

## **Regions and Structural Adjustment in Australia**

Australia's economy has experienced profound change over the last decade in response to the new opportunities generated by the expansion of the mining industry, the strength of the Australian dollar and on-going competition within global markets (Beer 2012). The new economic environment has resulted in the decline of industries and the loss of employment from high profile enterprises, including Bluescope Steel, Bridgestone Tyres, Ford Australia, Toyota, General Motors Holden and Mitsubishi Motors. Large scale redundancies have resulted in structural adjustment packages that seek to reduce unemployment and encourage the economic revitalisation of the affected region. Such arrangements have been criticised. Despite these concerns, structural adjustment measures are commonly used across Australia and, depending upon definition, more than \$88bn was committed to these programs by the Australian Government over the period 2000-12. New structural adjustment programs continue to be rolled out, while other industries call for support. This paper evaluates the outcomes of structural adjustment programs in Australia. It considers the impact of these schemes on the target communities, including those made unemployed, and whether there is the possibility of identifying better solutions to the challenges confronting communities undergoing change.

### **Introduction**

Australia's economy has experienced profound change over the last decade in response to the new opportunities generated by the expansion of the mining industry, the strength of the Australian dollar and on-going competition within global markets (Beer 2013). The new economic environment has resulted in the decline of industries and the loss of employment from high profile enterprises, including Bluescope Steel, Toyota, General Motors Holden (GMH), Bridgestone Tyres, Ford Australia and Mitsubishi Motors. Further change is likely to result from restructuring in the food processing sector and a decline in some parts of the mining sector – including mining services. Agricultural communities have also been adversely affected by change, including change in regulatory conditions (dairying), adverse environmental impacts, including drought (horticulture in the Murray Darling Basin, pastoralism in central and western Queensland), and the challenge of competing on global markets against producers from nations that subsidise production (citrus, sugar). Large scale redundancies often result in structural adjustment packages that seek to reduce unemployment and encourage the economic revitalisation of the affected region. Such arrangements have been criticised (Daley and Lancy 2011) and there are a number of questions around the nature and effectiveness of adjustment instruments, the impact on the community and how places are able to respond.

This paper examines structural adjustment programs in Australia, focussing on the period 2000 to 2012. Structural adjustment programs occupy a contradictory position within public policy in Australia and the more specific field of regional policy. This tension arises because, while Australian Governments have eschewed formal regional policies (Collits 2012), they have introduced a large number of structural adjustment measures with both explicit and implicit regional impacts. In short, structural adjustment programs have served as *de facto* regional policy for Australia. The effectiveness of this approach to ensuring the wellbeing of regions and communities is open to question and this issue is explored through this paper. The paper examines both the broad question of how effective these programs appear to be as well as the impacts they have on communities. Significant public funds have been committed to structural adjustment measures in Australia, with approximately \$88bn made available to communities and industries over the 12 year period. This paper sets out to answer three key questions: what are the distinctive features of structural adjustment programs in Australia; what is the evidence on their effectiveness; and, what have been the community impacts of structural adjustment in Australia?

### **Structural Adjustment: Australian and International Perspectives**

Research into the development of regions has highlighted the importance of institutional arrangements in determining trajectories of growth or decline (North 1990; Amin 1999; Stimson *et al* 2009). Rodriguez-Pose (2013) has argued that institutions represent the ‘missing variable’ in explaining why some regions grow and others do not. Research has acknowledged the critical role of institutions in determining regional fortunes, with various analyses focussing on their role in a number of domains, including building human capital (Murphy & Siedschlag 2013; Pike *et al* 2006); fostering regional innovation (Brenner *et al* 2013) and generating intangible assets (Surinach & Moreno 2012). As Rodriguez-Pose (2013) noted, institutional arrangements vary by location and their impact and value is a function of their quality rather than their number or ‘thickness’ (Amin & Thrift 1995). It is impossible to link a region’s growth to its ‘institutional environment’ but instead, Rodriguez-Pose (2013) argued, it is necessary to focus on its ‘institutional arrangements’, ‘the institutional factors that represent barriers to the efficacy of other factors influencing economic development and training (education, training and skills, innovation, infrastructure and the like)’ (2013 p 1034). Within this schema, structural adjustment programs can be thought of as an

‘institutional arrangement’ established to operate within an existing institutional environment in order to overcome impediments that would otherwise impede growth. These impediments could include the absence of new investment, inadequate skills within the labour market, infrastructure deficits or poor interconnectedness to the global marketplace.

There is a very substantial literature of structural adjustment programs, both internationally and in Australia. Published work in this field continues to grow (see, for example, Fairbrother *et al* 2013; Bailey *et al* 2008; Bailey *et al* 2014; Beer 2014) and this burgeoning of published work is partly in response to on-going economic and political change. Internationally, structural adjustment has often been imposed on nations in the global ‘South’ by supranational institutions, such as the World Bank (Haggard and Kaufman 1992; Chang 2002) or via the efforts of powerful national credit agencies. In Australia, the term ‘structural adjustment’ has been used to refer to ameliorative actions undertaken in response to economic shock – sometimes policy induced, sometimes not. These measures have become more prominent since the year 2000 and this new profile reflects a significant increase in the pace of change in the Australian economy (Beer 2012). Some of the most influential work in Australia on structural adjustment programs has been undertaken by the Productivity Commission. In large measure the Productivity Commission (2001) has been critical of structural adjustment programs in Australia, a view shared by the Grattan Institute (Daley and Lancy 2011). The Productivity Commission (2001) made several critiques of structural adjustment programs in Australia, including the observation that:

- Program objectives were not adequately defined at commencement, which in turn made the evaluation of outcomes difficult – if not impossible;
- There are direct and indirect costs arising from structural adjustment programs. Both adding to the costs of other, more viable, enterprises, communities and industries;
- Often such measures come at a high cost per job created (Daley and Lancy 2011);
- Assistance is often directed to industries and businesses on the verge of closure. Measures intended to prop up sectors or industries at risk are unlikely to be effective;
- Job seeking for displaced workers is best dealt with through existing social safety nets and programs, such as the Jobs Network and Centrelink.

The Productivity Commission went further in arguing that it is often difficult to justify special structural adjustment measures in principle. The Commission (2001) noted that:

Assistance designed to ‘buy-off’ opposition to a policy change may appeal on pragmatic grounds. However, it is fraught with difficulties and carries considerable risks. (2001 p xix)

The Productivity Commission’s (2001) work is important because of the Commission’s standing within public debate and because they identified a number of key themes within Australian structural adjustment practices. First, they noted structural adjustment programs in Australia are seen to be defensive or reactive, and may be construed to include an element of ‘buying off’ opposition to policy change. The Commission acknowledged, however, that there are some circumstances where the case for special assistance can be made more strongly. It is also important to acknowledge that the Productivity Commission (2001) was largely focussed on structural adjustment measures introduced in response to policy reform, such as tariff reduction or the introduction of competition policies as part of a wider project of micro economic reform. It was relatively silent on how governments should respond to *external* economic shocks.

Not all commentary on structural adjustment paints a negative picture. Recent research by the European Commission (Mouque 2012) suggests that public sector assistance, such as that provided as part of a structural adjustment program as a clear and positive impact on investment. That is, such programs leverage investment from the private sector, resulting in total capital outlays in excess of anything that would have occurred in the absence of public sector intervention. Mouque (2012) also argued that structural adjustment assistance resulted in increased employment and volumes of production, but not necessarily gains in productivity. Such measures were likely to result in high quality, long term employment, but often in limited quantities, which represents a significant challenge for public sector authorities and governments who often promote such schemes on the basis of employment generation. Mouque (2012) showed that structural adjustment measures can effectively stimulate innovation where the program specifically seeks to target this outcome and that it is more effective when targetted to small and medium sized enterprises (SMEs) than large businesses. Provisional conclusions from the European Commission suggest that targetting small businesses has the most positive outcomes, while providing assistance to large firms delivers no benefits with respect to employment or productivity. The European Commission evidence is unambiguous in supporting investment in firms of up to 50 employees, but it is

less clear if gains are still delivered for firms of up to 250 employees. Mouque (2012 p 11) notes that

support to large enterprises is sometimes justified not in terms of impacts on the enterprise itself but on ‘wider benefits’ to other firms and the region....Many of the studies cited above find that support does not change the behaviour of large firms in terms of investment and productive activity. If nothing changes inside the firm, how can one argue change has been produced elsewhere?

