suggested that while sad, this essentially meant the loss of the past rather than the present:

> ‘It's history that we're losing … When you look at what auto workers have done in this town, they've always adapted. They've always evolved’ (cited in Yeomanson 2018).

Canada’s Federal Opposition Leader and Federal Member for Durham, Erin O’Toole (2018), who worked at GM Oshawa, stressed the role of diversification in the region’s capacity to rebound after the closure:

> ‘Our region epitomised the concept of a “company town” and many families still have this connection through an employee or retiree. Fortunately, in the last two decades our economy has diversified with the growth of the energy, health and education sectors and with the expansion of small and medium sized employers across the region. This diversification will be critical as we rebound from the news from GM’.

By early 2019, an Oshawa City Councillor contended that:

> ‘We have strategically driven diversification, tangibly positioned Oshawa as a hotbed for knowledge-based investment and industrial development’ (cited in Flaherty 2019a).

Oshawa Mayor Dan Carter reassured the public that:

> ‘Diversification and innovation over the last 15 years have led to a strong economic base and provided tremendous job opportunities in several fields including education and health care’ (cited in Flaherty 2019a).

These quotations demonstrate the extent to which the public messaging was cohesive and consistent, with the key terms ‘diversification’, ‘resilient’ (see **Chapter 4**) and ‘adaptable’ dominating the discourse.

This consistent messaging was also clear from interviews with Oshawa stakeholders. In an interview in the aftermath of the closure, a City of Oshawa official (Interview Code FGH32) played down the impact of the closure on the grounds that the change had already happened:

> In the longer term, I don’t think we’re going to see much of an impact at all, actually. And quite frankly we’re looking at it as an opportunity, because in many ways, GM was a bit of an albatross around our necks … it was that thing that defined Oshawa even though that definition was no longer valid. And … by removing that we don’t have to worry about our history any more, we can just look to the future.

However, there was a significant divide between how local public sector officials, who wanted to diversify, and local capital and labour, who saw the GM plant as still integral to the city's economic fortunes, viewed the potential crisis. Interviewed just prior to the closure announcement, a local Durham labour market expert (Interview Code XYX247) focused on the potential identity shock rather than the labour impact:

> It would certainly be a shock, but I think it would be an emotional shock as opposed to an employment shock, even if you looked at the multiplier effect … I think the psychological shock to the raison d'etre of the city, would be deeper than the employment piece, frankly.

This view was not shared by local business or labour representatives prior to the closure. When asked what the impact of the closure would be on the local economy and the capacity of the region to respond, these often-antagonistic institutions appeared to respond in unison. For a business expert (QWQ24), when asked if the region could absorb the losses, the response was:

> I have no idea how they would do that. I think we would see a lot of people move out of Oshawa because they would have to relocate for other jobs. I mean, where would they go? Our employment rate is pretty good right now, we've done quite well in Oshawa, but if that (the closure) were to occur that would not be good.

Similarly, a Durham labour leader (Interview Code DYT39) argued that Oshawa would not be able to adapt well to the closure of the GM plant, pointing to the negative multiplier effects and inability to find work for all retrenched workers.

> It would create like a domino effect where, you know, you knock one thing over and a series of other things would fall around it as well. The challenge that would come about that is that I don't know if we're in a position to move that many people who would be impacted by the (closure) into something else. So there is a major impact … economically if that were to happen.

Despite these concerns, the positive messaging anchored by the diversification brand was effective in convincing the media. Aside from the stories focusing on the plight of individuals facing retrenchment and the blow to the city's identity, the major economic narrative that emerged was that the looming closure hardly represented a crisis for Oshawa. This was encapsulated by this headline:

> 'Why GM's retreat from Oshawa may "be a blow to Oshawa's heart", not its economy' (Mace 2018).

Another headline read:

> 'While GM may be, Oshawa definitely is not out of gas heading into 2019' (Clinkard 2019).

An article in the *Global News* on the closure relayed the diversification and transition narrative, explaining that:

> 'Once dubbed the Automotive Capital of Canada, Oshawa has diversified in recent years to become an education and health sciences hub' (Perkel 2018).

Similarly, in academic commentaries, local policymakers would be credited for a focus on diversification, with Cleave et al. (2019, p. 491) praising the Region of Durham's 'foresight for diversification' as being 'prescient'. A prominent Canadian automotive industry analyst suggested 'Economies like Oshawa are resilient. They find a way to survive' (cited in Tencer 2018).

The message was clear; while the plant's closure was a sad day for some individuals, Oshawa, the city, would be fine. The reason was that 'new' Oshawa is diversified, resilient and adaptable. A December 2019 report, highlighting Oshawa's economic development achievements, calmly proclaimed 'We used to build cars. Join us as we build our future' (City of Oshawa 2019a, p. 1).

Hiding the 'Dirty 'Shwa'

A look at Oshawa's new reality reveals a more problematic story. There are clear indications that successive rounds of economic displacement had excluded much of the local Oshawa population from the aspirational branding presented to outsiders. One study found Oshawa residents to be the most pessimistic about the future out of all Canadian cities (Levitz 2018). Despite a concerted effort by elite local stakeholders to promote the regional diversification brand, the negative perception of Oshawa, as an industrial town, persisted and was considered a barrier to economic development (**Table 8**).

Oshawa's image problem was encapsulated by its unflattering informal nickname, 'The Dirty Shwa' – a term used to describe the whole city, but now more commonly associated with disadvantaged areas in south Oshawa. Media reports carried testimonies of locals having to 'apologise' for being born in south Oshawa and documented the various social stigmas attached to it, as well as noting the divide between the 'dirty south' and 'Poshawa' – the informal term for the northern areas of the city (Gee 2018; Szekely 2015). Journalists also carried reports of social tension between long-term Oshawa residents who worked in the city and new residents who commute to Toronto (Levitz 2018).

Some media attention has been placed on the social problems associated with persistent, manufacturing decline, notably the perceived 'North/South' divide in the city (Gee 2018; Szekely 2015). However, reports highlighting the city's spatial inequality tend not to question Oshawa's overall success in transitioning its economy. This is perhaps best exemplified in a sub-heading in *The Globe and Mail* in 2018:

> 'Ontario's Motor City in the midst of a comeback, but as an income disparity grows, some of the neediest residents are being left behind' (Gee 2018).

The article highlights that Oshawa's successful diversification and transition has failed to address the city's social problems, but it does not dispute the positive media narratives that Oshawa is a town on the rise. Old Oshawa's issues remain, but the *new Oshawa* is a vibrant, growth centre not befitting the stigma of 'the Dirty Shwa'.

The city's branding story has been aided by a rescaling of the lens of policy interest via the constructed territory of the Oshawa Census Metropolitan Area (CMA). For example, a positive *Huffington Post* headline proclaiming Oshawa as the 'Best city in Canada for work' (Tencer 2016), was based on evidence of employment opportunities in the expanded CMA, a territory that includes the wealthy suburbs of Whitby and Clarington. Siemiatycki (2013, p. 1775) also used the CMA territorial construct to declare that Oshawa has consistently been among the wealthiest cities in Canada with the most equal income distribution. These pronouncements create and perpetuate the *new Oshawa* brand, even though empirical analysis (see **Chapter 8)** reveals that this statement is highly misleading. Focusing on the Oshawa CMA means that very high and relatively

equitable distributions of income in Whitby and Clarington, serves to obfuscate the relatively low incomes and extreme socio-spatial inequality *within* the City of Oshawa, particularly its downtown and southern neighbourhoods (see also Dinca-Panaitescu et al. 2017). The impact of presenting data on income and social inequality at the scale of the CMA shapes local (mis)perceptions of poverty rates. For example, Levitz (2018) cites data for the Oshawa CMA's high household income, while referring in the text only to Oshawa. She then quotes a local coffee shop owner's confusion:

> 'People from Oshawa are their own worst enemy, constantly talking down the city. We have high family incomes and yet looked at as poor and that's never made sense to me'.

The threat of focusing on issues that could damage Oshawa's image are reinforced by policy documents. A thematic analysis of economic priorities in a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis commissioned as part of a report, *City of Oshawa Sector Analysis and Cluster Development Strategies* in 2013 (Millier Dickinson Blais 2013), as well as the 'challenges' listed as part of a 2019 *Economic Development Action Plan (*City of Oshawa 2019b), reveals that questions about poverty, inequality and socio-spatial polarisation are essentially ignored in discussions of economic development priorities, with image a bigger factor (**Table 8**).

Table 8: Thematic Analysis of Image-related Economic Development Priorities in Oshawa

2013	**2019**	
"Weaknesses"	**On-going Challenges**	**Economic Imperatives and Action Items**
▪ Aesthetics around community gateways (e.g. Highway 401 ramps) give a poor first impression ▪ Blue collar image does not mesh with knowledge industries	Old Image as a One Industry Town	▪ Continuing Downtown Revitalization ▪ Improve the Physical Environment and Downtown Experience ▪ Improving Oshawa's Image

(Sources: City of Oshawa 2019b; Millier Dickinson Blais 2013)

With 'improving the City's Image' listed as a key 'action item', along with the need to improve the physical appearance of the city through revitalisation, the need to promote the city's diversification industry brand is seen as integral. The observation that the 'blue collar image does not mesh with knowledge industries', is seen as a 'weakness'

in the SWOT analysis and Oshawa's 'old image as a one industry town' is listed as an on-going challenge. The desire to diversify the economy and transcend the city's image as a one industry town is thus also expressed as a desire to move beyond its 'dirty' industrial past. The focus of economic development has been reinvention and attracting a more diverse cohort of people rather than a focus on improving the lives of existing low-income Oshawa residents.[17] Ultimately the public aim is socioeconomic metamorphosis as opposed to equitable social outcomes – part of the city's strategy to forget about the old and focus on the new.

Policy documents, such as those summarised in **Table 8**, show that image problems are seen as a threat to economic development. Oshawa's stigmatised image of the Dirty 'Shwa relates primarily to the industrial south side of the city. A clear example of the desire to brand its way out of an image problem is renaming the southern industrial area 'Lakeview'. A local Durham labour market expert (Interview Code XYX247) explained:

> The Lakeview neighbourhood, which is south Oshawa, we just renamed it for marketing reasons, obviously, has always been a Priority Neighbourhood.[18]

Yet this name change did nothing to change the actual reality on the ground. The Durham Workforce Authority (2018a, p. 3) in its report *Collective Impact & Community Service Planning in South Oshawa* advised the reader, 'The Lakeview neighbourhood is generally known locally as South Oshawa', seemingly needing to clarify why the place-name in the title is different from the place-name used throughout the text. During discussions with locals during field research, it became apparent that many south Oshawa residents had no idea that their neighbourhood was even designated 'Lakeview' for policy or statistical purposes, thinking of themselves simply as residents of south Oshawa. This 'whitewashing' does not suggest that local policymakers are unaware of the socio-spatial

[17] Certain socioeconomic problems in the city have been publicly acknowledged by local leaders. Conservative Oshawa Mayor Dan Carter (2018-present), who himself had experienced drug addiction and homelessness, had campaigned on addressing the city's homelessness and opioid problems (CBC 2018a). However, Carter's approach to the drug crisis involved enhanced policing (Durham Radio News 2020). Further, neighbouring municipalities and rights groups have accused his administration of attempting to whitewash Oshawa's homeless problem by deliberately establishing new low-income housing and using private security to clear homeless individuals away from Oshawa's downtown (Hall 2021; Javed 2020). Regardless, these problems have been treated as criminal or social issues, not matters related to economic development.

[18] A 'Priority Neighbourhood' is a euphemism for a disadvantaged neighbourhood in the Region of Durham's Health Neighbourhoods program.

polarisation within Oshawa. The Durham Workforce Authority's (2018b) *Oshawa Community Needs Assessment Report*, highlights various Priority Neighbourhood programs funded through Provincial Government funding streams. These are modest programs and do not represent major economic development, housing or poverty reduction initiatives. Priority Neighbourhood Programs have focused on public health and social services, as opposed to economic development or housing, with a major flagship programs focused on areas like early childhood development (Region of Durham 2019e). According to this project's informants, local business is not involved in Priority Neighbourhood programs.[19]

It seems that in Oshawa the policy areas are compartmentalised. The problems of deindustrialisation or plant closures have been separated from issues of regional development and both are isolated from problems of inequality and social dysfunction. This problematisation has contributed to south Oshawa – Lakeview – being almost ignored in terms of place-based policy.

The 'Public Position' of Oshawa's Diversification Brand

While issues of gentrification and socio-spatial inequality are not mentioned as threats in the public policy documents discussed in the previous section, privately they are recognised as a potential threat to the city's economic development strategies. In an interview, a City of Oshawa official (Interview Code FGH32) noted the city's socioeconomic problems:

> We've got a great deal of discussion happening around the whole areas of social inequality. And … I call them 'dire manifestations' that we're starting to see happening, we're seeing a tick up in homelessness filter into Oshawa. We've seen that spread through (because of) the opioid crisis that's happening here. But, you know, they're problems that we're seeing elsewhere too. But (here) they're becoming very visible in a lot of ways.

One of the consequences of Oshawa's emphasis on downplaying its socio-spatial polarisation has been the ability of higher tiers of government to continue to ignore the

[19] This contrasts with Geelong, where programs such as GROW, co-opt business groups such as the Geelong Chamber of Commerce to promote economic development in disadvantaged areas (G21 2015).

city's crisis. While, local officials could privately lobby for crisis support, they had to be 'cautious' about compromising the 'public position' of diversifying growth. This means drawing attention to social problems might be counterproductive:

> Depending on who you are talking to you pick your message. So, quite often we were talking to the province and the feds, (stressing that) 'the sky is falling, you guys have gotta help us'. But we've always had…a sort of public position too. So, we've always had to be a little bit cautious in terms of the messaging and communications.

As far as this official was concerned, the need for a positive 'public position' was clear, given the potentially damaging image-crisis generated by panicked reactions to the closure announcement:

> We needed to calm the investment waters, because (after) the announcement we were getting calls from projects … saying "our financers are saying that we no longer want to invest in this project any more". And so, we had to respond individually…talk to the bankers, talk to some of the financers. This is where … when we got into that (you have to ask) what is the real role of GM in the community and the impact it has? … We diversified our economy, and … (GM is) only 3% of total jobs. All of our growth projections, and all the residential development that was scheduled for Oshawa, was quite frankly independent of anything GM would be doing. It was being driven by absolutely different forces.

This quote reveals how important Oshawa's rebranding became for managing the fallout of the closure announcement. The official explained how they reassured bankers and financers:

> (To) give them what they need to keep their clients calm … (telling them that) we knew auto was going to be fading over the last number of decades anyway, so we diversified our own plans to the extent that, yeah, you know what? We're not even going to really notice it.

This responded to the fear that private investors from unrelated industries were nervous after the closure and would potentially withdraw capital from the region. Hence, Oshawa's diversification brand became a crucial part of ensuring the fallout was limited to the direct impact on the automotive supply chain. Local officials felt that over-emphasising the city's problems could be detrimental to the the city's brand. This

highlights the extent to which Oshawa's diversification is dependent on targeting external impressions of Oshawa.

Branding Conformity and the Normalisation of Socio-Spatial Inequality in Ontario

Place branding must inherently be recognised as an expression of capital selectivity. If place branding is a competitive tool to attract private capital, then it must mould its branding and development priorities in line with the priorities of these private interests. As central governments have either willingly or unwillingly decentralised global investment attraction schemes to regions, it is then international capital that determines 'competitiveness' (Harvey 1989a). Yet, while branding-based competition is assumed to breed innovation, in reality it often manifests in uniformity and replication of the same strategies (Warnaby & Medway 2013). This is also intuitive; absent the backing of an interventionist, placemaking state, then competitive regions must adhere to a 'high road' brand suited to the interests of capital, and innovate only within, rather than outside, the parameters that appeal to private investors.

Yet despite place branding being intrinsically linked with inter-urban competition, in reality it is still subject to state selectivity. For Boisen et al. (2011, p. 140), 'Different people have different interests in a place. Public authorities selectively cooperate with specific stakeholders favouring some interests above others. Place branding reflects this selectivity'. For Warnaby and Medway (2013, p. 351), an:

> 'officially sanctioned narrative … will inevitably be selective and its emergence will be a function of the power relations within the place (and also between that place and others within and between levels of a spatial hierarchy). As a consequence, some aspects of the place are emphasised and others marginalised or ignored'.

The result is that the issues that get prioritised or marginalised are determined by state spatial selectivity, regardless of whether or not this is passive.

In Ontario, a market-driven consensus on growth (Boudreau et al. 2007), diversification and the cultivation of a knowledge economy, meant that branding initiatives by local Oshawa policy actors had to align with provincial priorities, in order to receive attention. The branding and development emphasis on UOIT and projects centred

on the institution conformed with Provincial prerogatives (Siemiatycki 2013). Analyses by Cleave et al. (2016, 2019), highlight the homogeneity of regional branding and development initiatives in Ontario, despite the seeming ascendancy of 'competitive regionalism'. Cleave et al. (2016, p. 223) concluded, from a comprehensive evaluation of the place branding strategies of 25 Ontario municipalities (which excluded Oshawa), that because many Ontarian cities were grappling with deindustrialisation, the Ontario-wide brand focused on the province's 'transition towards advanced manufacturing and a knowledge economy'. This shows that Oshawa's 'local' branding efforts were a microcosm of this larger scale.

Cleave et al.'s later work (2019, p. 469) on policy responses to manufacturing transition, which included Oshawa among 46 other municipalities, concluded 'that there is considerable homogeneity in the way that cities of all sizes are approaching manufacturing, suggesting they are not adequately considering the local context in their policy, and rather focus on more general and previously adopted approaches'. A thematic analysis by Cleave et al. (2019, p. 485) found that of the 47 municipalities, 42 of 47 (89%) had a strategy to 'Pair local education institutes with industry', while 32 out of 47 (68%) had a strategy to 'Diversify economy in areas with predominantly manufacturing', and 22 out of 47 (47%) had a strategy to 'Pair arts and culture with industry'. There is nothing novel about Oshawa's diversification-led, creative urban and knowledge cluster branding and development agenda in Ontario. It is quite the opposite, in fact. For Anttiroiko (2014, p. 150), on a global scale Toronto is a Richard Florida-inspired 'creative city *par excellence*', so it is unsurprising that other Ontarian cities have followed similar branding strategies, including Oshawa (Siemiatycki 2013). In Ontario, it is apparent that intra-provincial regional competition has resulted in uniformity rather than innovation in branding and development strategies.

The result in Ontario is dozens of small, medium and large places competing with each other to market themselves. Nevertheless, this 'high road' branding largely coheres with the same policy mobilities and best practices that appeal to potential investors, leaving places constrained in their ability to market themselves in a way that truly differentiates them from others. In this context, it is likely that highlighting pockets of severe socioeconomic disadvantage, low-levels of educational attainment and pronounced socio-spatial polarisation for a place like Oshawa seems anathema to

successful branding. It provides additional reasons to minimise problems that would hurt the city's image. In this regard, Siemiatycki's (2013, p. 1775) observations, building on Peck (2005), that the normalisation of socioeconomic inequality in Oshawa as a result of its 'focus on diversification' was simply following extant orthodoxy, proved prescient.

In 2017, the City of Oshawa (2017) listed approximately 4,000 employees as working at GM, while by 2019, the Region of Durham (2019b) estimated the combined employment of UOIT and Durham College at 4,500-5,000. Employment at these institutions did not come close to matching the number of manufacturing jobs lost over the preceding decades. The success of Oshawa's branding strategy has thus been to at once downplay the impact of GM job losses, overstate the importance of higher education in stabilising the city's labour market, and downplay the socio-spatial inequality in the city.

This case study largely reinforces Siemiatycki's (2013) initial assessment of the city's development efforts, but offers an important distinction by adopting a multi-scalar perspective. By focusing on diversification as a brand, this section suggests that the relationship between diversification and equitable growth is not that the focus on one diverts attention from the other, since local officials in Oshawa and Durham were acutely aware of the major socioeconomic problems in the city. Instead, the focus on diversification and the position of Oshawa in a competitive regional milieu, necessarily came at the expense of addressing the fallout of deindustrialisation. Ignoring inequality publicly was not a result of negligent omission, nor simply the result of a local embrace of urban development orthodoxy, but was based on a strategic consideration of Oshawa's positionality and its external image.

Geelong: 'Sleepy Hollow' no More?

Like Oshawa, Geelong has long had a stigmatised image, encapsulated by its longstanding derisory moniker 'Sleepy Hollow'. This label was first attached to the city in the 19th century, as Geelong fell behind the engine of Victorian economic growth, Melbourne, and the goldfield towns of Ballarat and Bendigo, and would re-emerge as the city began to deindustrialise in the late 20th century (Gray & Novacevski 2017). This was a stigma that Geelong stakeholders wanted to overcome. A controversial marketing advert

released by the Geelong City Council (via its local tourism authority), *Geelong Reinvented*, invited viewers to witness 'The Tale of Sleepy Hollow' (Robot Army Productions 2014). *Geelong Reinvented* was a showcase of the city's economic diversification rebranding. Using both narration and visuals, the advertisement juxtaposed the city's 'old' image as a grimy manufacturing town – portrayed exclusively by male actors, complete with background centrefold pinups – with the city's 'new' image as a hospitality, cultural and entertainment hub, focusing on young couples and young women. Highlighted prominently, was the city's Australian Football League team, the Geelong Cats, which had won the national competition in 2007, 2009 and 2011 having re-emerged as a respected and powerful club after a 44-year Premiership drought, encapsulating a newfound sense of pride and confidence in the city's identity.

However, *Geelong Reinvented* was not a standard place marketing presentation. The crisis facing the city was framed in apocalyptic terms, with the narrator exclaiming that 'the city fell on dark times' over images of actors portraying zombies in a deserted main street. For Gray and Novacevski (2017, p. 310) 'The zombie-ridden dystopia presents an allegory for perceptions of urban decay associated with the deindustrialised city'. The extent to which the city embraced and reinforced the stigmatised image of the 'old Geelong' was unusual and striking, but served the thematic purpose of drawing a sharp distinction between the old and the new. As the narrator lamented that 'all hope seemed to be lost', suddenly Mayor of Geelong Darryn Lyons (2013-2016) appeared on horseback, representing the city's saviour who supernaturally excised the zombies and ushered in the new Geelong.

Lyons, known alternatively as the 'Mohawk Mayor' (a reference to his colourful hair) or 'Mr Paparazzi' (a reference to his former profession) was known for an eccentric personality. His run for Mayor of Geelong garnered national and, to an extent, even international notoriety, with Lyons having been a former contestant on *Celebrity Big Brother* in the United Kingdom (Casson 2016; Gray & Novacevski 2017). Lyons was viewed as an outsider candidate for Mayor and gained support from a local electorate unhappy with establishment figures in the City Council, which was commonly perceived as a 'nest of vipers' that was beholden to powerful local business and union interests (Kurmelovs 2016).

If Lyons branded himself as the champion of new Geelong, other stakeholders viewed him as a threat to the city's image and its economic development strategy. His election to Geelong Mayor and his ascent as Chairperson of the G21 caused significant tension with other mayors in the G21 and his administration was viewed by many Geelong stakeholders as an embarrassment (Casson 2016; Kurmelovs 2016). For Rebecca Casson (2016, p. 42), former CEO of the Committee for Geelong, Lyons 'seemed to drown out Geelong's important issues, and undermined the legitimacy of local government'. As stated previously, the sacking of Lyons and the rest of the Greater Geelong City Council by the Victorian State Government was given many justifications, but a fundamental assertion was that dysfunctional leadership was hurting Geelong's local economic development prospects. No explicit mention of public image or brand maintenance was used to justify Lyons' dismissal, but consternation over his public persona cannot be divorced from perceptions of his private leadership as dysfunctional.

Despite more controversial local leaders[20], Geelong's branding has in some respects been largely similar to Oshawa's branding strategy. Its branding has centred on its higher education sector, which has anchored related 'high road' brands espousing the city's shift to creative urbanism and advanced manufacturing (Correia & Denham 2016; G21 2007; Johnson 2009). The concept of diversification itself has likewise played a fundamental role in the city's branding (see **Chapter 4**).[21] However, unlike Oshawa, image, as opposed to economic development substance, appeared to be far less of a priority and disadvantage was not ignored in Geelong. In the 2013 *Geelong Regional Growth Plan* (G21 2013, p. 15), key priorities alongside the creative urban goal to 'Increase appreciation of diversity, arts and culture', was 'Improve access to services, infrastructure and affordable housing' and 'Address disadvantage'. The G21 (2016; Burkett 2013) would release two key policy documents, *Addressing Disadvantage through Affordable Social Housing* and *Addressing Disadvantage in the G21 Region: Using Place-Based Investment Approaches.*

[20] Oshawa's Mayor Dan Carter also made national news, because of his highly unusual background (being open about his struggles with homelessness, drug addiction and even illiteracy), but his personal redemption story was treated seriously and positively in the media (CBC 2018a).

[21] The tendency of G21 (2013, 2014) reports to seamlessly include the concept of industry diversity with other types of social and demographic diversity, such as in the 'diversity index', highlights that the concept was ubiquitous yet nebulous.

Tellingly, the *G21 Region Economic Development Strategy* (2014, p. 2) highlighted that branding the region's 'successful diversification' did not require ignoring socio-spatial inequality:

> 'The successful diversification, growth and stabilisation of the economy have been made possible through a committed and collaborative approach between key stakeholders. While there remain some pockets of disadvantage and underutilised labour, there are many development opportunities and the proximity and rapid expansion of Melbourne's western region presents unique opportunities for the growth and prosperity of the G21 region'.

Unlike Oshawa, therefore, Geelong's socio-spatial disparity has often been given a central position in policy discourse. In 2016, when the Victorian State Government (2016a, p. 9) enacted legislation to dismiss the entire Geelong City Council, it acknowledged explicitly that while Geelong had diversified, the decline of manufacturing had left behind significant structural issues. This included concentrated socioeconomic disadvantage in the suburbs surrounding major plants. The inquiry identified that the Geelong City Council was:

> 'deficient in a number of respects including a lack of focus on the locational impacts of structural change, for example on the City's northern suburb (sic) of Corio-Norlane, which is already subject to significant intergenerational disadvantage. The issues facing Corio-Norlane will be magnified by the closure of Ford and associated component manufacturers' (Victorian Government 2016, p. 18). [22]

Thus, while local stakeholders had identified socio-spatial polarisation as a priority, the Victorian State Government nonetheless based its intervention in part on the observation as this issue had not been properly addressed. Blaming the Geelong City Council for concentrations of socioeconomic disadvantage was specious, considering that in Australia's federal structure this is not the responsibility of local government, but nonetheless this highlighted how willing the Victorian Government was to at least acknowledge the problem. However, both the Victorian State Government and local Geelong policymakers preserved the branding message that the city had 'successfully'

[22] Corio and Norlane are separate suburbs, the report is referring to a combined statistical area.

diversified. As such, enduring socio-spatial polarisation was an issue to be contained in relation to this successful diversification, not ignored.

Despite Oshawa and Geelong both facing image problems related to their industrial pasts and adopting similar brands in response, the discourse surrounding socioeconomic disadvantage was markedly different in each case study. Unlike south Oshawa, there were no attempts at simply whitewashing the problems in Corio-Norlane and little downplaying of the direct relationship between the impacts of manufacturing closures and socioeconomic disadvantage. In fact, the opposite was the case, as addressing disadvantage in these areas provided justification for intervention. Geelong was afforded the luxury of simultaneously branding itself as a boom area and a disadvantaged and forgotten regional city beset by socioeconomic disadvantage, knowing that doing so cohered with federal and state government policy agendas.

Contrasting Geelong and Oshawa

Geelong and Oshawa both followed prevailing place branding orthodoxies to a large degree, but awareness of spatial inequalities was suppressed in Oshawa, while leveraged by Geelong. Policymakers in Oshawa sought to decouple deindustrialisation from social problems, whereas in Geelong the link between social disadvantage and deindustrialisation was accepted. This disjuncture reflects different opportunities available to, and constraints imposed on, actors as a result of different positionalities and institutional milieux. The Ontario Provincial Government and Canadian Federal Government were largely unwilling to intervene in Oshawa, either through place-based structural adjustment packages in response to the specific crisis of GM retrenchments, or long-term poverty reduction initiatives. As a result, Oshawa had to calibrate its brand to suit a market-led development strategy. Contrary to Cleave et al. (2016), the Oshawa case reveals that 'high-road' branding and 'low-road' efforts to hide problems are not dichotomous approaches to economic development, but may be complimentary. As the case of socioeconomic disadvantage in downtown and south Oshawa shows, a degree of whitewashing is necessary in order to maintain the broader 'high-road' diversification brand.

Ultimately, the question of why Oshawa's socio-spatial polarisation has been ignored appears straightforward: if a city is to brand itself successfully to attract private capital, then it may have to downplay its problems. Oshawa and Durham officials were actively aware of increased socioeconomic disadvantage in the city, but without access to public investment from higher tiers of government, they decided not to draw attention to it, lest it scare away private investors in a fiercely competitive 'new regional' Ontario context. Even when issues such as gentrification, inequality and social polarisation were acknowledged internally (see **Chapter 9**), these issues were not linked to the long-term shock of deindustrialisation, which reduced the policy impetus for intervention to resolve them.

While Oshawa's municipal government officials were generating positive headlines, Geelong's local political leaders were being criticised by both the media and the State Government itself, with socio-spatial disadvantage used as evidence of local policy dysfunction. If place branding and faith in local leadership was important for attracting private capital, then Geelong was unlikely to be successful. However, because a far more extensive state-led development project was launched in Geelong, local stakeholders did not have to defend the city's brand to private investors and could instead leverage the city's problems to lobby for more public funding. In both Geelong and Oshawa, local economic development strategies were carefully calibrated to maximise opportunities given imposed constraints. The different diversification branding strategies must therefore be understood through the lens of state spatial selectivity.

Conclusion

Both Oshawa and Geelong followed globally circulating discourses in urban/regional development and 'best practice' policy implementation, but their local expressions of these mobile policies had very important differences. Market-oriented branding, as currently constituted, enables provincial/state and federal governments to pass responsibility for regional development to regions or cities, forcing them to compete with each other and to cultivate identities that attract private capital. In this process, it is evident that structural arrangements – the constitutional distribution of powers and other institutional arrangements – condition the range of opportunities and constraints

facing local agents and to some extent dictate the range of policy actions available to them. The stronger the market orientation of the context, the more places must downplay their own socioeconomic problems in order to protect the 'brand'. A brand built on diversification, or a focus on the 'new', means marginalising the problems left behind by the 'old' image, which in turn presents an impediment to addressing these lingering problems.

If municipal governments do not have the ability to address socioeconomic disadvantage within their jurisdiction, then higher tiers of government must remain the core focus in understanding the relative agency to effect change. In the two case studies, local actors largely responded to their positionalities and limited resources. Geelong's economic development stakeholders have taken advantage of the place-making, spatial equalisation-based, de-concentration agendas of the state and federal scales to establish themselves as intra-public sector vertical lobbyists, as much as private capital marketers. Conversely, Oshawa stakeholders were forced to moderate vertical lobbying efforts in favour of branding the city in such a way as to be attractive to private capital. This dynamic helps explain the co-option of crises, related to deindustrialisation, to implement a state-led development agenda in Geelong and the absence of a substantial place-based response to economic shock in Oshawa.

Chapter 8 - Diversification as Spatio-Temporal Polarisation

Introduction

According to Meegan (2017, p. 1288), regional diversification entails that changes in local industry composition are not a process of replacement, but the 'historical layering of investment rounds' that 'creates new economic structures and geographies of production but also has the potential for transforming the social composition of affected localities'. This contention builds upon Massey (2007), who argues that social inequalities arise, because labour employed by the declining specialised industry is unsuited to new forms of employment. This means that localised inequalities are not just an unfortunate side-effect of industry decline and subsequent diversification 'but are integral to the form of spatial organisation itself' (Massey 2007, p. 52). From this perspective, increased localised socioeconomic polarisation is a necessary condition of 'successful' diversification. In the aftermath of economic shock, emerging industries cannot absorb retrenched workers and must attract new skills, for which the existing labour force is deficient. This leaves segments of the retrenched labour force either facing continued unemployment or dependence on employment in emergent sectors offering low-wage and precarious jobs.[23] This means successful diversification may 'solve' the potential crisis of regional decline, but cannot solve the crisis of **structural** displacement and may exacerbate the problem of localised socioeconomic inequality.

This chapter articulates this lesser-known 'dark side' of regional diversification, highlighting, in particular, the spatio-temporal determinants of socioeconomic polarisation. Following Massey's (1984, 2007) concept of layering, this process is shown to have both spatial and temporal dimensions so that, in both Oshawa and Geelong, the 'old' and 'new' industrial identities manifest in geographical divisions, as new industries establish at favourable sites. This leaves disadvantaged areas close to the epicentre of deindustrialisation to languish in decline. The chapter offers comprehensive empirical evidence that challenges the notion of 'successful' diversification in Geelong and Oshawa, by detailing the significant socioeconomic problems that have arisen as a result of

[23] Population mobility evidence suggests that low-skilled, precarious jobs are more likely to attract incumbent residents, while stable jobs requiring higher qualifications attract more migrants (Eriksson et al. 2018).

deindustrialisation. Using a multi-scaled analysis, it reveals that increased socio-spatial polarisation, in combination with the use of methodologically atomistic statistical constructs that up-scale or re-scale these spatially-concentrated problems out of view, has masked increased socioeconomic disadvantage in the areas of each city most affected by deindustrialisation.

Polarisation in Oshawa

This section focuses on a three-tiered income polarisation in Oshawa. First, it highlights a decoupling of the City of Oshawa from its surrounding Durham Region municipalities. Second, it reveals a marked divergence of median incomes, between the old urban area in the City of Oshawa's south centred on its traditional manufacturing industries and its newly developed northern areas within the City of Oshawa. Third, it exposes the increasing ghettoisation of the city's low-income neighbourhoods. Fourthly, it shows why the perceived 'north-south' divide needs to be better understood as a 'new-old' divide, with the crisis of deindustrialisation very much still evident in the 'old' Oshawa.

The Oshawa Census Metropolitan Area – Re-territorialising the Problem Away

The Oshawa CMA, which includes Oshawa and its neighbouring municipalities of Whitby and Clarington, is relatively prosperous compared to the Canadian average. In 2005, the Oshawa CMA had the highest median household income of all CMAs in Canada (Statistics Canada 2017; see also Siemiatycki 2013). Between 2005 and 2015 the Oshawa CMA dropped to third in Canada in median household income, but only because it was overtaken by the resource-fuelled economies of Calgary and Edmonton (Statistics Canada 2017). Further, economic prosperity has been distributed relatively equally in both a social and spatial sense. Walks (2013) observed that the Oshawa CMA had the lowest incidence of low-income individuals and households between 1980-2005 and found that it had the lowest spatial inequality across neighbourhoods from 1970-2005. Oshawa CMA still leads the way for Canadian metropolitan area in terms of low poverty incidence. Using the Low-Income Cut-offs (LICO) measure, the Oshawa CMA has had the lowest proportion of low-income residents across all Canadian CMAs since 1980 (Heisz & McLeod

2004; Statistics Canada 2007, 2017). The Oshawa CMA territorialisation produces a positive depiction of industrial diversification that has been used to enhance Oshawa's image (see **Chapter 7**). If the Oshawa CMA was able to retain one of the highest and most equitable income distributions in Canada despite deindustrialisation, it would be reasonable to conclude that it is a remarkably successful case study in diversification, justifying the lack of state-led intervention in Oshawa.

Deconstructing the Oshawa CMA

For Siemiatycki (2013a, p. 1775), prosperity in the Oshawa CMA could be attributed to 'its well-functioning industrial economy in which many local residents had relatively high-paying, unionised jobs'. The income equalising impacts of motor vehicle manufacturing assembly employment were indeed once clear. In 2005, a full-time motor vehicle assembly worker in the Oshawa CMA was earning an inflation-adjusted median income of CAD$82,000 compared with CAD$59,000 for all occupations in the metropolitan area and CAD$49,000 for all occupations across Canada (Statistics Canada 2007).[24] This was despite the reality that nearly three quarters (72%) of the 6,365 motor vehicle assembly workers in the Oshawa CMA, in 2006, had no post-secondary certificate, diploma or degree, and more than one fifth (22%) had no secondary school or other qualifications (Statistics Canada 2007).

Median annual full-time wages for assembly workers in the Oshawa CMA decreased to CAD$61,000 in 2015 – on par with the median employment income for all occupations in the Oshawa CMA (C$60,000) – following union concessions in response to threatened disinvestment by GM (see Siemiatycki 2012). However, this was still more than CAD$7,000 higher than the Canada median full-time employment income across all occupations. In 2015, a full-time motor vehicle assembly worker in the Oshawa CMA with no certificate, diploma or degree earned a median income of CAD$74,000 (higher than the median for assembly workers with qualifications), which was essentially double the CAD$37,000 earned by full-time workers with no certificate, diploma or degree across all occupations in Canada. Transport manufacturing remained one of the top average income industries in the Oshawa CMA in 2015, despite wage decreases (see **Figure 19**).

[24] Inflation adjusted to 2015 dollars using Bank of Canada (2019) inflation calculator.

The Oshawa CMA median income of CAD$48,000 for both full-time and part-time motor vehicle assembly workers, compared with CAD$10,000 for food and beverage service occupations, and CAD$15,000 for retail salespersons, showed that assembly work provided far higher and more stable income than other low-skilled occupations that have grown as Oshawa has diversified (see also Siemiatycki 2013).

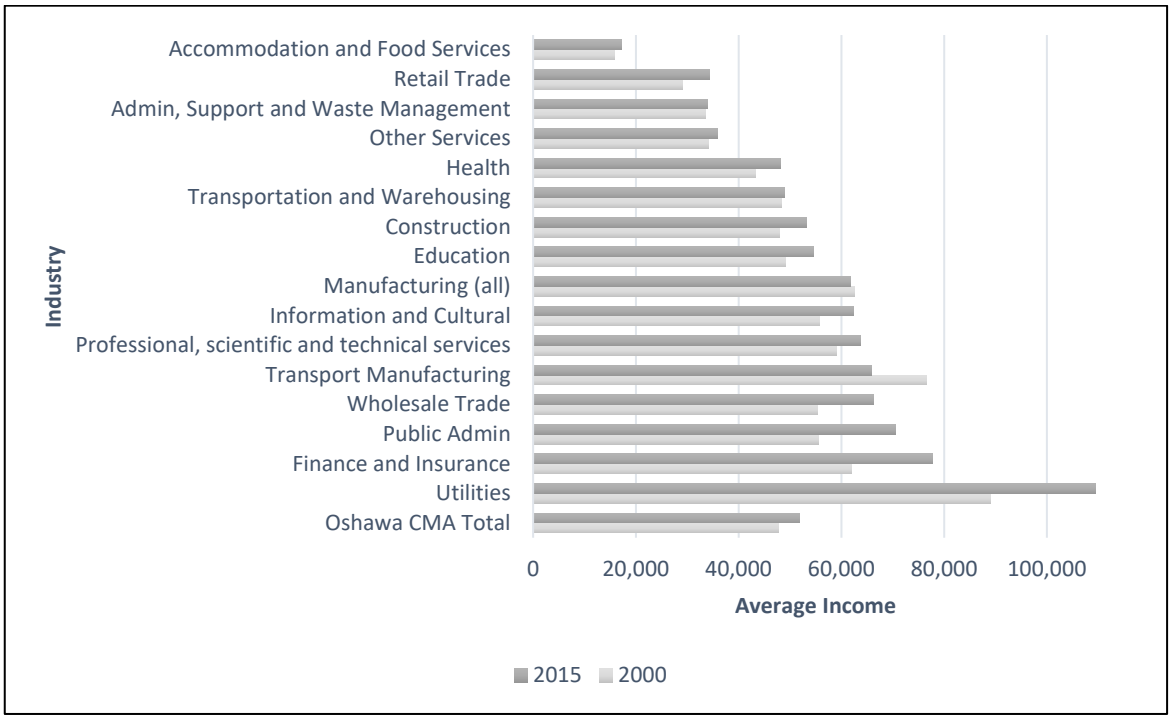


Figure 19: Average Income in Selected Industries in the Oshawa CMA, 2000, 2015

Note: Inflation adjusted to 2015 dollars using Bank of Canada (2019) Inflation Calculator. (Sources: Statistics Canada 2002, 2017)

According to Siemiatycki (2013), high- and equitable-income growth in the Oshawa CMA was driven by automotive manufacturing employment, but this is contradicted by the fact (otherwise recognised by Siemiatycki) that these steady, high-paying manufacturing jobs were being replaced in large part by low-wage, precarious jobs. That the Oshawa CMA was able to keep a steady high median income, in spite of tens of thousands of manufacturing job losses, seems to defy explanation.

In reality, the Oshawa CMA serves to conceal on-going challenges in the areas close to the Oshawa's automotive heart. There are three problematic issues: the artificial nature of Oshawa CMA, the uneven growth of the municipalities within Oshawa CMA, and the unevenness of growth within the City of Oshawa. The first problem, as introduced in **Chapter 4**, is that the Oshawa CMA has no inherent meaning beyond its role in the

geography of Census collections. The second is that Oshawa CMA includes the City of Oshawa and its two neighbouring municipalities of Whitby and Clarington, both of which have grown rapidly over the last 30 years. The three municipalities lack a unifying commonality. Certainly, like most metropolitan designations, there are significant economic links between these constituent parts – many individuals commute between Oshawa, Whitby and Clarington for work – but these links alone don't explain why Whitby would be considered part of the Oshawa CMA, when a far larger proportion of its labour force works in the Toronto CMA than the Oshawa CMA (Statistics Canada 2017).

The third problem is that by merging data from these three suburbs, the Oshawa CMA skews the income data to make its namesake at the municipal level (City of Oshawa) appear far more prosperous than it is. Whitby has a high median household income of roughly CAD$104,000. The corresponding figure for Clarington is CAD$96,000, also reflecting its status as a high-income municipality. These figures are 48% and 38% higher, respectively, than the City of Oshawa's CAD$70,000 (Statistics Canada 2017). The City of Oshawa's median household income is also well below the Durham median of CAD$90,000. Such income discrepancies between Oshawa and its fellow Durham municipalities did not always exist; in 1970, median household income in Whitby was a mere 5% higher than Oshawa (Statistics Canada 1972). In 2015, the City of Oshawa's median household income was slightly lower than the Canadian (CAD$70,000) and Ontario (CAD$74,000) medians (Statistics Canada 2017).

Patterns of population growth produce a similarly uneven picture in the 'Oshawa-centred region' of Durham. In 1976, two years after the creation of the Region of Durham, Oshawa was already an urban centre of more than 100,000 people and its population was more than triple that of the next largest municipality in Durham (Statistics Canada 1977). However, as these municipalities began to grow far more rapidly, as a result of urban expansion between Toronto and Oshawa, Oshawa went from comprising 43% of the Durham region's population in 1976 to just 25% of the total in 2016. Although the City of Oshawa's population has been relatively stagnant compared to its neighbours, it has not suffered depopulation like many other deindustrialising cities in North America. However, the next section shows that the historical core of the city is indeed suffering population decline.

Polarisation, Poverty and Disengagement within the City of Oshawa

There is a high level of polarisation *within* the City of Oshawa. This is expressed in a socio-spatial divide between the stigmatised south Oshawa, which is the industrial area home to the headquarters of General Motors Canada and the GM 'Autoplex' assembly, and the wealthier prosperous suburbs to the north of the city, which is home to the main campus of UOIT (see **Figure 27**).

As explained in **Chapter 7,** the south Oshawa area below Highway 401 has been rebranded as 'Lakeview'. Lakeview was not the only area in Oshawa hit by manufacturing decline, but was among the hardest hit, losing 2,735 manufacturing jobs, between 1986-2016 (representing a 72% decrease), and seeing its experienced labour force decline by 11% (Statistics Canada 1987, 2017). Its 1986 population of 19,268 had decreased by 6% (18,155) in 2016. **Figure 20** shows the higher incidence of low income in Lakeview compared with the City of Oshawa and City of Oshawa's higher incidence compared to its more prosperous neighbours. Nearly one in four Lakeview residents were classified as low income in 2016, compared to one in ten across the Durham region overall.

