

Economic Issues

No. 34

Assisting Regions and Communities to Cope with Structural Change: Context, Objectives, Principles and Good Practice

**Authors:
Emeritus Professor Cliff Walsh**

Michael O'Neil

August 2011

Executive Director's Note

Welcome to the thirty fourth issue of *Economic Issues*, a series published by the South Australian Centre for Economic Studies as part of its Corporate Membership Program. The scope of *Economic Issues* is intended to be broad, limited only to topical, applied economic issues of relevance to South Australia and Australia. Within the scope, the intention is to focus on key issues – public policy issues, economic trends, economic events – and present an authoritative, expert analysis which contributes to both public understanding and public debate. Papers will be published on a continuing basis, as topics present themselves and as resources allow.

This paper is the final of three papers on regional issues with earlier papers exploring first, the rejuvenation of the Provincial Cities following a protracted period of decline through the 1990s (EIP No. 29) and second, Re-Thinking the Approach to Regional Development in South Australia (EIP No. 28).

The authors of this paper are Emeritus Professor Cliff Walsh, School of Economics, University of Adelaide and Assoc Professor Michael O'Neil, Executive Director of the SA Centre for Economic Studies. The views expressed in the report are the views of the authors.

Michael O'Neil
Executive Director
SA Centre for Economic Studies
August 2011

12. The Relative Decline of Manufacturing Employment in South Australia by Anthony Kosturjak and Joshua Wilson-Smith, July 2004.
11. An Ageing Australia: Small Beer or Big Bucks? by Gary Banks, May 2004.
10. Enhancing Trust in Australia's Tax System by Owen Covick, April 2004.
9. Inquiry into the Management of Electronic Gaming Machine Numbers by Michael O'Neil and Steve Whetton, April 2004.
8. Review of the South Australian Economy, 1990-2003 by Michael O'Neil, Penny Neal and Anh Thu Nguyen, March 2004.
7. Darwin: A Gateway to Asia? by Andrew Symon, March 2004.
6. Innovation Activity and Income Levels: A Summary of Indicators by Jim Hancock, Marianne Herbert and Steve Whetton, April 2003.
5. The SA Labour Market Through the 1990s by Anthony Kosturjak, February 2003.
4. The 2002/03 Commonwealth Budget by Owen Covick, August 2002.
3. An Assessment of f f

Key Points

Continual changes in economic, demographic and biophysical forces and in the policy environment facing all regions are unavoidable facts of their economic, social and political life.

Regions have no choice but to adapt to the external forces: indeed it is an important principle that regional businesses, workers and communities themselves should take primary responsibility for adapting to pressures leading to structural change.

While structural change and structural adjustment are often seen as having negative

sector policies. Biophysical forces, such as prolonged droughts, increased climate variability and reduced security of rural and urban water supplies, while cyclical in nature can also have significant structural consequences. Climate change and policies designed to promote adaptation to it are widely expected to lead to particularly substantial, sustained structural change, with sharply different regional consequences.

At a national economy-wide level, the structural changes that have occurred over the last century or so are well-known: the substantial and persistent relative decline of agriculture as a source of output and employment; the rise and then fall of the relative significance of manufacturing; the long decline then subsequent (post-1960s) reversal in the relative significance of mining; and the rise and rise in the relative significance of the services sector (in the post-World War II years).¹ And, of course, there have been significant compositional shifts *within* each sector – such as the shift from low-tech to higher-tech manufacturing activities and the growth of social business and financial services relative to transport and communications services – and consequent significant changes in the skills required of the workforce.

At sub-national regional level, there obviously have been corresponding structural changes. Indeed, as a matter of self-evident economic fact, the adjustment pressures that eventually lead to significant economy-wide structural changes are first felt by businesses at regional level. How regions respond (adapt) to them has had important consequences both locally and nationally for the patterns and levels of output and employment in different economic activities and sectors and for the future prospects of regions. For example, the consolidation of farms and increased capital intensity of agricultural production in response to adjustment pressures has enabled the farm sector to continue growing its *absolute* output, including for export, and its demand for related inputs (raw materials, equipment and transport business services) at a broader economy-wide level. Overall, whether rural regions have been net beneficiaries or losers, at least in relative terms, has depended on how adaptable they have been to the pressures for change.