This research also found that the form of assistance appeared to be important, with financial engineering in the form of ‘soft’ loans more effective than the giving of grants – possibly because firms had to be more careful and deliberate in the use of funds. They also noted that non-financial assistance – such as business advice – made a difference to the long term survival of business start-ups and job growth; and that smaller grants were more cost effective than larger grants.

The European Union’s European Regional Development Fund’s ‘NICER’ (Networks for International Cluster Excellence’) programme (2013) highlighted good practice in regional inward investment strategies. Their examples of good practice included targeting specific industries/clusters that complement existing regional activities and try to upgrade or reposition them, attempting to anchor investments by encouraging local networking and sub-contracting, providing ‘one stop’ assistance for investors, building trust with local managers of incoming firms, providing after-care support, targeting financial support to investors upgrading operations, and monitoring performance (NICER project, 2013).

In broad terms, research suggests structural adjustment programs can exert either a positive or negative influence on national and local economies. On the one hand, the available literature suggests well-crafted structural adjustment programs have the potential to achieve significant benefits for their regions. On the other, such interventions carry the risk of mis-directing public policy efforts and resources to the long-term detriment of the affected industry and national productivity.

## **Understanding Structural Adjustment in Australia**

### *The Number and Size of Programs*

One of the conclusions to emerge from any examination of structural adjustment programs in Australia is that these programs constitute a large, and relatively costly, part of the Australian government's engagement with industry and communities. Analysis of government policy documents found 135 structural adjustment programs in operation between 2000 and 2012. Many of these include programs that were substantial in size, while others were much more limited in their geographic scope and ambition. Importantly, the total value of commitments undertaken as part of such schemes was considerable – more than \$88bn of prospective outlays, with the overwhelming majority Federal expenditures. Critically, a diverse range of industries received structural adjustment support, including higher education, the mining sector – including coal – and the video games industry. These are noted because they have been buoyant sectors over the past dozen years, though affected by the high value of the Australian currency. Expenditure and program effort is concentrated in the manufacturing and agricultural sectors.

The Productivity Commission (2012) noted that assistance is greatest in the manufacturing sector, but there remain a large number of programs targetted at agriculture, forestry and fishing. In many instances programs are tied to the Federal Government's aspirations with respect to the environment, and there is therefore a strong compensation dimension in these initiatives. The buy-back of water rights in the Murray Darling basin, and the introduction of changes to the rights of commercial fishers are two examples of structural adjustment programs tied to environmental initiatives. The political tensions in such arrangements can remain for a considerable time and jump spatial scales (McGuirk 2003), with local or regional issues emerging at the national level. For example, in June 2013, the Queensland Government announced it would withdraw from plans to reduce water diversions from the Murray, arguing that the Federal government needed to first fund initiatives to develop new industries in these regions and communities – structural adjustment.

Not all programs are large or have a significant take up. As of January 2013 only two individuals had received assistance as a result of the creation of Marine Protected Areas in Tasmania. A transitional assistance payment was made to a fisher in relation to the Port

Davey/Bathurst Harbour Marine Nature Reserve to compensate for increased operating costs. The other case concerned a fisher affected by the creation of the Kent Group Marine Nature Reserve. Financial assistance was provided for the acquisition of new fishing gear and they were given conditional continued access to the multiple use areas of the MPA. The total financial assistance provided to both fishers was approximately \$50,000. Some programs are, however, substantial. The Dairy Structural Adjustment Program that ran from May 2000 to December 2008 had a total budget of \$1.63bn. The Automotive Competitive Investment Scheme which ran from the 1<sup>st</sup> of January 2001 with an anticipated close in 2015 was budgeted to cost \$7bn. It was replaced in 2011 by the Automotive Transformation Scheme (ATS). More commonly, however, program costs range from \$5m to \$500m. Examples include: the Moreton Bay Marine Park Structural Adjustment Package – \$15.1m; the Structural Adjustment Fund for South Australia – \$45m of Commonwealth funding, plus \$10m of SA Government monies; the Illawarra Advantage Fund – \$10m; and the Regional Food Producers Innovation and Productivity Program – \$35m.

Programs badged ‘structural adjustment’ have not sought a single policy objective – and indeed many individual initiatives have had multiple objectives – but have instead sought to realise a number of goals including securing employment for displaced workers or business owners; supporting an industry as it goes through a time of change; compensating property owners for the loss of rights or other economic opportunities; and generating new economic opportunities in communities affected by change. This program sought to place Australia’s dairy industry on a globally competitive footing by assisting non-viable farmers leave. It provided exit payments to farmers, but also provided funds to invest in communities affected by change.

### *The Geography and Nature of Structural Adjustment Programs*

Some regions and localities receive multiple assistance packages, either because of the structure of their local industries, the depletion of natural resources, and/or the impact of government policy changes. Examples of regions to benefit from multiple programs include:

- **Tasmania** – Tasmanian Forest Industry Development Programme (2005-2006); Tasmanian Country Sawmills Assistance Programme (2005-2006); Tasmanian

Softwood Industry Development Programme (2005-2006); Tasmanian Forest Contractors Exit Assistance Program (2010-2012); Tasmanian Forest Contractors Financial Support Program (2010-2012); NBN Industry Assistance Package (Tasmania) (2012); Tasmanian Health Assistance Package (2012-2016); Scottsdale Industry and Community Development Fund (SICDF) 2007; Beaconsfield Community Fund (2006-closed); Tasmanian Innovation and Investment Fund (TIIF) (2011-closed); North West and Northern Tasmania Innovation and Investment Fund (NWNTIIF) (2009); North East Tasmania Innovation and Investment Fund (NETIIF) 2008.

- **Southern Adelaide** – Structural Adjustment Fund for South Australia (SAFSA) 2004-06 (Mitsubishi – Lonsdale); South Australia Innovation and Investment Fund (SAIIF) 2008-2010 (Mitsubishi – Tonsley).
- **Illawarra, NSW** – Illawarra Advantage Fund (ILAF) (1999-2011); Illawarra Region Innovation and Investment Fund (IRIIF) (2011-2014); Port Kembla Industry Facilitation Fund (PKIFF) (2006-closed).

It is important to acknowledge that this list does not form the totality of programs that may have operated in these regions. Industry focussed programs may also have been implemented in these localities, adding to the overall level of support. It could be argued that one of the conclusions we should draw from the incidence of repeat assistance for some, especially vulnerable regions, is that current policy instruments simply do not achieve the long term repositioning of these economies. It is possible that the programs are either of insufficient scale to fundamentally reshape these economies, or that they are mis-directed and that investment would be better placed in other activities or initiatives.

#### *The Nature of Structural Adjustment Programs – Industry Restructuring*

Over recent decades industry restructuring programs have taken a number of forms in Australia and have sought to achieve a range of outcomes. One of the key goals of industry restructuring programs has been – and remains – to assist industries adjust to new economic conditions in order to ensure their viability in the long term. Many programs introduced since the year 2000 have sought to do this by assisting non-viable enterprises exit the industry. Examples include the Tasmanian Forest Contractors Exit Assistance Program (2010-2011)



and the Tobacco Grower Adjustment Assistance Package (TGAAP) (2006-2007). Other programs have been introduced to both assist a process of change, and compensate industry participants, following government policy shifts in access to natural resources or other rights. The Tasmanian Forest Contractors Exit Assistance Program is one example, but others include the Murray-Darling Basin Small Block Irrigators Exit Grant 2008-2009 and the Queensland East Coast Commercial Net Fishing Reduction Scheme (2012-2013). Critically, industry restructuring programs of this type appear concentrated in primary industries – agriculture, forestry and fisheries in particular – where there are a large number of enterprises, production is geared to global markets, and changing circumstances internationally have challenged the viability of some industries and their constituent enterprises.