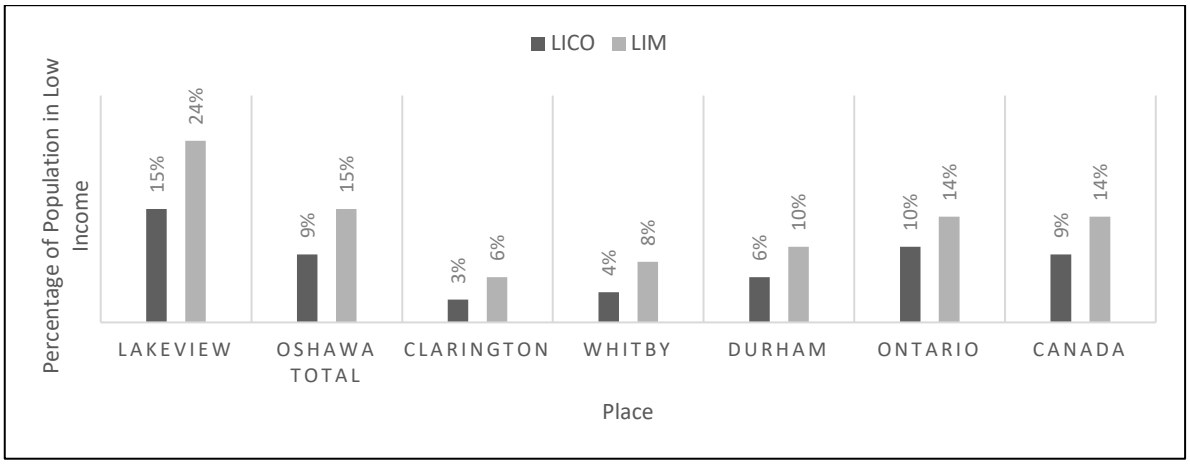


Figure 20: Incidence of Low Income in Lakeview and Selected Areas, 2016

Note: Metrics are LICO 'Low Income Cut-Offs' and LIM 'Low Income Measure'. Lakeview is defined according to Durham Health Neighbourhood boundaries and is comprised of 4 census tracts listed in Appendix B. (Source: Author calculations based on Statistics Canada 2017)

Low scores on these measures are associated with a host of socioeconomic disadvantages. Using a variety of socioeconomic indicators, the Durham Region (2016) divided Durham into 50 'Health Neighbourhoods' and determined that seven of those be considered 'Priority Neighbourhoods' for policy intervention. Tellingly, five of the seven

were located in the City of Oshawa, including Downtown Oshawa and Lakeview. Priority Neighbourhoods are areas of concentrated social housing that score poorly on a range of socioeconomic indicators, in particular low median income, as explained by the Region of Durham (2016, p. 16):

> 'Neighbourhoods in Durham with the lowest incomes also have lower high school competition rates, higher unemployment rates, higher percentages of children living in low income households and tend to have poorer health. This pattern is most clear for the seven neighbourhoods with the lowest median incomes'.

The layered inter-Durham and intra-Oshawa socio-spatial income disparities have not always existed. According to the 1961 Canadian Census (Statistics Canada 1962), the two Census tract areas below the Highway 401 (that encompassed what is now rebranded as Lakeview) had higher average household incomes than both the then northernmost census tract in City of Oshawa, as well as the adjacent Town and Township of Whitby.[25] In 1971, the last Census before the Durham Region's creation in 1974 and the amalgamation of Oshawa and East Whitby, the southwest Lakeview census tract – an area that now comprises 3 of the 4 modern census tracts and contains 81% of Lakeview's 2016 population – had a median household income only 3% lower than the City of Oshawa median, only 6% lower than the East Whitby median, and only 8% lower than the Whitby median (Statistics Canada 1972, 2017) (see **Figure 21**). Notably, **Figure 21** shows that the highest income census tracts in 1970 were not in Whitby or East Whitby, but in Oshawa.

[25] Confusingly, prior to amalgamations, there existed the Town of Whitby, the Township of Whitby (later amalgamated into the Town of Whitby) and the Township of East Whitby (later amalgamated into Oshawa and now known as north Oshawa). In the 1971 Census the then northernmost census tract in Oshawa lay to the south of the Township of East Whitby, which was then a largely rural area encompassing the northern and eastern portions of the current City of Oshawa with a population of 3,405. It was amalgamated into Oshawa in 1974.

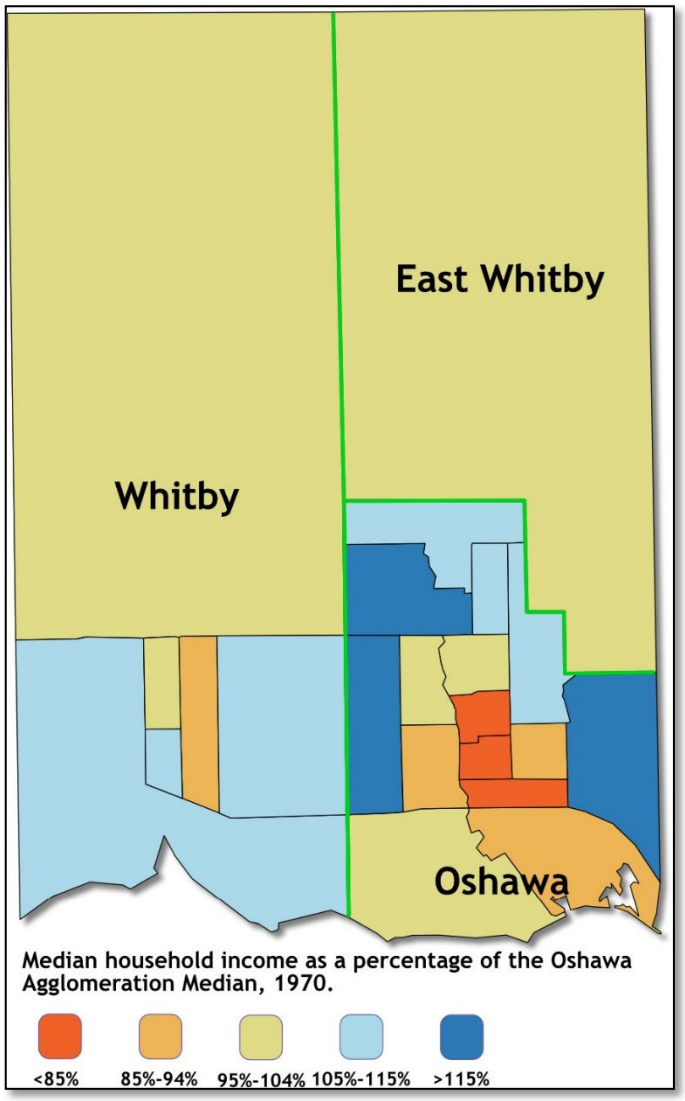


Figure 21: Median Household Income in Oshawa, Whitby & East Whitby Census Tracts, 1970

Note: Census tracts are benchmarked to the 1970 Oshawa Agglomeration (comprising Oshawa, Whitby and East Whitby) median household income. (Source: Author's calculations from Statistics Canada 1972)

Figure 22 shows the changes in median incomes for census tracts within the City of Oshawa in 1980, 1990, and 2015, highlighting increasing spatial polarisation between north-eastern census tracts that formerly comprised East Whitby, and other areas in the City of Oshawa. **Figure 23** shows that in 1980, median household incomes in Lakeview census tracts either exceeded or were comparable to the Canadian median, but experienced significant relative decline to national and regional incomes by 2015.

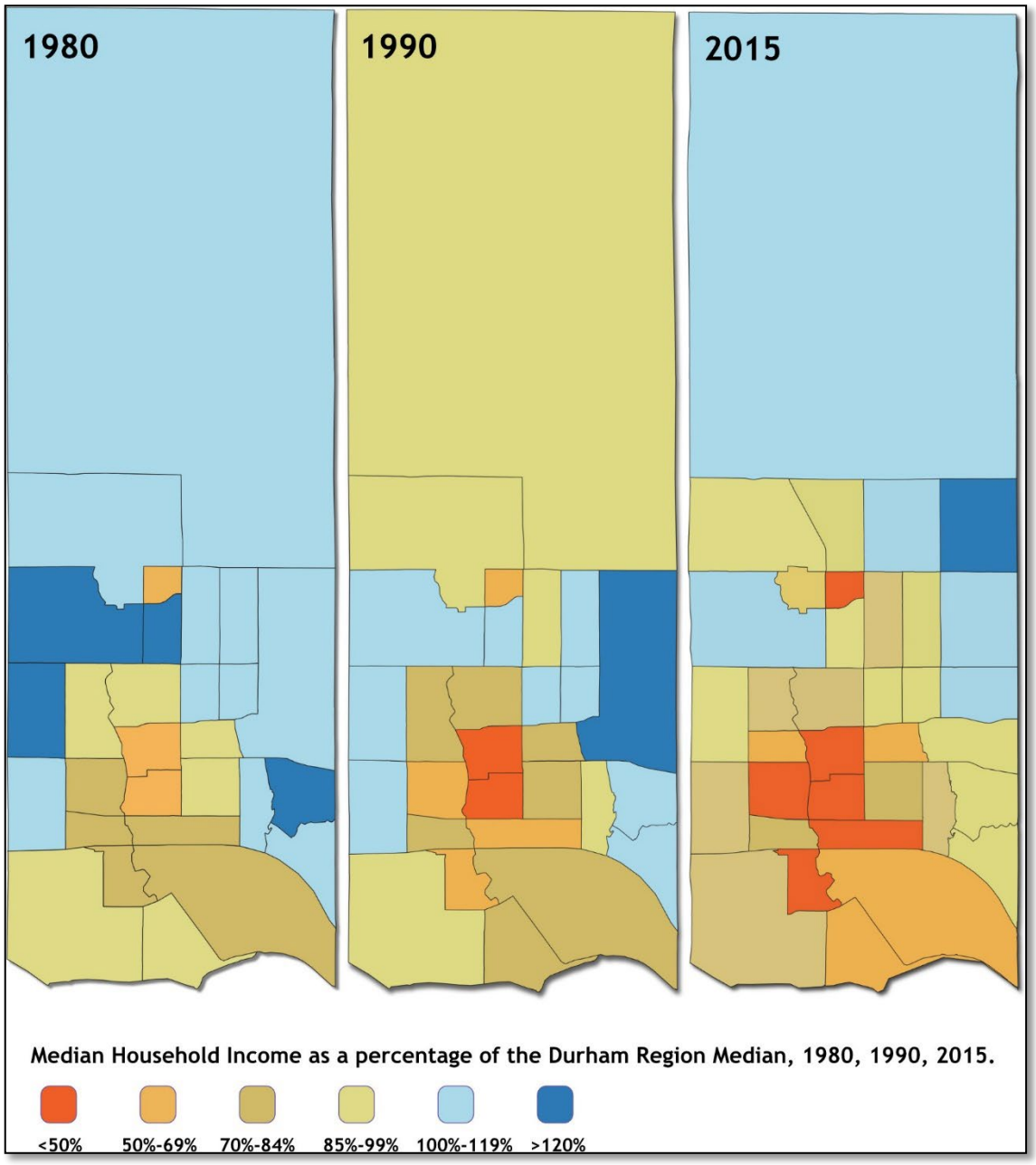


Figure 22: Income Polarisation in the City of Oshawa, 1980-2015

Notes: Boundaries of some census tracts change over time. Median household income is benchmarked to the Durham Region Median. Figure 21 and Figure 22 should not be compared directly as they use different benchmarks (Durham Region did not exist in 1970). (Sources: Author's calculations from Statistics Canada 1982, 1992, 2017)

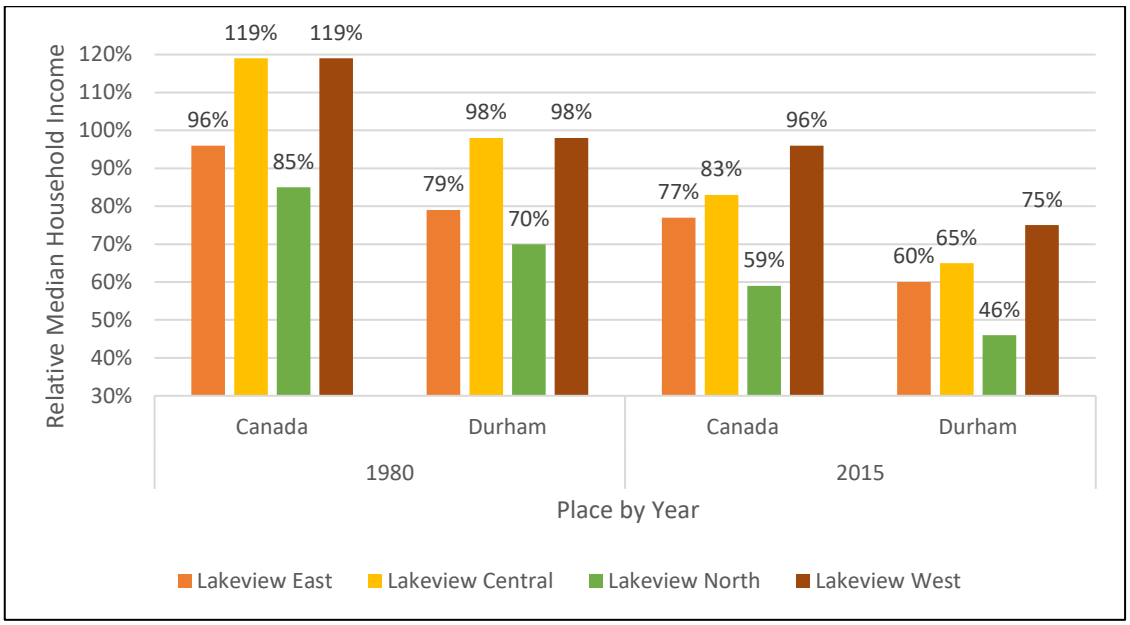


Figure 23: Median Household Income in Lakeview relative to Canada and Durham, 1980, 2015

Notes: Shows the four census tracts in Lakeview as a percentage of Canadian and Durham Region household medians incomes in 1980 and 2015. See Appendix B for census tract list. (Sources: Author Calculations based on Statistics Canada 1980, 2015)

Oshawa's six lowest income census tracts (the areas marked in red in **Figure 22**) are characterised by significant socioeconomic disadvantage and weak labour market engagement. With a combined 2016 population of roughly 25,500 people, these neighbourhoods experienced a 22% labour force decline between 1986 and 2016, precipitated by the loss of 3,905 manufacturing jobs (representing a 78% decrease), despite only losing 3% of their collective population (Statistics Canada 1987, 2017). This meant formerly working-class neighbourhoods were turning increasingly into slums.

Figure 24 shows the growing dependence on government transfers in the City of Oshawa's poorest neighbourhoods. In 1986, three of these six neighbourhoods had a roughly equivalent percentage of people on government transfers as all of Canada, at 11-12% of total income, but by 2016 transfers represented a disproportionate percentage.

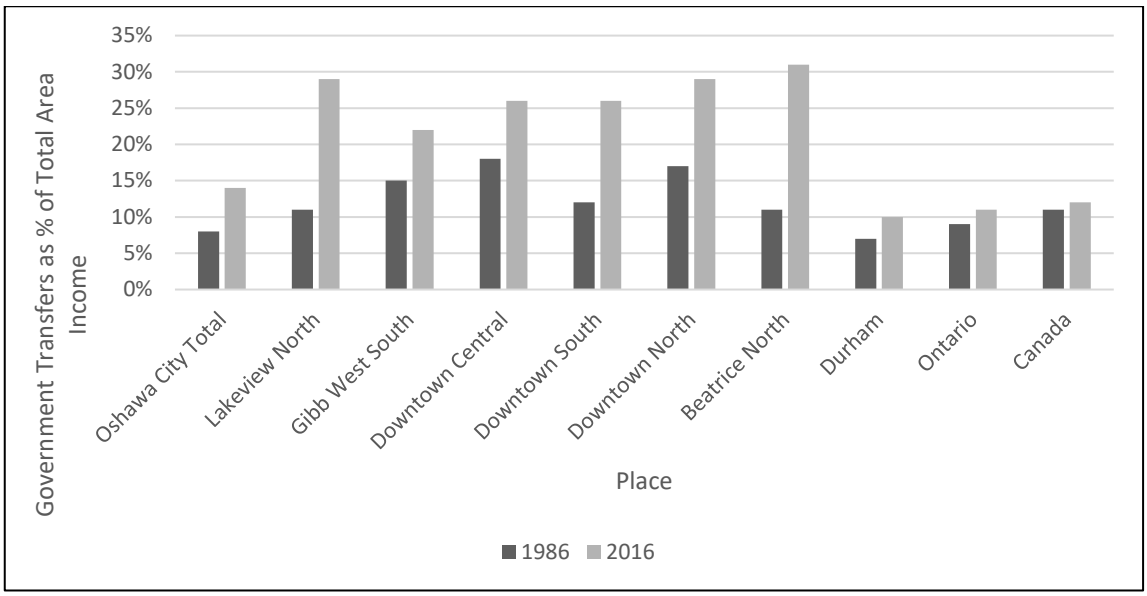


Figure 24: Welfare Dependence in Oshawa's Poorest Neighbourhoods, 1986, 2016

Note: Depicts government transfers as a percentage of total income. (Sources: Statistics Canada 1987, 2017)

This outcome reflects increasing unemployment and a decline in labour force participation. **Figure 25** and **Figure 26** show the labour force participation rate in these disadvantaged neighbourhoods declined significantly between 1991 and 2016, while the unemployment rate increased significantly between 1986 and 2016.

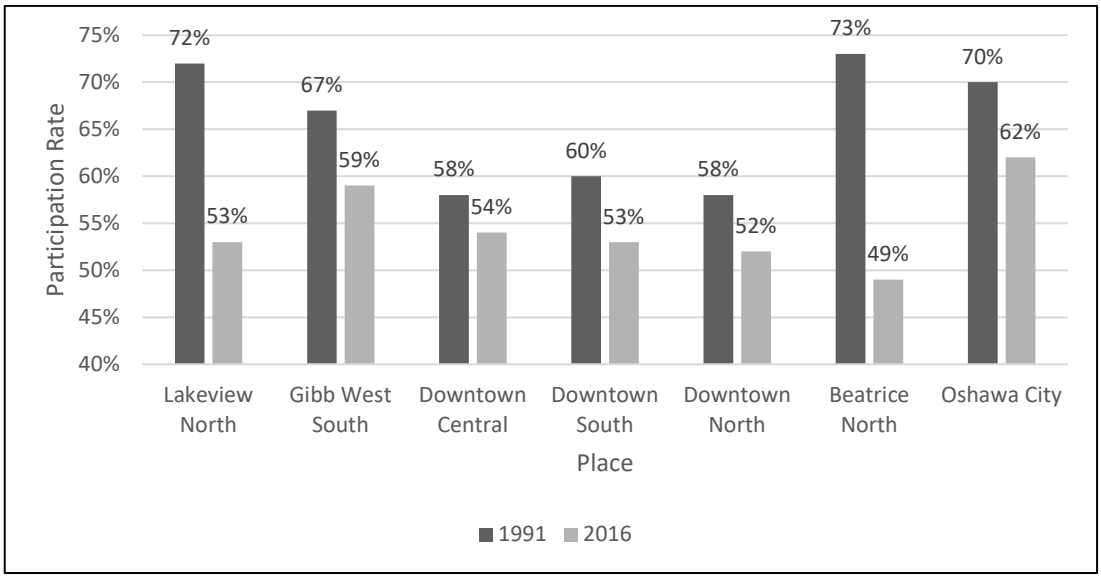


Figure 25: Labour Force Participation Rate in Oshawa's Poorest Neighbourhoods, 1991, 2016

(Sources: Statistics Canada 1992, 2017)

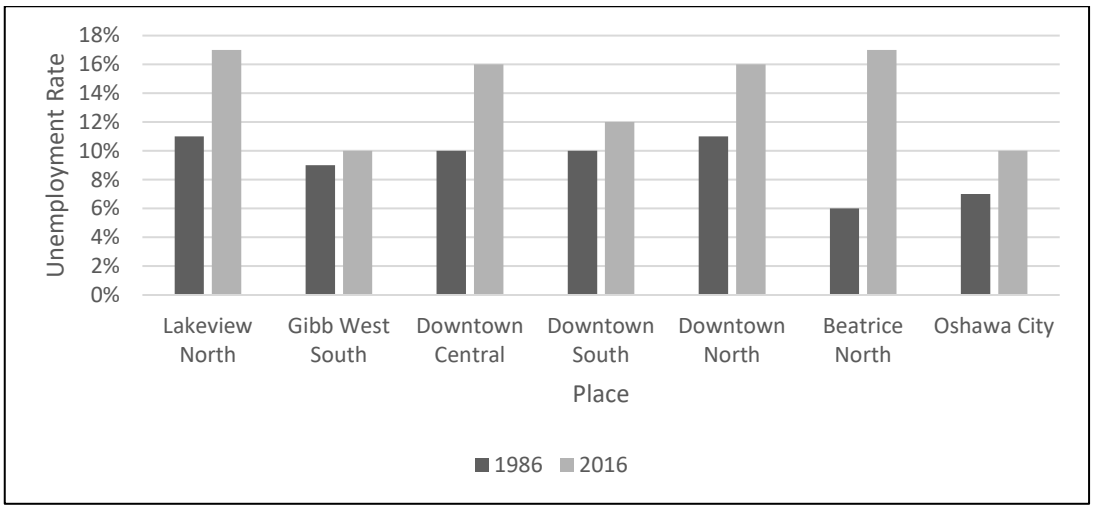


Figure 26: Unemployment Rate in Oshawa's Poorest Neighbourhoods, 1986, 2016

(Sources: Statistics Canada 1987, 2017)

Although the relative socioeconomic degradation in downtown and south Oshawa is most notable, **Figure 22** shows that median household income, relative to Durham, has declined in almost all areas that constituted the City of Oshawa's pre-1974 boundaries, including formerly high-income areas. In other words, socio-spatial income polarisation has increased in tandem with deindustrialisation. The evidence presented is this section suggests that the proposed spatial divide between the disadvantaged industrial south Oshawa and the prosperous north, is better described as a spatio-temporal divide. The former East Whitby is a rapidly urbanising, former sparsely populated rural area, while the historical core of Oshawa is a stagnating former industrial city. Hence, part of the reason that north and south Oshawa appear to be quite different places is because they once were different municipalities, with different developmental trajectories. Reinforcing this identity divide, north Oshawa still harbours a secession movement, with some residents of the former East Whitby lobbying to be annexed to Whitby rather than remain in Oshawa (Flaherty 2019b). What has occurred in Oshawa is a relatively straightforward divide, yet it does not reflect only a spatial dichotomy between north and south, but rather a spatio-temporal divide between old and new settlements.

New Oshawa versus Old Oshawa

This section focuses on the strong correlation between deindustrialisation and increasing socio-spatial polarisation in Oshawa. It presents evidence that the apparent success of Oshawa's diversification response to deindustrialisation is best understood as an illusory product of spatial development. That is, the problems of parts of the city hit the hardest by deindustrialisation are overshadowed by growth concentrated in parts of the municipality that never experienced deindustrialisation. The evidence shows the city's 'success' in diversification has been fundamentally underpinned by its ability to attract population growth in its expanding northern urban areas away from the depressed south. As such, socio-spatial polarisation is not simply a biproduct of deindustrialisation, but rather an intrinsic component of the city's growth and perceived 'successful' diversification.

To explain this, it is necessary to establish a spatial construct that can partially examine the changes in these areas separately. For the purposes of this analysis, Oshawa has been divided into 'New' and 'Old' Oshawa, with the former based loosely on the boundaries of the pre-1974 East Whitby and the latter based loosely on the boundaries of the pre-1974 City of Oshawa.[26] This bespoke solution is necessary, because census tract boundaries are constantly altered throughout time. Researchers using Canadian Census data, therefore, must conduct longitudinal analysis 'on an ad hoc basis for specific projects' (Allen & Taylor 2016, p. 576). While the weakness of this spatial construct is that it is necessarily ad hoc and does not reflect real boundaries, its strength is that any census tract changes that have occurred subsequent to the 1986 Census have been contained within the boundaries of these separate constructs. This allows for a longitudinal analysis that is not compromised by territorial reconfigurations. Although more complex databases for dealing with tract changes have been developed, they use formulas, assumptions and estimations to smooth data (Allen & Taylor 2016), while this simple

[26] While most of what is termed 'New' Oshawa are areas that were previously in East Whitby, substantial sections also traverse the pre-1974 City of Oshawa borders. Selections were made to ensure that the differences between the two areas were not exaggerated, with lower-income and low growth tracts that traversed the boundaries of both the City of Oshawa and the Township of East Whitby included in the 'New Oshawa' section.

method avoids manipulating the underlying data. **Figure 27** shows the territories comprising Old and New Oshawa.

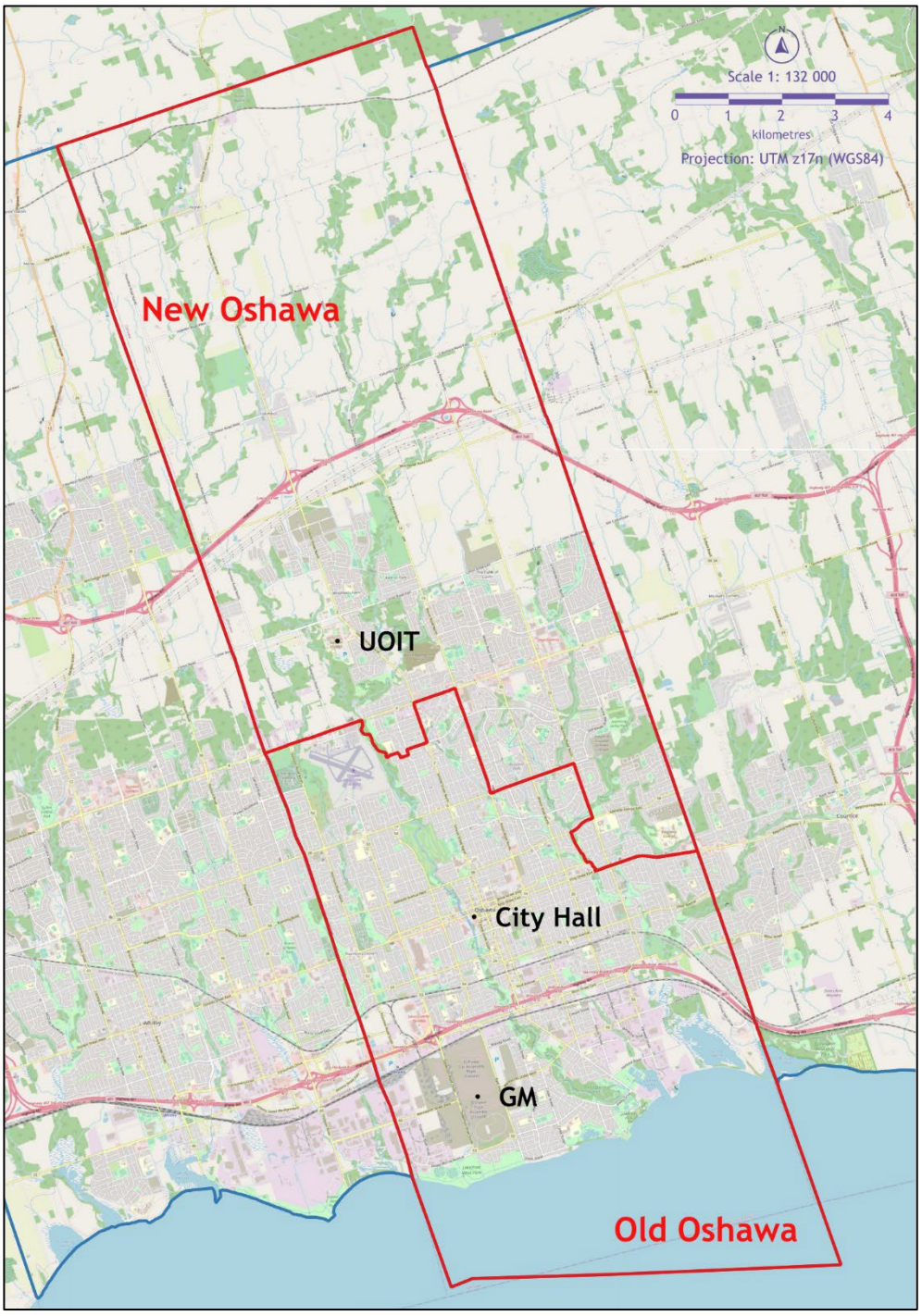


Figure 27: New and Old Oshawa

Note: See Appendix B for census tracts included in New/Old Oshawa

The first notable observation is that the areas of New Oshawa, which only comprised 17% of Oshawa's population in 1986, in 2016 comprised 39% of the

population, accounting for the entirety of Oshawa's population growth (see **Figure 28**). The Old Oshawa construct reveals modest population decline in what was the industrial heartland. Oshawa's population growth has been driven almost entirely from new residential development in the previously undeveloped north rather than urban development through rejuvenation of the already urbanised core of the city.

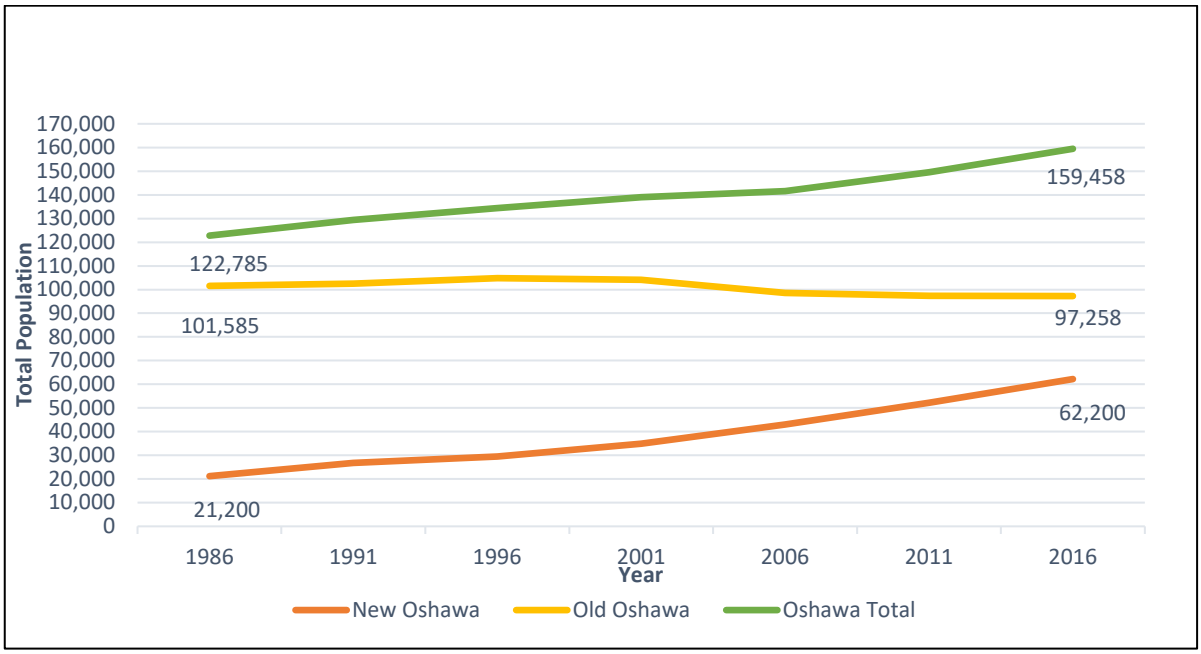


Figure 28: Population Change in Old and New Oshawa, 1986-2016

(Sources: Statistics Canada 1987, 1992, 1997, 2002, 2007, 2012, 2017)

Figure 29 shows the distribution of manufacturing job decline across Old and New Oshawa. Old Oshawa lost more than 13,710 manufacturing jobs between 1986-2016, while New Oshawa lost only 460. New Oshawa, in fact, experienced significantly less manufacturing decline than would be expected relative to the provincial scale (see **Figure 33**). Likewise, the City of Oshawa's neighbour, Whitby, only experienced a smaller decline of 1,580 net manufacturing jobs across the three decades, highlighting how the Oshawa CMA construct distorts the deindustrialisation crisis in the City of Oshawa.

There is a major education divide between the two areas. For residents of New Oshawa, 23% of residents between the ages of 25 and 64 had a bachelor's degree or above, but in Old Oshawa that figure was only 12% (Statistics Canada 2017). Overall, in 2016, only 17% of residents aged 25-64 in the City of Oshawa had a bachelor's degree or above, nearly half the Ontario percentage of 32%. This possibly reflects the ability for

residents to obtain high-paying automotive jobs that did not require university qualifications.

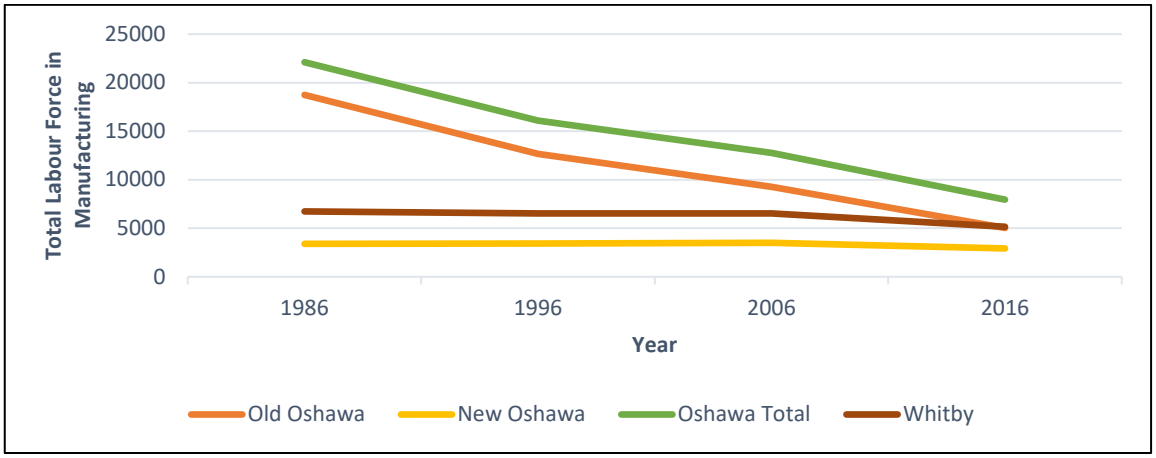


Figure 29: Manufacturing Decline in Old and New Oshawa, 1986-2016

(Sources: Statistics Canada 1987, 1997, 2007, 2017)

As with population, Old Oshawa's labour force is contracting, while New Oshawa's is growing. **Figure 30** shows that New Oshawa accounted for all of Oshawa's recently employed labour force growth since 1986, almost tripling. Conversely, Old Oshawa's recently employed labour force contracted by 13% in absolute terms, which is a significantly greater reduction than its population decline of 4%.

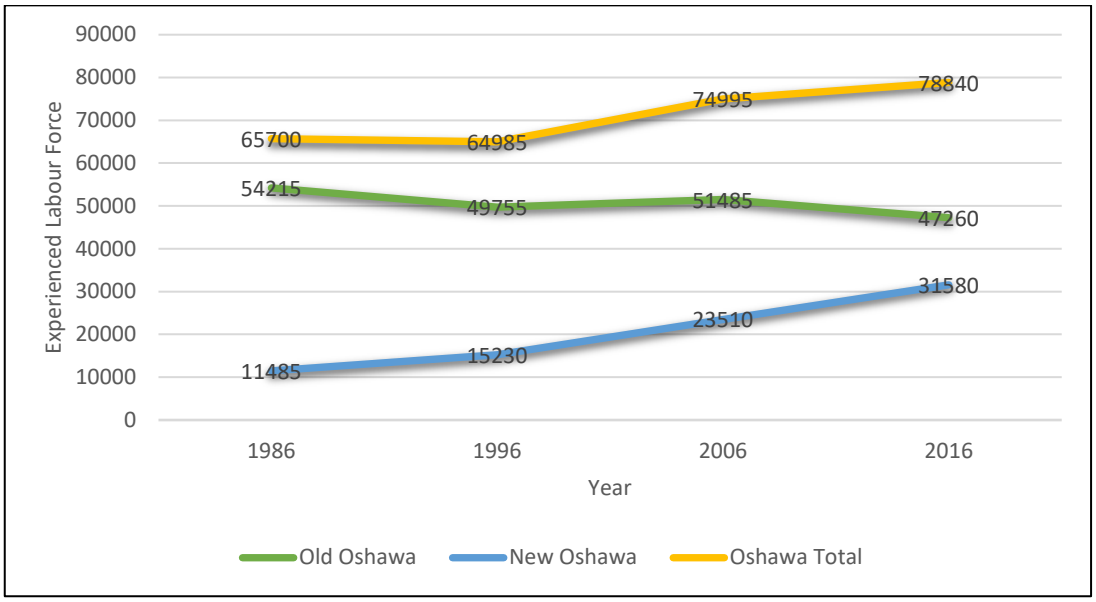


Figure 30: Recently Employed Labour Force in Old and New Oshawa, 1986-2016

Note: Refers to the 'experienced labour force' as defined by Statistics Canada, which includes residents over 15 who had worked in the prior year. (Sources: Author's calculations from Statistics Canada 1987, 1997, 2007, 2017)

Figure 31 reveals a significant decline in labour force participation in both New Oshawa and Old Oshawa, consistent with an overall national trend, but the disparity between the two parts of Oshawa masks the extent of the change. In 1986, Oshawa had a slightly higher overall participation rate than Ontario and a significantly higher rate than Canada; by 2016 it had dropped significantly below them. Old Oshawa's participation rate declined 9% to reach 60% of the working age population, while New Oshawa's declined 6% to 66%, just above the national rate. Thirty years ago, Old Oshawa's participation rate was 3% higher than the national average, in 2016 it stood 5% below the national rate. This evidence directly contradicts the claim that the labour market in Oshawa has been resilient in the face of deindustrialisation.

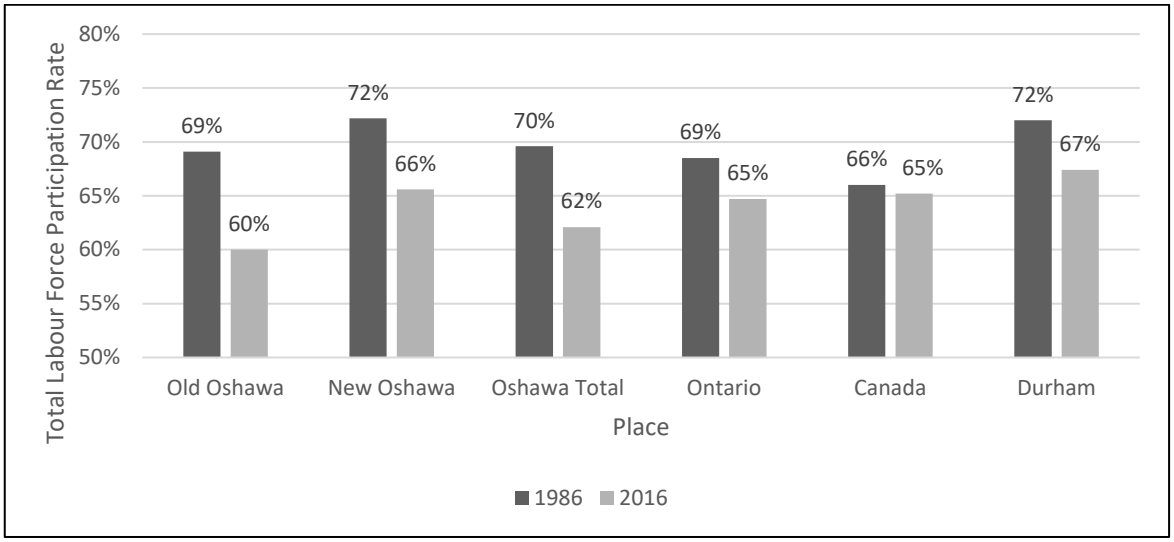


Figure 31: Change in Labour Force Participation Rate, Old and New Oshawa, 1986, 2016

(Sources: Author Calculations from Statistics Canada 1987, 2017)

There has also been a dramatic shift in the proportion of Old Oshawa residents who live and work within the area. **Figure 32** reveals that Old Oshawa has lost nearly half of its local resident-workers since 1991, while New Oshawa added roughly 1,000 extra residents who both live and work in Oshawa. It is not possible to establish to what extent these figures reflect: former internal commuters now being forced to commute elsewhere for work; the net displacement of internal commuters by external commuters through migration; growth industries in Oshawa favouring the skill base of external residents; or the growth of jobs with no fixed address as a result of the rise of the 'gig

economy'[27], but all factors have likely contributed. Regardless, it is clear that the City of Oshawa in aggregate could not replace the number or types of jobs that were lost since 1991.

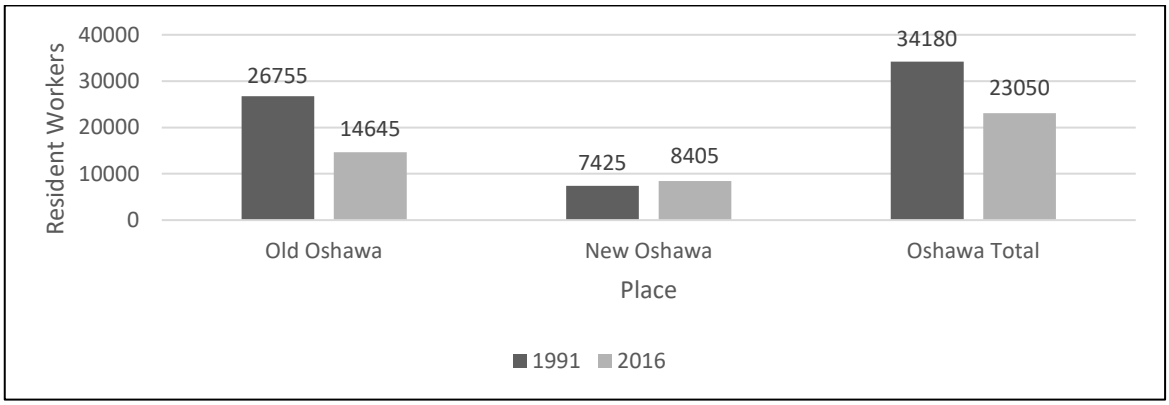


Figure 32: Internal Commuters in New and Old Oshawa, 1991, 2016

(Sources: Author's calculations from Statistics Canada 1992, 2017)

Figure 33 summarises the results of a shift-share analysis comparing growth in Old and New Oshawa to the overall trends across Ontario. It highlights extreme differences in labour force growth patterns by industry.

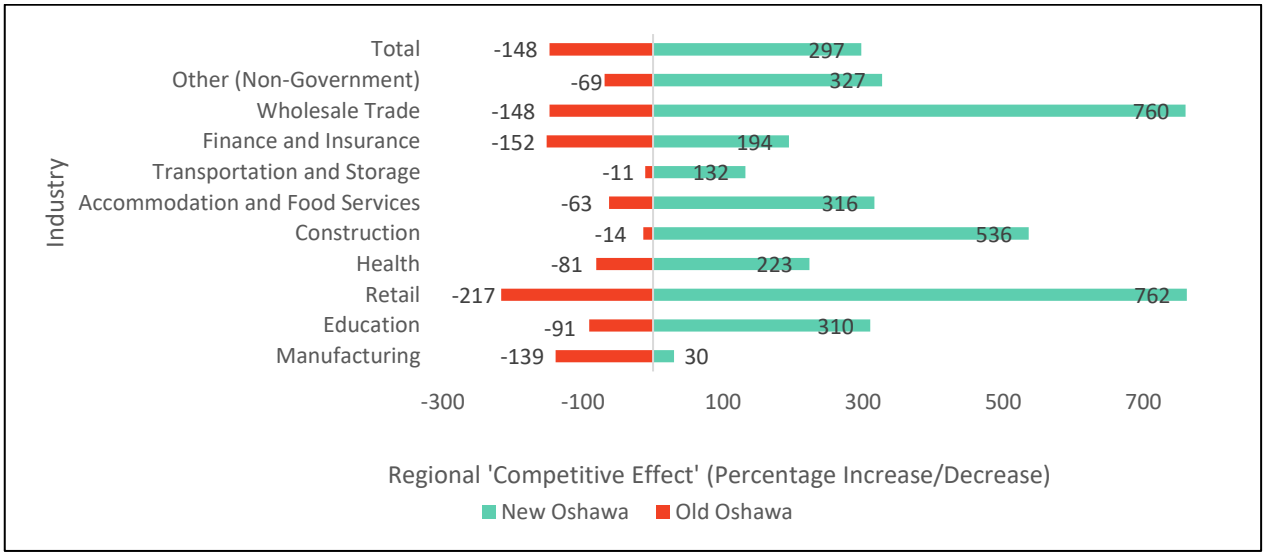


Figure 33: Shift-share, Selected Industries, New and Old Oshawa, 1991-2016

Note: Shows the regional 'competitive effect' (percentage increase/decrease) in selected industries relative to Ontario.
(Sources: Author's calculations from Statistics Canada 1992, 2017)

[27] In 1991, employed workers with no fixed workplace stood at only 1% in both Oshawa and Ontario – by 2016, it was 13% in the City of Oshawa and 11% in Ontario (Statistics Canada 1992, 2017).