Some *broad* generalisations about the likely consequences of structural change at regional level are possible. In particular, the degree of diversification or concentration of a region's economic base is important to how it likely has fared in response to pressures leading to structural change and to its future prospects. Metropolitan regions, with relatively diversified economic bases, are likely to have been net beneficiaries of structural changes – with, for example, any loss in manufacturing sector employment more than compensated for by growth in service sector employment – and are likely to have more secure long-term prospects. Non-metropolitan regions with less diversified economic bases and more disparate comparative advantages are likely to have had more diverse experiences and to have more widely divergent future prospects. They also are more likely to be susceptible to differences in the capacity of

individual businesses within them to adapt to changing economic circumstances.

Self-evidently, primarily rural regions, other things equal, are likely to have prospered less than many others and often have less robust economic futures especially if their capacity for diversification (e.g., into tourism) is limited. Likewise, many regions that have been substantially reliant on manufacturing employment will have struggled to maintain their economic (and community) vitality and identify ways to growth in future, especially if they have been specialised in the manufacture of textiles, clothing and footwear, motor vehicles and parts or basic metals: specialisation in the manufacture of food, beverages and tobacco products or paper products and printing would have been relatively more

However, there are some circumstances in which the ultimate adjustments might not be fully efficient. For example, resources which flow from less to more productive and profitable uses might also be flowing from less to more polluting economic activities. In the absence of appropriate polluter-pays charges, or equivalent regulations, the resource transfers might exceed those that would be socially efficient. The implication is *not* that governments should directly impede structural adjustment but rather that they should ensure that price signals provide incentives for socially efficient resource reallocation.

Moreover, policy settings which guide the ultimate economic structure of the economy might themselves impede productivity and welfare-enhancing resource-use changes between economic activities and consequently regions. At a macro-scale, the adoption, soon after Federation, of a national strategy of growing the Australian economy (and its population) behind high tariff barriers encouraged an inefficient flow of resources into protected manufacturing industries and into locations with a natural or contrived comparative advantage in producing protected products. A Tariff Board from time-to-time identified adjustments to tariff levels required to continue to give domestic production a competitive edge over imported competition, inhibited subsequent reallocations of resources to potentially more productive uses and locations of use. Policy changes since the mid-1980s, especially trade

essentially *intended* economy-wide consequences – whether policy or market-induced.

Since many regions tend to be relatively highly specialised in particular economic activities, some regions might experience disproportionate regional transitional dislocation costs as a consequence of intended economy-wide industry structural change, especially for workers, families and communities within them. However, these are essentially *incidental*, not directly intended, consequences of the process of structural adjustment.

The intended consequences – whether implicitly intended by changes in market forces or deliberately intended by changes in public sector policies – involve resources and profitability shifting from one type of economic activity (line of business, industry or sector) to others. Adversely affected businesses (often whole industries) typically argue the case for assistance to ease the effects of adjustment on their viability and profitability – or even to enable them to resist changes – particularly when the intended adjustment is a direct result of policy changes. Though it is often presented as about the consequences for employment levels (in general and (often) in particular regions), where such assistance is given to businesses, whether for good reason or not, it is best characterised as **industry adjustment assistance** even if a result is to assist some particularly adversely affected regions. Its consequence actually will be to assist a particular form of economic activity *irrespective of where its activity centres are located*.

By contrast, **regional structural adjustment assistance** is not directed at assisting a particular form of economic activity irrespective of its location. Indeed, it might not involve assistance to businesses *per se* at all. Its motivation is to assist specific, targeted regions and communities to cope with adjustment pressures that are unusually concentrated and is principally targeted at workers and families to help minimise the transitional costs to them of changing occupations and/or locations. If any form of assistance to businesses is involved, it, too, is region-specific and aimed at easing the transitional costs of closing down, or relocating or adopting more efficient and productive technologies or business practices.