**Table 1 Risks and Benefits of Industry Restructuring Programs for Affected Communities**

<b>Benefits</b>	<b>Risks</b>
Ensures the long term viability of remaining producers	Enterprise focus means that the impact on communities is overlooked
Overcomes structural weakness in the industry	Short term solution to a long term problem
Achieves environmental or other goals	Further intervention may be required
Reduces the risk of rural poverty – and associated social problems	May encourage ‘lock in’ if genuine restructuring not achieved
Achieve critical mass in production, allowing emergence of a more competitive sector	
May enable focussing on high-value parts of value chain or a diversification into related industries.	
Compensates producers for the cost of government decisions	

As Table 1 suggests, industry restructuring programs – as enacted in Australia over the last 12 years – carry a range of benefits and risks for communities. There are a number of very significant advantages that arise from such measures, with some programs helping to deliver a highly productive and efficient agricultural sector within Australia. The dairy industry, for example, has been transformed through government-provided assistance and has emerged as a major exporter. Industry assistance has also seen a number of irrigators in the Murray Darling basin stop production, resulting in reduced water diversions and a reduction in the number of producers not viable because of the small size of their holdings. Conversely, industry restructuring programs include risks for the affected communities. Significantly, programs that do not include adequate and appropriately targetted community measures can exacerbate the challenges confronting the region as the viability of infrastructure and other productive capacity is placed in question; capital leaves the region; labour and especially skilled labour departs for other regions; and, confidence in the region declines.

#### *The Nature of Structural Adjustment Programs – Enterprise Assistance*

It is important to distinguish between industry restructuring and enterprise assistance because, while the former has an explicit goal of helping some participants leave the sector, the latter is geared to helping individual enterprises remain viable. In large measure, industry restructuring programs have been more prominent in primary production in Australia, while enterprise assistance has more commonly been a feature of the manufacturing sector. The automotive industry is perhaps the most high profile example of enterprise assistance over the past 12 years in Australia. Programs of enterprise assistance include: the Automotive Industry Structural Adjustment Program (AISAP) (2009-2012); Automotive Competitiveness and Investment Scheme (ACIS) (2001-2011) and the Automotive Transformation Scheme (ATS) (2011-2020).

Enterprise assistance programs do not guarantee the sustainability of an enterprise or a division of an enterprise. Australia's experiences in 2013 and 2014 with the announcements by Ford Australia and General Motors Holden that they intend to cease production underscore this point acutely. Like other forms of structural adjustment, enterprise assistance carries with it advantages and disadvantages (Table 2). Perhaps the greatest risk is 'locking in' a region's economy and future to an industry or enterprise that cannot be sustained. There is a danger that short term support will result in a more difficult process of adjustment later.

**Table 2 Risks and Benefits of Enterprise Assistance for Affected Communities**

<b>Benefits</b>	<b>Risks</b>
Creates a 'level playing field' for Australian producers in recognition that other nations provide support to key industries	Supports businesses which will not be viable in the long term
Can provide time for a region, community or economy to adjust	Public expenditure 'crowds out' more profitable emerging industries and blinds policy makers to alternatives
Can assist the introduction of new technologies, with spin off benefits throughout the economy	
Cheaper than the policy alternatives, including the possible cost of social security outlays and/or the loss of economic infrastructure	
In some cases, supports industries with substantial multipliers within the economy	Need to provide assistance on an on-going basis
Slows things down; buys time to allow supply chain and wider economy to diversify	Creates institutional 'lock in'

*The Nature of Structural Adjustment Programs – Labour Market Programs*

Labour market programs are a prominent component of structural adjustment measures in Australia and other nations. Labour market programs are commonly introduced to assist workers displaced by a plant closure or similar economic shock. Common features include: expedited access to the highest level of support and assistance available through the Australian Government's Jobs Network; training assistance; advice on establishing a small business; job fairs; information seminars on employment opportunities; assistance and advice on writing job applications and in preparing a contemporary CV for employment; and, measures to recognise prior learning.

Labour market programs confront a number of challenges. In many industries the employees affected by change are older, long term staff, with considerable working histories and

substantial personal assets – either as superannuation, property or other forms of wealth. In these instances, a high percentage of workers may choose to leave the formal workforce. This loss of skilled labour can be exacerbated by generous redundancy provisions that effectively discourage a return to work. Labour market programs may be confronted by a second important reality: in regions with few alternative employment opportunities, finding employment for staff to move into can be difficult – especially if the displaced staff have relatively high expectations with respect to wages and conditions. The programs may therefore fail to achieve their objectives because the external environment is not conducive to their success. It can be argued that one of the keys to better labour market outcomes is a focus on a suite of measures, rather than one off interventions.

Perhaps perversely, labour market programs can be seen to carry risks for regions. If successful, they may provide an avenue for the accelerated departure of skilled workers to other communities or cities. They may also fail to train workers in the skills needed for the contemporary economy, potentially redirecting workers into well-known industries and employment opportunities rather than sectors with long term prospects. There may also be short term risks of public perception, with the community at large focuses on the training undertaken by displaced workers and not the longer term employment outcomes. However, such concerns are likely to be outweighed by the very considerable benefits associated with skills enhancement and the acquisition of additional credentials.

**Table 3                      Risks and Benefits of Labour Market Programs for Affected Communities**

<b>Benefits</b>	<b>Risks</b>
Ensures full use of the skills within the workforce and can retain skills where possible	Fail to provide the assistance workers need
Helps stimulate economic growth	Redistribution of jobs – with displaced workers simply crowding out new job seekers
Reduces dependency on income support payments	Failure to account for the education and skills of the workers
Raises self esteem of displaced	Timeliness – insufficient time to respond appropriately

workers	
Fills areas of workforce need	Efforts misplaced or mis-directed: little achieved for the effort
Reduces social/family issues, poor health outcomes	Failure to result in employment
Can focus the co-ordination of services	

*The Nature of Structural Adjustment Programs – Investment Attraction Strategies*

Investment attraction programs have been used with increasing frequency across Australia. Such programs consist of a funding pool – which may be exclusively monies from the Australian Government or a mix of resources that also includes State and private sector funds – made available to attract new investment. In some instances this consists of the entry of new businesses into the region, on other occasions it reflects the expansion of existing enterprises. Examples of investment attraction programs include the: Illawarra Region Innovation and Investment Fund (IRIIF) (2011-2014); Structural Adjustment Fund for South Australia (SAFSA) (2004-06); South Australia Innovation and Investment Fund (SAIIF); Geelong Investment and Innovation Fund (GIIF) 2007-closed.

The scale of the recipient region is one of the key issues for investment attraction programs. That is, does the new investment need to be located within the affected region or community, or is some degree of dispersion both expected and welcome, given the mobility of the workforce and the desire to support the best possible projects? Beer and Thomas (2007), for example, noted that the Structural Adjustment Fund for South Australia (SAFSA) had considerable dispersion – a feature that raised concerns within the region. The more recent Illawarra Region Innovation and Investment Fund (IRIIF) was more tightly targetted spatially, and this may reflect an evolution in such programs over time. The SAFSA was also criticised for including criteria that appeared to restrict access to the program by local businesses. Because the economy of southern Adelaide is dominated by small enterprises, few businesses could meet the \$1m minimum investment threshold to participate in the

scheme. Funding, therefore, went to larger businesses either outside the region or entering the region for the first time.

Investment attraction programs have been heavily criticised by some commentators, including Daley and Lancy (2011) and the Productivity Commission (2001) for the high cost relative to the number of jobs created. Such estimates of employment created, of course, reflect the number of direct jobs and ignore the multiplier effects of such investment. They also fail to account for the often intangible benefits associated with such investment in the form of increased business confidence, investment in associated infrastructure and the continued use of existing assets. It is reasonable to assume that for every job created directly, a further 0.6 positions are created through indirect activity – making investment attraction a much more worthwhile proposition economically and politically. What we do not know is the long term impact of such expenditures: that is, how many of these enterprises remain viable over a five year period and whether they grow further (or contract) over that time.