Old Oshawa's labour market has lagged significantly behind the province in almost every major industry category. Even key growth industries such as construction and transportation and warehousing lag behind the provincial mean. The opposite has occurred in New Oshawa, which has managed to grow at a significantly higher rate than the province. Superficially, Old Oshawa has diversified away from manufacturing just as its neighbours have, but it has not done so in the same manner, because its diversification has been driven by mass net redundancy accompanied by declining labour force participation. In New Oshawa, small-scale losses in manufacturing are offset by positive growth in other industries. Ultimately, the perceived divide between North and South Oshawa, more accurately understood as a divide between New and Old Oshawa, has abundant empirical support.

There are differences in the composition of industry between Old Oshawa's and New Oshawa's labour markets, but these differences are negligible. As expected, New Oshawa has a slightly higher proportion of higher paying industries, such as finance, education, professional services, public administration, as well as health. Old Oshawa has a higher proportion of workers in low-paying industries, such as accommodation and food services, retail, administrative support and waste management, as well as manufacturing and construction (Statistics Canada 2017). However, the labour markets of both New Oshawa and Old Oshawa, for the most part, are similar in terms of industry composition. Moreover, both have an industry composition similar to that of Ontario. New Oshawa is slightly more diversified relative to Ontario, with a Hachman Index score of .951 versus .925 in Old Oshawa (for a combined Oshawa scored of 0.947), but the latter is still diverse[28]. This result underscores the inadequacy of static economic diversity measures for analysing divergent inter- or intra-regional outcomes.

[28] The Hachman Index was calculated relative to Ontario based on 19 sectors (the main groupings used by Statistics Canada). A score of 1 indicates perfect alignment with provincial industry structure, while 0 indicates perfect non-alignment. (Source: Author's calculations from Statistics Canada 2017).

Analysis: Uneven Growth in Oshawa

Ultimately, despite the popular rhetoric of successful diversification in Oshawa, the data presented above paints a clear picture of dispossession and socioeconomic devastation, running in tandem with large-scale automotive manufacturing job losses, in the directly affected parts of the city captured by the Old Oshawa construct. Far from being a miracle story of deindustrialisation into successful diversification, Oshawa has in reality experienced growing socio-spatial polarisation that is correlated with automotive manufacturing decline.

In its former industrial heartland, population growth has declined, while unemployment has risen sharply and labour force participation has nosedived. Median household incomes have dropped in relative terms across almost all of the city's 'old' neighbourhoods, not just the most disadvantaged areas. The most socioeconomically disadvantaged areas of the city, already desperately poor by regional standards, have become poorer and more reliant on government transfers. Increasing incidence of low-income households, in particular concentrations in the city, has correlated with significant social problems. A positive diversification-led growth development that coincides spatially and temporally with an industry decline problem, is not necessarily a solution to the problems created by industrial decline.

Despite the city branding itself as a knowledge hub, Oshawa's labour force remains under-educated relative to the province, possibly as a legacy of high-paying manufacturing jobs that did not require qualifications (see also Siemiatycki 2013). Hence, the impacts of the loss of thousands of these high-paying, low-skilled jobs were not mitigated by the growth of low-paying, low-skilled jobs in the hospitality and retail industries or high-paying, high-skilled jobs in higher education and white-collar service industries. Instead, socio-spatial polarisation is not an unfortunate side-effect of Oshawa's 'successful' diversification, but rather a key driver of it. The ability of the City of Oshawa to facilitate new development in the north and northeast of the city has been able to compensate for the significant population, labour force and income decline in the rest of the city. This gives the appearance of success, without having to address the issues in the declining locations. This has left the city with a spatially defined and seemingly intractable social divide.

Polarisation in Geelong

This section replicates the analysis of socio-spatial polarisation in the case of Geelong. Like Oshawa, the City of Greater Geelong, in 2016, was empirically a region characterised by a high-level of industry diversity, having transitioned away from its former position as being the most highly specialised manufacturing centre in Australia. By 2016, the proportion of its labour force employed in the manufacturing sector was lower than the Victorian proportion (ABS 2017).

This section shows that much of the same phenomena observed in Oshawa also occurred in Geelong. It shows that despite the overall 'success' of Greater Geelong's diversification, the areas of the city most impacted by deindustrialisation have experienced significant socioeconomic distress, while areas outside the traditional manufacturing centres and newly developed suburbs have thrived. However, this section also reveals that unlike Oshawa, socio-spatial polarisation resulting from deindustrialisation and subsequent diversification is more generally accepted by analysts and policymakers in Geelong.

Economic Diversity in Geelong

Geelong is recognised as having one of the most diverse economies in Australia (see **Chapter 4**). A nineteen-sector analysis of 2016 Census labour market data shows that Greater Geelong has a Hachman Index score of 0.955 relative to Australia and 0.961 relative to Victoria, while the central Geelong Urban Centre and Locality is only slightly less diverse at 0.953 relative to Victoria (Author calculations based on ABS 2017). This suggests that the Geelong economy is now largely a microcosm of the larger Victorian and Australian economies. Geelong's labour market trajectory has also largely paralleled Victoria's trajectory. A shift-share analysis (**Figure 34**) comparing Greater Geelong region to Victoria, for the interval 2006-2016, shows that extensive growth in the finance and insurance, wholesale trade and health sectors have been offset by significant decreases in the manufacturing and retail sectors. This leaves the municipality following, essentially, the same growth path as its state. This shift-share analysis highlights that, much like Oshawa, while education and cultural industries have been made the centrepiece of the discursive component of diversification efforts, labour market growth in these sectors has

largely conformed to state/provincial growth patterns. Nonetheless, Geelong's labour market growth has slightly exceeded even the rapid growth of Victoria despite thousands of manufacturing job losses. This suggests that, at least superficially, the Geelong economy has successfully transitioned from manufacturing to a contemporary service-based structure. However, like Oshawa, diversification has in reality been a story of increasing socio-spatial polarisation.

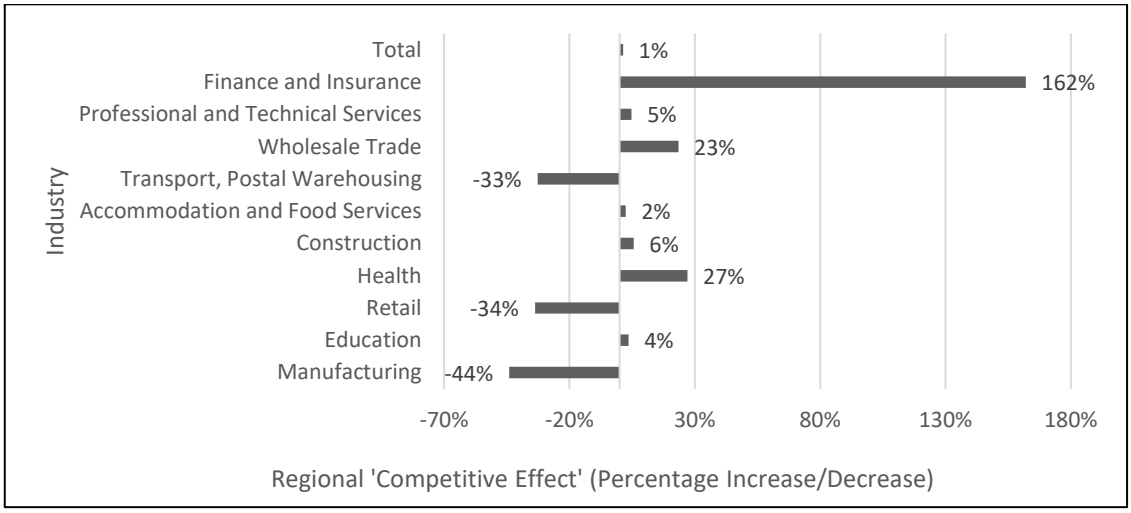


Figure 34: Shift-share, Selected Industries, Greater Geelong, 2006-2016

Note: Shows the regional 'competitive effect' (percentage increase/decrease) relative to Victoria. (Sources: Author calculations based on ABS 2007, 2017)

Polarisation within the City of Greater Geelong

In striking similarity to Oshawa, the transition from traditional manufacturing to higher education-led knowledge industries that has underpinned diversification strategies in Geelong has manifested itself spatio-temporally. The geographic centres of the new diversified Geelong flagship industries have prospered, while the geographic centres where the 'old' Geelong flagship industries were located, such as the Ford assembly plant and the Alcoa smelter, have stagnated and experienced significant hardship. Using the Australian Bureau of Statistics (ABS) Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) (which considers, among multiple other variables, indicators of low income and unemployment), it is apparent that like Oshawa, disadvantage in the Geelong UCL is clustered around the city's recently closed major manufacturing plants near the

inner-city.[29] The main campus of the local university, Deakin University, is located among prosperous outer-suburbs.

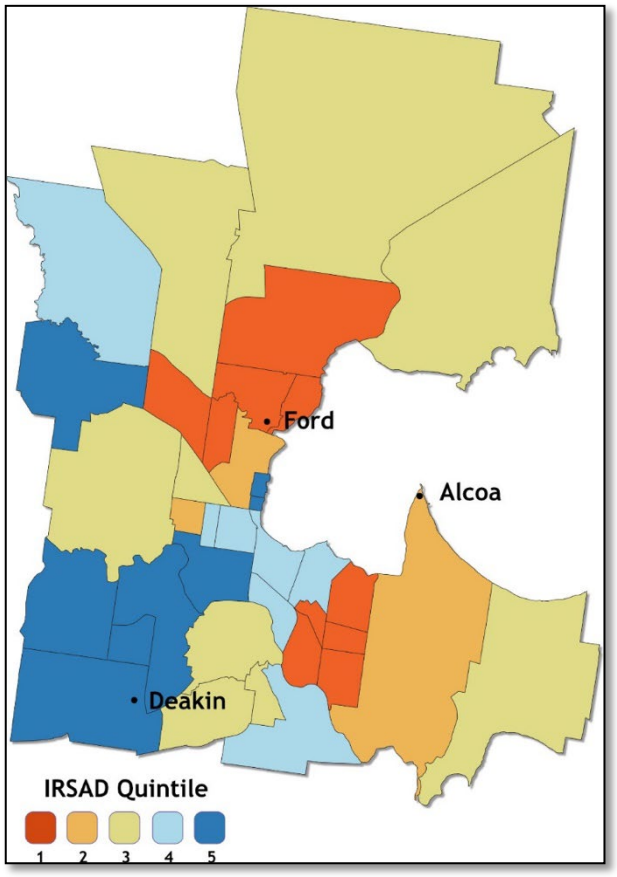


Figure 35: IRSAD Quintiles by Suburb in the Geelong UCL and Surrounds, 2016

Note: IRSAD quintile 1 represents 'most disadvantaged' suburbs while quintile 5 represents 'most advantaged' suburbs. (Source: ABS 2018). Figure 35 does not show the prosperous IRSAD 5 residential expansion suburb of Armstrong Creek. It also does not show Greater Geelong suburbs outside the Geelong UCL on the Bellarine Peninsula (see Figures 1 and 2 for Greater Geelong and Geelong UCL boundaries and below for discussion).

The two suburbs with the highest median household incomes in 2016 in Greater Geelong (both $99,000 annually) were Waurn Ponds, home of the original and main campus of Deakin University, and the nearby suburb of Armstrong Creek, a suburb created to facilitate urban expansion that was only gazetted in 2012 and built on largely undeveloped land in the Geelong Urban Centre and Locality's (UCL) southwest. The

[29] There are also disadvantaged suburbs outside the Geelong UCL on the Bellarine Peninsula. However, including them in Geelong income and employment comparisons would be problematic because both the IRSAD 1 suburb of St Leonards and the IRSAD 2 suburb of Portarlington (see Figure 2) are retirement communities with median ages of 56 and 59 respectively in 2016. This compares to a median age of 40 in Greater Geelong and 39 in Norlane. The other disadvantaged IRSAD 2 suburb on the Bellarine Peninsula, Clifton Springs (see Figure 2), was among the suburbs most heavily impacted by deindustrialisation, with net manufacturing job losses between 2006-2016 taken as a proportion of its 2016 labour force nearly 50% higher than the proportion for Greater Geelong (author calculations based on ABS 2007, 2017).

suburb with the lowest median household income was Norlane ($38,000), home of the Ford assembly plant (ABS 2017).

The Victorian State Government conducted a longitudinal analysis of increasing socio-spatial polarisation in Geelong between 1986-2006 (Victorian Government 2010). It found that four suburbs with previously high concentrations of manufacturing workers – Newcomb, Whittington, Bell Post Hill and Norlane – had lost more than half of their employed labour force between 1986-2006. Norlane was hardest hit, as manufacturing had comprised 44% of its workforce in 1986. The growth in new industries, and the employment they generate, was concentrated in a few prosperous suburbs. The Victorian State Government (2010) made the following key observations:

- 'Suburbs with higher proportions of persons employed in "knowledge economy" industries have lower proportions employed in manufacturing (and vice versa). This lends credence to the argument that there is a dichotomy developing in larger urban areas between patterns of residential labour markets in "old" (manufacturing) and "new" (knowledge economy) economies' (p. 10).
- 'Despite the overall population growth, a large number of suburbs lost population over the period 1981-2006 … growth that did occur was concentrated in a few areas…these areas were relatively undeveloped in the early 1980s but are now established, and still growing, parts of Geelong's urban fabric' (pp. 2-3).
- 'The rapid change in Geelong's economic base has had profound impacts, resulting in high unemployment and social disadvantage in specific locations' (p. 9).

In contrast to the official story in Oshawa, in Geelong the causal association between deindustrialisation, diversification and socio-spatial polarisation is undisputed. The Victorian State Government recognised that growth in Geelong was occurring away from the site of the deindustrialisation problem. Newly developed residential areas and an expanding urban fringe were simply compensating for depopulation in devastated 'old economy' suburbs. Finally, the Victorian State Government recognised that diversification, or the transition from the 'old' economy to the 'new' was manifesting itself in geographical bifurcation between suburbs that were plagued by the problems associated with the collapse of the old industries, and areas that were either less affected, or entirely unaffected, i.e. the newly developed areas. It was these areas that benefited from the transition to new industries, not the areas dominated by industries

this transition sought to replace. Diversification was not actually a solution for the spatially-embedded problems caused by the demise of the old industries, but instead was a process that largely occurred in opposition to them geographically. The Victorian State Government recognised that socio-spatial polarisation was not a perturbation in Geelong's diversification, but a feature of it.

Despite experiencing significant upheaval between 1986 and 2006, the industrial suburbs of 'old' Geelong were still specialised in manufacturing in 2006, with almost a quarter of their workforce employed in manufacturing in Norlane (24%) and neighbouring Corio (22%) (ABS 2007). Between 2006-2016, Greater Geelong would experience a further 4,605 manufacturing job losses, and the Geelong UCL would lose 3,520 of these (see **Figure 14**). Therefore, it is important to analyse the changes that occurred between 2006 and 2016 to update and expand upon the Victorian Government's (2010) longitudinal analysis.

Most areas in Geelong did not suffer depopulation between 2006-2016, even if growth was relatively stagnant in many areas (ABS 2007, 2017). Seven of the ten most disadvantaged (IRSAD 1) suburbs in the Geelong city area either grew slightly or retained their population, collectively adding just over 1,000 people and growing by 2%, from 48,660 to 49,738 people (ABS 2007, 2017). Of 29 suburbs in the Geelong UCL – excluding growth suburbs such as Armstrong Creek and Charlemont – only four lost population. The 29 suburbs, collectively, grew by 16,755 people (ABS 2007, 2017). However, 43% of this increase was concentrated in two prosperous (IRSAD quintile 5) suburbs of Highton and Waurn Ponds. The new (IRSAD quintile 5) suburb of Armstrong Creek had already grown to a 2016 population of 4,246. The implications of conurbation with Melbourne on this growth will be explored in **Chapter 9.**

Figure 37 shows that although job losses in manufacturing impacted all parts of the Geelong UCL, the labour markets of northern and south-eastern socioeconomically disadvantaged clusters were hit much harder as a proportion of their total labour forces between 2006-2016. **Figure 36** shows that while the northern suburbs surrounding Ford were most exposed to automotive retrenchments in 2006, the south-eastern suburbs were vulnerable to other manufacturing closures, such as Alcoa.

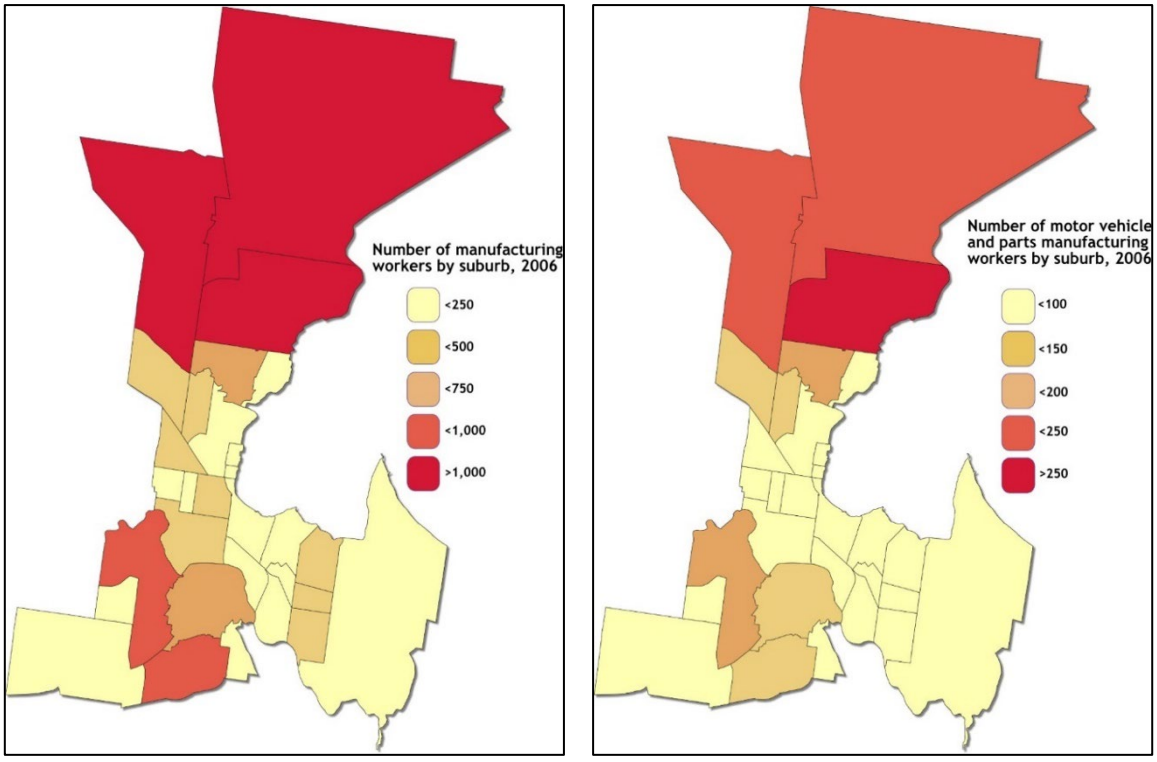


Figure 36: Automotive and Total Manufacturing Employment in Geelong, 2006

Note: Shows total (left graph) and motor vehicle & parts manufacturing workers (right graph) by suburb in the Geelong UCL & Lara. (Source: ABS Tablebuilder based on ABS 2007)

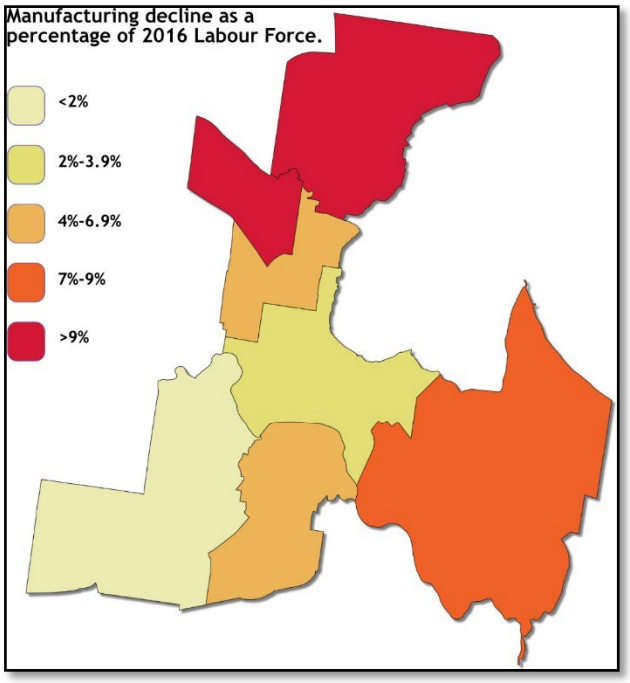


Figure 37: Manufacturing Decline in Selected Geelong UCL Suburbs, 2006-2016

Notes: Shows manufacturing decline between 2006-2016 as a percentage of 2016 Labour Force. Custom geography based on author's grouping custom of suburbs, listed in Appendix B. (Sources: ABS Tablebuilder based on ABS 2007, 2017)

Figure 38 shows that while central Geelong and the southwest growth areas have diversified into 'knowledge' industries and public administration, the disadvantaged clusters remained relatively (although much less) specialised in manufacturing in 2016. This meant these disadvantaged areas had not taken advantage of the 'new' Geelong economy and were vulnerable to further structural decline in manufacturing. The 2016 Census preceded the final Ford closures, so further job losses would follow.

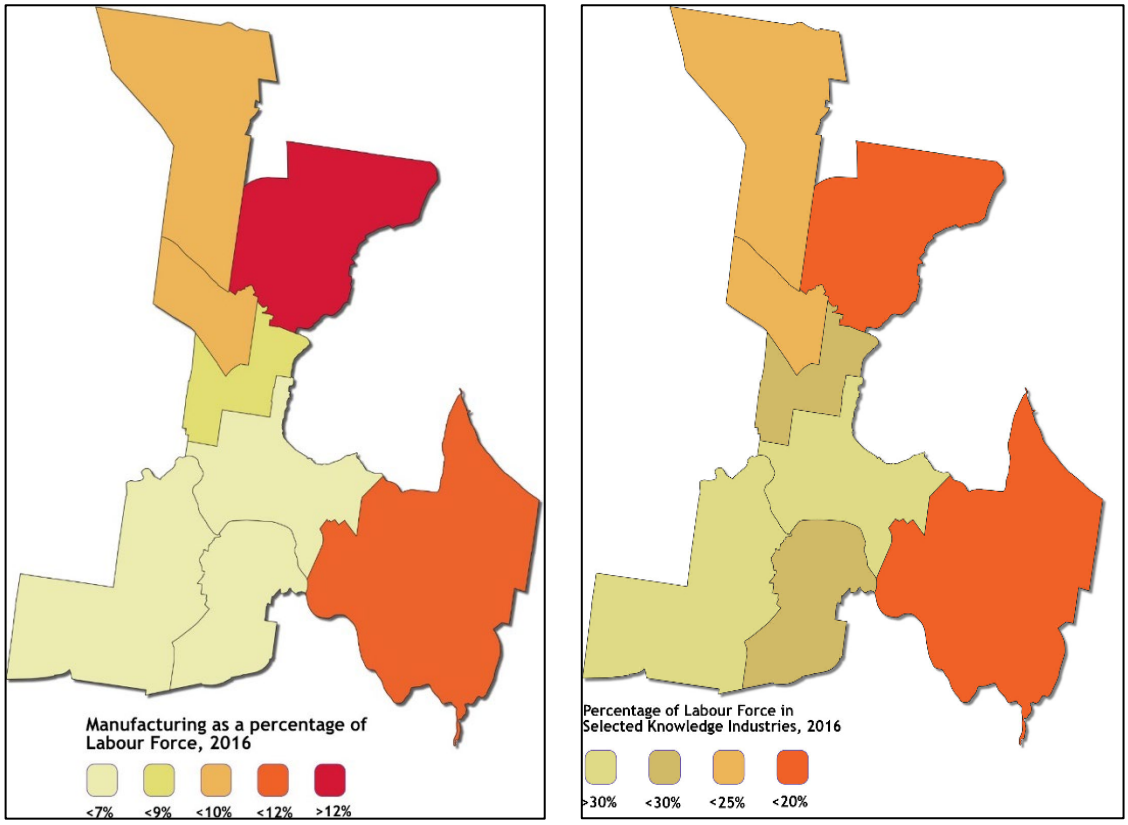


Figure 38: Uneven Diversification in Selected Geelong Suburbs, 2016

Note: Shows manufacturing employment (left graph) and select 'knowledge' industries (right graph) as a percentage of employed labour force. Knowledge industries includes Information, Media and Telecommunications, Financial and Insurance Services, Professional, Scientific and Technical Services, Education and Training and Public Administration and Safety). Custom geography listed in Appendix B. (Source: Tablebuilder based on ABS 2017)

A shift-share analysis shown in **Figure 39** compares the growth in the ten Geelong UCL suburbs in the lowest quintile of the IRSAD index (the suburbs marked in red in **Figure 35**), which had a combined population of 49,738 in 2016 (ABS 2017), to Victoria. It suggests that the negative employment trends of 1986-2006, identified by the Victorian government in 2010, continued in the period 2006-2016. Overall employment growth has suffered dramatically in these suburbs, particularly in manufacturing and retail. As

employment suffered, relative disadvantage in many of these areas increased, with Norlane, home of the Ford assembly plant, among the most disadvantaged suburbs in Australia using the ABS's various quantitative measures (Johnson 2017a). These areas have, for the most part, also been left behind by the transition to the 'knowledge' economy, but have fared better than some disadvantaged areas in Oshawa. Moreover, in contrast to Oshawa, where overall growth has lagged behind the province and 'Old Oshawa' has lagged even further behind, health sector employment in Geelong's most disadvantaged areas has kept pace with Victorian growth, while public administration employment growth has been relatively comparable (see **Figure 17**).

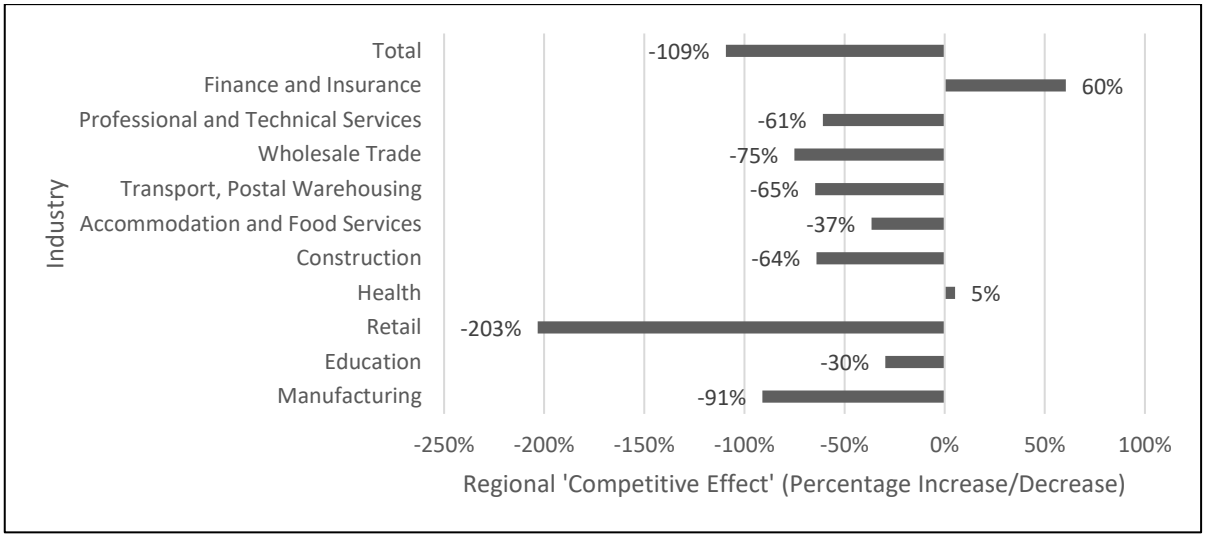


Figure 39: Shift-share, Selected Industries, in Geelong's Disadvantaged Suburbs, 2006-2016

Note: Shows the regional 'competitive effect' (percentage increase/decrease), in the Geelong UCL's ten most disadvantaged suburbs (IRSAD 1) relative to Victoria. (Source: Author's calculations from ABS Tablebuilder based on ABS 2007, 2017)

Paralleling Oshawa, education levels among auto workers and residents of Geelong's most disadvantaged areas did not align with the demands of the 'knowledge' economy. Workers employed in motor vehicle and parts manufacturing in Corio (the suburb with the largest concentration of motor vehicle and parts manufacturing workers in Greater Geelong) had low levels of education in 2016, with little more than a quarter (27%) finishing Year 12, compared with 48% of workers in the same industry across greater Geelong and 59% in Victoria (ABS Tablebuilder based on ABS 2017). Only 7% had a bachelor or postgraduate degree or diploma as their highest level of schooling, compared with 36% in Greater Geelong and 34% in Victoria. In Geelong's ten most disadvantaged suburbs combined, only 37% of applicable residents over the age of 15 had

finished Year 12 compared with 59% in Victoria.[30] Only 17% had at least a bachelor degree or advanced diploma as their highest level of education, which compared with 33% in Greater Geelong and 39% in Victoria. Therefore, it is unsurprising that the transition to the 'new Geelong' has not been a smooth one for auto workers or residents of these areas.

The Relationship between Diversification and Disadvantage

The question remains, what is the relationship between industrial diversification and disadvantage? Equivalently, is the problem that Geelong's socioeconomically disadvantaged suburbs have not diversified enough; that they are still too reliant on manufacturing employment?

Figure 40 plots levels of diversity, as measured by the Hachman Index, against socioeconomic disadvantage for Geelong suburbs. It finds no correlation (Pearson correlation coefficient = 0.04) at the SA2 level, but suggests a relatively strong correlation (Pearson correlation coefficient = 0.71) between the level of industry diversity at the suburban level in the Geelong UCL. Disadvantaged IRSAD quintile 1 suburbs tend to be more specialised (largely as a result of still maintaining a strong manufacturing base). However, this shows the methodological issues with using diversity indices as cross-sectional corollaries, rather than understanding industry diversity longitudinally, as a fluid process necessarily determined by whether a locale diversified through growth or decline. **Figure 41** shows there is a stronger correlation (Pearson correlation coefficient = 0.80) between manufacturing decline, expressed as a proportion of suburban labour markets, and relative disadvantage (IRSAD).

[30] Custom geography from ABS Tablebuilder based on ABS (2017). Excludes 'not stated'.

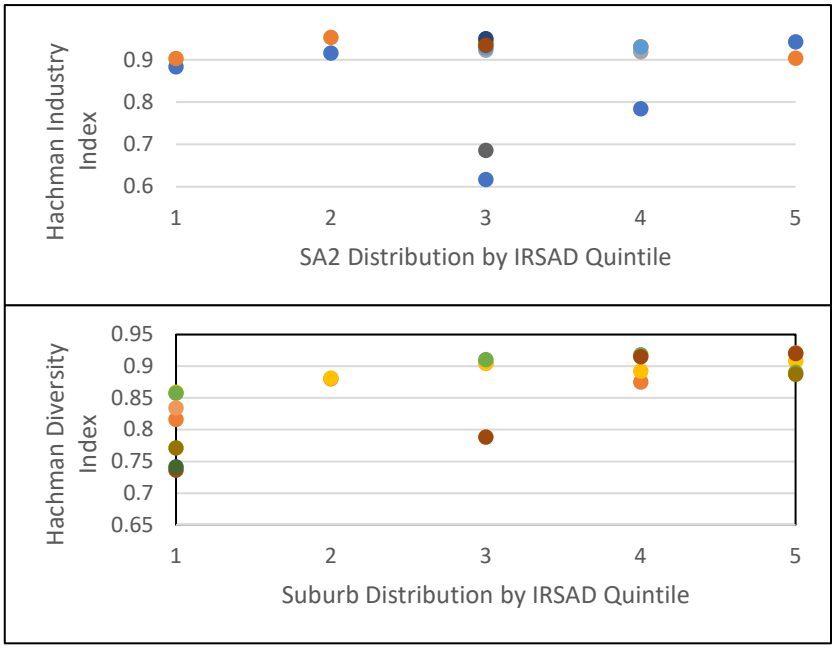


Figure 40: Economic Diversity (Hachman Index) by IRSAD Quintile in the Geelong Region, 2016

Note: Shows SA2 areas in the Geelong SA4 region (top graph) and Geelong UCL Suburbs with a minimum 1,000+ Employed Labour Force (bottom graph) (Source: Author calculations based on ABS 2017).

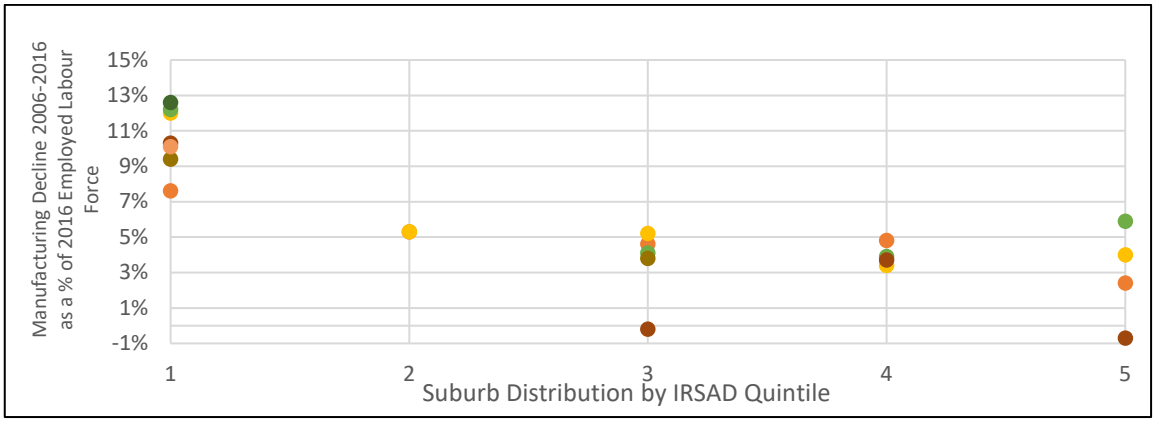


Figure 41: Manufacturing Decline by IRSAD Quintile in the Geelong UCL, 2016

Note: Shows manufacturing Decline 2006-2016 as a percentage of 2016 labour force, Relative to IRSAD Quintile in Geelong suburbs with a minimum employed labour force of 1,000. (Source: Author's calculations from ABS Tablebuilder based on ABS 2017).

Focusing on economic diversity at the suburban level in the Geelong UCL (**Figure 40**) would suggest that the solution to socioeconomic disadvantage is diversification, and thus the erosion of continued relative manufacturing specialisation. However, **Figure 41** suggests the opposite conclusion, that further loss of stable, middle-income manufacturing jobs would further disadvantage these communities. Further, at the larger SA2 scale (**Figure 40**), there is no correlation between relative economic diversity and

socioeconomic disadvantage. This reinforces the inadequacy of static measures of diversity, as it is important to identify *how* a region got to its current industry composition state (by growth or decline), before drawing any conclusions about the relationship between industry composition and socioeconomic disadvantage. This shows why the actual process of *diversification* must be analysed, not just measures of *diversity*.

Downtown Revitalisation in 'Old' Geelong

One of the major differences between Oshawa and Geelong is that while Oshawa's downtown core areas are the most disadvantaged parts of the city, Geelong's downtown core suburbs rank among the most advantaged. Understanding this dynamic requires some historical context. Unlike the City of Oshawa, the City of Greater Geelong has only existed since 1993, when the Victorian government amalgamated eight different municipalities into one city. The new city included the former cities of Geelong, Geelong West and Newtown, the Rural City of Bellarine and the Shire of Corio (the location of Ford and several of Geelong's most disadvantaged modern suburbs), most of the City of South Barwon and parts of the Shires of Bannockburn and Barrabool. 'Old Geelong' was typically understood as the three municipalities comprising its historical urban core, Geelong, Geelong West and Newtown (see Harris & Dixon 1978). These three core municipalities of 'Old Geelong' combined lost nearly a quarter of their population between 1954 and 1986, from roughly to 48,500 to 37,500 people, while the Shire of Corio's population more than tripled from under 16,000 to over 53,000 in the same time period (ABS 1955, 1987), largely as a result of public housing construction. Corio subsequently became significantly larger than all three 'old' suburbs combined (ABS 1955, 1987). In the same period, the Rural City of Bellarine's population increased from 7,000 to 35,000 and the Shire of South Barwon's population increased from 11,000 in 1954 to nearly 39,000 in 1986 (ABS 1955, 1987).

This uneven population growth and decline can be understood with reference to Greater Geelong's historically uneven manufacturing growth and decline within different constituent areas. Old manufacturing industries, like textiles production, contracted in the post-war period, while the automotive sector grew. The automotive industry, centred in the Shire of Corio, did not peak until the mid-1980s, and contributed to a total

manufacturing employment boom in this area. However, this was occurring simultaneously as 'Old Geelong's' labour market was being devastated by deindustrialisation. At the 1954 Census, 33% of Victoria's labour force worked in manufacturing, whereas in the Geelong urban area it was 46% (ABS 1955). During the period from 1954 to 1986, 'Old Geelong' lost more than 6,000 manufacturing jobs. In the same period, Corio, Bellarine and South Barwon added roughly 7,500 manufacturing jobs (ABS 1955, 1987). The implication was that the areas of 'Old Geelong' had already diversified through structural decline and were thus significantly less specialised and less exposed to further rounds of manufacturing decline post-1986.

In 1986, of the six core municipalities that would come to comprise the City of Greater Geelong (excluding the rural and lightly populated Bannockburn and Barrabool), 43% of manufacturing workers lived in the Shire of Corio, which comprised 32% of the population. In 1986, the Shire of Corio had an equal male labour force participation rate to South Barwon (74%), which was only slightly below Victoria (75%) and higher than the municipalities of Geelong (67%), Geelong West (68%), Newtown (70%) and Bellarine (71%) (ABS 1987). In 1986, 51% of the male labour force in both the municipalities of Corio and Bellarine were earning above an inflation-adjusted AUD$39,733 (roughly equivalent to 2018 full-time minimum wage), which was commensurate with Victoria (52%), and significantly higher than the municipalities of Geelong (43%) and Geelong West (45%).[31] By 2016, most of the populated areas of the former Shire of Corio and a significant portion of those in the Rural City of Bellarine were considered, by the Australian Bureau of Statistics, to be among the most disadvantaged suburbs in the country (see **Figure 35**). Patterns of socio-spatial disadvantage in the Geelong region, while evolving over time, have always correlated with deindustrialisation.

Geelong's progress in downtown revitalisation efforts thus cannot be compared directly with Oshawa, where downtown neighbourhoods remained highly specialised in manufacturing until recently. Moreover, the strategy of using higher education facilities to promote downtown regeneration began earlier in Geelong than it did in Oshawa. UOIT, established in north Oshawa in 2002, opened its first downtown Oshawa faculty in 2008, while Deakin's Waterfront Campus opened in 1996, realising one of the city's downtown

[31] Source: Author calculations using the Reserve Bank of Australia (2018) inflation calculator based on ABS (1987).

revitalisation priorities since the 1970s by repurposing and redeveloping the city's idle historic Wool Stores (Geelong Regional Commission 1981). Earlier development means that investment in the higher education sector has had more time to generate employment multipliers and other spill-over effects in downtown Geelong.[32] Ultimately, while inner-Geelong is an apparent recent diversification success story, in reality the recovery from deindustrialisation spanned multiple generations.

Constructing the Feminisation of the Workforce in Geelong and Oshawa

One outcome of deindustrialisation and diversification is the feminisation of local workforces. This can occur, in part, from a gradual historical trend towards increased female participation in the workforce. However, it is also a result of the decline of male-dominated industries and the layering of new industries that are often unrelated to the skills of the old industries, with female labour increasingly required to staff the new industries (Massey 2007). This means the shift in gender composition of the labour force in once-specialised manufacturing regions can be dramatic.

The appreciable decline in Oshawa's labour force participation rate, since 1986, is striking when the accompanying shift in the gender composition on the labour force is considered. Labour force decline for males since the 1980s has occurred structurally in Canada, but it has been far more dramatic in Oshawa. In 1986, Oshawa's male labour force participation rate (81%) was significantly higher than Canada's (77%), but by 2016 was significantly lower, having decreased a staggering 15% compared to only 7% in the nation (see **Figure 42**). In 1986, females comprised 41% of Oshawa's labour force, but by 2016 had reached near-parity at 49% (Statistics Canada 1987, 2017). This meant that Oshawa's labour force was proportionally more female than Ontario, having been significantly more male than Ontario in 1986. However, the female labour force participation rate in Oshawa remained steady between 1986 (58.3%) and 2016 (58.5%), meaning that this compositional change was driven entirely by male labour force decline.

[32] Similar, although not directly comparable, analyses (Deloitte 2014; UOIT 2015) estimating the impact of Deakin and UOIT on their respective regional economies suggest that both universities create significant indirect employment, and this highlights why they are central to broader urban revitalisation strategies. These analyses suggest that Deakin has played a more substantial role in Greater Geelong's economy than UOIT has in Oshawa and Durham. However, UOIT's impact is estimated to grow significantly over time, reinforcing why Geelong has benefited from long-term investment.

Females have increasingly dominated among both internal and external commuters to and from Oshawa. Some 58% of commuters to Oshawa with a usual place of work (both internal and external commuters) were women in 2016, having only been 47% in 2001 (see **Figure 43**). Men occupied 74% of manufacturing jobs in 2016. On the other hand, women comprised 71% of the education workforce, 86% of the health care and social assistance workforce and 62% of the finance and insurance industry workforce (Statistics Canada 2017). Thus, many of the jobs that have been the branding centrepiece of Oshawa's diversification have mainly employed (skilled) women.

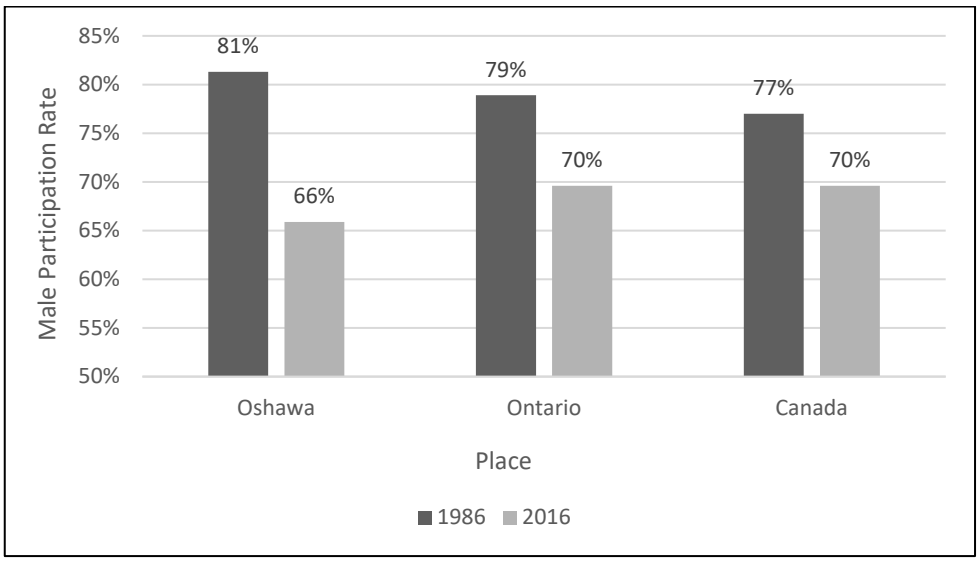


Figure 42: Change in Male Labour Force Participation Rate in Oshawa, 1986-2016

(Source: Statistics Canada 1987, 2017)

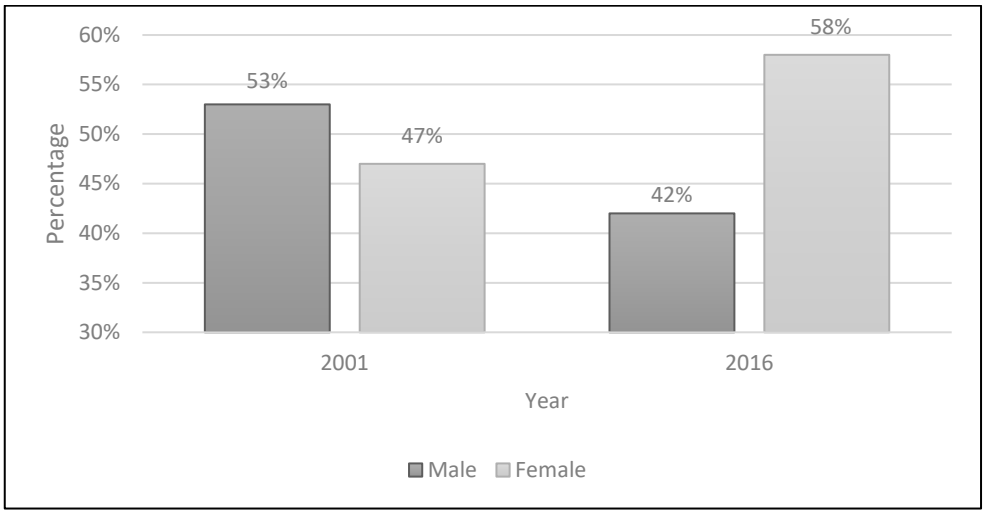


Figure 43: Oshawa as Usual Place of Work by Sex, 2001, 2016

(Source: Statistics Canada 2002, 2017)

However, Oshawa's diversification has not been all bad news for male-dominated industries. **Figure 15** shows that while health and education industries have grown in Oshawa, this has largely followed the provincial trend. While other relative growth industries such as professional, scientific and technical services (50% male), retail (47% male), and to a lesser extent accommodation and food services (38% male) have somewhat balanced gender compositions, Oshawa's biggest 'competitive' edge over Ontario, between 1996-2016, has in reality been in the male-dominated construction (89% male) and transportation and warehousing industries (77% male). Construction employment in Oshawa saw the biggest net increase in jobs of any industry between 1996-2016, surpassing even health (Statistics Canada 1997, 2017).