**Table 4 Risks and Benefits of Inward Investment for Affected Communities**

<b>Benefits</b>	<b>Risks</b>
Scope to generate new industries	Investment incentives ‘leak’ outside the region
Economic infrastructure secured by on-going activity	Simply displaces commitments that would have taken place anyway
Skills retained in the region	Too much paid per job
Boost to regional confidence	New enterprises fail or leave
Maintain the rate base for local government	Local businesses unable to secure funding because of grant conditions
Help reposition existing industry on a more high value part of value chain	Lack of local ‘embeddedness’; activities may anyway be shifted abroad by multinational firms as and when conditions change or support ends.
Maintain entrepreneurial base in the region	Incentive payments given when other expenditures would have been more effective

## **Case Studies: Illawarra and Southern Adelaide**

Two case studies of structural adjustment are considered here: Southern Adelaide and the Illawarra region, centred on Wollongong. Both locations had received assistance in the recent past, or are currently in receipt of assistance. Southern Adelaide is a metropolitan location, while Wollongong is normally considered part of regional Australia. It is important to acknowledge, however, that both are relatively urban places, either within or close to one of Australia's largest cities and with a highly urbanised workforce.

### **Figure 1. About here**

#### *The Illawarra*

Wollongong had a population of 181,000 persons in 2001, 183,000 in 2006 and 193,400 in 2011. Wollongong's economy has long been dominated by the steel making plant that was established at Port Kembla by BHP in the first decades of the 20<sup>th</sup> Century. Its economy is also affected by its proximity to Sydney, with approximately 20,000 workers commuting from Wollongong to Sydney daily. The University of Wollongong is also a significant economic force within the region, with students attracted from Sydney, southern NSW and internationally. The university has also been active in a number of technologically based industry projects.

The steel industry at Port Kembla has been undergoing a process of restructuring for a considerable period of time. Beginning in the 1980s with the Button Steel Plan, employees have been laid off and new technologies introduced to achieve greater efficiencies (Haughton 1990). In the 1990s BHP restructured again, spinning off Bluescope Steel (Port Kembla) and OneSteel (Whyalla) as separate businesses. In 2011 Bluescope announced a further 800 voluntary redundancies as the company closed part of their facilities. It is important to note that the scale of this restructuring was small compared with the changes introduced in the 1980s when more than 15,000 jobs were lost. In July 2011 the Gillard Government announced the \$30 million *Illawarra Region Innovation and Investment Fund (IRIIF)* to assist the region's economy adjust to a smaller heavy manufacturing sector.

### **Figure 2 about here.**

As Figure 2 shows, Wollongong's population has been relatively stable over the past decade and in part this reflects its desirability as a place to live, as well as its closeness to Sydney. The 2011 Census data would not include the impacts, if any, of the 2011 redundancy round at Bluescope, but in the longer term consequences of restructuring from the 1980s are reflected in the lower growth rate and relatively high unemployment rate (Figure 3).

**Figure 3. about here**

The unemployment rate in Wollongong has fallen over the past decade, though it remains appreciably higher – 2 to 3 percentage points – than the Australian average. Youth unemployment fell between 2001 and 2006, before rising again in 2011 – and in all years the rate of youth unemployment was high.

The restructuring of Wollongong's economy over the decade 2001 to 2011 is evident in Figure 4, with a notable decline in manufacturing employment and growth in service employment – especially health and community services, as well as education and training. Accommodation and food services have also grown, as has retail trade and construction employment. There has been modest growth in mining employment, with the expansion of some of the mines locally and within the broader region. This structural shift would have accelerated since 2011, when Bluescope announced voluntary redundancies. Census data from 2001, 2006 and 2011 shows that over that decade there was a pronounced fall in manufacturing employment in the Illawarra and a sustained rise in service-based employment, especially health care and social assistance, as well as education and training. In large measure this reflects broader trends across Australia, though the pace of change appears greater in Wollongong. Manufacturing employment declined from a much higher level than the national average. Since the 1980s the University of Wollongong has grown rapidly and education (which includes much more than the tertiary sector) is now the second largest industry within the region

**Figure 4 about here**

Discussions with stakeholders in 2013 throughout the region found a range of opinions on both restructuring within the Illawarra and the roll out of the IRIIF. Some of the key points to emerge included:



- A sense that the IRIIF was implemented and closed too quickly, which meant that some potentially valuable projects were not put forward as they could not be fully developed in the available time frame;
- Some of the businesses to receive IRIIF support subsequently suffered under the Global Financial Crisis (GFC), but generally the projects were considered appropriate and worthy of investment;
- Workers made unemployed sought comparable well paid employment, especially in mining and mining related employment. Many were willing to participate in Fly In-Fly Out work schedules. Few workers were willing to leave the region permanently for employment in anything other than the mining industry;
- There was a strong sense that it is too early to determine the impacts of the IRIIF investment, but several stakeholders felt that the Australian Government could have done more to keep them informed; and,
- Several stakeholders felt that a greater level of control should have been devolved to local leaders, and that there was a need for greater transparency.

In addition, persons interviewed as part of this project reported an adjustment process that was in many ways similar to the outcomes reported elsewhere (Beer and Thomas 2007). Some of the key insights included:

- Acknowledgement that many experienced – and well paid – workers simply left the workforce;
- Those workers with skills in demand found employment easily, while others struggled;
- Workers benefitted from advice and training on how to apply for work; and,
- Many who remained in the region found employment at much lower wage levels.

Not all commentators agreed with the direction and pace of structural adjustment in the region. One person noted that the building of high quality infrastructure investment would enable a far stronger growth dynamic in the region, while others felt that funding under the IRIIF was spread too thinly over a range of industries. All commentators, however, agreed that it was important that the Australian Government had been ‘seen to act’ at that time.

## *Southern Adelaide*

Southern Adelaide consists of the local government areas of the City of Marion and the City of Onkaparinga, with a total population of just under 250,000 persons (Figure 5). There are a number of major industrial precincts within the region, including Lonsdale within the City of Onkaparinga and Tonsley Park and Edwardstown within the City of Marion.

### **Figure 5 about here.**

Between 2000 and 2012 a number of major plants closed in southern Adelaide. The Port Stanvac refinery closed in 2002, followed by Mitsubishi's Lonsdale plant in 2005 and its Tonsley Park assembly plant in 2008. In 2006 Kimberley Clark closed its paper-products facility in Lonsdale.

The closure of the two Mitsubishi facilities had a substantial impact on the region, with the firm employing more than 7,000 staff in the year 2000, but less than 200 a decade later. The region received two packages associated with the Structural Adjustment Fund for South Australia (SAFSA) 2004-06 with the closure of the Lonsdale facility and the South Australia Innovation and Investment Fund (SAIIF) associated with the cessation of car assembly at Tonsley Park. In addition, Mitsubishi received state government assistance up to 2008, and the closure of Kimberley Clarke resulted in workers gaining access to a program focussed on the Textile Clothing and Footwear (TCF) industry.

### **Figure 6 about here**

Unemployment fell in southern Adelaide between 2001 and 2006, and increased slightly between 2006 and 2011 for the total workforce, and more markedly for workers aged under 24 years of age (Figure 6). The jobless rate was appreciably lower in southern Adelaide compared with some other parts of Adelaide, but it is worth acknowledging that many displaced workers were *under-employed* rather than unemployed.

**Figure 7 about here.**

The structure of employment in southern Adelaide shows the clear impact of a decade of decline in manufacturing and growth in service based employment (Figure 7). From 2001 to 2011 manufacturing employment declined by almost one third (approximately 600 jobs) while the number of workers engaged in health care and social services increased by an equivalent figure. Retail trade employment also grew, as did employment in education and training; public administration and safety and professional, scientific and technical services.