Greater Geelong has followed a similar trajectory in recent years, although gender compositional changes have been offset by higher overall growth. In parallel with Oshawa, there has been a marked decline in the labour force participation rate in disadvantaged suburbs, with sharp falls in the male participation and a modest decline in the female participation rate. **Figure 44** shows the decline in labour market participation in the two suburbs that experienced the highest aggregate manufacturing losses (although not as a percentage of labour market), Corio and Grovedale, between 2006-2016. It shows that female labour force participation also declined, but far less substantially. In the wider Greater Geelong municipality, a decline in male participation (from 68% to 66%) was offset by increased female participation (54% to 57%), leading to a slight increase in overall participation (ABS 2007, 2017). The female share of the employed Greater Geelong labour force increased between 2006-2016 (from 46% to 49%), as did the female share of internal and external commuters to Geelong for work (49% to 52%). This gender-based compositional shift was not as significant as it was in Oshawa, but nonetheless follows the same pattern.

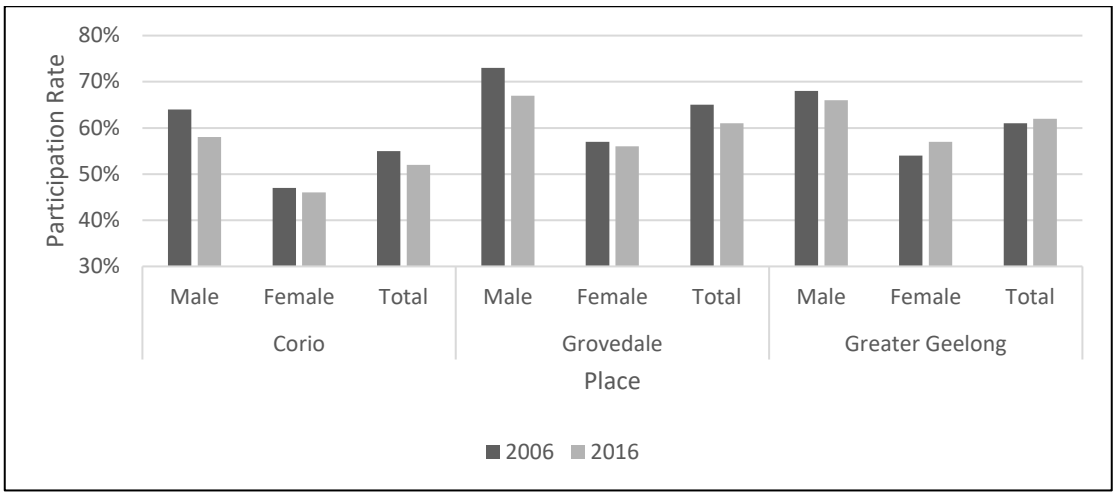


Figure 44: Male and Female Labour Force Participation in Selected Geelong Suburbs, 2006, 2016

(Source: ABS Tablebuilder based on ABS 2007, 2017)

Higher female labour force participation in Greater Geelong reflects the growth of the health (81% Female in 2016), education (68% female), accommodation and food services (58% female), retail (58% female) and the finance and insurance sectors (56% female) (ABS 2017). Growth in public administration (51% male) has followed a balanced gender composition. Yet, similar to Oshawa, Geelong's second biggest increase in net jobs (behind health) between 1996-2016 has been in construction (90% male). Ultimately, the dynamic in each case study site is that, although female-dominated industries have benefited from the growth of new types of work in the old industrial towns, a male-dominated industry has benefited from constructing them. This industry has also benefited from constructing the new residences fuelling related population growth.

Labour force feminisation and construction growth in Oshawa and Geelong both reflect global patterns of urban transformation. Massey (2007) showed that deindustrialisation is commonly accompanied by labour force feminisation. Harvey (1978, pp. 106, 110) documented a shift in investment focused on fixed assets related to production (industrial/commercial real estate), to investment in residential and institutional real estate, transport infrastructure, and the development of urban spaces, as well as universities, hospitals and research and design activities to facilitate the growth of 'human capital' and technological innovation. This transformation of the built environment requires significant construction. Oshawa and Geelong follow longstanding structural diversification trends, and the manner in which their labour forces have deindustrialised and feminised should not be considered unique.

However, the degree to which Oshawa and, to a lesser extent, Geelong, have experienced such pronounced shifts in the gender composition of their workforces shows that the structural decline of manufacturing has created significant social upheaval. The increasing feminisation of the workforce, in the context of increased unemployment and a significant decline in male labour force participation, reveals the limitations of diversification as a solution to deindustrialisation: it does not address the underlying problem of mass retrenchment in a male-dominated industry.

Conclusion

This chapter has shown that the 'success' of Geelong and Oshawa has, to a large extent, not been the ability to actually absorb or adapt to the devastating socioeconomic impacts of deindustrialisation, but rather to obscure these impacts and grow in spite of them. Crises in Geelong and Oshawa were intensified by the extent of their former industry specialisations and presented certain unique challenges, but negative diversification outcomes in the two case study sites also mirrored global structural trends. These findings provide a fundamental basis for understanding the merit of different approaches to the management of structural industry decline and subsequent diversification. The evidence presented in this chapter challenges the tenuous foundation of market-based perspectives, which have dominated approaches towards Oshawa, that minimise the link between deindustrialisation, entrenched socioeconomic disadvantage and uneven growth. It instead reinforces the view, acknowledged by the Victorian State Government and other stakeholders in Geelong, that processes of deindustrialisation, diversification and socio-spatial polarisation are intertwined. This chapter has shown that increasing socio-spatial polarisation has not simply been an unfortunate side-effect of diversification in these places, but rather a critical component of it. Wealthier or newly developed urban areas, less inhibited by the socioeconomic baggage of deindustrialisation, have emerged to provide space for high-income residents more suited to emergent, knowledge-based industries. This has contributed to the relative resilience of broader regional labour markets, but has also exacerbated intra-regional disparities further. Ultimately, 'successful' diversification in Geelong and Oshawa is driven by a duality, with the success of some spaces fuelling increasing relative 'failure' in others.

Chapter 9 - Positionality, Population Mobility and 'Balanced' Growth

Introduction: Agglomeration Economies and Urban Hierarchies

Agglomeration economics extols the virtues of particular modalities of agglomeration in idealised urban spaces for providing the significant increases in productivity that drive economic growth (see Glaeser 2012; Storper 2013). The tendency towards the concentration of firms and labour in core urban spaces is neglected in traditional factor-endowment focused neoclassical economics (Krugman 1991), yet the observable trend towards urbanisation and increasing agglomeration, which acts as a centripetal force dragging economic activity away from peripheral places, is a widely accepted phenomenon (World Bank 2009). However, while there is relative consensus on the existence of agglomeration effects, there is little consensus on the fundamental drivers of this phenomenon (Overman & Puga 2012; see also Austin et al. 2018).

Foundational market-oriented accounts of agglomeration economies see them as resulting from a combination of economies of scale and transaction costs (Scott 1988; Williamson 1979). Cities provide a large market conducive to attracting skilled labour and density, which encourages certain types of economic interactions (Glaeser & Resseger 2010). More specific accounts focus generally on the benefits to firms of labour pooling and knowledge externalities, which are proposed to engender higher productivity and increased technological innovation (Beaudry & Schiffauerova 2009; Marshall 1920; see also Krugman 1991; Overman & Puga 2012). Some viewpoints focus on knowledge spill-overs as the fundamental driver of agglomeration economies, arguing that large urban areas provide certain desirable lifestyle amenities, which cause skilled labour to concentrate (Florida 2012a, 2014). While these amenity-based accounts are disputed by spatial equilibrium perspectives, there is general agreement that urban concentrations cause human capital to accumulate more quickly (Glaeser & Resseger 2010).

Competing non-market explanations argue that agglomeration externalities are more fundamentally shaped by a variety of public goods and highlight the fundamental role of public investment decisions in driving agglomeration and its benefits (Eberts & McMillen 1999; see Ahlfeldt & Wendland 2013). These explanations draw attention to the

tendency for institutional power to centralise in places featuring agglomerations of formal political power (Faguet 2004). This is an important factor in the economic dominance of capital cities in largely unitary regions such as Europe (Parkinson et al. 2012), or state capitals in federal societies such as Australia and Canada. This literature argues that the concentration of economic activity cannot be explained as a purely market-driven process, but rather one that is also reflective of spatially selective state allocative decisions.

While much focus is given to the benefits of agglomeration economies, it is also recognised that these are offset by agglomeration diseconomies, notably congestion dis-amenities; demand for land and real estate exceeding supply and driving up both the cost of doing business for firms and living costs for residents; and extra burdens placed on governments for infrastructure and service provision. The negative externalities of increased agglomeration thus also act as forces for geographic diffusion, in the same way that positive externalities act as forces for concentration (Austin et al. 2018; Glaeser et al. 2001; Krugman 1998; Pike et al. 2016). Although technological improvements in communication have long been thought to reduce the need for agglomeration economies (for example, by achieving the same 'knowledge'-based spillover effects without the need for geographic clustering), and thus reduce their offsetting diseconomies, the predicted decline in the importance of large cities has not occurred (Giuliano et al. 2019). Instead, urban forms continue to be dominated by the interplay of agglomeration economies and diseconomies.

Theoretical explanations for the existence of core-peripheral relationships or hierarchies in urban systems are also disputed and complex (Ahlfeldt & Wendland 2013). Methodologically individualistic, micro-foundational theories argue that core-peripheral patterns in urban systems represent a spatial equilibrium that emerges after factor endowments, or export potential, determines the location of core areas, and land use and transaction cost dynamics dictate the growth of towns in the agricultural periphery, which both service and are serviced by the core (see Krugman 1991, 1998; Fujita et al. 1999). Although conceptually distinct, some macro-focused urban systems models also offer a binary understanding of urban hierarchies, viewing them as emerging as a consequence of the supply of goods in 'central places' (Getis & Getis 1966), with 'high-end' cores providing services that 'low-end' towns in the city's hinterland cannot provide, including

public services (Ahlfeldt & Wendland 2013). However, the widespread emergence of interdependent polycentric urban spaces, including conurbations, has challenged the theoretical basis for these 'core/periphery' or 'high-end-low end' dualistic explanations for urban hierarchies (Growe 2012; van Houtum & Langendijk 2001; Meijers & Romein 2003). Market perspectives view emerging polycentricity in urban areas, such as the rise of 'edge cities' or satellite cities, as a spatial-equilibrium based response to diseconomies in core urban areas, with firms and residents incentivised to cluster in spaces outside a traditional core by rising costs and dis-amenities (Glaeser et al. 2001; see Garreau 1991).

Urban planners have long recognised that polycentric spaces may offer the same total agglomeration benefits of large monocentric cores, whilst avoiding some of the agglomeration diseconomies associated with them, and have pursued polycentricity as a deliberate spatially selective urban planning agenda (Meijers & Romein 2003). In polycentric urban system models, as in monocentric urban system models, employment density is supposed to decrease the further the distance from an employment centre, as firms cannot take advantage of agglomeration effects (thus lowering the demand for commercial and industrial land). As such, governments have pursued deliberate decentralisation and de-concentration initiatives to transform hinterlands and commuter towns into employment centres, with maintaining sufficient employment densities and strong jobs-per-resident ratios a primary goal (Garcia-Lopez & Muniz 2010).

Managing the diseconomies of economic growth in core cities and taking advantage of agglomeration effects in satellite urban economies is only one proposed advantage of polycentricity. The 'borrowed size' thesis posits that satellite areas can also take advantage of their positionality relative to a core agglomeration to generate similar economic growth and develop similar functional urban characteristics (inclusive of public institutions and services) to the larger area, in a manner that comparably-sized standalone cities cannot (Burger et al. 2015). This theory suggests that public investment in satellite cities will also be more efficient in generating growth multipliers than public investment in remote isolated urban areas.

However, polycentricity is not without its threats, with the potential for agglomeration forces in core areas potentially acting as barriers to growth in smaller employment centres. Satellite cities can alternatively experience an 'overshadowing'

effect, whereby higher-level urban functions, amenities and services cluster in the larger agglomeration, making the overshadowed smaller urban area less attractive for firms and dragging economic growth away from the satellite city towards the larger core (Burger et al. 2015; Correia & Denham 2016; Pike et al. 2016). This means that without intervention to maintain a strong employment base after a crisis, satellite cities can face depopulation or alternatively become commuter towns that only supply labour to the larger core. According to Pike et al. (2016), a strong corollary to urban decline in the UK is this agglomeration shadow effect in former manufacturing centres.

Despite the potential for negative outcomes associated with unmanaged agglomeration, policies attempting to inhibit the 'pull' factor of agglomeration economics are disavowed by authoritative institutions such as the World Bank (2009; see Rodriguez-Pose 2018) and Australia's Productivity Commission (2017b). These perspectives maintain that diseconomies are outweighed by the benefits of increasing agglomeration in core areas, and suggest that attempts to interfere in this market-driven process is bound to engender inefficient outcomes (Daley & Lancy 2011; World Bank 2009). According to spatial equilibrium, agglomeration diseconomies will result in dispersal to peripheral areas anyway, so there is no need to attempt to 'push' growth towards them (Glaeser et al. 2001) and interfering to do so creates undesirable flow-on effects (Glaeser & Gyourko 2005). However, there is no persuasive empirical justification to substantiate the idea that centrifugal and centripetal forces for concentration or dispersal are, or can be, somehow in the balance of equilibrium. As Harvey (1982, p. 418) insists, 'Opposed tendencies towards geographic concentration and dispersal run up against each other. And there is no guarantee of a stable equilibrium between them'. Systematic analysis disputes the empirical basis for spatial equilibrium theories (Beenstock et al. 2018; Partridge et al. 2015).

Moreover, the absence of any empirically-based clarity on the specific inputs that engender optimal agglomeration outcomes or a replicable agglomeration model has led, even among influential adherents of spatial equilibrium models, to growing acceptance that the mere existence of agglomeration economies does not preclude policies which may distort this equilibrium (Austin et al. 2018; see Glaeser & Resseger 2010). Arguments about the role of the state in managing agglomeration economies/diseconomies thus largely overlap with the more generalised debate over the role of the state in initiating

spatially selective approaches as part of planned development agendas (see **Chapter 2**). Just as debates rage over whether or not states can and should implement 'redistributive' place-based policies to lock in regional investment, so do they rage over whether states can and should manage agglomeration economies.

Attempts at fostering urban agglomeration or 'pull' effects have been similar in Oshawa and Geelong, including the imposition of 'Creative Class' knowledge economy policies (Johnson 2009; Siemiatycki 2013; see also Cleave et al. 2019; Florida 2012a). However, 'push' approaches to managing agglomeration diseconomies, which underpin government-instigated decentralisation initiatives aimed at diverting growth from the central core, have been largely absent in the Greater Toronto Area (GTA) since the 1990s. Conversely, these policies have been a cornerstone of recent urban/regional policy in Greater Melbourne and its surrounding areas, as well as a direct response to deindustrialisation in Geelong (see **Chapter 5**). There has been a state-driven approach to attempting to harness local agglomeration economies in both Oshawa and Geelong, but only in the latter has there been a sustained commitment to managing potential conurbation 'overshadowing' effects from Melbourne, while the former has allowed market forces to dictate employment flows throughout the GTA. Indeed, the Government of Ontario believed that Oshawa's advantageous position, relative to Toronto, justified the denial of place-based interventions that were open to areas of the province outside the GTA (see **Chapter 6**).

Therefore, what is required is to incorporate these considerations into a relational examination of the extent to which Geelong's and Oshawa's 'successful' diversification is derived from their **positionalities** adjacent to their larger metropolitan cores. This includes identifying the positive and negative aspects of these positionalities, as well as exploring how different approaches to managing the opportunities and threats presented by these effects, which manifest in different outcomes. In this chapter, the dichotomy of labour market diversification versus jobs diversification is explored with reference to internal migration, commuting patterns, gentrification and agglomeration economies in the existent or emerging conurbations of Oshawa-Toronto and Geelong-Melbourne. Examining the specific 'push' and 'pull' drivers of change, and the resultant 'borrowed size' and 'overshadowing' effects in Oshawa and Geelong, as this chapter will do, provides a better understanding of post-industrial urban/regional diversification. The analysis

highlights the important distinction, in the context of conurbation, between diversifying local jobs markets and diversifying local labour markets and provides further evidence that place-based policies may be warranted to avoid overshadowing effects.

The rest of this chapter is structured as follows: The first section shows the fundamental importance of Toronto and Melbourne as population growth drivers in Oshawa and Geelong, but notes differentiated commuting patterns, showing that Oshawa has become a partial bedroom community, while Geelong remains a work hub. The second section details the agglomeration diseconomies in Toronto and Melbourne pushing growth towards Oshawa and Geelong, noting that while this is producing growth benefits, it is also engendering housing stress and placing significant gentrification pressures on Geelong and Oshawa's poorest neighbourhoods. The third section examines the issue of land use in Geelong and Oshawa, contrasting Geelong's ability to build significant industrial and commercial real estate with the constraints imposed on Oshawa as a result of planning decisions and a preference for residential development. The fourth section looks at the threats to Geelong and Oshawa in the form of 'overshadowing' effects, as the large neighbouring agglomerations potentially pull business growth away from them. The final section focuses on the implications of local labour market diversification versus industry diversification on notions of 'successful' diversification and resilience.

Internal Migration to Oshawa and Geelong

Job displacement after major plant closures often leads to increased regional migration outflows, but these can be offset by inflows from migrants attracted by the growth of new industries or non-employment factors (see Eriksson et al. 2018; Huttunen et al. 2011). Despite mass retrenchment episodes, Oshawa and Geelong derive significant net growth benefits from their proximity to Toronto and Melbourne through internal migration. However, agglomeration diseconomies and gentrification, in Melbourne and Toronto, are crucial in driving these migration patterns and these growth pressures in turn have negative effects in Geelong and Oshawa.

Toronto's urban and suburban outgrowth has extended rapidly towards Oshawa since the 1970s, when the once small towns of Pickering, Ajax and Whitby, to the west of

Oshawa, grew into larger urban areas and essentially formed a contiguous urban conurbation between the two cities (see Wang et al. 2015). Between 2011 and 2016, Toronto grew at an average annual rate of 1.2%, while Oshawa grew at 1.3%. According to Statistics Canada, between 2012 and 2015, the Toronto Census Metropolitan Area (CMA) had the largest net outflow of internal migrants of any metropolitan area in Canada (Sergerie 2016). With rapid expansion of the Greater Toronto Area (GTA), outflows from Toronto to surrounding metropolitan areas comprised six of the top ten intra-provincial outflow destinations in the country. Clearly at number one, both in absolute terms and as a ratio of population, was the outflow of residents from the Toronto CMA to the Oshawa CMA. Oshawa CMA also had the highest rate of internal in-migration in Canada, in terms of migrant/population ratios, and was second only to Edmonton for net positive internal migration in absolute terms (Sergerie 2016).

This trend continued according to more recent estimates. Statistics Canada estimated that in 2018/2019 and 2019/2020, the Oshawa CMA had by far the largest net positive intra-provincial migration of any of Canada's 158 (combined) CMAs or Census Agglomerations (Statistics Canada 2021b).[33] The Oshawa CMA was second in total net positive internal migration (both intra-provincial and inter-provincial) only to the nation's capital, Ottawa (which includes Gatineau in its CMA), and far exceeded Ottawa for net positive migration as a ratio of population (Statistics Canada 2021b).[34]

The Oshawa CMA's net gain in internal migration was driven entirely by inflows of people from Toronto CMA, which more than compensated for significant outflows to other parts of Ontario and Canada. In 2018/2019 and 2019/2020, Toronto had a significant combined net internal migration loss of 94,282, which was far in excess of Montreal's net combined loss of 46,514 (Statistics Canada 2021b). In 2018/2019 alone, the Oshawa CMA saw a net positive migration flow from the Toronto CMA of 9,053, making it by far the largest net catchment area for former Toronto CMA residents (Statistics Canada 2021b). However, there is another side of the Oshawa CMA internal

[33] Net intra-provincial migration in the Oshawa CMA was 6,114 in 2019/2020 and 5,196 in 2018/2019 compared to 2nd largest, Edmonton (4,138 in 2019/2020; 4,254 in 2018/2019) (Statistics Canada 2021b)
[34] Total net internal migration in the Oshawa CMA was 5,800 in 2019/2020 and 4,970 in 2018/2019 compared with Ottawa-Gatineau (6,874 in 2019/2020; 7,548 in 2018/2019). The 2016 Census population of Ottawa-Gatineau (1,323,783) was more than triple that of the Oshawa CMA (379,848) (Statistics Canada 2017).

migration story: excluding the net gain from Toronto, the Oshawa CMA has one of the highest negative outflows of any Canadian city to the rest of Canada (-4,083). If net migration flows between Toronto and Oshawa were zero, Oshawa CMA's population would have declined by more than 1,000 residents in 2018-2019 (Statistics Canada 2021a).[35] This shows that conurbation with Toronto and the ability to capture its growth overflows is the fundamental driver of population growth in the Oshawa CMA, yet also a potential source of displacement within it.

Unlike Toronto and Oshawa, Melbourne and Geelong have not formed a contiguous conurbation and are still separated by swathes of undeveloped or rural land. However, this is rapidly changing. While the growth rate in Toronto and Oshawa is high by global standards, it still pales in comparison to recent growth in Melbourne and Geelong. Melbourne (2.4%) doubled Toronto's (1.2%) average growth rate between 2011-2016, while Greater Geelong's growth, at 2.0% was significantly higher than Oshawa's (1.3%) (ABS 2012, 2017; Statistics Canada 2012, 2017). Melbourne's process of westward expansion has seen the population of the metropolitan City of Wyndham – the Greater Melbourne municipality adjacent to Geelong – nearly double since 2006, and nearly triple since 1996, as Greater Melbourne sprawled out into previously undeveloped land (ABS 1997, 2007, 2017). Melbourne is seemingly moving towards forming a contiguous urban conurbation with Geelong, just as Oshawa has done with Toronto.

Westward Melbourne metropolitan expansion has contributed substantially to Geelong's population growth. Between 2011 and 2016, Greater Geelong had a net migrant inflow of 4,884 people from Greater Melbourne (ABS Tablebuilder based on ABS 2012, 2017). Of the nine Greater Melbourne (SA4) labour market areas, Melbourne West provided by far the greatest net inflow to Greater Geelong, with 1,900 people from that area. This is indicative of a trend the Victorian Government refers to as 'border hopping' (Victorian Government 2020b), where the net outward migration flow to surrounding municipalities (of which Geelong was the highest) comes predominantly from the nearest Greater Melbourne labour market region. This is a part of a wider westward movement of population: Melbourne West itself had a net inflow of +6,837 people from the rest of Greater Melbourne between 2011 and 2016 (ABS Tablebuilder). Between 2018-2019, the

[35] Including births, deaths and immigration/emigration flows but excluding non-permanent residents

ABS estimates that Melbourne West had the second highest net internal migration gains of any SA4 region in Australia, with the Geelong SA4 area ranked fifth (ABS 2020). These trends are explained by housing affordability: in 2017, Melbourne West had the second lowest median weekly rent of Greater Melbourne's nine SA4 labour market divisions (ABS 2017).[36]

Population growth fuels residential development and drives increased private and public capital investment, and internal migration is an important driver of this process. In 2016, of the 4,246 residents in Geelong's newly gazetted residential development area of Armstrong Creek, the majority settled from other parts of the Geelong SA4 metropolitan region, and a further 10% (403) had lived in Greater Melbourne in 2011 (ABS Tablebuilder). A former manager at ISPT Super Property (Interview Code SDS49) explained that retail investment in Geelong's prosperous southwest was driven by this residential growth:

> One of the primary reasons we purchased Waurn Ponds Shopping Centre was to capture the increased spending linked to very strong population growth taking place in Armstrong Creek and the broader catchment.

Similarly, when asked what was driving public investment in health and education in Oshawa, a local Oshawa business expert (Interview Code QWQ24) was straight to the point:

> Population. Definitely.

Conurbation, or emergent conurbation, has contributed to each city's reorientation after deindustrialisation. It explains the observed growth in the industries of education, health, retail and hospitality in each case study area, as these industries have grown in response to population growth. Residential development in Oshawa's north and Geelong's southwest have been positive drivers of labour market growth. Thus, population growth can engender a positive feedback loop whereby the anticipation of future population growth drives public and private capital investment, creating more job opportunities, providing for future population growth. However, when the full context of the growth benefits Oshawa and Geelong derive from their positionalities relative to

[36] This is after the Mornington Peninsula, the eastern periphery of Greater Melbourne, which itself had significant net internal migration inflows from the other eight SA4 areas of Greater Melbourne.

Toronto and Melbourne is considered, it is clear that not all of the implications are positive.

The 'Push Factor': Gentrification and Displacement in Melbourne and Toronto

Popular urban development theories, such as those centred on 'Creative Class' attraction, suggest that cities must provide certain lifestyle amenities, in order to attract firms and skilled labour to generate desirable agglomeration effects (Florida 2012a, 2014). This means that neighbourhoods that do not currently provide these amenities must go through a process of 'revitalisation'. Critical perspectives argue that these urban rejuvenation orthodoxies, often centred on the concept of diversification, are geared towards gentrification, and thus, implicitly, to the displacement of incumbent residents, rather than improving existing living standards (Lees 2003).

Gentrification is loosely defined as 'the production of urban space for progressively more affluent users' (Hackworth 2002, p. 815). Gentrification studies have traditionally focused on once 'poor or blighted' inner-city residential neighbourhoods or suburbs that were once 'formerly dominated by industrial and warehouse activities' that have been rezoned and redeveloped for real estate investment (Scott 2019, p. 508). The relationship between gentrification and internal migration is thus often characterised by the 'expansion of professional, financial and business-service employment opportunities in central-city areas and the concomitant tendency of many white-collar workers to turn away from suburban living and to seek out residential accommodation closer to the urban core' (Scott 2019, p. 508). Gentrification is not confined to low-income industrial or inner-city areas, but is increasingly experienced by middle-income suburbs, as prior rounds of gentrification produce flow-on effects (Lees 2003; Pegler et al. 2020). The demand for housing, driven by the drift of higher-income suburban migrants back to inner-city areas, displaces incumbent residents through subsequent rising living costs, with rental price increases a consistent predictor of the displacement of lower-income incumbents (Scott 2019; Zuk et al. 2018). Importantly, displacement is not always the outcome, with multiple studies showing that incumbent residents of gentrifying areas are often 'stuck in place' despite rising price pressures (see Zuk et al. 2018).

Critical perspectives on gentrification argue that incumbent residents in gentrifying area have often experienced a 'one-two knockout' from government policies that denied them public investment and diverted private investment away from them, only to reverse course and promote investment strategies designed to displace incumbent residents (Powell & Spencer 2002). For others, the social problems related to gentrification are purely the result of other distortions in the market. According to Glaeser and Gyourko (2005; see also 2018; Glaeser & Gottlieb 2008, 2009), the flow-on effects of supply-constraints in housing markets in prosperous cities, or place-based policies in declining areas, can push up housing prices and lead to distortions in migration flows to and from declining areas, causing low-income residents to cluster and for poverty to perpetuate. The solution, under this spatial equilibrium framework, is to ensure that housing supply is not restricted, as this market distortion leads to demand pressures that negatively impact low-income individuals, who are assumed to be mobile, despite evidence to the contrary (Eriksson et al. 2018; Zuk et al. 2018). The anticipated housing price-income-amenities offset relationship is underpinned by the assumption that supply dynamics engender equilibrium in the longer term. For Glaeser et al. (2009, p. 1018), 'the number of people in an area is essentially proportional to the number of homes' in that area.

However, in a global context in which real estate prices have, to a significant degree, been decoupled from localised demand/supply dynamics (see Beauregard 1994; Christophers 2011), these dynamics may not hold. Gotham (2006, pp. 233, 232) observes the transformation of real estate 'into a liquid financial asset that is abstracted from local conditions' and into a 'standardized and transparent security that can be bought and sold on a global scale' (see also Harvey 1978). Financial dynamics, such as low interest rates, explain why record levels of increased housing supply in Australia failed to moderate prices (Planning Institute of Australia 2018). Canada's home vacancy rate – estimated at five times the rate of the US (Tencer 2019) – is also informed by financial dynamics (see August & Walks 2018; Rankin & McLean 2015).

Like other global cities (Harvey 2008), Toronto and Melbourne are 'dealing with the effects of a historic decline in housing affordability' (Parliament of Victoria 2013b, p. 50). In both Melbourne and Toronto, population growth policies, the deregulation (or spatially selective re-regulation) and the financialisation of housing markets (which has

included an influx of speculative foreign capital inflows) have fuelled housing bubbles and led to the increasing gentrification of inner-city areas (August & Walks 2018; Hulse & Reynolds 2018; Hulse et al. 2020; Rankin & McLean 2015; Weller & van Hulten 2012).[37] This phenomenon has been linked to the outward displacement of low-income residents and the increasing suburbanisation of socioeconomic disadvantage in both metropolitan areas (see Dinca-Panaitescu et al. 2017; Hulchanski 2007; Pegler et al. 2020). The dynamics driving population overflows from Toronto and Melbourne to Oshawa and Geelong – principally rising prices and congestion dis-amenities – are thus fundamental to understanding how the two smaller satellite cities have diversified.

A primary attraction for Toronto and Melbourne residents to relocate to Oshawa and Geelong is housing affordability. According to the 2016 Census, median weekly rent was 18% percent cheaper in the City of Greater Geelong compared to Greater Melbourne, while monthly mortgage payments were 13% lower (ABS 2017). These advantages for attracting population were not lost on local policymakers in Geelong. According to former Geelong Deputy Mayor Peter Murrihy:

> 'It's because of the affordability that people want to come to Geelong, they see the opportunity that Geelong offers for young families to set up here' (cited in Dyett 2018).

Likewise, housing affordability is a major selling point in Oshawa. In a 2014 policy document, citing the Toronto Real Estate Review Board (TREB), the City of Oshawa boasted that in 2014 Oshawa had 'the lowest average home sale price in the GTA', listing an average house price half that of the GTA average (City of Oshawa 2014a).[38]

However, the literature highlights that incumbent Geelong and Oshawa residents are now facing a pincer movement of potential gentrification cost pressures: from one side, internal policies aimed at promoting 'Creative Class' urbanism and the attraction of high-income in-migrants and from the other, low and middle-income Toronto and Melbourne residents that are being pushed to the peripheries of their metropolitan areas

[37] The Union Bank of Switzerland (2017) Bank ranked Toronto number 1 in its 2017 'Global Real Estate Bubble Index'

[38] In 2019 the City of Oshawa had the equal second cheapest average housing prices after fellow Durham municipality Brock on the rural outer fringes of the GTA, (TREB 2019). The Toronto CMA remained one of the least affordable (housing prices relative to income) metropolitan areas in Canada in 2018 (Al-Tawil 2019).

by similar policies and waves of displacement. The implications are explored in the next section.

Housing Pressures in Geelong

In Melbourne, spatially selective development restrictions have significantly influenced localised supply and demand dynamics. In Melbourne, socioeconomic disadvantage was concentrated in inner-city suburbs until they began to experience gentrification in the 1970s. The recent wave of gentrification is more heavily concentrated in middle-suburbs, as middle-class residents cannot buy into previously gentrified inner-suburbs (Pegler et al. 2020, p. 1). These previous rounds of gentrification mean that, for Pawson et al. (2015, p. 34), unlike most other developed countries in the world, where poverty is often a distinctly downtown urban centre phenomenon, 'Australia's now predominantly suburban location of concentrated disadvantage is pronounced'. Restrictions on high-rise development and urban intensification outside the central City of Melbourne, has meant that new developments have turned towards lower-income western suburbs on the edge of the gentrified core. According to Weller and van Hulten (2012), since the early 2000s, levels of housing unaffordability rose far more quickly in these western Melbourne areas than the rest of the city. Increasing levels of unaffordability in the inner-western municipality of Maribyrnong, soon followed by the middle-western municipality of Brimbank, then spread to the outer western municipality of Wyndham adjacent to Geelong.

The relationship between patterns of gentrification, displacement and outward migration is evident in the westward movement of population towards Greater Geelong. Despite making up less than a third of all Melbourne migrants to Geelong, former Melbourne West (SA4) region residents supplied two-thirds of internal migrants from Greater Melbourne to Lara (SA2), the adjacent area in Greater Geelong, and 41% of migrants to the next closest area, the Greater Geelong low-income area of Corio-Norlane between 2011-2016 (ABS Tablebuilder based on ABS 2017). Lara was the most popular (SA2) destination for Melbourne West residents and Corio-Norlane was the fourth most popular, while from all other Greater Melbourne SA4 regions, aside from the Mornington Peninsula (from which migration to Geelong was by far the lowest), these two areas were

not in the top five destinations.[39] **Table 9** shows that low-income migrants favoured the disadvantaged area of Corio-Norlane, but it was largely bypassed by higher-income migrants, who settled in the city centre and the south, highlighting income was a significant determinant in internal migration patterns to Geelong's urban centre

Table 9: Migrants from Greater Melbourne to Geelong by Income, 2011-2016

SA2 Area	Corio-Norlane	Lara	Highton	Geelong West-Hamlyn Heights	Newtown
Relative Disadvantage (IRSAD)	1	3	4	3	5
Population Share (%)	14	10	12	10	5
In-migrant Share – Total (%)	12	13	13	12	7
Income less than $800 pw	16	12	13	10	4
Income $800-$1249 pw	12	13	9	13	6
Income $1250-$1999 pw	4	15	13	16	8
Income more than $2000 pw	4	10	17	18	16

Notes: Shows migrants from Greater Melbourne to Geelong SA3, Selected SA2 areas 2011-2016, by Income and share of in-migrant population. Total Geelong SA3 Population was 188,184 in 2016. (Source: Author calculations using ABS Tablebuilder based on ABS 2017)

Figure 45 shows that housing costs are significantly more affordable in Geelong's disadvantaged suburbs relative to Victoria, explaining their position as a low-cost refuge for outwardly displaced Melburnians. However, the figure also highlights that for current residents in these locations, median housing costs relative to Victoria far exceed median incomes relative to Victoria. This is a different dynamic to that observed in the broader Greater Geelong municipality, where median housing costs and median incomes are balanced relative to the state median. In the City of Greater Geelong's two highest median income suburbs, Armstrong Creek and Waurn Ponds, high median incomes significantly exceed housing costs. Median mortgage payments in Armstrong Creek and Waurn Ponds are similar to those in Greater Melbourne, despite much higher median incomes. In both locations, residents have larger land sizes, on average, than comparably priced properties in Melbourne. These relativities are likely to explain its appeal for in-

[39] By far the most popular SA2 destination for Greater Melbourne migrants to Greater Geelong area was the wealthy coastal area of Ocean Grove-Barwon Heads (2113), which nearly doubled Lara (1104) (ABS Tablebuilder based on ABS 2017).

migrants. **Figure 45** also shows how an imbalance between median housing costs and median income can correlate with net internal migration losses.[40]

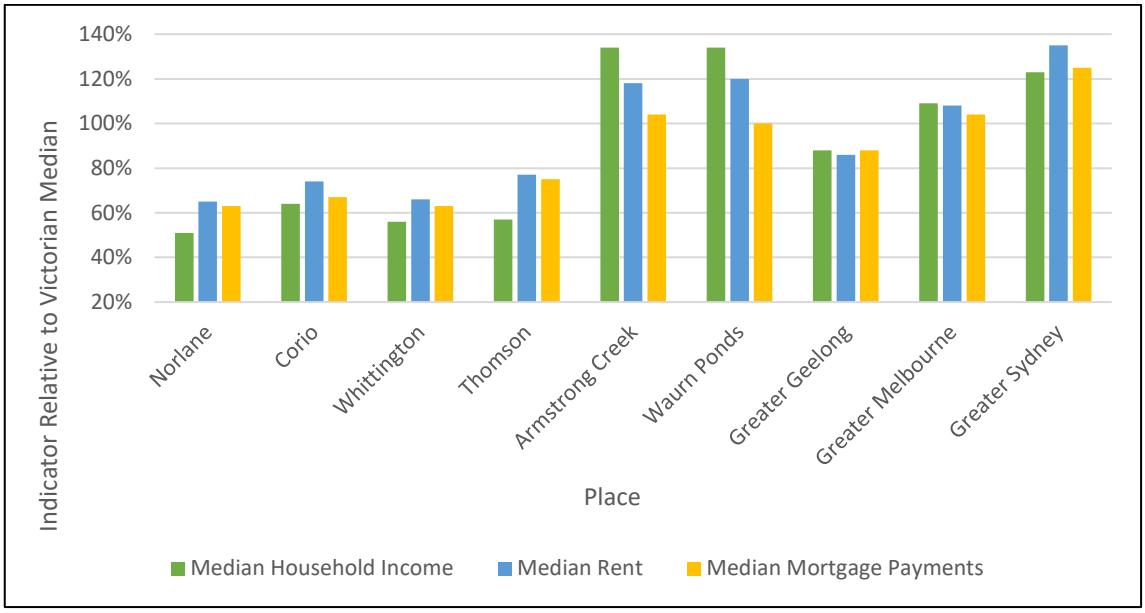


Figure 45: Median Household Income and Housing Costs, Selected Geelong Areas, 2016

Notes: Shows median household income, rent and mortgage payments as a percentage of Victorian medians. (Source: ABS 2017)

While incomes rose in most deindustrialising suburbs in Geelong (adjusted for inflation), so did housing costs. In Geelong's poorest suburb of Norlane (home of Ford), more than one in five households (22%) were experiencing rent stress in 2016 compared with only 6% in Geelong's richest suburb, Waurn Ponds (home of Deakin University) (see **Figure 47**). **Figure 46** shows that increases in median household incomes are failing to keep pace with median rent increases in Geelong's poorest suburbs, putting low-income residents in Geelong's most disadvantaged suburbs under increasing risk of housing stress. These are the areas where growth is producing negative impacts.

[40] Sydney, where high median incomes relative to the State of Victoria are offset by even higher rental costs, is experiencing significant net internal migration losses, unlike Victoria and Melbourne, which receive net internal migrant inflows (ABS 2019).

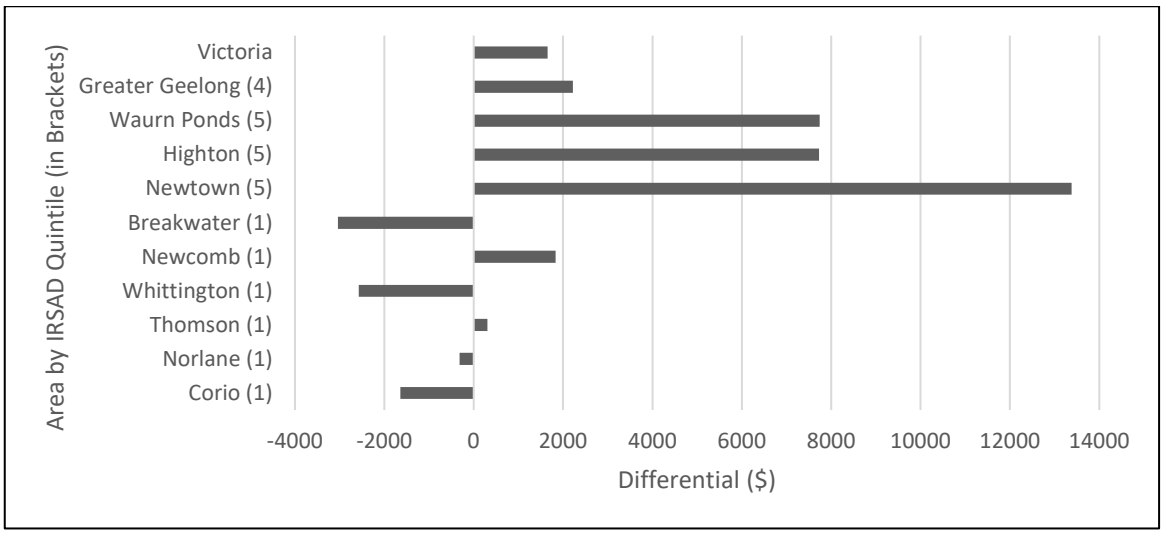


Figure 46: Household Income/Rent Increase Differential in Selected Geelong Suburbs, 2006-2016

Notes: Shows the difference between inflation-adjusted median household Income increase and median rent increase in selected Geelong suburbs 2006-2016. Data is adjusted for inflation using the RBA Calculator (2018). IRSAD Quintile in brackets. (Source: Author Calculations based on ABS 2007, 2017)

When the relative change in housing costs in Greater Geelong's most disadvantaged suburbs is compared with disadvantaged rural Local Government Areas (LGAs) (IRSAD Quintile 1 or 2) in Victoria, it becomes apparent that while these are also low-income locales, this is offset to a significant extent by cheaper housing. This suggests that growth pressures are potentially exacerbating the issues in Geelong's low-income suburbs while they deal with the legacy of deindustrialisation. Although Geelong's lowest income areas are attracting lower and middle-income residents from Greater Melbourne, this is putting immense housing demand pressure on incumbent low-income residents. **Figure 47** suggests this phenomenon does not appear to impact low-income residents of disadvantaged rural municipalities in Victoria, where low incomes are offset by low housing costs. This appears to justify Geelong's poorest suburbs as spaces requiring crisis intervention, even if overall growth in Geelong far surpasses that of disadvantaged rural areas.

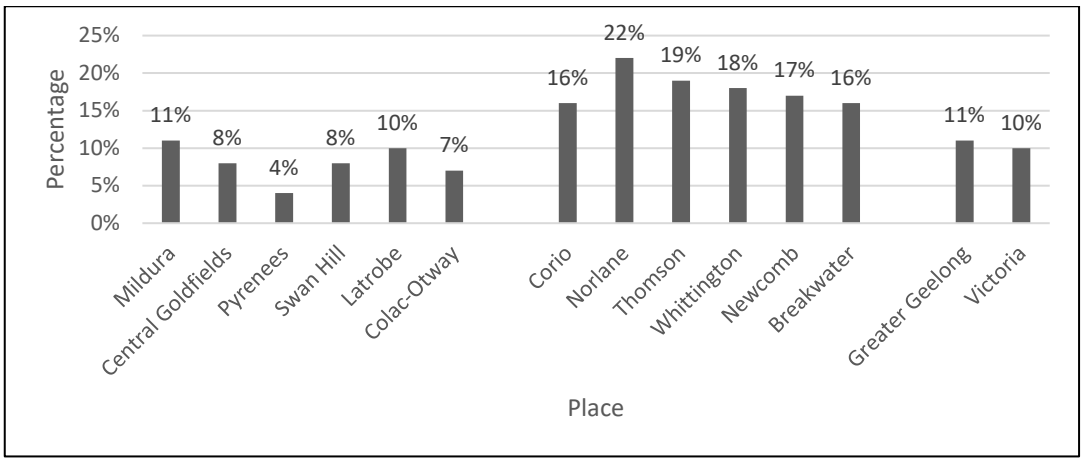


Figure 47: Housing Stress in Selected Disadvantaged Geelong Suburbs and Rural LGAs, 2016

Note: Shows the percentage of households in housing stress in selected disadvantaged rural Victorian LGAs and Geelong suburbs. Housing stress is defined as the percentage of residents spending more than 30% of income on rent. (Source: ABS 2017)

Another threat to low income households in Geelong is the loss of (rent-controlled) public housing. As highlighted by Zuk et al. (2018), while gentrification is one form of urban or suburban revitalisation, another is 'incumbent upgrading', which aims to benefit existing residents rather than displace them. However, often the lines between these goals are blurred in practice. Programs such as the New Norlane and Whittington Community Renewal programs are sold as forms of incumbent upgrading (see G21 2007; Johnson 2017b). These are public-private partnerships for development, which as Geelong analyst (Interview Code JKJ67) explained, has resulted in the net loss of public housing.

> (New Norlane) was 320 new housing units gonna be built by the private sector, so they're getting all the crappy old ones that were falling apart in the public sector, which they were, and then the private sector would come in, knock 'em down, make them all beautiful but not too beautiful and the tenants would be, you know, rehoused in those. So what happened is exactly what's happening in Melbourne, was that 100 of those were lost from the public system, 100 of them went on to the private market to pay for it and to insure their profit margin.

However, while rising housing costs associated with conurbation-led growth pressures represents a significant threat to Geelong's most disadvantaged neighbourhoods, an even more extreme discrepancy between income and housing costs is apparent in Oshawa's most disadvantaged neighbourhoods.

Housing Pressures in Oshawa

Proactive, spatially selective urban planning and policy decisions have influenced specific patterns of low-income displacement in Toronto. The decentralisation of social housing to municipal governments in Ontario, has contributed to a general reduction in total social housing stock and the City of Toronto has specifically targeted the selection of areas outside the city core for low-income housing development (see Hackworth & Moriah 2006; Leone & Carroll 2010). This, alongside deregulation and financialisation, has contributed to the displacement of low-income residents from the Toronto city core and to the outward movement of low-income residents (Pawson et al. 2015; Rankin & McLean 2015). However, decentralisation has also compelled regional governments surrounding the City of Toronto in the GTA, such as in Durham, to also exert control over social housing and land use planning decisions. In the devolved Canadian federation, municipal governments are incentivised to reduce social housing programs, because of budget constraints and to pursue their own gentrification strategies because of a reliance on property taxes (see Hackworth & Moriah 2006; Hackworth & Smith 2001). As a consequence, the outward displacement of downtown Toronto low-income residents is, to an extent, geographically constrained by institutional boundaries and the decisions of other municipal actors. The regional municipalities in the GTA remain far more affluent than the City of Toronto (Dinca-Panaitescu et al. 2017; Hulchanski 2007; Statistics Canada 2017), producing a layered spatial dynamic of polarisation, in which an increasingly gentrified and affluent core CBD is surrounded by increasingly disadvantaged middle-suburbs that are in turn surrounded by affluent commuter towns. The major notable exception to this is Oshawa. This means that the outward movement of GTA residents in search of cheaper housing presents a unique challenge for Oshawa over other already-prosperous outer-municipalities.

Unsurprisingly, gentrification as a result of diversification remains a fundamental concern for the City of Oshawa. Redressing the ill-effects is seen as crucial for managing economic development internally, even if the issue is downplayed externally for regional branding purposes. When asked ‘do you see any threat from the strategy of diversification?’, an Oshawa City official (FGH32) replied:

> It's gonna be the whole gentrification piece, right? …As, you know, we've become a more balanced sort of community. How we balance those two pieces in terms of, you know, doing the right thing by some of our lower-income residents (while) at the same time having a healthy, dynamic community, I think that's kind of a threat.

However, as shown in (**Chapter 7**), this threat is not widely acknowledged as part of the city's 'public position'. Nonetheless, there is justification for this internal concern. In the wider Oshawa CMA, housing prices to income ratios increased far more rapidly than the average for many comparably-sized CMAs in Canada, between 2000 and 2015 (Cox & He 2016). The supply of social housing has not grown in tandem. Between 2006 and 2017, the number of applicants on the waiting list for Durham Access to Social Housing nearly doubled, while rent-geared-to-income housing (RGI) remained stagnant and the number of new applicants housed, halved (Region of Durham 2019a, 2019c). Oshawa residents were impacted by this shortage the most, as they comprised nearly 31% of applicants on the waiting list compared to 38% for the rest of Durham combined (with the remainder residents outside the region) (Region of Durham 2019c).

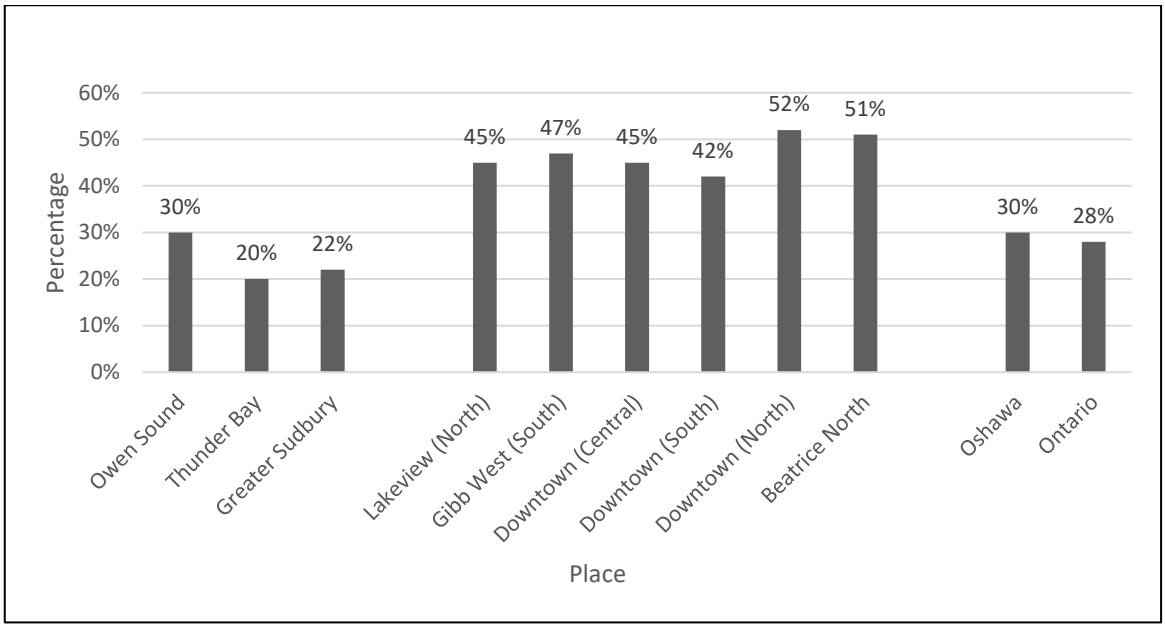


Figure 48: Tenant Households in Housing Stress in Selected Ontario Areas, 2015

Notes: Shows the percentage of tenant households in housing stress in the lowest-Income Oshawa neighbourhoods and selected remote and northern Ontario Urban areas. Housing stress is defined by Statistics Canada as households spending 30% or more of income on shelter costs (includes utilities, not just rent), so this data cannot be directly compared with Australian housing stress data. (Source: Statistics Canada 2017)

Figure 48 shows that many households in Oshawa's disadvantaged neighbourhoods were experiencing housing stress in 2016. **Figure 48** also shows that compared to other disadvantaged regions in Canada, such as the remote southern Ontario town of Owen Sound, or comparably-sized northern Ontario urban areas, such as Thunder Bay and Greater Sudbury, Oshawa has marginally higher average incomes, but considerably higher living costs. Northern Ontario's largest municipality, Greater Sudbury, has both a higher median income than Oshawa and significantly lower median housing costs. The result is that even in a very low-income disadvantaged area, such as the small town of Owen Sound, lower housing costs mean that the proportion of residents under housing stress is similar to Oshawa as a whole, and much lower than Oshawa's most disadvantaged neighbourhoods, which collectively comprise a similar population profile. **Figure 49** shows that these highly disadvantage areas in Oshawa still have comparable housing costs to Ontario, despite very low incomes. Finally, **Figure 49** highlights that median housing costs in the City of Toronto far exceed median income (which is slightly lower than Oshawa). This highlights the housing pressures in Toronto and provides a strong causal explanation for Toronto's high net internal out-migration losses, as the city becomes increasingly unaffordable.

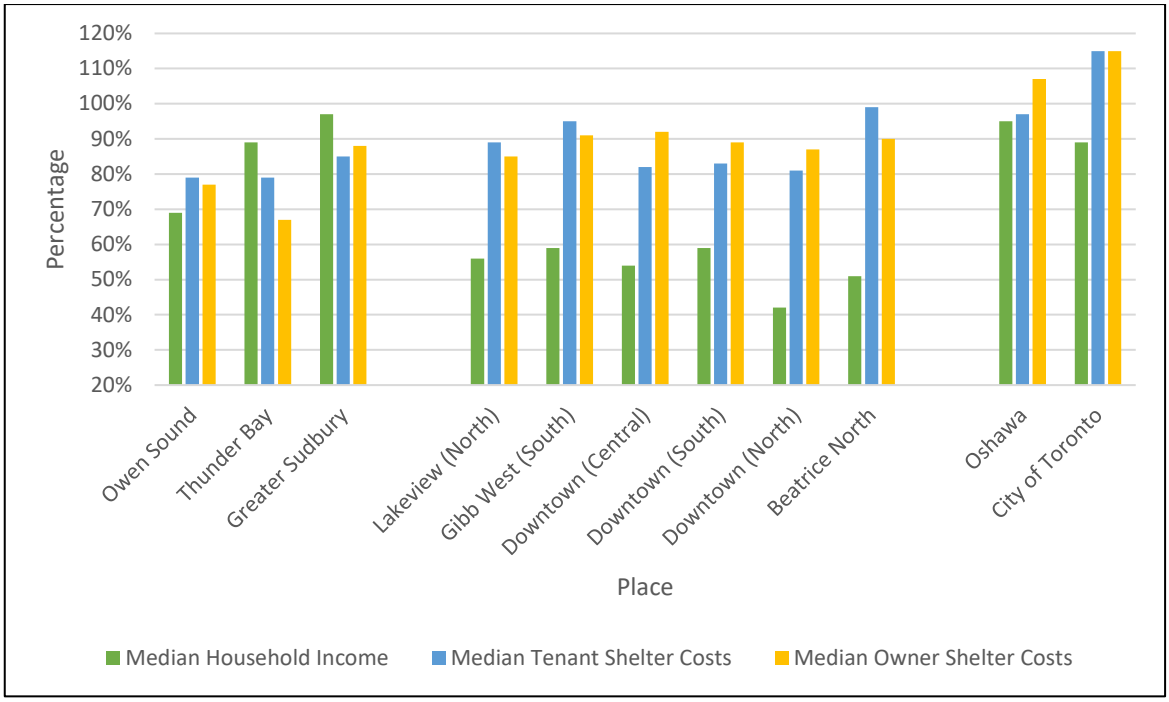


Figure 49: Median Household Income & Shelter Costs in Selected Ontario Areas, 2015

Note: Shows median household income, tenant and owner shelter costs relative to Ontarian median (percentage) in selected northern and remote Ontario urban areas and low-Income Oshawa neighbourhoods. (Source: Statistics Canada, 2016).

The spatial equilibrium framework posits that low housing demand and lower housing costs compensate for lower incomes and lower amenities in less central areas. However, the unique positionality of Oshawa as part of a conurbation has meant that even its low-income areas are high-rent places. The evidence above suggests that while there is some merit to the basic observation that lower incomes and amenities in rural areas are offset by lower housing costs, even if a generalised national-scale 'equilibrium' did exist, this does not hold in poor neighbourhoods in increasingly gentrifying conurbations, which are notably in disequilibrium.

Geelong - Oshawa Comparison

Housing costs are an important factor when assessing the dynamics of resource allocation in spatially selective place-based policies. Despite Geelong's own gentrification problems, relative housing costs in Geelong's lowest-income areas are still far less of a problem than in Oshawa. This suggests that the gentrifying process of conurbation (in Oshawa) is a far greater threat to low-income residents than any gentrification generated by place-based policies (in Geelong). As argued by Scott (2019, p. 522),

> 'The replacement of minority and/or low-income populations by more privileged social groups in contemporary cities is rarely, if ever, a purely neutral, apolitical affair, no matter whether it involves direct displacement or what, on the face of it, might appear to be voluntary departure'.

Population policies in Toronto and Melbourne have promoted gentrification and driven growth towards Oshawa and Geelong, producing displacement effects. Adding to conurbation-driven demand pressures on low-income residents are the deliberate 'Creative Class'-focused diversification and urban revitalisation strategies, in both Oshawa and Geelong (Siemiatycki 2013; Johnson 2009). In this framing, diversification is a social and cultural phenomenon advanced through 'urban revitalisation initiatives (that) … embrace diversity, both cultural and economic, as well as functional and spatial' that conceals the underlying goal of 'attracting middle-class gentrifiers' (Lees 2003, pp. 613, 614). The deployment of this nebulous discursive form of 'diversification' in Geelong and Oshawa to promote revitalisation also therefore promotes gentrification.

Nonetheless, regardless of deliberate gentrification-focused policies, low-income residents are under pressure in both Geelong and Oshawa, as labour markets diversify through conurbation-led population growth, driven from adjacent metropolitan areas. Deliberate policy action within these cities is less significant than the inter-place relational forces exacerbating socio-spatial polarisation. While the ability to capture population from Toronto/Melbourne and the ability to generate jobs multipliers from gentrification and conurbation-led growth may appear to be sustainable strategy for Geelong and Oshawa, both create long-term challenges that could undermine the long-term resilience of these cities. These threats arise through the interactions of conurbation, commuting, and resultant labour market imbalances, which are detailed below.

Conurbation, Commuting and Labour Market/Job Market Imbalances

Commuting patterns enable researchers to understand the growth, decline or dominance of particular employment centres in polycentric metropolitan spaces. They are a primary identifier of whether or not a smaller city is becoming 'overshadowed' or 'borrowing size' from a larger neighbour, and provide evidence for the effects of agglomeration economies/diseconomies or structural industry decline, such as deindustrialisation. Glaeser et al. (2001) used commuting patterns to trace the emergence of the agglomeration diseconomy-fuelled growth of edge cities in the US. Pike et al. (2016) highlight the effects of deindustrialisation in UK conurbations, showing a phenomenon whereby service-oriented cities that once served as bedrooms for manufacturing cities, now 'overshadow' these declining cities and pull commuters from them. However, while generalised patterns can emerge, Growe (2012, p. 309), observing monocentric and polycentric German agglomerations, notes that dependent on a variety of factors, the range of commuter flow relationships that can be observed between constituent parts of agglomerations is 'infinite'. This suggests that either the form of polycentric spaces, different institutional regimes or planning actions can influence commuter dynamics. This section focuses on the issue of commuter-led growth and resulting labour market-job growth imbalances. A clear distinction between the two case studies emerges: Geelong has retained a balanced job-per-resident dynamic in response to deindustrialisation, while Oshawa has not.

Oshawa Commuting

Just as the City of Oshawa recognised the threat of gentrification driven by an influx of new residents, it has also identified the other primary threat – namely that it was becoming an 'unbalanced' city. A report commissioned by the city (Millier Dickinson Blais 2013, p. 75) identified that 'persistence as a GTA bedroom community fuelled by cheap housing' was one of the primary threats to the city. The literature on polycentric spaces shows that cities without a strong industry base cannot harness agglomeration economies and can be 'overshadowed' by neighbours.

The City of Oshawa's (2018, s. 7.1) *Official Plan* maintains a goal of achieving a 'complete community', which involves achieving a 'live-work relationship' by ensuring a ratio of one job for every two residents. The *Plan* (2018, s. 6.1; s. 2.4.1) makes clear that alongside a 'diversified labour force' it 'will seek to achieve greater diversification in the industrial base by encouraging new industry to locate in the City'. However, by its own admission, the Region of Durham has lagged significantly behind the other major municipal governments of the GTHA (the Regions of Halton, York and Peel and the Cities of Toronto and Hamilton) in reaching the population, business and local employment-population ratio targets set in the *Places to Grow* plan (Region of Durham 2019d). While Oshawa has performed the best of the Durham municipalities in this regard, it has been comparatively stagnant compared to Geelong.

This reality is acknowledged by City of Oshawa officials. They attribute the failure to maintain a balanced ratio as the result of new residential developments (as opposed to industrial or commercial development) in Oshawa's north, which is being snapped up by high-income Toronto commuters. One Oshawa official explained (Interview Code FGH32):

> Our ratio of jobs to labour force is not quite as strong as I'd like it to be. I think if we start looking at the demographic shift and commuting pattern, a lot of that is related to the growth of north Oshawa where we've had significant new residential development. And not cheap growth … the people that are moving in there tend to be higher educated two-income families. So, it's not a surprise in many ways that they're going back to Markham, or Scarborough or Toronto as part of their job. I think over time that also creates a significant opportunity for us to look at getting that concentration of our labour force now starting to come into professional services.

The response acknowledged that this dynamic was increasing socio-spatial bifurcation between north and south Oshawa. It acknowledged that labour force diversification into higher income occupations was driven not just by an increase in migrants attracted by the growth of Oshawa's own services industries, but by these new commuting families settling in north Oshawa. Yet, the role of spatial polarisation in driving labour market diversification was thus viewed in Oshawa as a positive phenomenon.

Empirically, it is clear that new Oshawa residents commuting to Toronto have played a significant role in stabilising the labour market, but not the local jobs market, as permanent local jobs in Oshawa have declined. In 2001, 54,670 individuals listed their usual place of work as Oshawa compared to 47,285 in 2016, a decline of 14% (Statistics Canada 2002; 2017).[41] According to the 2006 Census, 27,310 City of Oshawa commuters with a usual place of work who lived in Oshawa also worked in Oshawa, but by 2016 this number was down to 23,050 – a reduction of 16% in the same period that Oshawa's population grew by 13% (Statistics Canada 2007, 2017). Between 2006 and 2016, total commuter flows from the City of Oshawa to the City of Toronto grew at roughly the same rate as the population (13%), from 9,540 to 10,750. Flows in the other direction, from Toronto to Oshawa, barely increased from 1,750 to 1,800. The only municipality that the City of Oshawa attracted a significant net inflow from was its eastern adjacent municipality of Clarington, but its net inflow of 6,310 commuters in 2016 represented a significant decline from the 2006 net inflow of 7,965 commuters. The rural eastern municipality of Kawartha Lakes supplied Oshawa with its third highest number of incoming commuters (1,850), after Whitby and Clarington, in 2006, but this declined to 570 commuters in 2016. The decline in eastern commuting to Oshawa was matched by increasing net outflows from Oshawa to western municipalities such as Toronto.[42]

Overall, the City of Oshawa went from a net outflow of 3,030 commuters to other municipalities in 2006, to a net outflow of 11,640 in 2016, a 284% increase. The combination of conurbation and deindustrialisation has seen a reduction in permanent

[41] This dataset only includes places with a minimum of 20 or more commuters, but the remainder is negligible.
[42] This included increases of 15% to Toronto; 15% to Pickering; 11% to Ajax and 40% to Markham between 2006-2016.

employment in the city, but has also seen an increase in in-migrant external commuters settling in the city. This has dramatically changed the character of the city, from a central work hub to a semi-bedroom community, in a very short time period.

Geelong Commuting

As shown in **Chapter 4**, Geelong retains a far more balanced, self-contained workforce where roughly three out of four Greater Geelong workers with a usual place of work commute within Greater Geelong (ABS 2017). Between 2006 and 2016, the number of people listing the City of Greater Geelong as their place of work increased by more than 20,000, or 27%, while the population increased by roughly 36,000, or 18% (ABS 2007, 2017). This showed that it was maintaining a jobs-to-population growth ratio exceeding 50%. It was achieving growth-driven diversification of its jobs base. As manufacturing jobs were lost, other local jobs were being created at a faster rate.

While Greater Geelong has a net outflow of commuters to Melbourne, significant numbers of Greater Melbourne residents also commute into Greater Geelong. Greater Geelong supplied 14,221 workers to Melbourne in 2016, and Greater Melbourne supplied 6,003 workers to Geelong in return. However, the aggregate inflow of workers to Greater Geelong from Greater Melbourne more than doubled, since 2006, while its outflow increased by less than 50% (ABS 2007, 2017). Ultimately, 9,902 commuters from outside Geelong commuted there for work in 2006, while 16,151 did in 2016, showing a substantial increase since 2006 (ABS 2007, 2017). It also retained net inflows from its surrounding northern and western municipal neighbours such as Golden Plains Shire (+2,613) and Surf Coast Shire (+2,901), firmly retaining its place as the G21 region's central work hub.

Geelong - Oshawa Comparison

To conclude, superficially, comparing the industry and occupational profiles of Oshawa and Geelong shows similar trends in loss of manufacturing jobs and growth of services jobs. However, closer inspection reveals that in Oshawa, the dominant dynamic is one of labour market diversification made possible by commuting out of the area, while in Geelong the dominant dynamic is diversification of the local employment base. Oshawa

has avoided regional labour market decline, due in large part to internal migration, but it has not been able to arrest similar declines in local job opportunities, as it has become 'overshadowed' by the GTA. Geelong has managed to buck this trend, creating jobs locally and avoiding the same reversal of commuting patterns.

Land Endowments, Planning and Diversification

In analysing the dynamic of local labour market versus local industry diversification, it is fundamentally important to address a simple, but nonetheless crucial determinant: namely, the endowment of land. More specifically, how institutional constraints and actor decisions determine the use of land for residential and industrial purposes. Neither Greater Geelong nor Oshawa are physically constrained by land scarcity, as each municipality contains swathes of sparsely populated territory. However, different approaches to land use are conditioned by different institutional arrangements, and different spatially selective priorities at the state/provincial level.

Greater Geelong has achieved a balance between residential and industrial, commercial and institutional (ICI) land development, and has planned to provide adequate land zoned for employment-generating purposes, such as the Geelong Ring Road Employment Precinct, the Avalon Airport Industrial Precinct and the Deakin University-centred Geelong Future Economy Precinct in Waurn Ponds. Expanding these employment lands was considered a priority by the G21 (2013).

Oshawa, in contrast, has been restricted by planning decisions. According to an Oshawa business expert (QWQ24), the lack of ICI development in the City of Oshawa is a result of planning restrictions from higher tiers of government:

> We're short on (employment) land in the City of Oshawa and when you become landlocked the growth expectation diminishes quite quickly. There are lands available on our new highway, but those lands are being held up by the Province.

The City of Oshawa (2019b) also considers the lack of available land, for employment-generating activities, as a central challenge to economic development. Aside from Provincial planning restrictions on northern ICI development, projects like the Northwood Business Park were delayed by planning disagreements between the City of

Oshawa and the Region of Durham (Wittnebel 2018). A City of Oshawa official (Interview Code FGH32) explained that land use was a primary reason why the (later reversed) loss of Oshawa's GM plant presented a significant economic development opportunity. This was because the massive geographic footprint of the Autoplex was not matched by the utilisation of its capacity to provide jobs. The official (Interview Code FGH32) explained that if the site was repurposed, it could provide a much higher density of jobs:

> Until this last year when we've run out of our employment land … even before the announcement [of the closure] we were talking to them [GM, about selling land assets] … If we develop it at normal densities, we'll have 13,000 jobs there versus the 2,500 [under GM uses].

Nonetheless, physical and planning restrictions aside, there are other institutional incentives for local municipalities in Canada to favour residential development over ICI development. With ICI property taxes flat due to the lack of business investment, the municipality admits that it has become reliant on residential growth for property tax growth, which is crucial for municipal service provision (City of Oshawa 2019b). Oshawa is not alone, as the increasing reliance on residential tax assessments, as opposed to ICI assessments, has been noted across Ontarian and other Canadian municipalities (Eastern Ontario Warden's Caucus 2013). Disinvestment due to deindustrialisation is considered a driver of this phenomenon (Johal et al. 2019).

The tension between population growth and business growth is a core determinant of the nature of the diversification of the local economy. When asked if local council plays a role in diversifying the local economy, a local Oshawa business expert (Interview Code QWQ24) acknowledged that the Ontario Provincial Government planning restrictions were holding up current ICI development. However, the interviewee also expressed that an underlying reliance on population/labour market growth, rather than business growth, at the municipal level was also an issue:

> … If a plan comes to them to build 2,000 houses, and they take that and build 2,000 houses instead of putting in a Fortune 500 business, I'm against that. I want to see more businesses here in Oshawa. If we don't have the businesses in Oshawa, how are people going to stay working here? They're going to leave [and] we're going to be a bedroom community. We don't want to be that. We want to be a vibrant, growing community, and the only way you do that is you bring business to your city.

For this informant, Oshawa's transition to a 'bedroom community' was not an inexorable process, but rather viewed as the consequence of decisions by actors within various tiers of government.

To conclude this section: Whether or not a satellite city like Oshawa or Geelong responds to deindustrialisation and disinvestment by focusing on land usage for residential development or ICI re-investment, is a fundamentally important determinant in regional diversification. The scarcity of land for ICI investment could reflect geographical endowments, planning restrictions or actor decisions that privilege residential growth. Diversifying the labour market and diversifying the business base are not only far from interchangeable, but may have an inverse relationship depending on the context. The privileging of one type of diversification may inhibit the other. This brings the repurposing of sites more strongly into the story of regional revitalisation. For Harvey (1978, p. 124), the geographical imprint of capital investment means that once highly productive fixed assets can themselves 'act as barriers to further accumulation' and can be 'removed only slowly unless there is a substantial devaluation of the exchange value locked up in the creation of these physical assets'. As such, when land for employment-generating uses is scarce – or at least actors have imposed artificial scarcity on it for various purposes – the 'old' industry can still impose a very real physical restraint on the transition to the new industries. Cities can easily rebrand themselves, but they cannot so easily overcome the tangible, physical legacy of an old industry that may prevent desired levels of diversification.

The 'Pull' Factor: 'Overshadowing' and Agglomeration Effects

So far, this chapter has suggested that agglomeration diseconomies, such as gentrification and increasing housing costs in larger cities, effectively 'push' population growth from core cities, like Toronto and Melbourne, towards satellite cities, like Geelong and Oshawa. This effectively allows these satellite cities to 'borrow size'. However, this process is simultaneously offset by agglomeration economies that 'pull' economic activity towards the central cores that are not easily identified or quantified. These forces must be understood as a co-existing, unstable and perpetually evolving processes rather than a dichotomous equilibrium. The forces conducive to the ability to 'borrow size' or the

threat of 'overshadowing' are ever-present, and the degree to which a satellite city trends towards the former or the latter can be influenced by numerous factors, not the least of which are actor decisions. These sections detail how these forces play out differently in Geelong and Oshawa.

'Overshadowing' in Geelong

Overshadowing impacts can be highlighted by very simple, tangible processes such as firm relocations. Geelong has continually lost major firm operations to Melbourne throughout its history, including firms that were established in the city or are intrinsic to its identity, such as the transfer of Ford's headquarters to Melbourne in 1965 and the transfer of Target's headquarters to Melbourne in 2018. The decision to relocate to Melbourne from Geelong also reflects firm responses to local and global dynamics. This includes the opening of new opportunities for warehousing by Victoria's infrastructure investments (in particular, the Western Ring Road and improvements to the port of Melbourne). Reducing travel times between Geelong and Melbourne has been a major goal of policymakers, resulting in improvements to both road and rail connections (Parliament of Victoria 2013b). Such decisions effect agglomeration relationships.

However, while agglomeration economies have dragged growth from Geelong towards Melbourne, explicit, active measures have also been deployed to take advantage of Melbourne's diseconomies to drag growth towards Geelong. The 'Second City' policy framework, espoused by the Committee for Geelong (Correia & Denham 2016, p. 80), proposes that 'Private investment attraction should draw on the agglomeration diseconomies associated with Melbourne, such as congestion, pollution and high real estate prices' and that branding should 'be clear on why government and industry should invest in Geelong … and not Melbourne'.

In developing the 'Second City' policy, however, the Committee for Geelong was reacting positively to signals from higher levels of government; that is, to prior authoritative proposals at the State Government level to declare Geelong Victoria's official 'Second City' (Correia & Denham 2016). The Victorian Government's interventionist de-concentration approach recognised that left unencumbered, the tendency for market activity to be drawn to Melbourne was a threat to Geelong. Ensuring

Geelong retains a separate identity is considered important for development purposes, as evidenced by Regional Development Victoria (RDV 2020a) listing one of the four main challenges in the wider Geelong region, as 'Clarifying the role of Geelong as a regional hub'.

It is notable that in contrast to Oshawa, Geelong is not integrated in Melbourne's metropolitan rail network and services are far more limited, solidifying it as a separate 'regional city'. Improving transport infrastructure to facilitate economic development is seen as a goal in both Toronto-Oshawa and Melbourne-Geelong (Parliament of Victoria 2013b). For some, this is a common-sense goal that can help 'overshadowed' cities by further integrating them with the larger core (Pike et al. 2016, p. 44). However, building off Krugman's (1991) core-periphery agglomeration model, Fujita and Mori (1996) present a model that shows that improved transport linkages can actually serve to harm a peripheral region's economy (by making it easier for incumbent peripheral firms to relocate to the core) and thus it may be desirable for the periphery to protect its incumbent industries by preventing improvements in transit infrastructure. This ever-present tension between push and pull forces is acknowledged by key stakeholders in Geelong. Correia and Denham (2016, p. 80) argue that 'there is a need for Geelong to decide whether improving transport connections to Melbourne would provide more borrowed size benefits or rather create a larger agglomeration shadow'.

If the purpose of decentralisation and place-based policy in Geelong is designed to 'lock in' investment in the region, then improved transport linkages with Melbourne may actually undermine this strategy and lead to the same commuter town phenomena emerging in Oshawa. The dynamics of agglomeration economies and diseconomies, and the related dilemma of 'borrowing size' or 'overshadowing', are thus understood in Geelong not as equilibrium-based, purely market-driven processes, but rather as plethora of chaotic forces in constant disequilibrium. Both the provision of infrastructure investment and its denial is recognised as a means to disrupt and influence the direction of change.

'Overshadowing' in Oshawa

A major problem for Oshawa is that it is competing not just with the Toronto urban core, but other large agglomeration satellites around Toronto. While the City of Toronto remains the core of the Golden Horseshoe region, it is a polycentric agglomeration with multiple built-up commercial and industrial centres, unlike Melbourne. Thus, the loss of jobs in the city has occurred in the context of intense competition for inward private investment.

The market-driven milieu in Oshawa has implications for push and pull agglomeration factors in the city. Despite the GTA being viewed as a model of the 'creative city' (Anttiroiko 2014, p. 150), the influential 'Creative Class' theorist Richard Florida is less enthusiastic about his home city, pointing to a 'crisis of gentrification, rising inequality and increasingly unaffordable urban housing' (Florida 2017). Although Florida attributes the movement of higher-income suburban residents towards Toronto's core to gentrifying 'creative class' agglomeration effects, he also attributes the movement to transit-related dis-amenities and traffic congestion (Florida 2012b, 2017).

Indeed, congestion in the broader GTA plagues Oshawa commuters. While Oshawa has benefited from agglomeration diseconomies in Toronto pushing population growth outwards, its commuting labour force is also suffering from these diseconomies. The Oshawa CMA has the highest proportion of its population commuting more than 60 minutes to work of any metropolitan area in Canada, and the second highest average commuting times after neighbouring Toronto (Yaropud et al. 2019). In the Oshawa CMA municipality of Whitby, roughly 1 in 4 commuters travelled more than 60 minutes to work, while roughly 1 in 5 Oshawa commuters did the same, compared to only roughly 1 in 10 commuters in Ontario overall (Statistics Canada 2017).

For Florida (2017) one of the primary solutions to both congestion and gentrification is to improve transit linkages with other places in the Greater Toronto Area, allowing better access to central Toronto's jobs market without having to live there. Indeed, the extension of the Greater Ontario transit system to central Oshawa has long been the centrepiece of economic development efforts in Oshawa (Flaherty 2020). Intuitively, these strategies ease congestion in the core city and ease the commuting dis-amenities for Oshawa residents, which may discourage the out-migration of higher

income residents to the Toronto core. However, this may also exacerbate the inability for Oshawa to 'lock in' industrial and commercial investment and contribute to unbalanced growth.

Oshawa-Geelong Comparison

To sum up this section. Transaction-cost based theories of agglomeration suggest that improved transport linkages would diminish the need for firms and workers to cluster in close proximity. Improved transport linkages enable workers to live further from workplaces, but also signal to firms that they can access a broader labour resource – and other benefits of agglomeration – by locating closer to Toronto/Melbourne. Thus, transport infrastructure improvements might have the perverse effect of increasing the advantages in the core locations. This could lead to the same 'commuter town' phenomena that is emerging, to the distress of local leaders, in Oshawa. For Oshawa, which has to deal with the threat of capital flight on top of major manufacturing disinvestment, the common-sense solution of better transport linkages with Toronto, to aid economic development, needs to be reconsidered, and a greater emphasis placed on its growing population-to-jobs ratio imbalance.

Discussion: Labour or Industry Diversification?

This chapter has shown that Geelong and Oshawa have different patterns of labour market diversification. Geelong is benefiting from the relocations of public sector jobs into the satellite city, while Oshawa is also attracting higher income residents with a more diverse occupational profile, but it depends largely on its residents commuting into Toronto for work. In Oshawa, local business, labour and local government interests, to varying degrees, lament Oshawa becoming a 'bedroom community'.

The question is: Does this difference matter? Does the local employment base need to adapt, grow and diversify in unison with the labour force, as in Geelong? Or can the two happily disconnect, if labour has access to jobs in other municipalities, as in Oshawa? After all, parts of the Oshawa CMA are now among the wealthiest in Canada, despite the dearth of jobs relative to population. The major concerns of socio-spatial polarisation and entrenched poverty are occurring in both places, so what is the

difference? This quandary is reflected in the perennial argument between place-based and people-base policies and the ability to 'lock in' investment. Concerns over the socio-spatial dynamics of urban sprawl and the centripetal effects of agglomeration are true of both places, but only in Geelong are they deployed to justify and drive place-based policies.

In 2013, a Parliament of Victoria (2013b) inquiry into economic development in Melbourne's suburbs found that outer-suburban disadvantage in Melbourne was linked to a lack of access to services, inadequate infrastructure, and the concentration of low-income residents due to lower housing prices.[43] However, the report also identified that a legacy of deindustrialisation and disinvestment had left outer-suburbs without internal economic bases as investment flowed towards the Melbourne core. Simply, unencumbered agglomeration effects left these areas unable to create sufficient local jobs. In Victoria, therefore, decentralisation efforts, targeting Geelong and elsewhere, are driven by the recognition that allowing these processes to be governed by market forces is undesirable (Parliament of Victoria 2013b).

There is a significant risk that, without robust measures to ensure adequate public and private investment in outer municipalities, the currently wealthy commuter towns of Toronto may become increasingly undesirable places to live (for wealthier residents), as amenities make once undesirable inner and middle suburbs more appealing, as has occurred in Melbourne. For Pawson et al. (2015, p 34), this is already starting to occur: 'In their recent spatial trajectories … the US, Canada and the UK appear to have been closely paralleling Australia's experience'. As higher-income Torontonians have begun to migrate from outer-GTA municipalities to gentrify the city core, taking advantage of lifestyle and transport amenities (Florida 2017; Parliament of Victoria 2013b), the empirical evidence shows an increasing outward shift of socioeconomic disadvantage in Toronto (Dinca-Panaitescu et al. 2017; Hulchanski 2007). If the GTA's movement towards the 'Australian-model' were to continue, then peripheral areas like Oshawa, lacking targeted policies to 'lock in' investment, are at risk of adopting the characteristics of disadvantaged outer-suburbs observed in Australia.

[43] Notably, the inquiry used Oshawa along with other GTA municipalities as international case studies, which the report highlighted as examples of the benefits of polycentricity, decentralisation and infrastructure spending.

There is good reason to suggest that any growth strategy that is explicitly reliant on feeding off the agglomeration diseconomies, gentrification and urban sprawl from central cores is dangerous, not just for low-income incumbent residents, but also for the entire economies of satellite cities. Even with current investment multipliers driven by population shifts, it is possible that without investment lock-ins, these gains may be temporary. Although there may be little apparent distinction between successful local labour force diversification and successful local industry diversification initially, this may obfuscate underlying vulnerability in the local economy. Sustainable labour market diversification likely needs to be coordinated with the diversification of the entire economic base to harness localised agglomeration economies and resist the centripetal forces of agglomeration from nearby cores. This means that maintaining a strong population-to-jobs growth ratio remains a key indicator for 'success' in diversification.

Conclusion

The chapter has shown that a significant driver of growth in Geelong and Oshawa has been agglomeration diseconomies in the adjacent larger cities of Melbourne and Toronto, highlighting the importance of their positionalities in explaining diversification outcomes. Geelong and Oshawa differ with regards to population, job and labour market growth and in inter-urban commuting patterns, reflecting their respective capacities to lock in new investment in response to deindustrialisation. Oshawa has relied upon commuter-led population growth, while Geelong has maintained a steady balance between population and local industry growth. The evidence presented in this chapter suggests that agglomeration diseconomy-led labour market growth in satellite cities, without strategies to maintain a balance between population and local jobs growth, is likely unsustainable. 'Successful' diversification should be predicated on ensuring that the local industry base grows in response to a shock, not just the local labour force. For this important reason, Geelong appears more resilient than Oshawa in the short-term.

However, this chapter has also detailed the significant negative consequences of conurbation-driven growth in both case study sites, particularly in the low-income areas impacted most heavily by manufacturing decline. These growth pressures are exacerbating the most immediate and acute effects of the deindustrialisation crisis and

potentially compounding the long-term problems of entrenched socioeconomic disadvantage and socio-spatial polarisation, which threatens real recovery in both Oshawa and Geelong.

Chapter 10 - Conclusion: What is Successful Diversification?

This concluding chapter asks what constitutes successful diversification, reviews the utility of the PASID framework, and explores the policy implications of this study. The chapter summarises the research findings, emphasising the importance of exogenous forces and state intervention in influencing regional diversification trajectories. It discusses the problem of socio-spatial polarisation and its implications for notions of 'successful' diversification and resilience. The first section reflects on the value of the ASID framework for analysing diversification, and suggests that this thesis has justified extending it by adding 'positionality', which can inform future research. The second section identifies the principal mechanisms that facilitate diversification, including the composition of government and state institutions, the role of internal and external forces, and the 'positionality' of the case study sites, while commenting on the role of actors in navigating these opportunities and constraints. The third section addresses the issue of 'successful diversification' by reviewing the findings of the previous chapters through the lens of resilience. Although policymakers view resilience and successful diversification as interchangeable, this section argues, based on the findings of the empirical chapters, that diversification and resilience are simply correlated outcomes of other, intervening causal processes. It argues that atomistic conceptualisations of 'resilience' must be abandoned, as extreme socio-spatial polarisation in Geelong and Oshawa show that, in reality, they have been far less resilient to deindustrialisation than they appear. It also identifies socio-spatial polarisation as an unintended, but inevitable, outcome of diversification. The fourth and final section summarises the main points and discusses the policy implications of this research, focusing on the dichotomy of market-led versus state-led diversification.

Diversification and the PASID Framework

Drawing upon the thesis findings, this section posits that the PASID framework offers an important contribution to diversification research. This section first considers structure and recommends extending the ASID framework to incorporate positionality in order to make the framework more cohesive and have greater practical application for place-based analysis. It then comments on the interplay of agency and institutions before concluding with a discussion of the role of discourse in shaping regional trajectories.

Ultimately, this section shows that the comprehensiveness and breadth of the PASID synthesis framework makes it a valuable methodological tool for engaging in complex, multi-scalar research.

Structure and Positionality

According to Moulaert et al. (2016), structure is an intrinsic component of regional change. However, the ASID framework rejects 'structuralist' frameworks, which remain fixated on path dependencies and the seeming inevitability of regional trajectories. According to Moulaert (2016, p. 176), it is precisely in the moments of structural upheaval that opportunities for path creation through collective action present themselves. This thesis has shown how actor decisions in the form of various policies and programs in response to the crisis of deindustrialisation can serve as possible explanations for path creation.

However, this thesis has also revealed the extent to which phenomena in Geelong and Oshawa paralleled each other. For large segments of the thesis, the two place names could have been replaced interchangeably without impacting the validity of a particular sentence. The particularities of each city's process of diversification were often nearly identical not just in how the problem of deindustrialisation was defined, but in the formulation of the diversification solution and in its related outcomes. Oshawa and Geelong were not unique from each other in diversifying into education, health, retail, hospitality etc., while associated diversification phenomena such as socio-spatial polarisation also followed a similar pattern. These similarities highlight that ultimately the crisis in Geelong and Oshawa involved a degree of structural determinism, reflecting globally pervasive tendencies that transcended national borders. Certainly, the crisis of deindustrialisation is inherently spatial and driven in part by patterns of investment and disinvestment in the global North and South - as Harvey (2001, p. 24) puts it, 'deindustrialisation here and reindustrialisation there'. However, within the developed global North, deindustrialisation can be understood as a transnational sectoral crisis that only manifests as a place-based, spatially-embedded crisis due to specific regional specialisations through the spatial division of labour (Massey 2007).

Yet it is not just the crisis itself, but the replication of associated socioeconomic phenomena and policy responses to it that highlight the extent to which structure-based interpretations hold value. Writing more than four decades ago, Massey (2007) highlighted that existing regional specialisations were often framed as the problem, not the management of sectoral or industry shocks. For Massey (2007, pp.57, 52), 'regional problems are conceptualised, not as problems experienced by regions, but as problems for which those regions are, somehow, to blame' and thus the overarching policy solution to this problem was a 'general commitment to sectoral diversification as a basis for stability'. Then, as now, the solution to deindustrialisation was diversification to engender resilience. For Massey (2007), diversification represented regional 'convergence' to the industry structure of the national space, but this thesis has shown that this convergence is international, as places as geographically distant as Geelong and Oshawa converge on a similar industry structure that transcends institutional differences and reflects the broader global economy. The endurance of Massey's critique is reflected by the continuing reproduction of the associated phenomena of diversification across time and space, including socio-spatial polarisation. New investment does not eliminate or replace the problems associated with initial disinvestment, but instead builds upon and co-exists with them. Fundamentally, localised social polarisation is a feature of diversification, not a bug.

This thesis has articulated how this social polarisation embedded within industry compositional changes also manifests in spatial bifurcation. Harvey (1978) shows that the layering process causes previous rounds of capital investment to present geographic impediments to diversification as the tangible physical legacies of this prior accumulation – such as the massive Oshawa Autoplex – are not easily repurposed for new accumulation. However, it is also clear that the socioeconomic problems resulting from disinvestment can themselves form a tangible physical impediment to diversification. For example, dis-amenities associated with deindustrialisation and resulting entrenched disadvantage may make deindustrialising places – at least initially - unattractive for skilled labour migration. As such, new residential development to accommodate *social* polarisation tends to also result in *socio-spatial* polarisation, as spaces outside the deindustrialised areas need to be opened up to encourage the settlement of higher-income, skilled labour. This thesis has shown the complex processes through which this

has occurred in deindustrialised satellite cities can be understood only through a relational understanding that puts the positionality of these cities at the centre of the analysis. For example, it has shown how real estate investment flows in the adjacent core metropolises influence internal migration patterns in the satellite locations. However, while positionality must be considered, the remarkable similarity in the way this process has occurred in each case study shows that certain spatio-temporal phenomena are embedded intrinsically in global structural forces, not localised ones. This thesis has highlighted that while supposed universal axioms of aggregate individual behaviour, such as spatial equilibrium, are highly flawed, they still offer partial explanations for why certain phenomena appear to replicate without regard to specific local contexts.

While the ASID framework stresses the importance of establishing a relational focus on spatio-temporal determinants, this thesis has revealed the necessity of drawing a distinction between structuralist determinants that *are not* exclusive to an individual place and those that *are* embedded within a particular context and its relational positionality. This does not mean that these positionality-determined and non-positionality-determined structural processes should be considered dichotomous or mutually exclusive, but rather they should be disassembled and then reassembled for analytical clarity in identifying different causal mechanisms. This suggests a need to extend the ASID framework by adding a 'P' for 'positionality'. However, extending the ASID framework into a 'PASID' framework should necessarily be understood as a methodological extension rather than a fundamental epistemological departure. If the strength of the ASID framework is the breadth of its synthesis, then its weakness is its lack of methodological specificity. Adding positionality as a separate pillar clarifies how a 'relational' understanding of place can be conceptualised for the purposes of practical comparative research.

Without a distinction between positionality-based forces and other structural forces, there is a risk that the agency-structure binary could become too simplistic. For example, Safford's (2004, p. 2; see also 2009) often-cited comparative case study of two American cities' responses to deindustrialisation presented the case study sites - Allentown, Pennsylvania and Youngstown, Ohio - as 'well-matched Rust Belt cities'. Safford (2004, pp. 19, 3) contended that these cities 'shared remarkable parallels in terms of the timing and magnitude of their economic, social and political development', but that

ultimately the relative strength of each cities' actor networks 'were the source of the regions' economic divergence'. Yet the unequivocal causal assertion that collective agency, and the institutional infrastructure that enables or constrains it, were the ultimate source of continued decline in Youngstown and resurgence in Allentown, belied the fact that each city inhabited very different relational positionalities with other urban areas. Both are positioned as satellites/commuter towns to two other major metropolitan cores: for Youngstown, these cities are Pittsburgh and Cleveland, while for Allentown these cities are Philadelphia and New York City. One city (Youngstown) is in the heart of the rustbelt, and is situated between two cities whose entire metropolitan areas - not just city cores - have both themselves experienced deindustrialisation-related decline, while the other is at the centre of one of the world's most prosperous major urbanised regions, the expanding Northeast Megalopolis. Harnessing a strategically advantageous spatial position in a growing region was an option for actors in Allentown, whereas the opposite was true for actors in Youngstown.