Stakeholders in the region acknowledged that southern Adelaide had made a relatively successful transition to a service based economy over the decade to 2011. They noted, however, that household incomes had fallen as a higher percentage of employees worked part time or casually, and because wages tended to be lower in retail trade, health care and social services. Construction employment can pay well, but it offers less job security when compared with the manufacturing sector. Informants were also concerned about the effectiveness of some of the projects funded under the structural adjustment programs associated with the Lonsdale and Tonsley Park closures. They felt that:

- Small businesses struggled to gain access to the Structural Adjustment Fund for South Australia as the \$1m minimum threshold for investment ruled out too many enterprises. This issue was addressed in the design of the later program;
- An unacceptably high percentage of funds were invested outside the region;
- That the cost per job created may have been too high;
- Not all enterprises to receive funding under the SAFSA survived five years. However, some that did not were taken over by other businesses which then expanded production within the region.

**Making Sense of Structural Adjustment in Australia**

The examination of structural adjustment programs has shown that they are much more common within Australian policy domains than might otherwise be anticipated; that some regions have received structural adjustment programs; that such programs can be divided into four distinct types of intervention, though any individual program is likely to include a

mixture of elements; and, that while there is a well-developed literature on the principles underpinning structural adjustment measures and their potential advantages and disadvantages, the empirical analysis is remarkably scant. The paper has also considered two case studies, both of which suggest that structural adjustment programs appear to speed the process of industry restructuring. That is, they have expedited the transition from an industrial to a post industrial regional economy. The paper has also considered the views of key informants in the regions, many of whom felt that structural adjustment measures could be better targetted: geographically; with respect to the recipient enterprises; and, over a more realistic – that is longer – time frame.

There are a number of challenges in evaluating the impacts of structural adjustment programs that extend beyond the fact that various programs have different objectives and goals. The Productivity Commission (2001) noted there was often a lack of clarity associated with the objectives of structural adjustment programs, and that this made the evaluation of impacts extremely ambiguous. The Commission (2001) also noted the potential for a political dimension in structural adjustment programs and that this may further complicate analysis.

In attempting to assess the impacts of the structural adjustment programs we need to answer two separate, but inter-related questions. What would have happened in the absence of action by government? Was the form of assistance provided appropriate to the level of need within the community and did it represent ‘best practice’ with respect to structural adjustment? There is no clear cut answer to either question, but we can draw conclusions on a balance of probabilities approach. In all cases, affected regions would have eventually ‘adjusted’ if no action had been taken by governments. In all likelihood confidence in the region would have fallen to a greater extent, investment in the region would have declined more dramatically, the process of rebuilding would have taken longer, a higher percentage of workers would have left the labour market or spent long periods away from paid employment. In addition, local infrastructure expenditure would have declined and there would have been a greater loss of skills from the region. It is likely that the reputation of the region would have suffered. Structural adjustment programs in Australia mute these adverse impacts and deliver a number of intangible benefits to regions, including boosts to their reputation as a place to do business, a more buoyant outlook amongst consumers and enterprises and the opportunity to reshape their future. These psycho-social benefits are important because as Cook *et al* (2013) showed, the announcement of industry adjustment programs give a sense of responsiveness that in

turn creates a more positive regional economic outlook. We can therefore conclude that structural adjustment programs are a valid and necessary policy measure as the costs of not introducing such interventions are unacceptably high. These costs include a greater loss of business confidence, the erosion of human capital, lower social capital and the loss of productive capacity in both fixed assets and labour. Even enterprise assistance can be justified where it gives a regional economy or community time to reposition itself within national or global markets, a point underlined by Bailey *et al* (2008).

There is greater complexity associated with the question of whether the forms of assistance provided are appropriate to the level of need and represent ‘best practice’ at a national and international scale. The review of the literature and the case studies has identified a number of key issues, including:

- Time period. Structural adjustment is a long term proposition and measures that attempt to find solutions in a narrow time frame are not likely to find the best possible outcomes;
- Anticipatory planning. The overwhelming majority of structural adjustments can be anticipated and early steps are needed to a) reduce the likelihood of adverse events; b) reduce the scope and scale of adverse events; and c) plan for a new future. Anticipatory planning does not encompass subsidies for failing firms, instead it should be a process of looking to a new future for the region and its businesses and fostering, for example, diversification;
- Governance and information dissemination. Governance reform should be embedded in the process of structural adjustment to ensure that appropriate mechanisms remain to drive change and growth in the region or community. This may involve the creation of new entities or it could see the reform of existing institutions. In addition, the broader community needs to be kept informed of the change process;
- Focus on the affected region. Assistance measures need to be relatively tightly targetted to those places affected by change. The relative spatial immobility of a large part of the Australian workforce means that solutions need to be generated in the localities experiencing change (Beer 2010);

- Human capital is a driver of growth. Structural adjustment measures should always seek to add skills and abilities to the region's workforce, as well as retain existing skills for incoming investors;
- Economic diversification is a partial answer. More successful approaches to the repositioning of economies seek to build upon existing capacities – skill sets, infrastructure, intellectual capital et cetera – using an approach referred to as 'smart specialisation' (McCann and Ortega-Argilés 2013). Such considerations should inform any inward investment.

One of the realities confronting policy makers is that there is no single action or policy measure governments can introduce to best facilitate structural adjustment. Rather successful outcomes appear to be dependent upon:

- The external environment – including the prosperity of the national and/or global economy, the viability of other industries within the region;
- The assembly of the most appropriate mix of policy measures, which potentially includes infrastructure provision, labour market assistance, education and training, inward investment, improved governance arrangements to facilitate economic activity and place marketing; and,
- The stock of human and social capital within the region. Effective leadership can expedite the process of change (Beer and Clower 2014), while a workforce with flexible and/or sought after skills may either attract new investment or shift relatively seamlessly to other industries.

While there are dangers in transferring European experience to Australia without critical reflection, there would appear to be some lessons for Australia with respect to the nature and type of assistance delivered to restructuring regions and their businesses. The focus on assistance of lesser value targeted to small business appears critical, as does the emphasis on the provision of advice in addition to finance (Mouque 2012). The evaluation of assistance measures would appear to be an important step in the development of better policies, an argument made by the Productivity Commission.

Overall, the case for government intervention in structural adjustment programs appears compelling. Of the four forms of assistance considered in this report the evidence in support of enterprise assistance is weakest: it is often provided to enterprises for whom decline is inevitable; it creates a degree of ‘path dependency’ in the economy that can make adjustment more difficult; it is relatively expensive and it does not change the behaviour of recipient firms. The case for inward investment strategies is stronger as it appears to be effective, with support both within the published literature and from amongst informants who participated in this study. We can conclude that industry restructuring programs have positive impacts and therefore represent a valuable contribution to the total set of potential policies. However, greater attention could be paid to the social outcomes associated with these measures. Finally we can conclude that appropriately targetted labour market assistance is of considerable value.

## **Conclusion**

Rodriguez-Pose (2013) has argued that the growth of regions is not shaped by the simple presence or absence of appropriate institutions – the institutional environment – but instead upward or downward trajectories are determined by the quality of the interventions enabled or supported by institutions – the institutional arrangements. Such arrangements need to overcome the impediments to economic development, allowing pre-existing measures – such as national programs and policies – reach their potential. Within this context, structural adjustment programs can be considered to be an institutional arrangement, often focussed on particular regions and intended to overcome local challenges to growth. The discussion above has identified four dimensions to structural adjustment in Australia, which suggests that they respond to separate challenges: the lack of appropriate skills within the workforce; a shortage of investment in infrastructure and new businesses; short term volatility in major industries or enterprises as a result of external factors – such as environmental perturbation, currency fluctuations et cetera; and, long term structural change requiring the departure of some participants from the industry. The last two are closely related and at some stage short-term volatility in an industry must be construed as longer term structural change. Australia’s recent experience would suggest that on occasion short term assistance is applied – often for a considerable period – in spite of mounting evidence of a more profound structural shift.