By adopting a determinist sectoral lens – characterised as global deindustrialisation in the North impacting specialised manufacturing regions – the plausibility of Safford's actor-based explanation relies on the apparent similarity in the structural problem that acts as the foundation for collective agency. However, adopting a relational, positional lens reveals that despite similar sectoral structural forces acting upon these cities – that is, the material reality, which forms the basis for the argument that endogenous collective agency in the two locations responded differently to the same structural problem – place-specific structural forces may have been more important drivers of regional divergence. This thesis has provided a model of analysis that can help avoid this simplistic dichotomy between structure/agency by expanding the analysis to incorporate different modalities of structural determinants.

This thesis has shown that the main limitation of analyses such as Safford (2004, 2009) is not necessarily that actor networks have no influence over regional outcomes, but that it portrays places as something that they are not – as atomised and isolated. In so doing, this depicts the causal mechanisms driving socioeconomic change within them as purely endogenous, while misconstruing the structural forces that act upon them as operating in similar ways without regard to the unique positionalities that temper and contort the effects of wider forces. This has the effect of distorting the analysis of both

the structural and agent-based explanations. Therefore, this study concludes that any place-based analysis must adopt a positionality-focused lens that draws a methodological and analytical distinction between localised structural causal mechanisms and those that are not dependent on local contexts.

Ultimately, despite the importance of structural factors, this thesis has shown that the divergences in Geelong and Oshawa reveal that structural determinants do not offer a complete understanding of regional diversification. It has shown that institutional, discursive and agential collective action, at least partially, influence path creation.

The Interplay of Agency and Institutions

Dominant endogenous development and new regional paradigms posit that the relative 'competitiveness' of networks of regional agency determines regional outcomes. This has been accompanied by actor-centric comparative case study research designs that focus on endogenous factors as potential drivers of path creation. This thesis has detailed that if endogenous capabilities were the primary driver of regional growth trajectories in Oshawa and Geelong, then the former should have surpassed the latter. Field research for this thesis found no evidence that individual competence or collective actor networks at the municipal/regional level can explain Oshawa's lack of growth or its quantitative 'competitiveness' relative to Geelong, which was beset by serious dysfunction within the local political leadership. Instead, research identified a dynamic whereby observers in Oshawa were largely satisfied with regional/local government performance and critical of provincial/federal government, while in Geelong observers were critical of local politicians (although more positive towards local professional economic development staff) and more satisfied with state and federal government.

Moreover, this thesis has detailed why an atomistic, local capabilities-focused lens can fail to recognise that local actors are more beholden to external forces than is immediately apparent. For example, while the 'orthodoxy' evident in the local development agenda in Oshawa that normalised socio-spatial polarisation followed hegemonic economic development paradigms (Siemiatycki 2013), it was more a function of certain structural, spatial and institutional factors that engendered conformity in economic development priorities. Ultimately, the marginalisation of issues such as socio-

spatial polarisation and gentrification by local stakeholders – which was fully acknowledged as a major problem privately – was largely influenced by Oshawa's positionality within an Ontarian competitive regional milieu that necessitated particular discursive practices centred around image branding. Similarly, while actor networks in Geelong worked hard to brand the region and attract private investment, this thesis has shown that local networks, to a large extent, coalesced around a strategy of lobbying higher tiers of government for public investment. In Geelong, the overall 'bottom-up' regional development strategy was, in fact, a process of integration with a top-down state government placemaking agenda.

Fundamentally, as discussed in **Chapter 5**, actors in Durham and Oshawa seemingly had far greater fiscal and institutional autonomy to drive endogenous regional development than those in Geelong. However, a focus on individual competencies or actor networks at the local/regional level yielded little evidence that bottom-up agency was the primary driver of growth divergence between Geelong and Oshawa. This finding is consistent with a PASID approach of understanding agency in the context of positionality, structures, institutions and discourse, as opposed to hegemonic paradigms of endogenous development and new regionalism that privilege endogenous agency.

The degree to which institutions and agents influence regional trajectories are emphasised in different chapters of this thesis. **Chapter 5's** discussion of decentralisation provided an institutions-based explanation of growth and change, while **Chapter 6's** exploration of place-based policy revealed the substantial capacity for collective agency to engender path creation and influence diversification patterns, but through multi-level initiatives. By synthesising institutions-based explanations with actor-based explanations, this thesis has shown that understandings of actor capacity must be scaled up to incorporate appreciation of institutional power dynamics and regional positionality. This follows from Moulaert et al. (2016, p. 174) who maintain,

> 'what cannot be changed in the short-run at the 'localissimo' scale by actors located at (or oriented to) this specific site could well be altered through a concerted sequence of actions involving networked cooperation that connects different places, crosses frontiers, and combines scales of action'.

This thesis has suggested that while agency-based explanations remain valid, they must necessarily follow from an institutional perspective that is appropriately grounded in an understanding of scalar power dynamics. It has detailed why new regional/endogenous development perspectives, when applied to sub-intermediate regions in institutional environments, such as Canada and Australia, are deficient because they are divorced from institutional constraints at the local level. This thesis argues that the central and intermediate states must be re-positioned as the primary focus for examining agent-capacities.

The Role of Discourse

For Moulaert et al. (2016, p. 175, 169), discursive practices reveal the 'structural constraints and conjunctural opportunities' that 'orient social action in a complex world', and as such, analysis must focus on the 'the semiotic factors that make some discourses more resonant than others, more likely to be selected as the basis for strategic action and policy-making, and more likely to become institutionalised'. This thesis identified 'diversification', 'resilience' and 'decentralisation' as the primary discursive constructs that have dominated policy responses towards Geelong and Oshawa. It highlighted that these terms gained ascendancy because they represented positive ideals, while simultaneously remaining highly malleable concepts that appeased divergent and even competing narratives and agendas. Others have recognised the utility of such words in building collaborative projects, not only because they enable participants and stakeholders to retain divergent views on what the words signify, but also because the dominant meaning is able to change with the changing dynamics of the collective (McLennan 2004). Fundamentally, these words function as technologies of governance that adhere to the language privileged by dominant ideological paradigms, while facilitating consensus around particular policy actions.

This thesis has shown that discourse analysis can reveal simultaneously the structural and institutional constraints on actors, yet also the ways in which agents can overcome these impediments. For example, the identification of a spatially selective and redistributive, pseudo-Keynesian placemaking agenda in Geelong, which was justified using the language of the dominant market-based paradigms at the intermediate and

federal scales, highlights the ways in which collective agency can manipulate inter-subjective understandings of the semiotic signifiers that represent these structural or institutional constraints, thus partially overcoming them. In Geelong, for example, the co-option of the discourse of bottom-up new regional and endogenous development discourses as a means to legitimise and implement top-down agendas suggests that actors are aware – either consciously or sub-consciously – of constraints on their capacity for action. However, they can also seek to subvert them, while appearing to conform to them, by adopting appropriate discursive practices. Nonetheless, the universality and uniformity of these discursive constructs reveal the extent to which the capacity of local policy actors to implement innovative, bottom-up solutions are constrained by the globally circulating 'best practices' that represent hegemonic ideologies.

For Moulaert et al. (2016, p. 176), 'the ASID heuristic offers no particular substantive theory of crisis mechanisms, crisis-tendencies, or crisis resolution' and this thesis cannot claim to have achieved such a theory. However, this thesis has added to understandings of crisis resolution by showing that discursive analysis can be used as the conduit to illuminate institutional/structural/agent-based causal mechanisms. While material factors influence discursive practices (Moulaert et al. 2016), this thesis has revealed the extent to which discursive practices also determine material change. This thesis has shown that diversification is not simply a descriptive term for the material phenomenon of a regional specialisation transitioning to a new industry composition, but a branding technology used to manage the crisis of deindustrialisation by influencing external perceptions about a place, and thus influencing industry composition and material reality. This thesis has thus shown that re-orienting research designs to place greater emphasis on discursive practices can improve explanations of regional change.

The PASID Framework in Summary

This thesis has shown that the PASID framework was an effective methodological tool for overcoming the recognised gaps in the diversification literature. The practical application of the ASID framework to the problem of regional diversification provided insight into the ways in which the framework can be improved and applied to future research. This includes the addition of 'positionality' to distinguish between spatial and

non-spatial structural constraints, and provide a methodological justification for comparing two different places without resorting to methodological atomism. However, just as the PASID framework aimed to improve upon the foundational ASID framework by clarifying the role of structure in relation to space, there is significant scope for improving the PASID framework by adopting different approaches to the study of institutions, discourse and agents, which could also offer important distinctions and enhanced analytical clarity.

Ultimately, the thesis has shown that the PASID framework is a useful framework for multi-scalar comparative research. It enables various interrelated processes in complex fields of research to be synthesised and analysed. It provides the foundation for the summary of the thesis findings, which focus on the determinants of diversification, how the concept of 'successful diversification' in relation to regional resilience can be understood, and the significance of these findings for future policy interventions.

The Mechanisms Driving Diversification

The thesis's first research question asked: How do endogenous and exogenous structural, institutional, spatial and discursive factors constrain or facilitate the ability of actors at various scales to influence diversification trajectories?

The focus in the academic literature on diversification versus specialisation, or on related versus unrelated diversification, has been fixated on endogenous, firm-centric explanations for diversification and elides consideration of other factors that have been revealed in this thesis as crucial to shaping diversification in Geelong and Oshawa. These are the role of state institutions and multi-national firms, the locations of the two case study cities relative to larger urban centres, the way the layering of economic activity inextricably links diversification to socioeconomic polarisation, and the manner in which internal and external actors traverse these institutional, structural and positional forces. These are discussed in turn below.

State Institutions, Firms, Agency and Positionality

That external actors, including within central and intermediate governments, can influence regional industry composition, resilience and path dependency or creation, is plainly evident. Yet, most of the literature on diversification has remained 'firm-centric' (Dawley 2014), narrowly focused on local actors and institutions from an endogenous 'micro perspective' (Boschma et al. 2017), and has either ignored or have been dismissive of the importance of formal state institutions (Cortinovis et al. 2017).

Theoretical approaches focused only on a 'regional economy' are inadequate, because regional diversification is fundamentally conditioned by the relational positionality of places. Multi-national firms are often central to industry composition in specialised regions. Deindustrialisation, automotive retrenchment and the changing industry composition in both Geelong and Oshawa can to a large extent be traced back to decisions made in a single external place – the head offices of GM and Ford in Detroit. Improving endogenous regional capabilities and creating new interlinkages with exogenous institutional governance structures cannot dictate patterns of regional diversification and specialisation alone; these patterns and the wider spatial division of labour are affected by firm agency and interconnections in global production networks (Coe 1997; Martin et al. 2016; Massey 1995). Fundamentally, as argued by Massey (1995, p. 28) 'changes both in the labour process and in the degree of concentration of industry actually happen as a result of the day-to-day competition between companies' over the longer term. The deindustrialisation of Oshawa and Geelong expresses the changing strategies of GM, Ford and other manufacturing firms within global networks.

The impact of adjacent larger cities on development in Geelong and Oshawa revealed how spatio-structural dynamics, including agglomeration economies/diseconomies, defined how these places diversified. Specific structural phenomena affecting the larger cities – such as global patterns of speculative capital investment in core urban housing, leading to gentrification and outward migration patterns from Toronto and Melbourne – shaped the future for Geelong and Oshawa. These relational satellite city positionalities were also a crucial determinant in how external actors in Ottawa, Canberra, Toronto and Melbourne responded to crises in Geelong and Oshawa.

This thesis has presented strong evidence that formal, external state institutional structures also matter for local diversification, especially in determining the form that diversification takes. The research showed that the effective institutional capacity to drive diversification outcomes resided primarily in the higher tiers of government. Local formal and informal institutions seemed to have limited influence on the relative quality of successful diversification. Greater Geelong's local government was accused of being dysfunctional and was dismissed by the State Government. In any case, it had far less fiscal and institutional power than the City of Oshawa or the Region of Durham. Moreover, this research has found that what appeared to be endogenous diversification agendas, driven by informal and quasi-formal networked regional governance institutions, were in fact largely processes whereby intermediate and central governments were able to build consensus around top-down planning agendas that aligned with development-oriented local interests.

These findings suggest that the 'micro-perspective' focus on endogenous development – with its privileging of firms, informal institutions, local capacity, and 'governance over government' – fails to account for the fundamental and enduring role of formal government institutions. In this research, national and intermediate tiers of the state – and their spatially selective, top-down decision making – were the principle drivers of regional diversification and relative resilience, even if local actors still had some capacity to contribute to path creation.

The finding of Boschma & Capone (2015) that liberal market economies, which applies to both Canada and Australia, tend towards unrelated diversification proved valid, as states were constrained in their ability to facilitate a reorientation and branching of the local economies to a new, related specialisation. This was principally because related variety specialisation required private capital investment that was not available in sufficient quantities. This thesis found no relationship between the capacity of state institutions and the relatedness of diversification trajectories, as the state was able to facilitate both related and unrelated diversification either directly or indirectly by creating jobs through specific public investment schemes.

Public investment changes external perceptions of places. This research suggests that responses from government at the local, intermediate and central levels, despite

being focused on the concept of 'diversification', did not represent a coordinated strategy to shape and manipulate industry composition. Rather, the goal was the stabilisation and growth of labour markets through any means available, which included harnessing local skills and networks to take advantage of both related branching and unrelated investment opportunities. The immediate concern for policymakers at times of crisis is to stabilise devastated labour markets by supporting existing employment and creating new employment. The common-sense response is to signal to private capital that investment in the region will be supported by the state. This enables firms to take advantage of local skills and mitigates investment risk. This is seen in both Oshawa and Geelong, where private capital flight continued to be a serious concern, which engendered at least some response from the state. While policy actors used the concept of 'diversification' as a vehicular idea to justify public spending and manage the regional image (brand) to retain and attract private investment, this process should not be mistaken for a coherent industry composition strategy. Further, that this practice is commonly observed, does not mean the all resulting diversification outcomes are inherently path dependent, 'evolutionary' or structural.

There were important similarities in approaches to diversification in Geelong and Oshawa, but there were also major differences in the amount of state investment and in the overall level of success of these places in growth terms. This highlights that the degree to which private capital is leveraged in such places is highly dependent on public capital outlays. There is little reason to assert that 'evolutionary', market-based branching processes would have occurred to the same degree in the absence of this public investment. Where employment stabilisation did occur, it was heavily driven by deliberate public sector investment, rather than the workings of creative destruction or the invisible hand – the market didn't work to return these places to partial equilibrium. Rather, public investment and planning worked to avert further disaster.

In both Geelong and Oshawa, regional diversification, adaptation and resilience were tied to the publicly funded higher education and health sectors, both of which expanded from top-down, state-driven placemaking exercises rather than from bottom-up entrepreneurialism or a market-led recovery. For both, creative-class urbanism and university-led growth multipliers fitted the dominant innovation-system rhetoric, but also served as vehicles for channelling public funding into job creation. The discrepancy in

growth outcomes between the two cities reflects their respective degrees of divergence from market-driven solutions. The Victorian State's commitment to placemaking in Geelong explains its greater employment growth and stability. However, the market-based paradigms that informed government action constrained measures to address socio-spatial inequality.

This experience demonstrates that formal relationships among levels of government are central determinants of regional and national resilience. Ultimately, the qualified 'success' of Oshawa and Geelong was not correlated with specific industry composition-centred strategies, but spatially selective state intervention from higher tiers of government. Successful diversification or regional resilience – to the extent that it existed in Geelong and Oshawa – was fundamentally shaped by this intervention, with the primary quantitative and qualitative difference in the two case studies being attributable to the level of intervention.

Diversification and Socio-Spatial Polarisation

Geelong and Oshawa displayed a divergence in labour market growth outcomes, yet relative convergence in patterns of socio-spatial polarisation. This thesis has shown that both experienced the well-documented problems faced by regions affected by mass retrenchment, namely diminished labour force participation and wage levels. These were concentrated in areas with high levels of manufacturing employment. It found that the industry and employment growth occurred in largely undeveloped 'greenfield' sites and excluded the core deindustrialising areas, leading to increased socio-spatial polarisation. Many of the new types of jobs that emerged to replace manufacturing employment in Geelong and Oshawa were low-wage, precarious service jobs or high-income professional services or public administration jobs that were unsuited to the skill and education levels of the majority of retrenched workers. This reinforces the link between deindustrialisation, economic diversification and job polarisation (Holm & Østergaard 2018; see also Massey 2007).

This thesis has added to understandings of a relationship between polarisation and labour market diversification by focusing on intra-regional, as well as inter-regional comparisons, highlighting that labour market polarisation is defined both spatially and

temporally. It revealed labour market polarisation to manifest in spatial division between parts of the region heavily impacted by deindustrialisation and mass retrenchment, and the newly developed areas that were not directly affected by it. The thesis has suggested the relationship between these opposing outcomes is causal rather than co-incidental; that is, socio-spatial polarisation is a necessary component of 'successful' labour market diversification and growth rather than simply being an unfortunate side-effect. The thesis has shown that positive quantitative and qualitative job growth in both case studies was largely driven by the ability to attract new high-income residents, who settled away from the areas most affected by deindustrialisation. Without this socio-spatial polarisation, the regions may not have achieved positive diversification. While income and labour market growth has occurred around them, concentrated disadvantage in former industrial suburbs has become entrenched, with socioeconomic outcomes worsening over time. Moreover, this combination of polarisation and growth was driven to a large extent by diseconomies in the neighbouring core urban agglomerations, highlighting again that diversification was not endogenous. It also showed that growth pressures driven by conurbation-related diseconomies produced a new source of regional vulnerability in the form of increasing gentrification, potentially undermining 'incumbent upgrading' initiatives in disadvantaged areas affected by deindustrialisation.

Diversification as Regional Resilience

The thesis's third research question asked: What do divergent inter- and intra-regional outcomes reveal about successful approaches to diversification and regional resilience?

The previous chapters confirm that regardless of the coherence of their development strategies, Geelong and Oshawa were seemingly resilient in simple growth terms. Yet fundamental questions remain – have Geelong and Oshawa been as resilient as they seem? Is diversification the source of this resilience? What explains divergences between them? This section summarises the findings of the empirical sections by considering how different forms of diversification – unrelated, related, and discursive – contribute to the success criterion of 'resilience'. The section concludes that the relationship between diversification and regional resilience needs to be re-oriented to

focus more attention on intra-regional dynamics as opposed to inter-regional comparisons.

As the concept of resilience is intertwined with diversification in academic, policy and media discourse, it provides a loose conceptualisation through which to discuss the 'success' of diversification. The distinct lack of industry diversity in Oshawa and Geelong prior to automotive closures did leave these areas exposed to economic shocks, and the consequent deindustrialisation has resulted in enduring associated socioeconomic problems. This is consistent with the common-sense notion that regional industry specialisation makes regions more vulnerable to single industry shocks (see **Chapter 2).** This reality to an extent justifies diversification as a reactive policy solution to respond to mass retrenchment crises or as a proactive solution to future-proof regions by making them more resilient to singular industry shocks. By pursuing diversification, Geelong and Oshawa have been more successful, resilient and adaptable, at least when resilience is measured in growth terms (see Sweeney et al. 2020), than comparable former specialised automotive cities that have faced economic stagnation and depopulation after major closures.

Both Geelong and Oshawa pursued diversification via cluster-oriented development strategies promoting diversification into both related industries, like advanced automotive manufacturing, and unrelated industries such as in biotechnology, health, financial services, public administration, retail, and hospitality. Building educational institutions underpinned both related and unrelated diversification in each location. In both cases, these strategies were adopted only after the failure of the strategy of offering direct enterprise assistance to traditional manufacturing firms to maintain the existing industry specialisation. Diversification and resilience were also linked as nebulous branding terms surpassing their role as components of a coherent development strategy. Despite distinctions between concepts such as unrelated and related diversification, in practice, policy actors never considered these concepts to be mutually exclusive. The emphasis on diversification and resilience is best explained as reflecting the dominance of various globally circulating discourses which have themselves have been temporally contingent and fluid. The next sections examine how the different forms of diversification contribute to resilience.

Related Diversification and Resilience

Is related diversification more likely to promote resilience? Neffke et al. (2011, 2018) argue that incumbent firms engaging in a branching process of related diversification and exogenous entrepreneurs establishing new related enterprises were more likely to succeed than firms attempting to establish unrelated industries in regions. Building on that evolutionary, path-dependent focus, Boschma (2015, p. 737 see also Boschma 2017) agrees, arguing that 'related variety in a region has the potential to secure both adaptation and adaptability, and thus, may make a region more resilient'. He views related diversification as promoting regional resilience and unrelated diversification as inherently risky. Frenken et al. (2007) and Van Oort et al. (2015) associate related diversification with the growth of employment and specialisation with the growth of productivity. These influential studies provide support for the conclusion that policies should facilitate related diversification over other strategies. Previous chapters have described interventions in Geelong and Oshawa designed to aid manufacturing firms to diversify activities, upgrade technologies and capture new related product markets. Policies have also promoted the development of clusters around particular knowledge industries to facilitate related diversification.

However, the evidence presented in this thesis has also confirmed the finding of MacKinnon (2017) that related diversification cannot address a labour crisis in regions facing structural industry decline, because this 'branching' process is not sufficient to create enough jobs to compensate for mass retrenchments. This thesis has demonstrated that related diversification has been a small component of overall labour market diversification in Oshawa and Geelong. Facilitated to a large extent by public investment, incumbent firms in the automotive supply chain branched into related activity. This is likely to have absorbed segments of the retrenched labour force– manufacturing employed the largest number of retrenched automotive workers in Geelong. Nevertheless, with manufacturing in structural decline in both locations, these new jobs represented only a small number of opportunities relative to the automotive job losses and were not enough to reabsorb retrenched workers or grow the overall labour market. Moreover, related diversification of businesses generated employment for skilled occupations. These jobs may not have been suitable for employing retrenched

manufacturing workers, given low-education levels among the manufacturing, and broader regional, labour force. Even if some workers can upskill to the requirements of related jobs, this cannot solve the employment problem for all workers, and thus related diversification strategies risk exacerbating social polarisation (Holm & Østergaard 2018).

In the institutional contexts of Geelong and Oshawa, related diversification was not a viable standalone policy for reactive structural adjustment measures because structural decline in manufacturing was not going to be reversed by market processes and policy initiatives were not sufficient for these branching processes to dominate the regional economy. Simply, labour market adaptation in Oshawa and Geelong was buttressed by related diversification, but was primarily driven by unrelated diversification.

Unrelated Diversification and Resilience

Whilst the literature is dominated by a related-unrelated variety dichotomy, the empirical evidence presented in the previous chapters suggests that unrelated variety diversification takes a variety of forms – sometimes in wealth-producing export industries and sometimes in the local personal service sector. The latter, this section will argue, is a symptom of deindustrialisation rather than a cure.

This thesis has shown that reactive diversification policies are self-fulfilling, because unrelated diversification is an inevitable outcome of deindustrialisation and mass retrenchment episodes to some degree. An economy must appear more diverse, statistically, if a major industry is discontinued. That the two once-most specialised cities in Australia and Canada diversified in such a similar manner suggests they were converging in response to underlying structural changes affecting both national economies. Yet, at the same time, these places had divergent growth outcomes. Hence, resilience and adaptability are not consequences of industrial diversification *per se*, but are effects of other socioeconomic processes that are correlated with different types of diversification. Despite the intuitive appeal of diversification as engendering 'resilience', the evidence clearly shows that this is not always the case.

The most important factor in assessing the quality of diversification is its effects on job quality in the local economy. The diversification of the Oshawa economy has undermined job quality and made its workers more exposed to low-wage work and

insecure 'gig' employment (Siemiatycki 2013). This trend is also evident among retrenched Australian automotive workers, including Geelong (Barnes & Weller 2020). Full-time work has declined in Oshawa. In 1985, 63% of males in Ontario worked full-year full-time, as did 65% in the City of Oshawa. According to the 2016 Census, 58% of males in the City of Oshawa who had some work activity in 2015 worked full-time – a decline of 5% – although the proportion is slightly higher than Ontario (57%). This suggests a gradual convergence of Oshawa's industry and occupational profile relative to Ontario and western economies generally, where stable high-paying jobs have been replaced by low-paying, precarious jobs (Standing 2011). Diversification conceived as an industry structure that closely resembles a higher national or intermediate tier - as it is in Hachman models – could not be said to promote resilience if the diversity increases work insecurity.

The COVID-19 crisis provided a clear reminder that achieving diversity across a variety of unrelated industries also cannot necessarily proactively 'future-proof' a region, because a shock impacting multiple industries will expose an economically diverse region to a greater probability of experiencing a greater number of industry shocks, which a region specialised in a resilient industry may avoid (Boschma 2015, 2017). Labour market estimates (REMPLAN 2020) showed that between March and September 2020, Greater Geelong experienced significant declines in industries that underpinned its diversification, such as retail (-13.9%), education (-9.3%), accommodation and food services (-6.7%), transport and warehousing (-5.5%), and health (-2.1%), while the industry it was transitioning away from, manufacturing, proved to be more resilient (-1.1%). This trend was even more evident in Ontario, where manufacturing grew by 2.2% between September 2019-September 2020 (Statistics Canada 2020) despite big losses in accommodation and food services (-15.5%), transportation and warehousing (-11.2%), construction (-7.8%), retail (-4.7%), education (-1%) and health (-4%). The COVID-19 crisis showed that endogenous manufacturing capabilities may be required to respond to a global/national crisis, making the industry and regions specialised in it more resilient than previous trends suggested.[44] On the other hand, losses in a range of industries dominated by low-wage, precarious jobs showed that a diversified industry composition is no guarantee of resilience.

[44] The GM Oshawa plant would be mobilised to make face masks, for example (Bachar 2020).

The key implication is that assessments of 'unrelated' diversification must consider the form of new industries and their implications for employment. Many influential perspectives now suggest that it is not diversification *per* se that engenders resilience and adaptability, but specific types of diversification. Beer and Clower (2009, p. 385) drew on evidence from Australian regional cities to show that regions that had been subject to a process of diversification experienced highly divergent growth outcomes, because diversification could be 'high reward' but also 'high risk'. As practitioners in specialised regions facing structural decline must invariably pursue a diversification strategy (even if this is an initial step towards a re-specialisation strategy), the focus must therefore remain on the types of interventions that produce positive diversification outcomes, not on industry composition-based strategies.

Performative Diversification and Resilience

If an industry composition framework that focuses simply on the diversity of jobs rather than the quality of jobs has no identifiable bearing on regional resilience, is a focus on industry structure misguided? Are industry composition frameworks useful analytical tools for understanding regional resilience, adaptation and change? This thesis has shown quite clearly that industry composition terms like 'diversification' pervade discourse about structural adjustment and transition, meaning that academic consternation over their utility for descriptive analysis is irrelevant because these concepts have material effects in the real world. This thesis has shown that diversification's deployment as a discursive tool for managing the crisis of deindustrialisation is a global phenomenon. The dominant policy response, at least discursively, to the immediate and long-term economic shocks associated with deindustrialisation have long centred on using diversification to engender resilience.

Diversification cannot be understood as simply a neutral, descriptive tool of academic analysis. Rather, it functions as a fundamentally performative discursive tool of governance. The concepts of diversity and diversification pervade urban and regional policy discourse, because they are positive, yet amorphous and malleable, terms that enable a variety of interpretations (Foster et al. 2016; Lees, 2003; Weller 2017; Weller & Tierney 2017). This thesis has shown that the idea of regional diversification in

engendering adaptation and resilience relates as much to cultivating an external perception of a region as to the composition of industry itself. The successful use of the term as a positive repackaging of the problem has material consequences through its influence on inward investment and, therefore, on the extent to which diversification produces positive or negative growth outcomes. Moreover, diversification helped established consensus around other amorphous concepts, such as decentralisation, through which an interventionist, top-down state-led development agenda was justified, despite running counter to dominant, market-based paradigms and their language of endogenous development, new regionalism and market-led growth. Analysts working within the industry composition framework need to incorporate this performative understanding rather than view the framework only as a neutral, descriptive phenomenon.

Summing up: What Drives Successful Diversification?

Overall, this research has attributed 'successful' diversification in Geelong and Oshawa mainly to external structural, spatial and institutional factors. This highlights the danger of examining these places as if they are atomised, self-contained units. Furthermore, it shows that understanding regional resilience necessarily requires a holistic view that contextualises a region's positionality in and among a broad range of socio-spatial economic processes.

These findings provide grounds for rejecting equilibrium-based understandings of the change process. Far from reverting to any localised 'equilibrium', the once-highly industrialised areas of these cities were turned into areas with the characteristics of ghettoes. Seemingly the only source of future 'improvement' on the horizon for these areas is the slow march of gentrification which may eventually displace remaining low-income residents. Many neighbourhoods in Geelong's and Oshawa's historic urban cores have experienced socioeconomic decline to varying degrees and those that have shown signs of growth and recovery have taken generations to do so. Broader regional 'recovery', built largely on fortuitous external factors, was not a return to the original state of working prosperity, but, rather, a progression to a highly socio-spatially polarised context. New areas housed wealthy commuters and professionals, but deindustrialised

areas experienced lower labour force participation, rising housing costs, lower relative wages and thus growing socioeconomic stress. The cases studies highlight that detailed observation and analysis of socioeconomic phenomena provide better explanations than the nebulous, abstract literature that attempts to explain regional resilience or adaptability through biological or mechanical metaphors. It also shows that while the literature often presents the tension between path creation or regional lock-ins, the potentials for unrelated or related diversification, or the primacy of structure or agency in regional growth trajectories as mutually exclusive dichotomies, in fact they co-exist in constantly changing and evolving processes.

These findings suggest that literature on regional resilience needs to incorporate a better understanding of sub-regional outcomes and interrelated spatial dynamics. Sweeney et al. (2020) have recently attempted to demystify the concept of resilience by establishing positive or negative growth as what distinguishes a resilient region from a 'resistant' region. Yet this thesis has shown that this framing's methodological atomism is inadequate, because labour markets within 'regions' – which may be little more than arbitrary labels assigned to particular geographic spaces – often bifurcate into a dualistic resilience and resistance simultaneously. Seeming resilience to deindustrialisation in Geelong and Oshawa has actually been accompanied by increasing vulnerability and 'resistance' in the parts of these cities most affected by it. Instead, 'regional' resilience must be reframed to better reflect intra-regional dynamics, cognisant of the fact that resilience and vulnerability may have an inverse relationship at the intra-regional and inter-regional scales. The identified link between diversification and socio-spatial polarisation means that the fundamental proposed relationship between diversification and resilience must also be re-considered.

Policy Implications: State-led or Market-led Diversification

The second research question this thesis asked was: What are the roles of markets and states in shaping diversification outcomes?

The findings have shown that not only can central and intermediate governments intervene to influence regional diversification outcomes, but they are justified in doing so. An evaluation of the effectiveness of any specific place-based, industry-based or people-

based program targeted at Geelong and Oshawa was not conducted, because specific policy inputs and outputs could not be isolated in complex economic systems. However, by comparing and contrasting different generalised approaches to state-led or market-led diversification in the two case studies and their associated outcomes, this thesis can comment on the effectiveness of overarching responses. This evidence suggests that interventionist, state-led diversification approaches are required to address market failure in regions experiencing economic shock, structural decline and industry transition.

Laissez-faire or spatially neutral people-based approaches to structural adjustment are associated with poor growth outcomes when compared with state-led indirect, quasi-Spatial Keynesian approaches that aim to stabilise labour markets through multiplier effects by creating direct public sector employment. Unless they have the fiscal capacity to create jobs of the required scale, local governments cannot pursue the same agenda. Hence, these spatially selective policies must be made from the top down at the level of the central or intermediate state. This also applies to endogenous development-oriented, innovative 'governance over government' taskforces, which, without integration within existing central or intermediate state apparatuses, cannot make allocative public investment decisions.

Supply-side, industry support schemes to help firms diversify or people-based re-training/upskilling programs are not ineffective, but are also not sufficient. They should only be considered as part of a broad suite of policy interventions. For regions facing capital flight, the fundamental priority should be to 'lock in' investment, as is the promise of place-based policies, with people-based programs and industry-based programs coordinated around this goal to ensure they do not undermine it. This thesis has shown that governments can use direct public sector job creation as a means to compensate for mass retrenchments in private firms, stabilise the labour market, stimulate multiplier effects and anchor regional recovery.

While this thesis has also shown that quasi-Spatial Keynesian de-concentration policies are effective for stabilising broader regional labour markets, they are ineffective for addressing the effects of long-term structural decline and mass retrenchment in disadvantaged areas, where existing skills and education levels for many residents are incompatible with the newly created jobs. There appears to be little justification for

decoupling training initiatives focused on retrenched workers and residents from disadvantaged locales from indirect public sector employment stimulus programs that largely do not benefit this segment of the labour market. Therefore, more overt, targeted Spatial Keynesian direct jobs programs (including stimulatory public works schemes) should be considered, alongside indirect de-concentration public sector schemes. Direct financial assistance to private firms to help them diversify operations should be made conditional on quotas for hiring retrenched workers, and have various safeguards to help ensure this private investment is 'locked in' to the affected region.

Neighbourhood revitalisation programs (based on the philosophy of incumbent upgrading not gentrification) should be pursued, including re-investment in better social housing and welfare programs. These should be coordinated with other interventions, such as rent control policies, to prevent place-based policies aimed at stimulating the broader regional labour market from also stimulating gentrification, housing stress and displacement of low-income residents in the most disadvantaged areas.

Of course, the possibility of these prescriptions for regional interventions becoming viable as a new orthodoxy is highly unlikely in market economies in the near-term, although this will depend upon how global and national socio-political contexts evolve. However, ultimately, 'successful' regional diversification should not be conceived of as increasing socio-spatial inequality. Success should not be defined as ensuring broader regional labour markets recover and grow in spite of increasing socioeconomic disadvantage in areas most affected by the transition away from existing industry specialisations, but rather should be defined as ensuring that these areas recover. The trade-off for non-intervention is to allow the perpetuation of socioeconomic disadvantage, which can create social problems that in turn create long-term costs far in excess of the costs of initial interventions. This is a reality increasingly recognised even by once vehement opponents of spatially-targeted policies. Ultimately, state-led regional diversification policies should consider the most affected or disadvantaged areas to be the main development priority in the aftermath of an economic shock, rather than treating them as unfortunate casualties of 'successful' diversification to be contained or ignored.

References

ACIL Allen & Wallis Consulting 2017, *Ford Transition Program evaluation*, Auto Skills Australia, Melbourne.

— 2019, *The transition of the Australian car manufacturing sector: Outcomes and best practice summary report*, Department of Employment, Skills, Small and Family Business, Canberra.

Addie, JD 2013, 'Metropolitics in motion: The dynamics of transportation and state reterritorialization in the Chicago and Toronto City-Regions', *Urban Geography*, vol. 34, no. 2, pp. 188-217.

Ahlfeldt, G & Wendland, N 2013 'How polycentric is a monocentric city? Centers, spillovers and hysteresis', *Journal of Economic Geography*, vol. 13, no. 1, pp. 53-83.

Aither 2014, *Structural adjustment in regional Australia: Learning from experience, improving future responses*, Rural Industries Research and Development Corporation, Australian Government, Barton.

Allen, J & Taylor, Z 2016, 'A new tool for neighbourhood change research: The Canadian Longitudinal Census Tract Database, 1971—2016', *The Canadian Geographer*, vol. 62, no. 4, pp. 575–588.

Al-Tawil, J 2019, 'Homeownership, income, and residential property values', *cat. no. 46-28-0001*, Statistics Canada, Ottawa.

Anttiroiko, AV 2014, *The political economy of city branding*, Routledge, Oxford.

Aranguren, MJ, Magro, E & Wilson, JR 2017, 'Regional competitiveness policy in an era of smart specialization strategies', in R Huggins & P Thompson (eds), *Handbook of regions and competitiveness: Contemporary theories and perspectives on economic development*, Edward Elgar Publishing, Cheltenham, ch. 25, pp. 546-563.

Arcand et al. 2017a, *Metropolitan outlook 1 – economic insights into 13 Canadian metropolitan economies – Autumn 2017*, The Conference Board of Canada, Ottawa.

— 2017b, *Metropolitan outlook 2 – economic insights into 15 Canadian metropolitan economies – Summer 2017*, The Conference Board of Canada, Ottawa.

Asheim, B 2013, 'Smart specialisation - Old wine in new bottles or new wine in old bottles?' *Presentation at the ERSA Conference in Palermo*, August 28.

Asher, N 2018, 'Authority unable to say how much of $266m Hazelwood fund remains one year after closure', *Australian Broadcasting Corporation*, April 11.

Attaran, M 1986, 'Industrial diversity and economic performance in U.S areas', *Annals of Regional Science*, vol. 20, no. 2, pp. 44-54.

Attaran, M & Zwick, M 1987, 'The effect of industrial diversification on employment and income: A case study', *Quarterly Review of Economics and Business*, vol. 27, no. 4, pp. 38-54.

August, M & Walks, A 2018, 'Gentrification, suburban decline, and the financialization of multifamily rental housing: The case of Toronto', *Geoforum*, vol. 89, pp. 124–136.

AusIndustry 2013, *Fact sheet: Geelong Region Innovation and Investment Fund*, G21, Australian Government, Canberra, retrieved from http://www.g21.com.au/sites/default/files/resources/GRIIF_FactSheet.pdf

Austin, B, Glaeser E & Summers, L 2018, 'Jobs for the heartland: Place-based policies in 21st-century America', *Brookings Papers on Economic Activity*, vol. 2018, no. 1, pp. 151-255.

Australian Broadcasting Corporation (ABC) 2016, 'Target to shut Geelong headquarters, up to 180 jobs axed', *ABC*, April 14.

Australian Bureau of Statistics (ABS) 1955, *Census of population and housing 1954*, ABS, Canberra.

— 1967, *Census of population and housing 1966*, ABS, Canberra.

— 1972, *Census of population and housing 1971*, ABS, Canberra.

— 1987, *Census of population and housing 1986*, ABS, Canberra.

— 1992, *Census of population and housing 1991*, ABS, Canberra.

— 1997, *Census of population and housing 1996*, ABS, Canberra

— 2002, *Census of population and housing 2001*, ABS, Canberra

— 2007, *Census of population and housing 2006*, ABS, Canberra.

— 2012, *Census of population and housing 2011*, ABS, Canberra.

— 2013, *A review of Regional Development Australia Committee 2010-2011 regional plans: Issues identified by regions*, cat. no. 1381.0, ABS, Canberra.

— 2014, *Research paper: A review of selected regional industrial diversity indexes, 2011*, cat. no. 1381.0.55.001, ABS, Canberra.

— 2017, *Census of population and housing 2016*, ABS, Canberra.

— 2018, *Census of population and housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2016*, cat. no. 2033.0.55.001, ABS Canberra.

— 2019, *Regional population growth, Australia, 2017-18*, cat. no. 3218.0, ABS, Canberra.

— 2020, *Migration, Australia,* cat. no. 3412.0, ABS, Canberra.

Australian Government 2016a, *Australian industry report 2016*, Department of Industry, Innovation and Science, Canberra.

— 2016b, *Independent review of the Regional Development Australia Programme: Final report*, Department of Infrastructure and Regional Development, Canberra.

— 2017a, *Australian Government response to the Senate Economics References Committee Report - Future of Australia's automotive industry*, Australian Government, Canberra.

— 2017b, *Regions 2030: Unlocking opportunity*, Department of Infrastructure and Regional Development, Canberra.

— 2019a, 'Advanced Manufacturing Growth Fund grant recipients', *Department of Industry, Science, Energy and Resources,* Canberra, viewed December 20, https://www.business.gov.au/Grants-and-Programs/Advanced-Manufacturing-Growth-Fund/Grant-recipients.

— 2019b, 'Regional Jobs and Investment Packages (RJIP) – Geelong grant recipients', *Department of Industry, Science, Energy and Resources*, Canberra, viewed December 20, https://www.business.gov.au/Grants-and-Programs/Regional-Jobs-and-Investment-Packages-RJIP/Geelong-grant-recipients.

Australian Local Government Association (ALGA) 2020, 'Facts and figures', *ALGA*, viewed March 27, https://alga.asn.au/facts-and-figures/.

Australian National Audit Office 2019, *Award of funding under the Regional Jobs and Investment Packages*, Auditor-General Report No.12 2019–20, Australian National Audit Office, Canberra.

Australian Public Service Commission (APSC) 2019, *APS employment data 31 December 2019*, APSC, Canberra.

Bacchi, CL 1999, *Women, policy, and politics: The construction of politics*, Sage, London.

— 2012, 'Introducing the 'What's the Problem Represented to be?' approach', in A Bletsas & C Beasley (eds), *Engaging with Carol Bacchi: Strategic interventions and exchanges*, University of Adelaide Press, Adelaide, ch. 2 pp. 21-24.

Bachar, C 2020, 'Oshawa's GM plant reaches mask-making milestone', *The Oshawa Express*, October 6.

Bailey, D, Bentley, G, De Ruyter, A, & Hall, S 2014, 'Plant closures and taskforce responses: An analysis of the impact of and policy response to MG Rover in Birmingham', *Regional Studies, Regional Science*, vol. 1, no. 1, pp. 60-78.

Bailey, D, Coffey, D, Gavris, M & Thornley, C 2019b, 'Industrial policy, place and democracy, *Cambridge Journal of Regions, Economy and Society*, vol. 12, no. 3, pp. 327–345.

Bailey, D, Glasmeier, A & Tomlinson, PR 2019a, 'Industrial policy back on the agenda: Putting industrial policy in its place?' *Cambridge Journal of Regions, Economy and Society* 2019, vol. 12, no. 3, pp. 319–326.

Bailey, DC, Mahdon, M, Fauth, R 2008, *Life after Longbridge: Three years on pathways to re-employment in a restructuring economy*, The Work Foundation, London.

Balakrishnan, A 2020, 'GM says pickup truck production will return to Oshawa plant with new Unifor deal', *Global News*, November 5.

Bank of Canada 2019, 'Inflation calculator', *Bank of Canada*, viewed April 24, https://www.bankofcanada.ca/rates/related/inflation-calculator/.

Bardhan, P 2002, 'Decentralization of governance and development', *Journal of Economic* Perspectives, vol. 16, no. 4, pp. 185–205.

Barnes, T 2016, *Transition to where? Thinking through transitional policies for Victoria's automotive manufacturing industry*, Library Fellowship Paper No. 3, Parliament of Victoria, Melbourne.

Barnes, T & Weller, S 2020, 'Becoming precarious? Precarious work and life trajectories after retrenchment', *Critical Sociology*, vol. 45, no. 4-5, pp. 527-541.

Barnes, TJ, Peck, J, Sheppard, ES & Tickell, A 2007, 'Methods matter: Transformations in economic geography', in A Tickell, ES Sheppard, J Peck, J & TJ Barnes (eds), *Politics and practice in economic geography*, Sage, London, ch. 1, pp. 1–24.

Barro, RJ & Grossman, HI 1971, 'A general disequilibrium model of income and employment, *American Economic Review*, vol. 61, no. 1, pp. 82-93.

Bathelt, H 2013, 'Post-Reunification restructuring and corporate re-bundling in the Bitterfeld-Wolfen chemical industry, East Germany', *International Journal of Urban and Regional Research*, vol. 37, no. 4, pp.1456–85.

Beaudry, C & Schiffauerova, A 2009, 'Who's right, Marshall or Jacobs? The localization versus urbanization debate', *Research Policy*, vol. 38, no. 2, pp. 318–337.

Beauregard, RA 1994, 'Capital switching and the built environment: United States, 1970–89', *Environment and Planning A: Economy and Space*, vol. 26, no. 5, pp. 715-732.

Beenstock, M, Felsenstein, D & Xieer, D 2018, 'Spatial econometric analysis of spatial general equilibrium', *Spatial Economic Analysis*, vol. 13, no. 3, pp. 356-378.

Beer, A 2011 'Local government and economic shock within a federal system: The Australian case', in D Bailey, and C Chapain (eds), *The recession and beyond: Local and regional responses to the downturn,* ch. 17, pp. 332-46, Routledge, Abingdon.

— 2014, 'Structural adjustment and the automotive industry: Insights for regional policy and programmes', *Regional Studies, Regional Science*, vol. 1, no. 1, pp. 96-101.

— 2015, 'Structural adjustment programs and regional development in Australia', *Local Economy*, vol. 30, no. 1, pp. 21-40.

— 2018, 'The closure of the Australian car manufacturing industry: Redundancy, policy and community impacts', *Australian Geographer*, Vol. 49, no. 3, pp. 419-438.

Beer, A & Clower, T 2009, 'Specialisation and growth: Evidence from Australia's regional cities, *Urban Studies*, vol. 46, no. 2 pp. 369-89.

Beer, A, Akshay, V, Rainnie, A, Veitch, W, & Clower, T 2020, *The impacts of specialisation and diversification on Australia's mid-sized towns*, The Regional Australia Institute, Canberra.

Beer, A, Weller, S, Barnes, T, Onur, I, Ratcliffe, J, Bailey, D & Sotarauta, M 2019, 'The urban and regional impacts of plant closures: New methods and perspectives', *Regional Studies, Regional Science*, vol. 6, no. 1, pp. 380-394.

Bergman, MM (ed) (2008), 'The straw men of the qualitative-quantitative divide and their influence on mixed methods research', in *Advances in mixed methods research*, Sage, London, ch. 1, pp. 10-21.

Bhaskar, R 1989, *Reclaiming reality: a critical introduction to contemporary philosophy*, Verso, London.

— 2008, *A Realist theory of science*, Routledge, Oxford.

— 2013, *The possibility of naturalism: A philosophical critique of the contemporary human sciences*, Taylor & Francis, Florence.

Binz, C, Truffer, B & Coenen, L 2016, 'Path creation as a process of resource alignment and anchoring: Industry formation for on-site water recycling in Beijing', *Economic Geography*, vol. 92, no. 2, pp. 172-200.

Boadway 2007, 'Canada', in A Shah & J Kincaid (eds), *The practice of fiscal federalism: Comparative perspectives*, McGill-Queen's University Press, Montreal.

Boisen, M, Terlouw, K & van Gorp, B 2011 'The selective nature of place branding and the layering of spatial identities', *Journal of Place Management and Development*, vol. 4, no. 2, pp. 135–47.

Boschma, R 2015, 'Towards an evolutionary perspective on regional resilience,' *Regional Studies*, vol. 49, no. 5, pp. 733-751.

— 2017, 'Relatedness as driver of regional diversification: A research agenda', *Regional Studies*, vol. 51, no. 3, pp. 351-364.

Boschma, R, & Capone, G 2015, 'Institutions and diversification: Related versus unrelated diversification in a varieties of capitalism framework', *Research Policy*, vol. 44, no. 10, pp. 1902–1914.

Boschma, R, Coenen, L, Frenken, K & Truffer, B 2017, 'Towards a theory of regional diversification: Combining insights from Evolutionary Economic Geography and Transition Studies, *Regional Studies*, vol. 51, no. 1, pp. 31-45.

Boschma, R & Gianelle, C 2014, 'Regional branching and Smart Specialisation policy', *S3 Policy Brief Series No. 06/2014*, European Union, Luxembourg.

Boudreau, J, Hamel, P, Jouve, B & Keil, R 2007, 'New state spaces in Canada: Metropolitanization in Montreal and Toronto compared', *Urban Geography*, vol. 28, no. 1, pp. 30-53.

Bowen, WM & Kimble, D 1997, 'Edge cities in context', in RD Bingham et al. (eds), *Beyond edge cities*, Garland Publishing, New York, ch. 1, pp.3-23.

Bradford, N 2008, *Canadian social policy in the 2000s: Bringing place in*, CPRN Research Report, Canadian Policy Research Networks, Ottawa.

— 2010, *Regional economic development agencies in Canada: Lessons for Southern Ontario*, School of Public Policy and Governance, University of Toronto, Toronto.

— 2017, *Canadian regional development policy: Flexible governance and adaptive implementation*, OECD, Paris.

Breathnach, P 2010, 'From Spatial Keynesianism to Post-Fordist neoliberalism, *Antipode*, vol. 42, no. 5, pp. 1180-95.

Brenner, N 2004, 'Urban governance and the production of new state spaces in western Europe, 1960–2000', *Review of International Political Economy*, vol. 11, no. 3, pp. 447-488.

Bristow, G 2010, 'Resilient regions: Re-'place'ing regional competitiveness', *Cambridge Journal of Regions, Economy and Society*, vol. 3, no. 1, pp. 153–167.

Brown, AJ & Deem, J 2016, 'A tale of two regionalisms: Improving the measurement of regionalism in Australia and beyond', *Regional Studies*, vol. 50, no. 7, pp. 1154-1169.

Brown, L & Greenbaum, RT 2017, 'The role of industrial diversity in economic resilience: An empirical examination across 35 years', *Urban Studies*, vol. 54, no. 6, pp. 1347-1366.

Bryman, A 1988, 'The debate about quantitative and qualitative research', in *Quantity and quality in social research*, Taylor and Francis, New York, ch. 5, pp. 93-125.

Buch-Hansen, H 2005, 'Critical realism in the social sciences', *Distinktion: Scandinavian Journal of Social Theory*, vol. 6, no. 2, pp. 59-69.

Burawoy, M 1998, 'The extended case method', *Sociological Theory*, vol. 16, no. 1, pp. 4-33.

Burger, MJ, Meijers, EJ, Hoogerbrugge, MM & Tresserra, JM 2015, 'Borrowed size, agglomeration shadows and cultural amenities in North-West Europe, *European Planning Studies*, vol. 23, no. 6, pp. 1090-1109.

Burkett, I 2013, *Addressing disadvantage in the G21 Region: Using place-based investment approaches*, G21 Geelong Regional Alliance, Geelong.

Burstein, M & Tolley, E 2011, *Exploring the effectiveness of place-based program evaluations*, Policy Research Initiative, Ottawa.

Callan, V & Bowman, K 2015, *Industry restructuring and job loss: Helping older workers get back into employment*, NCVER Research Report, Adelaide.

Cambridge Journal of Regions, Economy and Society 2018, 'Editorial statement', *Cambridge Journal of Regions, Economy and Society*, vol. 11, no. 1, pp. 1–2.

Canadian Auto Workers (CAW) Local 222 2009, *The Oshaworker*, vol. 68, no. 6, CAW Local 222, Oshawa.

Canadian Broadcasting Corporation CBC 2013, 'Toronto saw greatest benefit from FedDev Ontario money', *Canadian Broadcasting* Corporation, March 3.

— 2018a, 'How Oshawa's new mayor recovered from addiction and got off the streets', *Canadian Broadcasting Corporation*, October 23**.**

— 2018b, 'Martinrea to close Ajax car part factory in wake of GM Oshawa news', *Canadian Broadcasting Corporation*, November 29.

Canadian Business Journal 2015, 'City of Oshawa: Prepare to be Amazed', *Canadian Business Journal*, January, retrieved from https://www.cbj.ca/city-of-oshawa/.

Canadian Government 1972, *Land use assessment, Six Nations Reserve Brantford*, Department of Indian Affairs and Northern Development, Ottawa.

— 2006, *From restless communities to resilient places: Building a stronger future for all Canadians*, Final report of the External Advisory Committee on Cities and Communities, External Advisory Committee on Cities and Communities, Canadian Government, Ottawa.

— 2018a, *A just and fair transition for Canadian coal power workers and communities*, Task Force on Just Transition for Canadian Coal Power Workers and Communities, Environment and Climate Change, Canada.

— 2018b, 'FedDev Ontario announces new funding for innovative start-ups in Eastern Ontario', *Canadian Government,* viewed December 25, https://www.canada.ca/en/economic-development-southern-ontario/news/2018/12/feddev-ontario-announces-new-funding-for-innovative-start-ups-in-eastern-ontario.html.

— 2020, 'Canada's Regional Development Agencies', *Innovation, Science and Economic Development Canada*, viewed December 15, https://www.ic.gc.ca/eic/site/icgc.nsf/eng/h_07662.html.

Casson, R 2016, 'Gas, grass or ass, no one rides for free: The mohawk mayor', *Persona Studies*, vol. 2, no. 2, pp. 42-56.

Caunce, T 2017, *Means and ends: Macroeconomic theory and the Australian Labor Party's social democratic ideology*, PhD thesis, University of Adelaide, Adelaide.

Cecco, L and Elk, M 2018, '"No jobs left on the horizon": Workers respond to General Motors' decision to close plant', *The Guardian*, November 28.

Cellini, R, Di Caro, P & Torrisi, G 2017, 'Regional resilience in Italy: Do employment and income tell the same story?', in R Huggins & P Thompson (eds), *Handbook of regions and*

competitiveness: Contemporary theories and perspectives on economic development, Edward Elgar Publishing, Cheltenham, ch. 14, pp. 308-331.

Centre for Workplace Skills 2011, *Workforce adjustment in action: Policies, practices and programs*, Centre for Workplace Skills, Ottawa.

Christophers, B 2011, 'Revisiting the urbanization of capital', *Annals of the Association of American Geographers*, vol. 101, no. 6, pp. 1347-1364.

City of Greater Geelong 2013a, *Central Geelong action plan*, Central Geelong Taskforce, City of Greater Geelong, Geelong.

— 2013b, 'Enterprise Geelong', City of Greater Geelong, March 13, retrieved from https://www.geelongaustralia.com.au/ct/news/item/8cfedea40bb16b7.aspx.

— 2018, *Select Major Employers: Barwon Region*, City of Greater Geelong, Geelong.

— 2019, *Annual Report 2018-2019*, City of Greater Geelong, Geelong.

— 2020, *Our Vision to 2030*, *City of Greater Geelong*, retrieved from https://www.geelongaustralia.com.au/fpg/article/item/8d39c0a2dfef7ce.aspx.

City of Oshawa 2014a, *2014 community profile*, City of Oshawa, Oshawa.

— 2014b, *Plan 20Twenty: Downtown Oshawa*, City of Oshawa, Oshawa.

— 2015, *Our future, our focus: Oshawa strategic plan 2015-2019*, City of Oshawa, Oshawa.

— 2016a, *Developing a winning formula of economic diversification*, City of Oshawa, Oshawa.

— 2016b, 'The New Oshawa: City invites developers, real estate professionals to share its story of economic evolution', City of Oshawa, December 21, retrieved from https://www.oshawa.ca/Modules/News/index.aspx?newsId=6f2297b7-d2a1-4e63-bd01-25ff0a76e99a.

— 2017, *Major employers and military establishments*, City of Oshawa, Oshawa, retrieved from https://oshawa.edtools.ca/EDTools/pdfHTML.php.

— 2018a, *Annual report*, City of Oshawa, Oshawa.

— 2018b, *Official plan*, City of Oshawa, Oshawa.

— 2019a, *Development insider*, City of Oshawa, Oshawa.

— 2019b, *Economic development action plan*, City of Oshawa, Oshawa.

— 2020, 'Smart cities challenge', *Connect Oshawa*, viewed February 28, https://connectoshawa.ca/scc.

Clark, GL 1998, 'Stylized facts and close dialogue: Methodology in economic geography', *Annals of the Association of American Geographers*, vol. 88, no. 1, pp.73-87.

Cleave, E, Arku, G, Sadler, R & Gilliland, J 2016, 'The role of place branding in local and regional economic development: Bridging the gap between policy and practicality', *Regional Studies, Regional Science*, vol. 3, no. 1, pp. 207-228.

Cleave, E, Vecchio, M, Spilsbury, D & Arku, 2019, 'Manufacturing change and policy response in the contemporary economic landscape: How cities in Ontario, Canada, understand and plan for manufacturing, *Regional Studies, Regional Science*, vol. 6, no .1, pp. 469-495.

Clinkard, J 2019, 'While GM may be, Oshawa definitely is not out of gas heading into 2019', *Daily Commercial News*, January 29.

Clower, R 1967, 'A reconsideration of the microfoundations of monetary theory', *Economic Inquiry*, vol. 6, no. 1, pp. 1-8.

Coe, N 1997, 'lnternationalisation, diversification and spatial restructuring in transnational computer service firms: Case studies from the U.K. market', *Geoforum*, vol. 28, no. 3-4, pp. 253-270.

Coe, N, Hess, M, Yeung, HWC, Dicken, P & Henderson, J, 2004, 'Globalizing' regional development: A global production networks perspective', *Transactions of the Institute of British Geographers*, vol. 29, no. 4, pp. 468-484.

Collits, P 2014, 'Regional policy in post-war Australia: Much ado about nothing?' in A Hogan & M Young (eds), *Rural and Regional Futures*, Taylor and Francis, Florence.

Conroy, M 1975, 'The concept and measurement of regional industrial diversification', *Southern Economic Journal*, vol. 41, no. 3, pp. 492-505.

Conteh, C 2011, 'Balancing resilience and adaptability: Regional development policy governance in northern Ontario and Manitoba', *Canadian Journal of Regional Science,* vol. 34, no. 2/3, pp. 69–80.

— 2015, *It's just got to be free: Toward more strategic and collaborative governance of regional economic development in Northern Ontario, lessons from other regions of Canada*, Report No. 5, Northern Policy Institute, Thunder Bay.

Cook, B 2008, *National, regional and local employment policies in Australia*, Working Paper No. 08-06, Centre for Full Employment and Equity, University of Newcastle, Newcastle.

Correia, JA & Denham, T 2016, *Winning from second*: *What Geelong can learn from international second cities*, Committee for Geelong, Geelong.

Cortinovis, N, Xiao, J, Boschma, R & van Oort, FG 2017, 'Quality of government and social capital as drivers of regional diversification in Europe', *Journal of Economic Geography*, vol. 17, no. 6, pp. 1179–1208.

Courvisanos, J, Jain, A & Mardaneh, KK 2016, 'Economic resilience of regions under crises: A study of the Australian economy', *Regional Studies*, vol. 50, no. 4, pp. 629-643.

Cox, W & He, A 2016, *Canada's middle-income housing affordability crisis*, Frontier Centre for Public Policy, Winnipeg.

Creative Geelong 2018, *Geelong's creative potential: A manifesto*, Creative Geelong, Geelong.

Crimeen, A, Bernstein, M, Zapart, S, Haigh, F 2017, *Place-based interventions: A realist informed literature review*, Centre for Health Equity Training, Research and Evaluation, Liverpool.

Dachis, B 2018, *A roadmap to municipal reform: Improving life in Canadian cities*, C.D Howe Institute, Toronto.

Daley J & Lancy A 2011, *Investing in regions: Making a difference*, Grattan Institute, Melbourne.

Davidson, C 2009, 'Transcription: Imperatives for qualitative research', *International Journal of Qualitative Methods*, vol. 8, no. 2, 35-52.

Davies, A & Tonts, M 2010, 'Economic diversity and regional socioeconomic performance: An empirical analysis of the Western Australian grain belt', *Geographical Research,* vol. 48, no. 3, pp. 223–234.

Dawley, S 2014 'Creating new paths? Offshore wind, policy activism, and peripheral region development', *Economic Geography*, vol. 90, no. 1, pp. 91-112.

Dawley, S, MacKinnon, D, Cumbers, A & Pike, A 2015, 'Policy activism and regional path creation: The promotion of offshore wind in North East England and Scotland', *Cambridge Journal of Regions, Economy and Society*, vol. 8, no. 2, pp. 257–272.

Deakin University 2015, 'Quickstep brings global R&D to Geelong', Deakin University, Geelong, August 10, retrieved from https://www.deakin.edu.au/research/research-news/articles/quickstep-brings-global-r-And-d-to-geelong.

Deber, RB, Millan, K, Shapiro, H and McDougall, CW 2006, 'A cautionary tale of downloading public health in Ontario: What does it say about the need for national standards for more than doctors and hospitals?', *Healthcare Policy*, vol. 2, no. 2, pp. 60-75.

Dee, P 1994, 'General Equilibrium Models and Policy Advice in Australia', *A paper presented at the IFAC Workshop on Computing in Economics and Finance Amsterdam*, Australian Industry Commission, Canberra.

Delgado, M, Porter, ME & Stern, S 2016 'Clusters and the Great Recession', *Paper to be presented at DRUID15*, Rome, June 15-17.

Deloitte 2014, *Economic contribution of Deakin University's Geelong Waurn Ponds and Waterfront campuses*, Deloitte Access Economics, Melbourne.

DeWilde, M 2016 'Social capital, economic diversity, and civic well-being in Flint and Grand Rapids', *Seidman Business Review*, vol. 22, no. 1, pp. 23-27.

DiGaetano, A, & Lawless, P 1999, 'Urban governance and industrial decline: Governing structures and policy agendas in Birmingham and Sheffield, England, and Detroit, Michigan, 1980-1997', *Urban Affairs Review*, vol. 34, no. 4, pp. 546-577.

Dinca-Panaitescu, M, Hulchanski, D, Lafleche, M, McDonough, L, Maaranen, R & Procyk, S 2017, *The opportunity equation in the Greater Toronto Area: An update on neighbourhood income inequality and polarization*, United Way Toronto & York Region, Toronto.

Dissart, JC 2003,'Regional economic diversity and regional economic stability: Research results and agenda', *International Regional Science Review*, vol. 26, no. 4, pp. 423–446.

Donovan, S 2013, Vic Govt urges NDIS HQ for Geelong in wake of Ford closure, *Australian Broadcasting Corporation*, May 24.

Downward, P & Mearman, A 2002, 'Critical realism and econometrics: Constructive dialogue with post Keynesian economics', *Metroeconomica*, vol. 53, no. 4, pp. 391-415.

— 2007, 'Retroduction as mixed-methods triangulation in economic research: Reorienting economics into social science', *Cambridge Journal of Economics*, vol. 31, no. 1, pp. 77-99.

Durham Radio News 2020, 'Mayor calls on DRPS to address flood of crime, drug use in downtown Oshawa', *Durham Radio News*, viewed September 17**,** https://www.durhamradionews.com/archives/129163.

Durham Region News 2007, 'Action Centre opens for Lear layoffs', *Durham Region News*, November 30.

Durham Workforce Authority 2018a, *Collective impact & community service planning in South Oshawa*, Report 1 from the Engaging Priority Communities Project, Durham Workforce Authority, Oshawa.

— 2018b, *Oshawa community needs assessment*, Prepared in Support of the Smart Cities Challenge Applications, Durham Workforce Authority, Oshawa.

Dyett, G 2018, 'Two years on from Ford factory closure, how are workers coping?', *SBS News*, September 15.

Eastern Ontario Warden's Caucus 2013, *Municipal affordability: One of a series of white papers on the financial sustainability of local governments in eastern Ontario*, Eastern Ontario Warden's Caucus, Belleville.

Eberts, RW & McMillen, DP 1999, 'Agglomeration economies and urban public infrastructure', in P Cheshire & ES Mills (eds), *Handbook of regional and urban economics: volume 3: Applied urban Economics*, ch. 38, pp. 1455-1495.

Eccleston, R & Smith, H 2015, 'Fixing funding in the Australian Federation: Issues and options for state tax reform', *Australian Journal of Public Administration*, vol. 74, no. 4, pp. 435-447.

Economic Council of Canada (ECC) 1990, *From the bottom-up: The community economic development approach: A statement*, Economic Council of Canada, Ottawa.

Eidelman, G, Hachard, T & Slack E 2020, 'In it together: Clarifying provincial-municipal responsibilities in Ontario, Institute on Municipal Finance and Governance, University of Toronto, Toronto.

Eriksson RH, Hane-Weijman E, Henning, M 2018, 'Sectoral and geographical mobility of workers after large establishment cutbacks or closures', *Environment and Planning A: Economy and Space*, vol. 50, no. 5, pp. 1071-1091.

European Commission 2010, *Appendix A: Document accompanying the Commission communication on regional policy contributing to smart growth in Europe 2020*, European Commission, Brussels.

Faggio, G 2016, *Relocation of public sector workers: Evaluating a place based policy*, Department of Economics, University of London.

Faggio, G & Overman, H 2014 'The effect of public sector employment on local labour markets', *Journal of Urban Economics*, vol. 79, pp. 91-107.

Faguet, JP 2004, 'Why so much centralization? A model of primitive centripetal accumulation, *STICERD DEDPS*, No.43, London School of Economics, London.

Faguet, JP & Pöschl, C (eds) 2015, *Is decentralization good for development? Perspectives from academics and policy makers*, Oxford University Press, Oxford, pp. 1-29.

Fairclough, N 2013, *Critical discourse analysis: The critical study of language,* 2nd edn, Routledge, London.

Fairclough, N, Jessop, B & Sayer, A 2002, 'Critical realism and semiosis, *Alethia*, vol. 5, no. 1, pp. 2-10.

Fairweather, C 2018, 'Left nationalism and global solidarity: Strategy, identity, and the fight to save GM Oshawa', Masters thesis, Carleton University, Ottawa.

Farhauer, O & Kroll, A 2012, 'Diversified specialization: Going one step beyond regional economics', *Jahrbuch für Regionalwissenschaft*, vol. 32, no. 1, pp. 63–84.

FedDev Ontario 2009, 'Oshawa to Receive Government of Canada Stimulus Funding for Four Local projects', *FedDev Ontario*, September 9, retrieved from https://www.feddevontario.gc.ca/eic/site/723.nsf/eng/00216.html?OpenDocument

Fenna, A 2007, 'The malaise of federalism: Comparative reflections on Commonwealth–state relations', *Australian Journal of Public Administration*, vol. 66, no. 3, pp. 298–306.

—2008, 'Commonwealth fiscal power and Australian federalism', *University of New South Wales Law Journal*, vol. 31, no. 2, pp. 509-529.

— 2010, *Benchmarking in federal systems*, Occasional Paper Series No. 6, Forum of Federations, Ottawa.

Fenna, A & Hollander, R 2013, 'Dilemmas of federalism and the dynamics of the Australian case', Australian *Journal of Public Administration*, vol. 72, no. 3, pp. 220–227.

Flaherty, D 2018, ‘Durham regional chair election avoids Ford’s axe’, *The Oshawa Express*, July 28.

— 2019a, ‘City ranked high in BMO study’, *The Oshawa Express*, February 12.

— 2019b, ‘Feature: Oshawa’s rural residents face a technology divide’, *The Oshawa Express*, February 27.

— 2020, ‘The saga of the GO rail in Durham’, *The Oshawa Express*, February 19.

Florida, R 2012a, *The rise of the Creative Class, revisited*, Basic Books, New York.

— 2012b, ‘What Toronto needs now: Richard Florida offers a manifesto for a new model of leadership’, *Toronto Life*, October 22.

Florida, R 2014, ‘The Creative Class and economic development’, *Economic Development Quarterly,* vol. 28, no. 3, pp. 196–205.

Florida, R 2017, ‘Lost in housing hysteria, middle-class neighbourhoods have gone extinct’, *The Globe and Mail*, April 24.

Foray, D 2014, ‘From smart specialisation to smart specialisation policy’, *European Journal of Innovation Management*, vol. 17, no. 4, 492–507.

Foster, N, Grodach, C & Murdoch, J 2016, ‘Neighborhood diversity, economic health and the role of the arts’ *Journal of Urban Affairs*, vol. 38, no. 5, pp. 623–642.

Fotopoulos, G, Kallioras, D & Petrakos, G 2010, ‘Spatial variations of Greek manufacturing employment growth: The effects of specialization and international trade’, *Papers in Regional Science*, vol. 89, no. 1, pp. 109-133.

Frenken, K, van Oort, FG & Verburg, T 2007, ‘Related variety, unrelated variety and regional economic growth’, *Regional Studies*, vol. 41, no. 5, pp. 685–697.

Friedmann, J & Sorensen, A 2019, ‘City unbound: emerging mega-conurbations in Asia’, *International Planning Studies*, vol. 24, no. 1, pp. 1-12.

Frisken, F 2007, *The public metropolis: the political dynamics of urban expansion in the Toronto region 1924-2003*, Canadian Scholars Press Inc., Toronto.

Fujita, M, Krugman, P & Mori, T 1999, ‘On the evolution of hierarchical urban systems’, *European Economic Review*, vol. 43, no. 2, pp. 209-251.

Fujita, M & Mori, T 1996, ‘The role of ports in the making of major cities: Self-agglomeration and hub-effect’, *Journal of Development Economics*, vol. 49, no. 1, pp. 93-120.

G21 Geelong Region Alliance (G21) 2007, *The Geelong Region plan: A sustainable growth strategy*, G21, Geelong.

— 2013, *G21 regional growth plan*, G21, Geelong.

— 2014, *G21 Region economic development strategy*, G21, Geelong.

— 2015, *GROW: G21 Region opportunities for work strategic plan*, G21, Geelong.

— 2016, *Addressing disadvantage through affordable social housing*, G21, Geelong.

— 2018, 'Our achievements', *G21*, viewed December 24, http://www.g21.com.au/our-achievements.

— 2021, 'About G21', *G21*, viewed January 19, https://g21.com.au/about-g21/.

Garcia-López, M, & Muñiz, I 2010, 'Employment decentralisation: Polycentricity or scatteration? The case of Barcelona. *Urban Studies*, vol. 47, no. 14, pp. 3035-3056.

Garreau, J 1991, *Edge city: Life on the new frontier*, Doubleday, New York.

Gathmann, C, Helm, I & Schonberg, 2020, 'Spillover effects of mass layoffs', *Journal of the European Economic Association*, vol. 18, no. 1, pp. 427-46.

Gee, M 2018, 'A clash of classes: The other side of Oshawa, Ont.', *The Globe and Mail*, July 15.

Geelong Regional Commission 1981, *Geelong - city by the bay*, Geelong Regional Commission, Geelong.

General Motors (GM) 2018, 'General Motors accelerates transformation', *General Motors*, viewed November 29, https://media.gm.com/media/us/en/gm/home.detail.html/content/Pages/news/us/en/2018/nov/1126-gm.html.

— 2019, 'About Oshawa Assembly', *General Motors*, viewed June 27, https://media.gm.com/Facilities/public/ca/en/oshawa/about_us.html

General Motors Canada (GMC) 2020, 'A statement from GM Canada President Scott Bell on Unifor negotiations', *General Motors Canada*, viewed November 7, https://media.gm.ca/media/ca/en/gm/home.detail.html/content/Pages/news/ca/en/2020/Nov/1105_Negotiations.html.

Gertler, MS 2001, 'Best practice? Geography, learning and the institutional limits to strong convergence', *Journal of Economic Geography*, vol. 1, no. 1, pp. 5-26.

Getis, A & Getis, J 1966 'Christaller's central place theory', *The Journal of Geography*, vol. 65, no. 5, pp. 220-226.

Giddens, A 1979, *Central problems in social theory: Action, structure and contradiction in social analysis*, Macmillan, London.

Giuliano, G, Kang, S & Yuan, Q 2019, 'Agglomeration economies and evolving urban form', *The Annals of Regional Science*, vol. 63, no. 3, pp. 377–398.

Glaeser, EL 2005, 'Reinventing Boston: 1630–2003', *Journal of Economic Geography*, vol. 5, no. 2, pp. 119–153.

— 2012, *Triumph of the city*, Penguin, New York.

Glaeser, EL & Gottlieb, JD 2008, 'The economics of place-making policies' *Brookings Papers on Economic Activity*, vol. 1, pp. 155–239.

— 2009, 'The wealth of cities: Agglomeration economies and spatial equilibrium in the United States', *Journal of Economic Literature*, vol. 47, no.4, pp. 983-1028.

Glaeser, EL & Gyourko, J 2005, 'Urban decline and durable housing', *Journal of Political Economy*, vol. 113, no. 2, pp. 345-375.

— 2018, 'The Economic implications of housing supply', *Journal of Economic Perspectives*, vol. 32, no. 1, pp. 3-30.

Glaeser, EL, Kolko, J, & Saiz, A 2001, 'Consumer city', *Journal of Economic Geography*, vol. 1, no. 1, pp. 27-50.

Glaeser, E & Resseger, I 2010, 'The complementarity between cities and skills', *Journal of Regional Science*, vol. 50, no. 1, pp. 221-244.

Gordon, J 2013, 'Geelong post-Ford turns to Newcastle', *The Newcastle Herald*, May 28.

Gordon, J, Zhao, S & Gretton, P 2015, *On productivity: Concepts and measurement*, Productivity Commission, Canberra.

Gotham, KF 2006, 'The secondary circuit of capital reconsidered: Globalization and the US real estate sector', *American Journal of Sociology*, vol. 112, no. 1, pp. 231-275.

Government of Ontario 1976, *Ontario Budget 1976*, Ministry of Treasury, Economics and Intergovernmental Affairs, Toronto.

— 2019, 'Ontario supporting affected GM workers, families and community', *Government of Ontario*, viewed October 25, https://news.ontario.ca/mol/en/2019/10/ontario-supporting-affected-gm-workers-families-and-community.html.

— 2020, 'Supporting auto parts workers in Durham Region', *Government of Ontario*, viewed February March 3, https://news.ontario.ca/mol/en/2020/02/supporting-auto-parts-workers-in-durham-region.html

Gray, F & Novacevski, M 2017, 'Zombie urbanism and the city by the bay: What's really eating Geelong?', *Journal of Urban Cultural Studies*, vol. 4, no. 3, pp. 309–332.

Gretton, P 2008, 'Assessing the importance of national economic reform — Australian Productivity Commission experience', *Paper presented to the Conference on the Micro Foundations of Economic Policy Performance in Asia*, New Delhi.

Growe, A 2012, 'Emerging polycentric city-regions in Germany. Regionalisation of economic activities in metropolitan regions', *Erdkunde*, vol. 66, no. 4, pp. 295–311.

Hackworth, J 2002, 'Postrecession gentrification in New York City', *Urban Affairs Review*, vol. 37, no. 6, pp. 815–843.

Hackworth, J & Moriah, A 2006, 'Neoliberalism, contingency and urban policy: The case of social housing in Ontario', *International Journal of Urban and Regional Research*, vol. 30, no. 3, pp. 510-527.

Hackworth, J & Smith, N 2001, 'The changing state of gentrification', *Tijdschrift Voor Economische En Sociale Geografie*, vol. 92, no. 4, pp. 464–477.

Halcomb, EJ, & Davidson, PM, 2006, 'Is verbatim transcription of interview data always necessary?' *Applied Nursing Research*, vol. 19, no. 1, pp. 38–42.

Hall, C 2021, 'Brock Township demands Durham address safety concerns at non-profit housing complex Allen Place', *The Toronto Star*, May 4.

Harris, CP & Dixon, KE 1978, *Regional planning in New South Wales and Victoria since 1944 with special reference to the Albury-Wodonga growth centre*, Australian National University Press, Canberra.

Harvey, D 1978 'The urban process under capitalism: a framework for analysis', *International Journal of Urban and Regional Research*, vol. 2, no. 1-3, pp. 101-131.

— 1982, *The limits to capital*, Verso, London.

— 1989a, 'From managerialism to entrepreneurialism: The transformation in urban governance in late capitalism', *Geogr. Ann*, vol. 71, no. 1, pp. 3-17.

— 1989b, *The urban experience*, John Hopkins University Press, Baltimore.

— 2001, 'Globalization and the "spatial fix"', *Geographische Revue*, vol. 2, pp. 23–30.

— 2008, 'The right to the city', *New left Review*, vol. 53, pp. 23-40.

Hassink, R 2010, 'Regional resilience: A promising concept to explain differences in regional economic adaptability?', *Cambridge Journal of Regions, Economy and Society*, vol. 3, no. 1, pp. 45–58.

Heery, L, Naccarella, L & McKenzie, R 2018 '"Improvement focused" evaluation of place-based initiatives: An approach to examining three methodologies', *Evaluation Journal of Australasia*, vol. 18, no. 2, pp. 99-108.

Heisz, A & McLeod, L 2004, *Low-Income in Census Metropolitan Areas, 1980-2000*, *cat. no. 89-613-MIE-N0.001,* Statistics Canada, Ottawa.

Hicks, J & White, G 2015, *Made in Nunavut: An experiment in decentralized government*, UBC Press, Vancouver.

Higgins, B & Savoie, DJ 1994, 'Comparing Australian and Canadian regional development policy: Lessons for Canada', *Canadian Journal of Regional Science*, vol. 17, no. 1, pp. 1-22.

Hodge, G & Robinson, IM 2001, *Planning Canadian regions*, UBC Press, Vancouver.

Hodgins, BW 1978, 'The plans of mice and men', in BW Hodgins, D Wright & WH Heick, *Federalism in Canada and Australia: The early years,* ANU Press, Canberra.

Holm, JR & Østergaard, CR 2018, 'The high importance of de-industrialization and job polarization for regional diversification', *Papers in Evolutionary Economic Geography (PEEG) 1821*, Utrecht University, Utrecht.

Holmes, J, Rutherford, T & Carey, J 2017, 'Challenges confronting the Canadian automotive parts industry: What role for public policy?', *Canadian Public Policy*, vol. 43, no. 1, pp. 75-89.

Hood, MM 1968, *Oshawa: Canada's motor city*, McLaughlin Public Library Board, Oshawa.

Hooghe, L, Marks, G & Schakel, AH, 2010, *The Rise of Regional Authority: A Comparative Study of 42 Democracies*. Routledge, New York.

Hudson, R 2010, 'Resilient regions in an uncertain world: Wishful thinking or practical reality?', *Cambridge Journal of Regions*, Economy and Society, vol. 3, no. 1, pp. 11-26.

Hulchanski, JD 2007, 'The three cities within Toronto: Income polarization among Toronto's neighbourhoods, 1970-2005', University of Toronto, Toronto.

Hulse K & Reynolds, M 2018, 'Investification: Financialisation of housing markets and persistence of suburban socio-economic disadvantage', *Urban Studies*, vol. 55, no. 8, pp. 1655-1671.

Hulse, K, Reynolds, M & Martin, C 2020, 'The Everyman archetype: Discursive reframing of private landlords in the financialization of rental housing', *Housing Studies*, vol. 35, no. 6, pp. 981-1003.

Hunter Valley Research Foundation (HVRF) 2011, 'Diversification of the Hunter Economy – Post BHP', *HVRF*, Newcastle.

Huttunen, K, Salvanes, KG & Møen, J 2011, 'How destructive is creative destruction? Effects of job loss on job mobility, withdrawal and income', *Journal of the European Economic Association*, vol. 9, no. 5, pp.840-870.

Jackson, E 2018, 'More to come: Why GM closed its Oshawa plant and what it means for Canada's auto sector', *Financial Post*, November 26.

Jackson, RW 1984, 'An evaluation of alternative measures of regional industrial diversification', *Regional Studies*, vol. 18, no. 2, 103-112.

Jackson, T, Nel, E, Connelly, S 2016, 'A comparison of resource equalization processes for subnational rural governance and development: Case studies of England, Scotland, Canada, Australia, and New Zealand', in E Schoburgh & R Ryan, *Handbook of research on sub-national governance and development*, IGI Global, Hershey, ch. 6, pp. 117-149.

Javed, N 2020, '"It's been overwhelming": Oshawa's homeless population has soared under COVID-19. So it hired a private security firm to police its downtown', *The Toronto Star*, July 12.

Jessop, B 1982, *The capitalist state: Marxist theories and methods*, Martin Robertson, Oxford.

— 1993, 'Towards a Schumpeterian workfare state? Preliminary remarks on Post-Fordist political economy, *Studies in Political Economy*, vol. 40, no. 1, pp. 7-39.

Johal, S, Alwani, K, Thirgood, J & Spiro, P 2019, *Rethinking municipal finance for the new economy*, Munk School of Global Affairs and Public Policy, University of Toronto, Toronto.

Johne, M 2017, 'An Ontario success story, Oshawa bounces back from factory losses', *The Globe and Mail*, October 4.

Johnson, L 2009 'Valuing Arts & Culture in the Community', *Asia Pacific Journal of Arts and Cultural Management*, vol. 6, no. 2, pp. 471–487.

— 2017a, 'Can regional restructuring be socially inclusive? The case of Northern Futures in Geelong, Victoria', *8th State of Australian Cities National Conference*, Adelaide, South Australia.

— 2017b, *Northern Futures 2008-2016 Retrospect & Prospect: A Critical Assessment*, Deakin University, Geelong.

Johnson, LC, Mundell, M & Bartel, R 2020, *Resilient Geelong: Reasons for success and challenges for a post-COVID-19 future*, Committee for Geelong, Geelong.

Johnson, RB & Onwuegbuzie, AJ 2004, 'Mixed methods research: A research paradigm whose time has come', *Educational Researcher,* vol. 33, no. 7, pp. 14-26.

Jonas, AEG & Pincetl, S 2006, 'Rescaling regions in the state: The New Regionalism in California', *Political Geography*, vol. 25 no. 5, pp. 482-505.

Jones, MR 1997, 'Spatial selectivity of the state? The regulationist enigma and local struggles over economic governance', *Environment and Planning A*, vol. 29, no. 1, pp. 831-864.

Jones, MR & MacLeod, G 1999, 'Towards a regional renaissance? Reconfiguring and rescaling England's economic governance', *Transactions of the Institute of British Geographers*, vol. 24, no. 3, pp. 295-313.

Kavaratzis, M 2004, 'From city marketing to city branding: Towards a theoretical framework for developing city brands', *Place Branding*, vol. 1, no. 1, pp. 58–73.

Kemeny, T & Storper, M 2015, 'Is specialization good for regional economic development?', *Regional Studies*, vol. 49, no. 6, pp. 1003-1018.

Kenney, M & von Burg, U 1999, 'Technology, entrepreneurship, and path-dependence: Industrial clustering in Silicon Valley and Route 128', *Industrial and Corporate Change*, vol. 8, no. 1, pp. 67- 103.

King, A 2010, 'The odd couple: Margaret Archer, Anthony Giddens and British social theory', *The British Journal of Sociology*, vol. 61, no. 1, pp. 253-260.

Kitchen, HM & Slack, E 2006, *Trends in public finance in Canada,* Federation of Canadian Municipalities, Ottawa.

Klink, J, de Oliveira, VE & Zimerman, A 2013, 'Neither spatial Keynesianism, nor competitive neolocalism: Rescaling and restructuring the developmental state and the

production of space in Brazil', *International Journal of Urban Sustainable Development*, vol. 5, no. 1, pp. 25–39.

Krugman, P 1991, 'Increasing returns and economic geography', *Journal of Political Economy*, vol. 99, no. 31, pp. 483-499.

— 1998, 'What's new about the New Economic Geography?', *Oxford Review of Economic Policy*, vol. 14, no. 2, pp. 7-17.

Kurmelovs, R 2016, *The death of Holden: The end of an Australian dream*, Hachette Australia, Sydney.

Langmaid, A 2013, 'Hi-tech and health jobs are the future of Geelong', *Perth Now*, May 24.

Langmaid, A & Hurley, D 2013, 'Proud city will stage fightback after closure of one of Geelong's biggest manufacturers and employers', *News Corp Australia Network*, May 24.

Lannen, D 2016, 'Ford Geelong workers decline Broadmeadows plant's farewell to stay home', *The Geelong Advertiser*, September 30.

Larner, W & Walters, W 2002, 'The political rationality of ''new regionalism'': Toward a genealogy of the region', *Theory and Society*, vol. 31, no. 3 pp. 391-432.

Lecours, A 2019, 'Dynamic de/centralization in Canada, 1867–2010', *Publius: The Journal of Federalism*, vol. 49, no. 1, pp. 57–83.

Lees, L 2003, 'The ambivalence of diversity and the politics of urban renaissance: The case of youth in downtown Portland, Maine', *International Journal of Urban and Regional Research*, vol. 27, no. 3, pp. 613-634.

Legislative Assembly of Ontario 1983, *32e législature, 3e session, 3 juin,* Legislative Assembly of Ontario, retrieved from https://www.ola.org/fr/affaires-legislatives/documents-chambre/legislature-32/session-3/1983-06-03/journal-debats.

Leijonhufvud, A 1967, 'Keynes and the Keynesians: A suggested interpretation', *American Economic Review*, vol. 57, no. 2, pp.401-410.

Leone, R & Carroll, BW 2010, 'Decentralisation and devolution in Canadian social housing policy', *Environment and Planning C: Government and Policy*, vo. 28, no. 3, pp. 389-40.

Levitz, S 2018, 'Ordered Oshawa: Why this city is ranked Canada's most insecure', *National Post*, January 26.

Loveridge, S & Selting, AC 1998, 'A review and comparison of shift-share identities', *International Regional Science Review*, vol. 21, no. 1, pp. 37–58.

Lotz, J 2012, 'You get what you pay for: How Nordic cities are financed', *IMFG Papers on Municipal Finance and Governance*, No. 7, Institute on Municipal Finance and Government, Munk School of Global Affairs, University of Toronto, Toronto.

Lovering, J 1999, 'Theory led by policy: The inadequacies of the 'New Regionalism' (illustrated from the case of Wales)', *International Journal of Urban and Regional Research*, vol. 23, no. 2, pp. 379-395.

Lucas, RE 1988, 'On the mechanics of economic development', *Journal of Monetary Economics*, vol. 22, no. 1, pp. 3-42.

—1993, 'Making a miracle', *Econometrica*, vol. 61, no. 2, pp. 251-272.

Lynn, M 2018, 'Communities, Regions, States: Accountabilities and Contradictions', in A Rainie and M Grobbelaar (eds), *New Regionalism in Australia*, Routledge, London.

Mace, J 2018, 'Why GM's retreat from Oshawa may 'be a blow to Oshawa's heart', not its economy', *BNN Bloomberg*, November 30.

MacKinnon, D 2017, 'Labour branching, redundancy and livelihoods: Towards a more socialised conception of adaptation in evolutionary economic geography', *Geoforum*, vol. 79, pp. 70–80.

MacKinnon, D & Derickson, KD 2013, 'From resilience to resourcefulness: A critique of resilience policy and activism', *Progress in Human Geography*, vol. 37, no. 2, pp. 253–270.

Malizia, EE 1990, 'Economic growth and economic development: Concepts and measures', *The Review of Regional Studies, Southern Regional Science Association*, vol. 20 no. 1, pp. 30-36.

Malizia, EE & Ke, S 1993, 'The influence of economic diversity on unemployment and stability', *Journal of Regional Science*, vol. 33, no. 2, pp. 221–235.

Markusen, A 2003, 'Fuzzy concepts, scanty evidence, policy distance: The case for rigour and policy relevance in critical regional studies', *Regional Studies*, vol. 37, no. 6, pp. 701–71.

Marshall, A 1920, *Principles of economics*, 8th edn, Macmillan & Co., London.

Marston G and Watts R 2003, 'Tampering with the evidence: A critical appraisal of evidence based policy', *The Drawing Board: An Australian Review of Public Affairs,* vol. 3, no. 3, pp. 143–163.

Martin, R & Sunley, P 2006, 'Path dependence and regional economic evolution', *Journal of Economic Geography*, vol. 6, no. 4, pp. 395–437.

— 2015, 'On the notion of regional economic resilience: Conceptualization and explanation', *Journal of Economic Geography*, vol. 15, no. 1, pp. 1–42.

Martin, R, Sunley, P, Gardiner, B & Tyler, P 2016, 'How regions react to recessions: Resilience and the role of economic structure', *Regional Studies*, vol. 50, no. 4, pp. 561-585.

Martin, R, Tyler, P, Sunley, P, Pike, A, Bailey, D, Evenhuis, E, Gardiner, B & Swinney, P 2017, 'Cities and the national productivity problem', *Working Paper. 6*, Evidence submitted to the UK Government's Industrial Strategy Green Paper Consultation,

retrieved from https://www.cityevolutions. org.uk/wp-content/uploads/Project-Submission-toIndustrial-Strategy.pdf.

Massey, D 1995, *Spatial divisions of labor: Social structures and the geography of production*, 2nd edn, Routledge, New York.

— 2007 [1978] 'In what sense a regional problem?' *Regional Studies*, vol. 41, no. 1, pp. S49-S59.

Massey, D & Meegan, R (eds) 1985, 'Profits and job loss', *Politics and Method: Contrasting Studies in Industrial Geography*, Methuen & Co., New York, ch. 5, pp. 119-143.

Maxwell, JA 2010, 'Using numbers in qualitative research', *Qualitative Inquiry*, vol. 16 no. 6, pp. 475–482.

Mayor, M, López, AJ & Pérez, R 2007, 'Forecasting regional employment with shift-share and ARIMA modelling', *Regional Studies*, vol. 41, no. 4, pp. 543–551.

McCann, P 2020, 'Perceptions of regional inequality and the geography of discontent: Insights from the UK, *Regional Studies*, vol. 54, no. 2, pp. 256-267.

McCann, P & Ortega-Argilés, R 2015, 'Smart specialization, regional growth and applications to European Union cohesion policy', *Regional Studies*, vol. 49, no. 8, pp.1291-1302.

McLennan G 2004, 'Travelling with vehicular ideas: The case of the Third Way, *Economy and Society*, vol. 33, no. 4, pp. 484–499.

McMurtry, R & Curling, A 2008, *The review of the roots of youth violence*, vol. 1, Government of Ontario, Ottawa.

Meegan, R 2017 'Doreen Massey (1944–2016): A geographer who really mattered', *Regional Studies,* vol. 51, no. 9, pp. 1285-129.

Meijers, E & Romein, A 2003, 'Realizing potential: Building regional organizing capacity in polycentric urban regions', *European Urban and Regional Studies*, vol. 10, no. 2, pp. 173–186.