The emphasis placed by Rodriguez-Pose (2013) on the quality of institutional interventions rather than their sheer presence or number is helpful at a number of levels. It leads us to conclude that it is the quality of the structural adjustment program – how well it is targeted at the impediments to growth locally, whether it is the right form of structural assistance, whether its implementation addresses the most appropriate actors at the local scale et cetera – that determines its value and contribution to the region. The European Union (Mouque 2012) has also shown that it is possible to identify both more and less effective strategies for facilitating structural change. By implication, we can conclude that not all structural adjustment measures are of equal merit. This must lead us to conclude that structural adjustment measures can be effective and often are effective, but the challenge for government is to introduce appropriate programs at the most appropriate time. Good quality structural adjustment programs will deliver long term impacts, while poorly conceived initiatives will generate limited benefits and call into question the value of these programs. The question we should therefore ask is not, do structural adjustment programs work? Rather we should consider, which structural adjustment measures work best under which circumstances and how can we ensure appropriate action is implemented?

Finally we need to acknowledge that structural adjustment measures in Australia are a largely defensive form of public sector action, with limited capacity to offer long term solutions. Many regions have received multiple assistance packages without finding a resolution to their fundamental challenges. What is needed is long term strategic planning, the development of appropriate governance measures, the identification of key strategies for growth and an on-going program of regional development measures. In short, regional policy is the missing ingredient within Australia's restructuring economy. It is likely that the implementation of effective regional policies across Australia would reduce the need for very substantial outlays on structural adjustment while delivering a more prosperous economy, a more productive workforce and a more equitable distribution of incomes.



## Bibliography

- Amin, A. 1999 An Institutional Perspective on Regional Development, *International Journal of Urban and Regional Research*, 23:2, pp 365-78.
- Amin, A. and Thrift, N. 1995 Globalisation and Institutional Thickness, in Healey, P. Cameron, S. Davaoudi, S. Graham, C. and Madani-Pour, A. (eds) *Managing Cities: The New Urban Context*, Chichester, NY.
- Bailey, D. Chapain, G. Mahdon, M. and Fauth, R. 2008 *Life After Longbridge: Three Years On. Pathways to Re-employment in a Restructuring Economy*, Birmingham Business School, Birmingham.
- Bailey, D. and MacNeill, S. 2008 'The Rover Task Force: A Case Study in Proactive and Reactive Policy Intervention?', *Regional Science Policy & Practice*, 1, pp 109-24.
- Bailey, D., Bentley, G. de Ruyter, A. and 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*, 1:1.
- Beer, A. 2012 The Economic Geography of Australia and its Analysis: From Industrial to Post Industrial Regions, *Geographical Research*, 50:3, pp 269-81.
- Beer, A. 2014 Structural Adjustment and the Automotive Industry: Insights for Regional Policy and Programs, *Regional Studies, Regional Science*, 1:1.
- Beer, A. and Clower, T. 2014 Mobilising Leadership in Cities and Regions, *Regional Studies, Regional Science*, <http://rsa.tandfonline.com/doi/pdf/10.1080/21681376.2013.869428>
- Beer, A. and Thomas, H. 2007 'The Politics and Policy of Economic Restructuring in Australia: Understanding Government Responses to the Closure of an Automotive Plant', *Space and Polity*, 11 pp 243-61.
- Beer, A. and Thomas, H. 2008 'A Tale of Two Cities: Auto Plant Closures and Policy Responses in Birmingham and Adelaide', *Policy Studies*, 29 pp 249-53.
- Beer, A. and Clower, T. 2014 Mobilising Leadership in Cities and Regions, *Regional Studies, Regional Science*, <http://rsa.tandfonline.com/doi/pdf/10.1080/21681376.2013.869428>

- Brenner, T. Canter, U. and Graf, H. 2013 Structure & Dynamics of Innovation Networks, *Regional Studies*, 47:5, pp 647-50.
- Chang, H. 2002 *Kicking Away the Ladder: Development Strategy in Historical Perspective*, Anthem Press, London.
- Cook, J. Pringle, S. Bailey, D. Cammis, S. Wilkinson, C. and Amison, P. 2013 *Economic Shocks Research: A Report to the Department for Business, Innovation and Skills*, London.
- Daley, J. and Lancy, A. 2011 '*Investing in Regions: Making a Difference*', Melbourne: Grattan Institute.
- Fairbrother, P. Snell, D. Cairns, G. Bamberry, L. Tyler, M. Pape, M. Rioux, C. Carroll-Bell, S. and Saruci, S. 2013 *Identification of Opportunities to Support Structural Adjustment in the La Trobe Valley*, Centre for Sustainable Organisations and Work, RMIT, Melbourne.
- Haggard, S. and Kaufman, R. 1992 *The Politics of Economic Adjustment*, Princeton University Press, Princeton.
- Haughton, G. 1990 'Manufacturing Recession? BHP and the Recession in Wollongong', *International Journal of Urban and Regional Research*, 11, pp 70-88.
- Mccann, P. and Ortega-Argilés, R. 2013 Smart Specialization, Regional Growth and Applications to European Union Cohesion Policy, *Regional Studies*, DOI: 10.1080/00343404.2013.799769
- Mouque, D. 2012 *What are Counterfactual Impact Evaluations Teaching Us About Enterprises and Innovation Support?* Regional Focus, 2/12, Directorate General for Regional and Urban Policy, Brussels.
- Murphy, G. and Siedschlag, I. 2013 Human Capital and Growth of ICT Industries, *Regional Studies*, 47:9, pp 1403-24.
- North, C. 1990 , *Institutions, Institutional Change, and Economic Performance*, Cambridge: Cambridge University Press.
- Pike, A. Rodriguez-Pose, A. and Tomaney, J. 2006 *Local and Regional Development*, Routledge, Abingdon.
- Productivity Commission 2001 '*Structural Adjustment – Key Policy Issues*', Canberra.

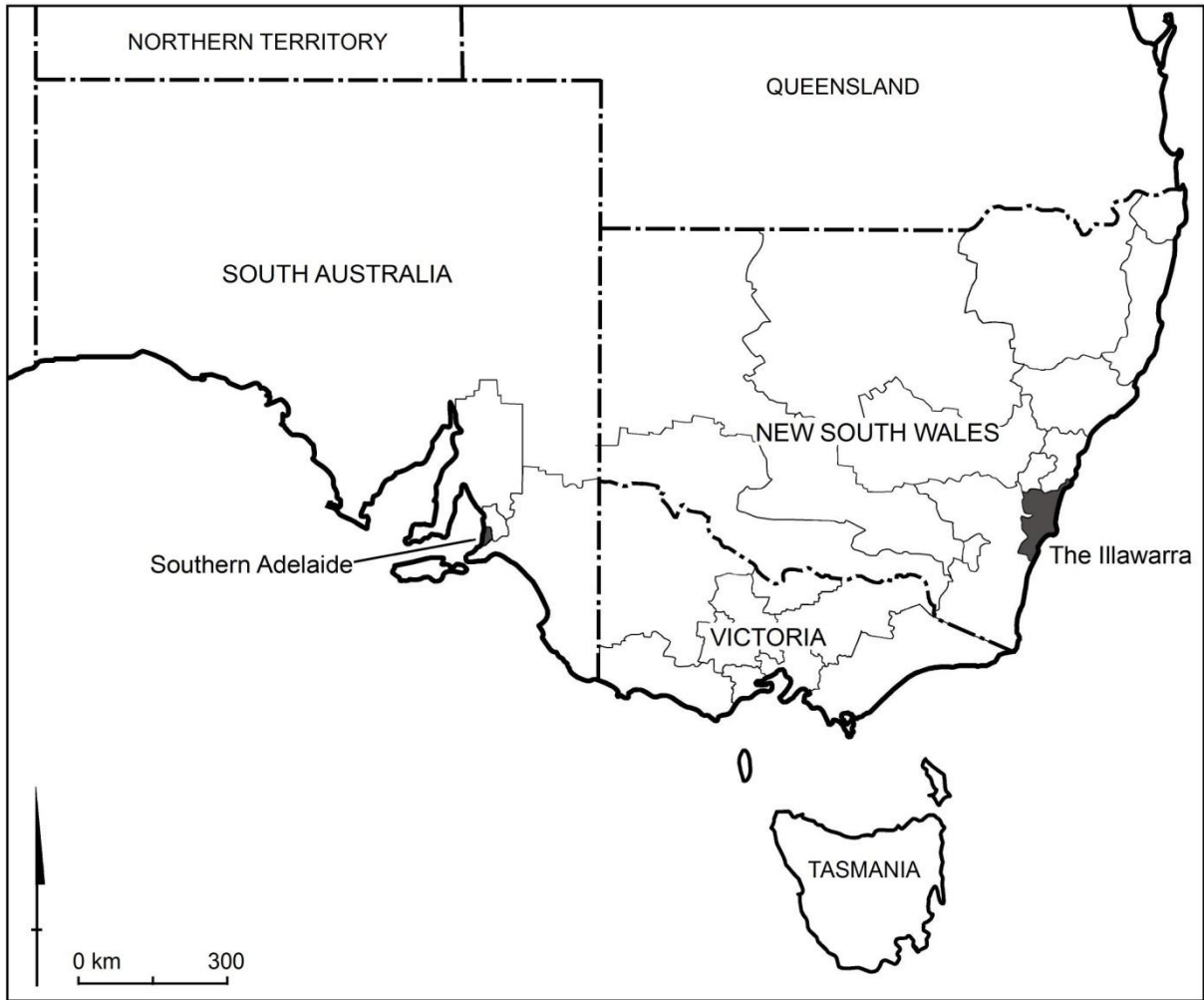
Productivity Commission 2012 'Adjustment Assistance', in *Trade and Assistance Review 2010-11*, Australian Government Productivity Commission pp 69-93.