Melo, PC, Graham, DJ & Noland, RB 2009, 'A meta-analysis of estimates of agglomeration economies', *Regional Science and Urban Economics*, vol. 39, no. 3, pp. 332–342.

Miles, MB, & Huberman, AM 1994, *Qualitative data analysis: An expanded sourcebook*, Sage, London.

Millier Dickinson Blais 2013, *Sector analysis and cluster development strategy,* City of Oshawa, Oshawa.

Mittelman, JH 1996, 'Rethinking the "New Regionalism" in the context of Globalization', *Global Governance*, vol. 2, no. 2, pp. 189-213.

Mojtehedzadeh, S 2018, 'Spending on provincial retraining program offered to GM workers has declined sharply', *The Toronto Star*, November 28.

Morgan, K 2006, 'Devolution and development: Territorial justice and the North-South divide' *Publius*, vol. 36, no. 1, pp. 189-206.

Moulaert, F, Jessop, B & Mehmood, A 2016, 'Agency, structure, institutions, discourse (ASID) in urban and regional development', *International Journal of Urban Sciences*, vol. 20, no. 2, pp. 167-187.

Napthine, D 2018, 'Victoria needs a decade of decentralisation', *The Ballarat Courier*, May 19.

Naudé, W, Bosker, M & Matthee, M 2010, 'Export specialisation and local economic growth', *World Economy*, vol. 33, no. 4 pp. 552–572.

Neffke, F Hartog, M, Boschma, R & Henning, M 2018, Agents of structural change: the role of firms and entrepreneurs in regional diversification', *Economic Geography*, vol. 94, no. 1, pp. 23-48.

Neffke F, Henning M & Boschma R 2011, 'How do regions diversify over time? Industry relatedness and the development of new growth paths in regions', *Economic Geography*, Vol. 87, no. 3 pp. 237–265.

Nine News 2013, 'Vic premier sees light for Geelong', *Nine News*, May 24.

Northern Futures 2019, *Annual report 2019*, Northern Futures, Norlane.

Organisation for Economic Co-operation and Development (OECD) 2009, 'Revenue and expenditure structure by level of government', *Government at a Glance 2009*, OECD Publishing, Paris.

— 2016, *Back to work Australia: Improving the re-employment prospects of displaced workers*, OECD Publishing, Paris.

— 2019, 'Revenue and expenditure structure by level of government', *Government at a Glance* 2019, OECD Publishing, Paris.

Ortiz-Ospina, E & Roser, M 2016, 'Government spending', *Our World in Data*, Oxford University, retrieved from https://ourworldindata.org/government-spending.

O'Toole, E 2018, 'Labour and prosper', *Erin O'Toole, Member of Parliament for Durham*, viewed December 15, https://erinotoolemp.com/2018/12/04/labour-and-prosper/.

Overman, HG & Puga, D 2012, *Labour pooling as a source of agglomeration: An empirical investigation*, EFIGE working paper 57, Bruegel, Brussels.

Papageorgiou, T & Michaelides, PG 2016, 'Joseph Schumpeter and Thorstein Veblen on technological determinism, individualism and institutions', *The European Journal of the History of Economic Thought*, vol. 23, no. 1, pp. 1-30.

Parkinson, M, et al. 2012, *Second-tier cities and territorial development in Europe: Performance, policies and prospects,* SGPTD Final Report, European Union, Luxembourg.

Parliament of Australia 2018, *Regions at the ready: Investing in Australia's future*, House of Representatives Select Committee on Regional Development and Decentralisation, Parliament of Australia, Canberra.

Parliament of Victoria 2013a, *Inquiry into local economic development initiatives in Victoria*, Economic Development and Infrastructure Committee, Parliament of Victoria, Melbourne.

—2013b, *Inquiry on growing the suburbs: Infrastructure and business development in outer suburban Melbourne*, Parliamentary Paper PP 236, Session 2010-13, Outer Suburban/Interface Services and Development Committee, Parliament of Victoria, Melbourne.

Parsons, W 2002 From muddling through to muddling up – evidence-based policy making and the modernisation of British Government. *Public Policy and Administration* 17(3): 43–60.

Partridge, MD Rickman, DS, Olfert, MR & Tan, Y 2015 'When spatial equilibrium fails: Is place-based policy second best?', *Regional Studies*, vol. 49, no. 8, pp. 1303-1325.

Pavlínek, P & Ženka, J 2010, 'The 2008–2009 automotive industry crisis and regional unemployment in Central Europe', *Cambridge Journal of Regions, Economy and Society*, vol. 3, no. 3, pp. 349-365.

Pawson, R 2006, *Evidence-based policy: A realist perspective*, Sage, London.

Pawson, H, Hulse, K & Cheshire, L 2015, *Addressing concentrations of disadvantage in urban Australia,* AHURI Final Report No.247, Australian Housing and Urban Research Institute, Melbourne.

Peck, J 2003, 'Geography and public policy: Mapping the penal state', *Progress in Human Geography*, vol. 27, no. 2, pp. 222-232.

— 2005, 'Struggling with the Creative Class', *International Journal of Urban and Regional Research*, vol. 29, no. 4, pp. 740-770.

— 2015, 'Cities beyond compare?', *Regional Studies*, vol. 49, no. 1, pp. 160-182.

Peck, J, & Jones, M 1995, 'Training and enterprise councils: Schumpeterian workfare state, or what? *Environment and Planning A: Economy and Space*, vol. 27, no. 9, pp. 1361–1396.

Peck, J & Theodore, N 2010, 'Mobilizing policy: Models, methods, and mutations', *Geoforum*, vol. 41, no. 2, pp. 169-174.

— 2012, 'Follow the policy: A distended case approach', *Environment and Planning A*, vol. 44, no. 1, pp. 21–30.

Pegler, C, Li, H & Pojani, D 2020, 'Gentrification in Australia's largest cities: a bird's-eye view', *Australian Planner,* vol. 56, no. 3, pp. 191-205.

Pendall, R, Foster, K A & Cowell, M 2010, 'Resilience and regions: Building understanding of the metaphor', *Cambridge Journal of Regions, Economy and Society*, vol. 3, no. 1, pp. 71–84.

Perkel, C 2018, 'It's bad': Employees, families digest 'devastating' Oshawa GM plant closure', *Global News*, November 26.

Pierce, R 2008, 'Qualitative versus quantitative methods: A relevant argument?', In *Research methods in politics*, Sage, London, ch. 4, pp. 40-50.

Pike, A 2015, *Origination: The geographies of brands and branding*, Wiley Blackwell, West Sussex.

Pike, A, Dawley, S & Tomaney, J 2010, 'Resilience, adaptation and adaptability', *Cambridge Journal of Regions, Economy and Society*, vol. 3, no. 1, pp. 59–70.

Pike, A, MacKinnon, D, Coombes, M, Champion, T, Bradley, D, Cumbers, A, Robson, L & Wymer, C 2016, *Uneven Growth: Tackling City Decline*, The Joseph Rowntree Foundation, York.

Piore, MJ 2006, 'Combining qualitative and quantitative tools: Qualitative research: Does it fit in economics?', in E Perecman & SR Curran (eds), *A handbook for social science field research: Essays & bibliographic sources on research design and methods*, Sage, London, ch. 7, pp. 142-160.

Planning Institute of Australia 2018, 'Planning is part of the solution to housing affordability – not the problem, PIA says', *Planning Institute of Australia,* June 4, retrieved from https://www.planning.org.au/news-archive/2017-2018-media-releases/planning-is-part-of-the-solution-to-housing-affordability-not-the-problem-pia-says.

Plunkett, JW 2007, *Plunkett's automobile industry almanac 2008*, Plunkett Research Ltd., Houston.

Polis Partners 2020, *The city report: Tracking the performance of Australian cities and towns*, Polis Partners, Canberra.

Porter, ME 1998, *Competitive advantage: Creating and sustaining superior performance*, The Free Press, New York.

Porter et al. 2018, *Special report: End of an era for Canada's auto industry?,* Bank of Montreal, Montreal.

Powell, J & Spencer, M 2002, 'Giving them the old one-two: Gentrification and the K.O. of impoverished urban dwellers of color', *Howard Law Journal*, vol. 4, no. 3, pp. 433-490.

Prime Minister of Australia 2019, '$355 million investment secures Geelong City Deal', *Department of the Prime Minister and Cabinet*, viewed March 11, https://www.pm.gov.au/media/355-million-investment-secures-geelong-city-deal.

Productivity Commission 2001, *Structural adjustment: Key policy issues*, Productivity Commission, Canberra.

— 2012, *Trade and assistance review 2010–11*, Productivity Commission, Canberra.

— 2014, *Australia's automotive manufacturing industry*, Inquiry Report No. 70, Productivity Commission, Canberra.

— 2017a, *Shifting the Dial: 5 Year Productivity Review*, Inquiry Report No. 84, Productivity Commission, Canberra.

— 2017b, *Transitioning Regional Economies*, Study Report, Productivity Commission, Canberra.

— 2018, 'Overview and Recommendations', *Horizontal Fiscal Equalisation*, Report no. 88, Productivity Commission, Canberra.

Rainnie, A, Beer, A, & Rafferty, M 2018, *Effectiveness of place based packages: Preliminary framework report*, Regional Australia Institute, Canberra.

Rankin, KN & McLean, H 2015, 'Governing the commercial streets of the city: New terrains of disinvestment and gentrification in Toronto's inner suburbs', *Antipode*, vol. 47, no. 1, pp. 216–239.

Ray, MD, Lamarche, RH, MacLachlan, IR 2013 'Restoring the "regional" to regional policy: A regional typology of Western Canada', *Canadian Public Policy,* vol. 39, no. 3, pp. 411-429.

Regional Australia Institute (RAI) 2017, *[IN]SIGHT: Australia's regional competitiveness index*, Regional Australia Institute, viewed July 27, http://www.regionalaustralia.org.au/home/tools-and-products/insight/.

Regional Development Australia (RDA) Hunter 2017, RDA Hunter implements Smart Specialisation to drive international competitiveness', *RDA Hunter*, viewed 25 August, http://rdahunter.org.au/news-events/rda-hunter-implements-smart-specialisation

Regional Development Victoria (RDV) 2015, 'Quickstep Holdings relocates to Geelong', *Regional Development Victoria,* August 11, retrieved from https://www.rdv.vic.gov.au/news/quickstep-holdings-relocates-to-geelong.

— 2020a, 'Barwon South West's Barwon Region', *Regional Development Victoria*, viewed July 6, https://www.rdv.vic.gov.au/victorias-regions/barwon-south-west/barwon.

— 2020b, 'Victorian GovHubs', Regional Development Victoria, viewed May 26, https://www.rdv.vic.gov.au/grants-and-programs/victorian-govhubs.

Region of Durham 2016, *Overview report: Health Neighbourhoods in Durham*, Region of Durham Whitby.

— 2018, *Annual report*, Region of Durham, Whitby

— 2019a, *At home in Durham: Five-year review*, Region of Durham, Whitby.

— 2019b, *Business counts: highlights*, Region of Durham, Whitby.

— 2019c, *Council information package*, June 21, Region of Durham, Whitby.

— 2019d, *Growth management: Urban system discussion paper,* Planning and Economic Development Department, Region of Durham, Whitby.

— 2019e, *Making children the priority: Early childhood development in Priority Neighbourhoods*, Region of Durham, Whitby.

REMPLAN 2020, 'Greater Geelong, COVID-19: Impact on Employment', *REMPLAN*, retrieved from https://app.remplan.com.au/geelong/economy/covid-19/impact-on-employment?state=R2RYFn!y08BCkxL9SGJ6RDfoQrQ4hBFDhV3oSdhQhBhnVfGU2HAUzzxYTz53.

Rigby, DL 2015 'Technological relatedness and knowledge space: Entry and exit of US cities from patent classes', *Regional Studies*, vol. 49, no. 11, pp. 1922-1937.

Rimmer, B 2012, 'Benchmarking, competitive federalism and devolution: How the COAG reform agenda will lead to better services', in A Fenna & F Knupling (eds), *Benchmarking in federal systems*, Productivity Commission, Melbourne.

Robot Army Productions 2014, 'Geelong Reinvented'*, Tourism Greater Geelong and the Bellarine*, November 6, retrieved from https://www.youtube.com/watch?v=aTZkob0Dmo0.

Rodgers, A 1957, 'Some aspects of industrial diversification in the United States', *Economic Geography*, vol. 33, no. 1, pp. 16–30.

Rodríguez-Pose, A 2013, 'Do institutions matter for regional development?, Regional Studies, vol. 47, no. 7, pp. 1034-1047.

— 2018, 'The revenge of the places that don't matter (and what to do about it)', *Cambridge Journal of Regions, Economy and Society*, vol. 11, no. 1. pp. 189-209.

Romer, PM 1986, 'Increasing Returns and Long-Run Growth', *The Journal of Political Economy*, vol. 94, no. 5, pp. 1002-1037.

— 1994, 'The origins of endogenous growth', *Journal of Economic* Perspectives, vol. 8, no. 1, pp. 3–22.

Rose, A 1972, *Governing Metropolitan Toronto: A social and political analysis, 1953-1971*, University of California Press, Berkeley and Los Angeles.

Rutherford, T & Holmes, J 2008, ''The flea on the tail of the dog': Power in global production networks and the restructuring of Canadian automotive clusters', *Journal of Economic Geography*, vol. 8, no. 4 pp. 519–54.

— 2013, '(Small) differences that (still) matter? Cross-border regions and work place governance in the Southern Ontario and US Great Lakes automotive industry', *Regional Studies*, vol. 47, no. 1, pp. 116-127.

Ryan, R &Woods, R 2015, 'Local government capacity in Australia', *Public Policy and Administration*, vol. 14, no. 3, pp. 225-248.

Safford, S 2004 ‘Why the Garden Club couldn’t save Youngstown: Civic infrastructure and mobilisation in crisis, *IPC working paper series, MIT-IPC-04-002*, Massachusetts Institute of Technology, Cambridge.

— 2009 *Why the Garden Club couldn’t save Youngstown: The transformation of the Rust Belt*, Harvard University Press, Cambridge.

Sancton, A 1994, *Governing Canada’s city-regions: Adapting form to function*, The Institute for Research on Public Policy, Montreal.

Sayer, A 1992, *Method in social science: A realist approach*, 2nd edn, Routledge, London.

— 2000, *Realism and social science*, Sage, London.

— 2005, ‘Reductionism in social science’, *Paper for Workshop on Challenges to Dominant Modes of Knowledge: Reductionism*, December 16-17, Paris, France.

Savoie, D 2003, ‘Reviewing Canada’s regional development efforts’, *Royal Commission on Renewing and Strengthening our Place in Canada*, Government of Newfoundland and Labrador, St. John’s.

Saxenian, A 1996, ‘Inside-out: Regional networks and industrial adaptation in Silicon Valley and Route 128’, *Cityscape: A Journal of Policy Development and Research*, vol. 2, no. 2, pp. 41-60.

Sayer, A & Morgan, K 1985, ‘A modern industry in a declining region: Links between method, theory and policy’, in D Massey & R Meegan, *Politics and method: Contrasting studies in industrial geography*, Methuen & Co., New York, ch. 5, pp. 119-143.

Schrank, A 2006, ‘Case studies: Case-based research’, in E Perecman & SR Curran (eds), *A handbook for social science field research: Essays & bibliographic sources on research design and methods*, Sage, London, ch. 2, pp. 21-44.

Scorsone, E & Bateson, B 2011, *Long-Term Crisis and Systemic Failure: Taking the Fiscal Stress of America’s Older Cities Seriously – Case Study: Flint, Michigan*, Michigan State University, Lansing.

Scott, A 1988, *Metropolis: From the division of labor to urban form*, University of California Press, Berkeley.

— 1998, *Regions and the world economy: The coming shape of global production, competition, and political order*, Oxford University Press, New York.

— 2019 Residential adjustment and gentrification in Los Angeles, 2000–2015: theoretical arguments and empirical evidence, Urban Geography, 40:4, 506-528.

Scott, AJ, & Garofoli, G (eds) 2007, ‘The regional question in economic development’, in *Development on the ground: Clusters, networks and regions in emerging economies*, Routledge, London, ch. 1, pp. 3-22.

Sergerie, F 2016, ‘Internal migration in Canada from 2012/2013 to 2014/2015: Report on the demographic situation in Canada’, *cat. no. 91-209-X*, Statistics Canada, Ottawa.

Sheppard, E 2002, 'The spaces and times of Globalization: Place, scale, networks, and positionality', *Economic Geography,* vol. 78, no. 3, pp. 307-330.

Short, JR 1999 'Urban Imagineers: Boosterism and the Representation of Cities', in AEG Jonas & D Wilson (eds) *The urban growth machine: Critical perspectives two decades later,* State University of New York Press, New York, ch. 3, pp. 37–54.

Siegel, D 1997, 'Local government', in G White (ed), *The government and politics of Ontario*, 5th edn, University of Toronto Press, Toronto, ch. 6, pp. 126-157.

Siegel, P, Alwang, BJ & Johnson, TG 1995, 'Regional economic diversity and diversification' *Growth and Change*, vol.26, no. 2, pp. 261-84.

Siemiatycki, E 2012, 'Forced to concede: Permanent restructuring and labour's place in the North American auto industry', *Antipode*, vol. 44, no. 2, pp. 453-473.

— 2013, 'A smooth ride? From industrial to creative urbanism in Oshawa, Ontario', *International Journal of Urban and Regional Research*, vol. 37, no. 5, pp. 1766-1784.

Simmie, J & Martin, RL 2010, 'The economic resilience of regions: Towards an evolutionary approach', *Cambridge Journal of Regions, Economy and Society*, vol. 3, no. 1, pp. 27-43.

Sjoholm, F 1999, 'Productivity growth in Indonesia: The role of regional characteristics and direct foreign investment', *Economic Development and Cultural Change,* vol. 47, no. 3, pp. 559-584.

Skills and Jobs Centre 2018, *Tracked ex-Ford workers case management report*, Skills and Jobs Centre, The Gordon, Geelong.

Slack, E 2006, *Fiscal imbalance: The case for cities*, Federation of Canadian Municipalities, Ottawa.

Smith, DE 2010, *Federalism and the Constitution of Canada*, University of Toronto Press, Toronto.

Snell, D & Gekara, V 2020, 'Unions and corporate social responsibility in a liberal market context: The case of Ford's shutdown in Australia', *Journal of Industrial Relations*, vol. 62, no. 5, pp. 713-734.

Standing, G 2011, *The precariat: The new dangerous class*, Bloomsbury, London.

Starr, MA 2014, 'Qualitative and mixed-methods research in economics: Surprising growth, promising future', *Journal of Economic Surveys*, vol. 28, no. 2, pp. 238–264.

Statistics Canada 1952, *1951 Census*, Statistics Canada, Ottawa.

— 1962, *1961 Census,* Statistics Canada, Ottawa.

— 1972, *1971 Census*, Statistics Canada, Ottawa.

— 1977, *1976 Census*, Statistics Canada, Ottawa.

— 1982, *1981 Census*, Statistics Canada, Ottawa.

— 1987, *1986 Census*, Statistics Canada, Ottawa.

— 1992, *1991 Census*, Statistics Canada, Ottawa.

— 1997, *1996 Census*, Statistics Canada, Ottawa.

— 2002, *2001 Census*, Statistics Canada, Ottawa.

— 2007, *2006 Census*, Statistics Canada, Ottawa.

— 2012, *2011 Census*, Statistics Canada, Ottawa.

— 2017, *2016 Census*, Statistics Canada, Ottawa.

— 2019, 'Local general government revenue and expenditures, year ending December 31 (x 1,000)', *Table 10-10-0042-01*, Statistics Canada, Ottawa.

— 2020, 'Labour force characteristics by census metropolitan area, three-month moving average, seasonally adjusted (x 1,000)', *Table 14-10-0294-02*, Statistics Canada, Ottawa.

— 2021a, 'Components of population change by census metropolitan area and census agglomeration', *Table 17-10-0136-01*, Statistics Canada, Ottawa.

— 2021b, 'Interprovincial and intraprovincial migrants, by census metropolitan area and census agglomeration of origin and destination', *Table 17-10-0141-01*, Statistics Canada, Ottawa.

Storper, M 2013, *Keys to the city*, Princeton University Press, Princeton.

— 2017, 'Explaining regional growth and change', in R Huggins & P Thompson (eds), *Handbook of regions and competitiveness: Contemporary theories and perspectives on economic* development, Edward Elgar Publishing, Cheltenham, ch. 2, pp. 35-48.

Storper, M & Scott, AJ 2009, 'Rethinking human capital, creativity and urban growth', *Journal of Economic Geography*, vol. 9, no. 2, pp. 147–167.

Streck 2018, ''One of the greatest honours': Dan Carter sworn in as mayor of Oshawa, *Global News*, December 3.

Sweeney, B Mordue, G & Carey, J 2020, 'Resilient or resistant? Critical reflections on resilience in an old industrial region', *Geoforum*, vol. 110, pp. 125–135.

Swyngedouw, E 2005, 'Governance, innovation and the citizen: The Janus face of governance-beyond-the-state', *Urban Studies*, vol. 42, no. 11, pp. 1991–2006.

Szekely, R 2015, 'Local historian explores myth of 'dirty south Oshawa', *Durham Region News*, September 25.

— 2019, 'Oshawa and Whitby go toe-to-toe in fight for Durham's new hospital', *The Toronto Star*, September 18.

Taylor, Z 2019, ‘Ontario's “places that don't matter” send a message: The fault lines dividing the province are getting deeper’, *Inroads: A Journal of Opinion*, vol. 44, pp. 93-99.

Taylor, Z & Nostrand, JV 2008, *Shaping the Toronto region, past, present and future: An exploration of the effectiveness of changes to planning policies governing greenfield development in the Greater Golden Horseshoe*, The Neptis Foundation, Toronto.

Temenos, C & McCann, E 2013, ‘Geographies of policy mobilities’, *Geography Compass*, vol. 7, no. 5, pp. 344–357.

Tencer, D 2016, ‘Best city in Canada for work? ‘Rust belt’ town Oshawa, *The Huffington Post*, May 10.

— 2018, ‘GM’s Oshawa shutdown: What will it cost Canada’s economy?’, *The Huffington Post*, November 27.

— 2019 ‘Canada’s vacant home rate is 5 times higher than U.S., and rising’, *Huffington Post*, August 15.

The Oshawa Express 2016, ‘Feds launch infrastructure funding program, *The Oshawa Express*, May 31.

The Sydney Morning Herald 2013, ‘Geelong gets NDIS HQ: Gillard’, *The Sydney Morning Herald*, June 3.

Tierney, L et. al 1975, *Victorian evaluation of the Australian Assistance Plan*, Australian Social Welfare Commission, Canberra.

Tobin, J 1975, ‘Keynesian models of recession and depression’, *The American Economic Review,* vol. 65, no. 2, pp. 195-202.

Tomaney, J 2012, ‘Is there a case for regional policy in Australia?’, *Australian Journal of Regional Studies*, vol. 18, no. 1, pp. 150-156.

Toner, P & Douglas, N 2020, *Diversity* and Growth in Regional Development*: Report for Regional Australia Institute*, RMIT University, Melbourne.

Tonts, M & Haslam-McKenzie, F 2005, ‘Neoliberalism and changing regional policy in Australia’, *International Planning Studies*, vol. 10, no. 3-4, pp. 183-200.

Toronto Real Estate Board (TREB) 2019, *Market watch: October 2019*, TREB, Toronto.

Twomey, A & Withers, G 2007, *Australia’s federal future: Delivering growth and prosperity*, Federalist Paper 1, Council for the Australian Federation, Canberra.

Unifor Local 222 2020, *Unifor-General Motors Bargaining Report: Summary of the 2020 Tentative Agreement Between Unifor and General Motors*, Unifor Local 222, November, retrieved from http://local222.ca/wp-content/uploads/gm_master_bargaining_report-final_0.pdf

United Nations 1999, *Decentralization: A sampling of definitions*, Joint UNDP-Government of Germany Evaluation Working Paper, United Nations, New York.

— 2016, *The concept of economic diversification in the context of response measures: Technical paper by the secretariat*, Framework Convention on Climate Change, United Nations, New York.

Union Bank of Switzerland (UBS) 2017, *UBS global real estate bubble*, UBS, Zurich.

University of Ontario Institute of Technology (UOIT) 2012, 'FedDev Ontario invests in UOIT research and industry collaborations', *UOIT*, November 22, retrieved from https://news.ontariotechu.ca/archives/2012/11/feddev-ontario-invests-in-uoit-research-and-industry-collaborations.php.

— 2015, *Economic impact of UOIT on Durham Region and Northumberland County*, UOIT, Oshawa.

Van Houtum, H & Lagendijk, A 2001, 'Contextualising regional identity and imagination in the construction of polycentric urban regions: The cases of the Ruhr area and the Basque Country', *Urban Studies,* vol. 38, no. 4, pp. 747–767.

Van Oort, De Geus, S & Dogaru, T 2015, 'Related variety and regional economic growth in a cross-section of European urban regions', *European Planning Studies*, vol. 23, no. 6, pp. 1110-1127.

Vazquez-Barquero, A 2007, 'Endogenous development: analytical and policy issues' in AJ Scott & G Garofoli (eds), in *Development on the ground: Clusters, networks and regions in emerging economies*, Routledge, London, ch. 2, pp. 23-44.

Vazquez-Barquero, A & Rodriguez-Cohard, JC 2016, 'Endogenous development and institutions: Challenges for local development initiatives', *Environment and Planning C: Government and Policy*, vol. 34, no. 6, pp. 1135-1153.

Victorian Auditor-General 2015, *Regional Growth Fund: Outcomes and learnings*, Victorian Auditor-General's Office, Melbourne.

Victorian Auditor-General 2019, *Outcomes of investing in regional Victoria*, Victorian Auditor-General's Office, Melbourne.

Victorian Government 2005a, 'Government expands Renewal program to disadvantaged areas', Department of Human Services, October 17, retrieved from https://hnb.dhs.vic.gov.au/web/pubaff/medrel.nsf/LinkView/545E5BA55C42A225CA25709C007EFB17?OpenDocument.

— 2005b, 'Neighbourhood Renewal extended in Corio/Norlane', Department of Human Services, November 8, retrieved from https://hnb.dhs.vic.gov.au/web/pubaff/medrel.nsf/LinkView/8C955E5A1CCAF7FBCA2570B200769C16?OpenDocument.

— 2010, *Victoria's regional centres: A generation of change – Geelong*, Department of Planning and Community Development, Melbourne.

— 2014, *Plan Melbourne: Metropolitan planning strategy*, Department of Transport, Planning and Local Infrastructure, Melbourne.

— 2016a, *Commission of inquiry into Greater Geelong City Council*, An Independent Commission of Inquiry established by the Minister for Local Government, Melbourne.

— 2016b, 'Dismissal of Greater Geelong City Council', Office of the Premier, April 12, retrieved from https://www.premier.vic.gov.au/dismissal-of-greater-geelong-city-council/.

— 2017, *Plan Melbourne 2017-2050*, Department of Environment, Land, Water and Planning, Melbourne.

— 2020a, *A framework for place-based approaches: The start of a conversation about working differently for better outcomes*, Victorian Government, Melbourne.

— 2020b, *Population and Housing in Regional Victoria: Trends and Policy Implications*, Department of Environment, Land, Water and Planning, Melbourne.

Visit Melbourne 2019, 'Geelong and the Bellarine: Arts and Culture', *Visit Melbourne*, viewed December 12, https://www.visitmelbourne.com/regions/geelong-and-the-bellarine/things-to-do/art-theatre-and-culture.

Wang, L, Li, W, Wang, S & Li, J 2015, 'Examining urban expansion in the Greater Toronto Area using Landsat imagery from 1974–2014', *Geomatica*, vol. 69, no. 2, pp. 161-172.

Wagner, JE & Deller, SC 1998, 'Measuring the effects of economic diversity on growth and stability', *Land Economics*, vol. 74, no. 4, pp. 541-56.

Walks, A 2013, 'Income inequality and polarization in Canada's cities: An examination and new form of measurement', Cities Centre, University of Toronto, Toronto.

Ward, K 2010, 'Towards a relational comparative approach to the study of cities', *Progress in Human Geography*, vol. 34, no. 4, pp. 471–487.

Warnaby G & Medway, D 2013, 'What about the 'place' in place marketing?', *Marketing Theory*, vol. 13, no. 3, pp. 345-363.

Wayland, M 2018, 'Unlike 2008, GM cutting jobs, plants proactively', *Automotive News,* December 3.

Weller, S 2017, 'Fast parallels? Contesting mobile policy technologies', *International Journal of Urban and Regional Research*, vol.41, no. 5, pp.821-837.

Weller, S & Tierney, J 2017, 'Evidence in the networked governance of regional decarbonisation: A critical appraisal', *Australian Journal of Public Administration*, vol. 77, no. 2, pp. 280-293.

Weller, S & van Hulten, A 2012, 'Gentrification and displacement: The effects of a housing crisis on Melbourne's low-income residents, *Urban Policy and Research*, vol. 30, no. 1, pp. 25-42.

White, G 2000, 'Revolutionary change in the Ontario Public Service', in EA Linquist (ed), *Government restructuring and career public service in Canada*, The Institute of Public Administration Canada, Toronto, ch. 12, pp. 310-348.

— 2007, *The Growth Plan for the Greater Golden Horseshoe in historical perspective*, Paper No. 4, The Neptis Foundation, Toronto.

Whittemore, R, Chase, SK, & Mandle, CL 2001, 'Validity in qualitative research', *Qualitative Health Research,* vol. 11, no. 4, pp. 117-132.

Wilkins, M & Hill, FE 2011, *American business abroad: Ford on six continents*, 2nd edn, Cambridge University Press, New York.

Williams, R, 2015, *Keywords*: *A vocabulary of culture and society*, 3rd edn, Oxford University Press, Oxford.

Williamson, OE 1979, 'Transaction-cost economics: The governance of contractual relations', *The Journal of Law and Economics*, vol. 22, no. 2, pp.233-261.

Wilson, DA 2016, *The Metropolitan Auckland Project: A Step-Change in Governance and Regional Economic Development in a City-Region*, PhD thesis, Auckland University of Technology, Auckland.

Winchester, HPM 1996, 'Ethical issues in interviewing as a research method in human geography', *Australian Geographer*, vol. 2, no. 1, pp. 117-131.

Wittnebel 2018, 'Oshawa to be "major player" in tech sector', *The Oshawa Express*, May 16.

Wolfe, D 2010, 'The strategic management of core cities: Path dependency and economic adjustment in resilient regions', *Cambridge Journal of Regions, Economy and Society*, vol. 3, no. 1, pp. 139–152.

Wolfe, D & Goracinova, E 2017, 'Regional resilience and Ontario's automotive cluster: Its future in the digital age', *Paper Prepared for the Annual CDO Partnership Network Conference Montréal, QC, May 1-3, Innovation Policy Lab*, Munk School of Global Affairs, University of Toronto, Toronto.

World Bank 2009, *World development report 2009: Reshaping economic geography*, World Bank, Washington, D.C.

World Trade Organization (WTO) 2019, *Subsidies: New and full notification pursuant to Article XVI:1 of the GATT 1994 and Article 25 of the Agreement on Subsidies and Countervailing Measures: Australia*, Committee on Subsidies and Countervailing Measures, October 14, Geneva.

Yamamoto, D 2011, 'Regional resilience: Prospects for regional development research', *Geography Compass*, vol. 5, no. 1, pp.723–736.

Yaropud, T, Gilmore, J & LaRochelle-Côté, S 2019, 'Results from the 2016 Census: Long commutes to work by car', *Insights on Canadian Society*, cat. no. 75-006-X, Statistics Canada, Ottawa.

Yates, C 2015, How *can public policy help sustain a globally competitive Canadian automotive industry?*, Automotive Policy Research Centre, McMaster University, Hamilton.

Yeomanson, A (2018), ‘Growing up Oshawa: Changing times in the city that General Motors built’, *The Globe and Mail*, November 30.

Yeung, HW 1997, ‘Critical realism and realist research in human geography: A method or a philosophy in search of a method?’, *Progress in Human Geography*, vol. 21, no. 1, pp. 51–74.

— 2003, ‘Practicing new economic geographies: A methodological examination’, *Annals of the Association of American Geographers*, vol. 93, no. 2, pp. 442–462.

Yin, RK 2003, *Case study research: Design and methods*, 3rd edn, Sage, Thousand Oaks.

— 2013, ‘Validity and generalization in future case study evaluations’, *Evaluation,* vol. 19, no. 3, pp. 321–332.

Zeisel, J 1981, *Inquiry by design: Tools for environment behavior research*, Cambridge University Press, Cambridge.

Zuk, M, Bierbaum, AH, Chapple, K, Gorska, K & Loukaitou-Sideris, A 2018, ‘Gentrification, displacement, and the role of public investment’, *Journal of Planning Literature*, vol. 33, no. 1, pp. 31–44.

Appendices

Appendix A - Programs and Investment in Geelong

Program	Program Type and Details	Funding Estimates
Geelong Innovation and Investment Fund (GIIF) (2007-2010) **Geelong Region Innovation and Investment Fund (GRIIF) (2014-2017)** **Local Industry Fund for Transition (LIFT) (2017-2018)**	**Program Type:** Place-based Co-Investment; Investment Attraction **Program Goals:** Regional Innovation and Diversification; Regional Transition; Labour Market Adjustment; **Details:** Provides co-investment for new business initiatives in the Geelong Region to diversify the economy in response to plant closures in the automotive and aluminium manufacturing industries.	**Funding Source:** Australian Federal Government (Major funder); Victorian State Government; Ford (GIIF and GRIIF); Alcoa (GRIIF); Victorian State Government (LIFT) **GIIF:** $24 Million **GRIIF Funding Total:** $26.8 Million ($2.5 million unspent) **Greater Geelong GRIIF Funding:** $19.5 Million LIFT funding total included in RJIF
Regional Jobs and Investment Packages (RJIP) – Geelong Region (2017)	**Program Type:** Place-Based Co-Investment; Investment Attraction; Infrastructure; Skills and Employment **Program Goals:** Regional Diversification; Spatial Equalisation; Labour Market Adjustment **Details:** Broad diversification program targeted at ten disadvantaged regional areas across Australia. It has three funding streams – Business Innovation; Skills and Training; and Infrastructure. Geelong funding was primarily allocated to Business Innovation with some funding provided for Infrastructure.	**Funding Source:** Australian Federal Government **'Geelong Region' Funding Total**: $19.9 Million **Greater Geelong Funding -** **Enterprise Assistance:** $11.2 Million **Infrastructure:** $2 Million
Ford Transition Project (FTP) (2013-2017; 2017-onwards Skills and Jobs Centre phase)	**Program Type:** Skills, Education and Employment **Program Goals:** Labour Market Adjustment **Details**: Established as a one-stop shop for workers to receive assistance related to employment, education and training and offering advice with accessing various programs. The FTP was outsourced to a private service provider, Auto Skills Australia and was eventually incorporated in the Skills and Jobs Centre at The Gordon TAFE.	**Funding Source:** Australian Government (FTP); Victorian State Government (Skills and Jobs Centre) **Funding Total:** $5.2 Million (FTP) N/A (Skills and Jobs Centre)
Growth Fund **(Part of the Automotive Transformation Scheme)** **Automotive Diversification Programme** **Automotive Industry Structural Adjustment Programme** **Next Generation Manufacturing Investment Programme (2014-2020)**	**Program Type:** Industry-Based Co-Investment; Place-Based Co-Investment; Enterprise Assistance; Investment Attraction; Skills, Education and Employment **Program Goals:** Manufacturing Industry Diversification; Manufacturing Industry Support; Labour Market Adjustment; Business Innovation **Program Details:** Includes a variety of streams related to employment, training and automotive manufacturing industry co-investment grants aimed at either diversifying or consolidating business activities.	**Funding Source:** Australian Government (Major Funder); Victorian State Government, South Australian State Government **Greater Geelong Funding Total -** **Next Generation Manufacturing Investment Programme**: $3.4 Million **Automotive Diversification Programme**: $2 Million $15 Million Automotive Industry Structural Adjustment Program is not Geelong-specific

Program	Program Type and Details	Funding Estimates
Advanced Manufacturing Fund **Advanced Manufacturing Growth Fund** **Automotive Innovation Labs Program (2014-2020)**	**Program Type:** Industry-based Co-Investment; Enterprise Assistance **Program Goals:** Manufacturing Industry Diversification; Innovation **Program Details:** Provides co-investment for SME manufacturing firms to diversify their activities.	**Funding Source:** Federal Government **Geelong Funding**: **Advanced Manufacturing Growth Fund:** $11.7 Million **Automotive Innovation Labs Program**: $140 Thousand
Geelong Development Fund – Geelong Advancement Fund and Greater Geelong Industry Fund (2012-2014)	**Program Type:** Place-Based Co-Investment**;** Housing, Institutional and Community Infrastructure **Program Goals:** Business innovation; Infrastructure and housing support **Details:** A broad-based structural adjustment program. Included co-investment; residential housing and community development streams	**Funding Source:** Victorian State Government **Funding:** $15 Million Victorian State Government contribution (included in the Victorian State Government's Regional Growth Fund) $5 Million Provided by Alcoa for Skills and Employment Training not Included in the Fund
Skilling the Bay (2011-present) **Northern Futures (2007-present)** **Whittington Works Alliance – Opportunity East program**	**Program Type:** Place-based Skills, Education and Employment **Program Goals:** Labour-market adjustment; Spatial Equalisation **Program Details:** Skilling the bay is a Geelong-wide program aimed at improving education, skills and employment outcomes. Northern Futures was established as part of the Victorian State Government's response to Ford retrenchments and aims to improve job opportunities for residents of Geelong's north. Whittington Works Alliance is a similar project to Northern Futures but focused on Geelong's south-eastern disadvantaged suburbs, and was established as part of the broader Whittington Community Renewal Project.	**Funding Source:** Various (Primarily State Government) **Total Funding:** Variable
Neighbourhood Renewal Corio-Norlane (2002-2011) **Community Jobs Program and Regional Jobs Program** **New Norlane (2014-present)** **Whittington Community Renewal Project**	**Program Type:** Residential Housing; Place-Based Skills, Education and Employment **Program Goals:** Neighbourhood revitalisation; Labour Market Adjustment; Spatial Equalisation **Program Details:** These programs are broad skills, employment and infrastructure initiatives targeted at public housing residents	**Funding Source:** State Government (All); Local Government (Whittington project) **Neighbourhood Renewal:** Total Program: N/A 2010 Allocation: $4 Million **New Norlane:** $80 Million **Whittington Community Renewal Project: N/A**
G21 Region Opportunities for Work (GROW) (2014-present)	**Program Type:** Strategic Planning; Place-Based Skills, Education and Employment; Investment Attraction; Infrastructure **Program Goals:** Labour Market Adjustment; Place-Based Impact Investment; Spatial Equalisation; Neighbourhood Revitalisation **Program Details:** GROW focuses on neighbourhood revitalisation and encouraging businesses to hire from Geelong's disadvantaged areas.	**Funding Source:** Federal Government**;** State Government, Local Government, Give Where you Live Foundation; Alcoa **Total Funding for GROW and Related programs**: $12 Million **Give where you live funding**: $2 Million **Legacy grant Alcoa Foundation**: $317k **Demand-led employment programs in target communities**: $1.3m **State Government funding**: $1.1m **Federal Government funding for Baptcare's Norlane Project**: $7.25m

Program	Program Type and Details	Funding Estimates
Various Infrastructure Projects in Corio and Norlane	**Program Type:** Community and Health Infrastructure **Program Goals:** Spatial Equalisation; Neighbourhood revitalisation	**Funding Source:** State Government; Federal Government **Funding Total:** $122.4, including: • $34.8 million towards the Northern Bay College regeneration • $33 million for Barwon Health North, an urgent care centre and co-location of GP services (Northern ARC) • $14 million for a walk-in Adult Mental Health Centre in Corio.
Direct Subsidies to Ford and Alcoa for Geelong Operations (2005-2006 and 2012)	**Program Type:** Enterprise Assistance **Program Goals:** Manufacturing Industry Support**;** Transition **Details:** Included funding for Ford to establish a R & D centre in Geelong and invest in engine technology, and funding for Alcoa to temporarily maintain operations before closure 2014	**Funding Source:** Federal Government (Major funder); State Government **Funding Total:** $120 Million $80 Million (Ford) $40 Million (Alcoa)
Geelong City Deal (2019-onwards)	**Program Type:** Infrastructure; culture; urban renewal **Program Goals:** Regional innovation diversification; urban revitalisation; tourism; cluster spillovers; manufacturing industry support Along with diversification and urban renewal, it aims to foster a 'knowledge economy' and advanced manufacturing through investment in Deakin University's Future Economy Precinct.	**Funding Sources:** Federal Government, Victorian State Government (Local Government minor contribution) **Funding:** $370 Million $235 Million aimed for projects in the Geelong UCL, $136 Million for infrastructure projects related to the Great Ocean Road and smaller communities in Victoria's west
Revitalising Central Geelong Action Plan (Ongoing)	**Program Type: I**nfrastructure; culture; urban renewal **Program Goals:** Multi-faceted flagship program aimed at renewing Geelong's urban centre.	**Funding Source:** Victorian State Government **Funding:** $175 Million
Regional Growth Fund (RGF) (2011-2015) **Regional Jobs and Infrastructure Fund (RJIF) (2015-2018)**	**Program Type:** Broad-Based Regional Development Grants Program **Program Goals:** Regional Development These successive funds comprised the Victorian State Government's main funding allocation for regional development.	**Funding Source:** Victorian State Government **Geelong Funding Total:** $103 Million Total $33 Million (RGF) $70 Million (RJIF)

(Source: Compiled by author from various publicly available government sources. Figures listed in the table should only be treated as estimates and not reproduced elsewhere directly).

Appendix B - Custom Geography

Oshawa Custom Geography

New Oshawa Census Tracts		Old Oshawa Census Tracts		Lakeview Census Tracts		Very Low Income Census Tracts	
1986	**2016**	**1986**	**2016**	**1970**	**2016**	**Custom Label**	**1986-2016**
5320016.00	5320016.04	5320014.01	5320014.01	532002.00	5320002.03	Beatrice North	5320014.02
5320015.00	5320016.03	5320014.02	5320014.02	532001.00	5320002.02	Downtown North	5320010.00
532.0009.03	5320016.01	5320013.00	5320013.00		5320002.01	Downtown South	5320006.00
532.0008.04	5320015.04	5320012.00	5320012.01		5320001.00	Downtown Central	5320005.00
	5320015.03	5320011.00	5320012.02			Gibb West South	5320004.02
	5320015.02	5320010.00	5320011.00			Lakeview North	5320002.02
	5320009.05	5320009.04	5320010.00				
	5320009.03	5320009.02	5320009.04				
	5320008.07	5320009.01	5320009.02				
	5320008.06	5320008.03	5320009.01				
	5320008.05	5320008.02	5320008.03				
		5320008.01	5320008.02				
		5320007.00	5320008.01				
		5320006.00	5320007.00				
		5320005.00	5320006.00				
		5320004.02	5320005.00				
		5320004.01	5320004.02				
		5320003.02	5320004.01				
		5320003.01	5320003.02				
		5320002.03	5320003.01				
		5320002.02	5320002.03				
		5320002.01	5320002.02				
		5320001.00	5320002.01				
			5320001.00				

Geelong Custom Geography

Figure 37 and Figure 38 – Suburb Groupings

Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7
Bell Park	Norlane	Hamlyn Heights	East Geelong	Belmont	Waurn Ponds	Breakwater
Bell Post Hill	Corio	Herne Hill	Drumcondra	Grovedale	Wandana Heights	Moolap
Lovely Banks[45]	North Shore	North Geelong	Geelong		Highton	Newcomb
			Geelong West			Thomson
			Manifold Heights			St. Albans Park
			Newtown			Whittington
			Rippleside			
			South Geelong			

Geelong UCL 10 Disadvantaged IRSAD 1 suburbs

North Geelong	South-east Geelong
Bell Park	Breakwater
Bell Post Hill	Newcomb
Corio	St. Albans Park
Norlane	Thomson
North Shore	Whittington

The author engaged Eamonn Clifford for help with graphic design work to improve original author maps using a variety of programs. The author would like to acknowledge the following organisations for the use of their spatial and aspatial data: the Australian Bureau of Statistics, Land Use Victoria, OpenStreetMap, Statistics Canada and the City of Toronto.

Appendix C - Interview Codes

Anonymous interview participants quoted in the thesis:

Interview Code	Interviewee Type
XYX47	Analyst
FGH32	Municipal Government
ABA12	Provincial Government
QWQ24	Business
DYT39	Union
SDS49	Business
JKJ67	Analyst
RER29	Former State Government
IOI88	Employment Services
VBV07	Employment Services
ZSZ64	Employment Services

[45] Lovely Banks is only included in Figure 38