Productivity Commission 2012 'Structural adjustment in a multi-speed economy' in *Australian Productivity Commission Annual Report 2011-12* pp 1-28.

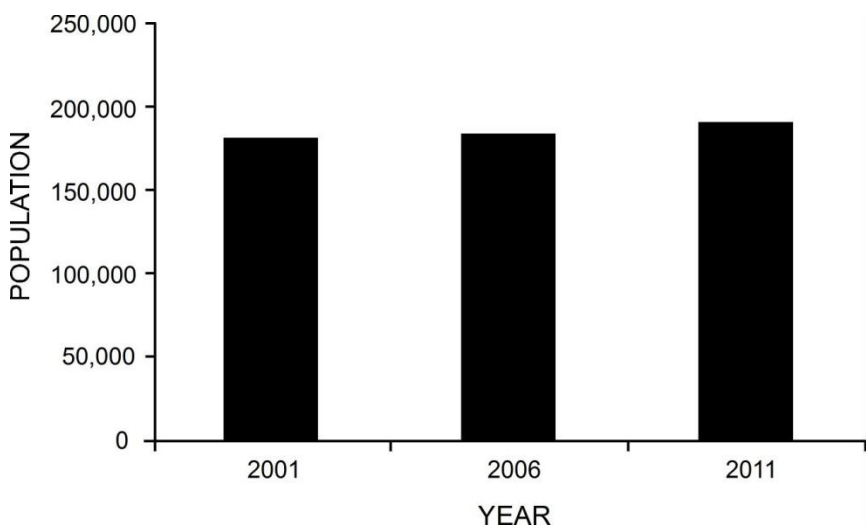
Rodriguez-Pose, A. 2013 Do Institutions Matter for Regional Development? *Regional Studies*, 47:7, pp 1034-47.

Surinach, J. and Moreno, R. 2012 Intangible Assets and Regional Economic Growth, *Regional Studies*, 46 pp 1277-82.

### **Figure 1. The Case Studies**

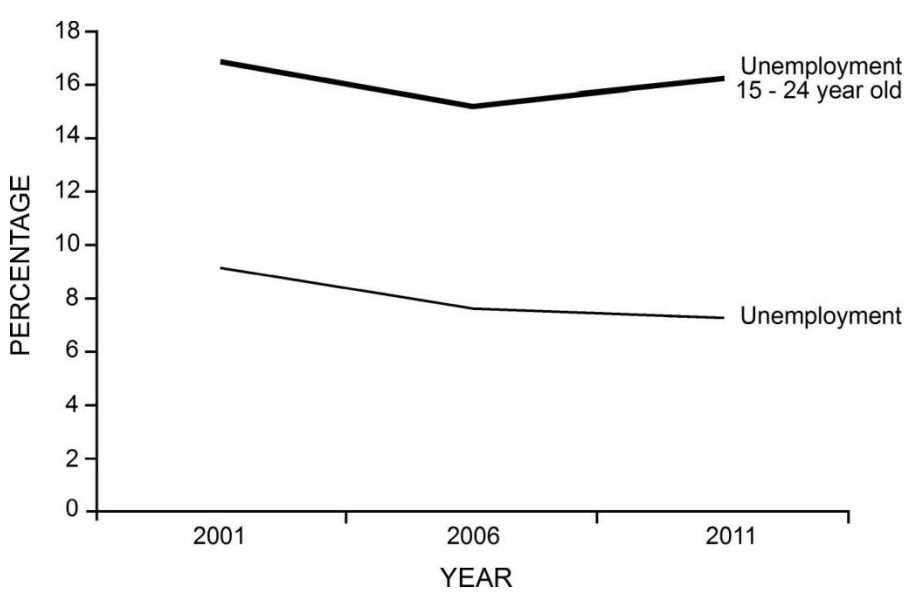


**Figure 2 Wollongong Population 2001, 2006 and 2011**



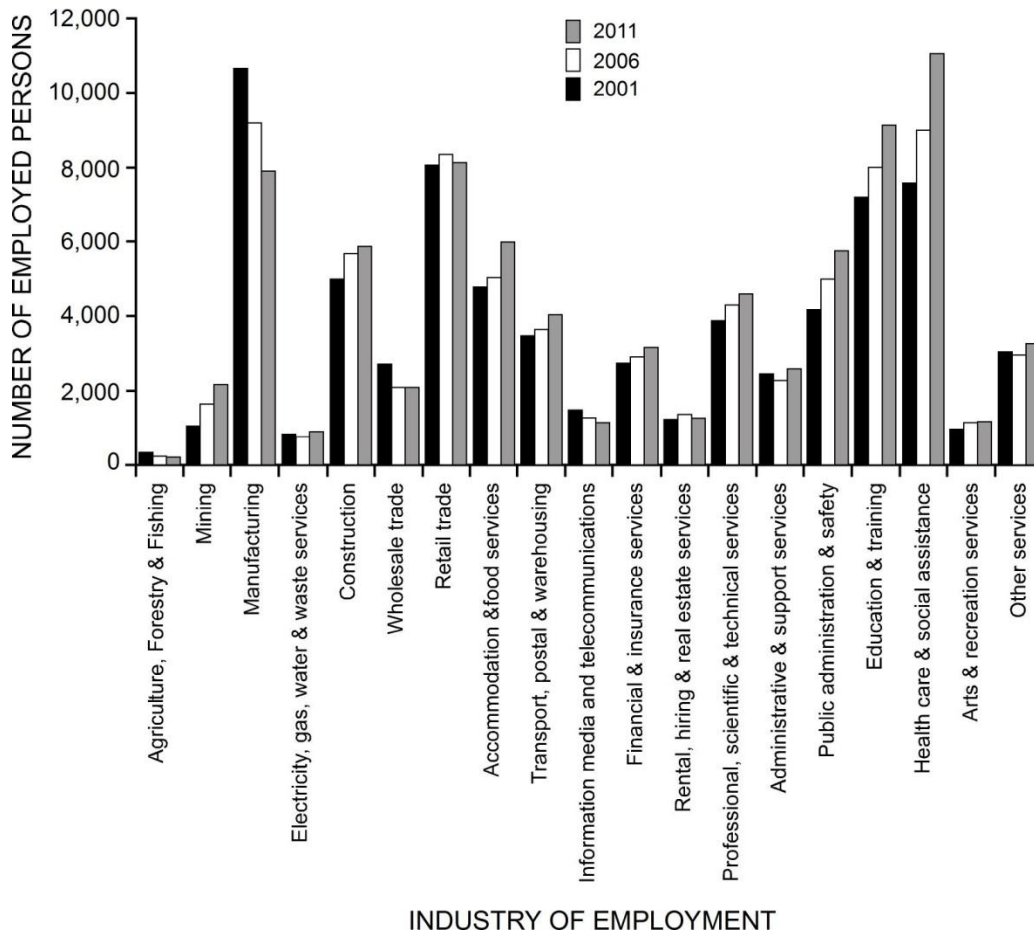
Source: ABS Census, 2001, 2006 and 2011

**Figure 3 Unemployment and Youth Unemployment Rates, Wollongong, 2001, 2006 and 2011**



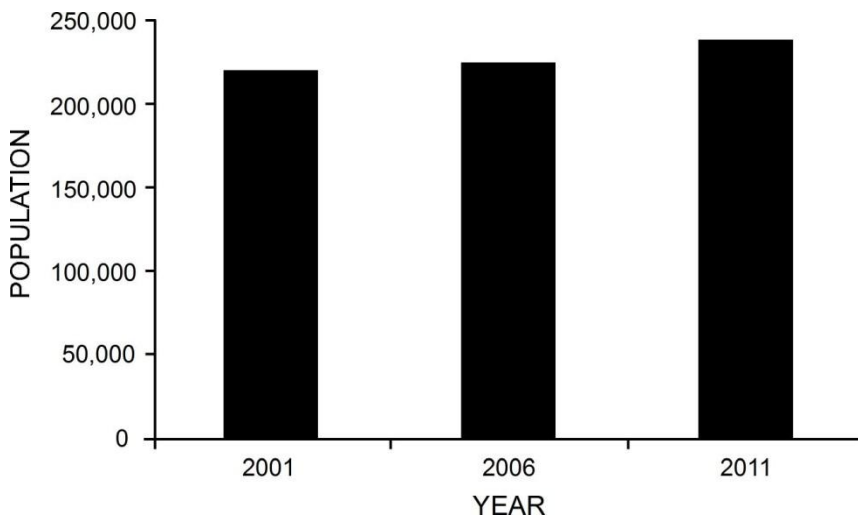
Source: ABS Census, 2001, 2006 and 2011

**Figure 4 Wollongong Industry Structure, 2001, 2006 and 2011**



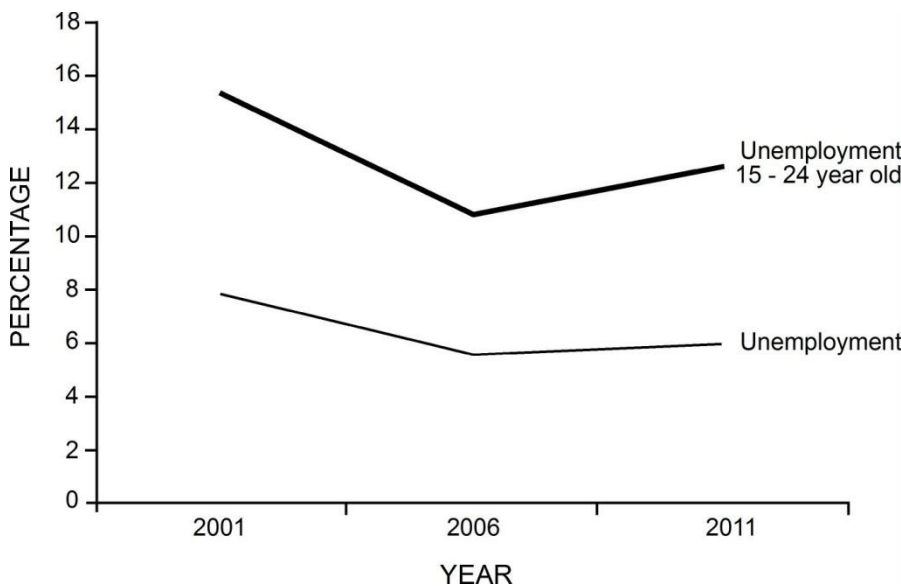
Source: ABS Census, 2001, 2006 and 2011

**Figure 5 Southern Adelaide Population 2001, 2006 and 2011**



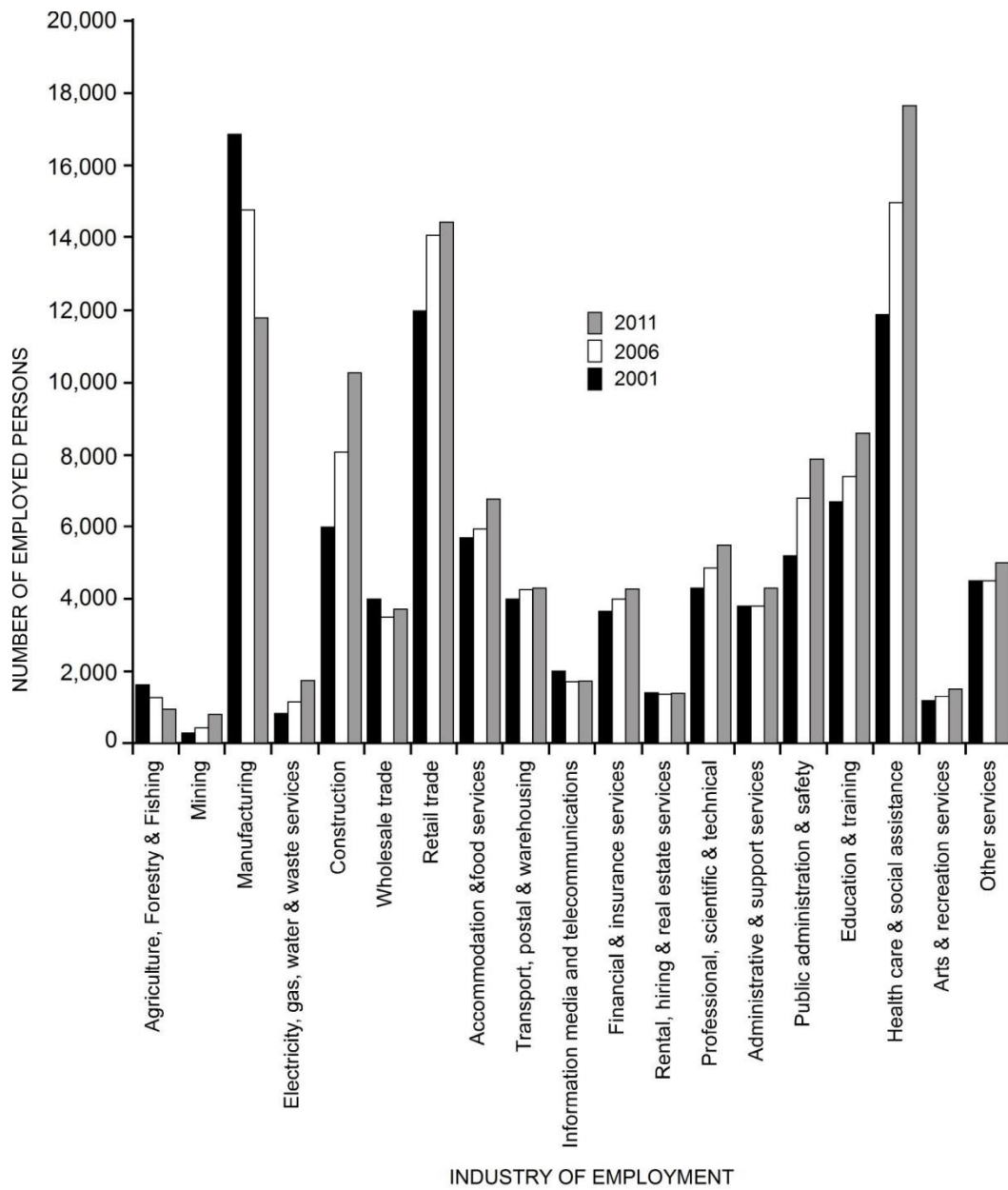
Source: ABS Census, 2001, 2006 and 2011

**Figure 6 Southern Adelaide Unemployment and Youth Unemployment Rates, 2001, 2006 and 2011**



Source: ABS Census, 2001, 2006 and 2011

**Figure 7 Southern Adelaide Industry Structure, 2001, 2006 and 2011**



Source: ABS Census, 2001, 2006 and 2011