Whether, when and how governments should assist regions to adjust have been contentious issues. In what follows we first (Section 2) put the causes and consequences of regional structural change into broad context, attempting to provide a framework for thinking about the process of structural adjustment, its impact on regions and appropriate public sector responses to its regional impacts. We then turn (Section 3) to developing a clear statement of what

progressive changes in the age structure of its population; and changes in people's preferences about where they want to live, work or do business (including sea change or tree change preferences);

- ⊞ changes to the economic, social or environmental policy or regulatory context in which regions operate – such as those caused in recent decades by tariff reductions, economic and financial deregulation, National Competition Policy and reforms to State infrastructure and service provision, and also those now in progress or prospect through the COAG Reform Agenda, through developments in water policy at State and national level and through the application of mandatory renewable energy targets and, eventually, a carbon price; and
- ⊞ other external factors – such as biophysical forces leading to prolonged drought, natural disasters, increased climate variability, reduced security of urban and rural water supplies or the potential long-run consequences of climate change; or such influences as changes in societal values which *directly* impact on economic activities (e.g., attitudes towards live sheep or cattle exports).

There are also some less easy to classify forces, such as the insidious, cumulative consequences of poor business management practices. The most dramatic examples include the ultimate consequences of poor, short-sighted land management practices which lead to increasing soil salinity or soil erosion. But businesses more broadly can

alternative uses. As with the case of market-led adjustment pressure, there will be a transition period during which at least some resources, labour especially, will be disemployed for periods of varying length.

In all cases, adverse initial impacts, and their first-round flow-on consequences involve reduced incomes to workers, either directly through wage cuts and/or disemployment of workers in the initially affected businesses, or indirectly through wage cuts or disemployment of workers in businesses that are upstream producers and suppliers, or most likely some of both. Since the initial adversely affected business and the upstream input suppliers are located somewhere, there will be a further flow-on effect through reduced turnover and profits in local businesses (shops, service stations, cafes, restaurants, hairdressers and so on) – and ever more widely dispersed ripple effects will flow. The earlier rounds of flow-on consequences are obviously likely to be more localised than the later rounds. However localised, and hence region-specific will be circumstance-specific. Where the initially adversely impacted business(es) are in non-metropolitan regions there is likely to be a stronger nexus between where people work and where they live and where they spend much of their incomes: that is, the early-round effects are likely to be more concentrated, the more remote is a community and its wider region and particularly substantial where initially adversely affected businesses are significant sources of employment and incomes in the communities and regions in which they operate.

Conversely, where the initial impacts of adjustment processes are beneficial to some businesses (for example, through increased overseas demand for their domestically produced goods or domestic microeconomic reforms that lower business costs of import competing domestic businesses) the initial effect will be to increase the profitability of those businesses. In this case, the transmission of the impact effect on businesses will be to *increase* employment of workers in the businesses and in other input suppliers, increasing their incomes and consequently their demand for locally supplied goods and services, resulting in further, ever widening, ripple effects. The more significant a beneficially affected business is to its local and regional economy, the more substantial the local and region-specific effects will be.

Of course, some forces leading to structural change can have both adverse initial effects on some businesses and beneficial impacts on others more or less simultaneously. For example, a continuing growth of consumer preferences for white-meat (especially chicken) over red-meat increases the profitability of chicken-meat growing and processing and reduces the profitability of beef and sheep growing and processing. The flow-on effects of increased output of chicken meat is increased employment and incomes in the industry and the opposite in red-meat production and incomes. Because chicken meat growing and processing tends to be concentrated near major markets – especially near cities – and, for logistical reasons, hatcheries, growing facilities and processing facilities tend to (need to) be in close proximity to each other, chicken meat production is highly regionally concentrated but most often near

Even the introduction of a carbon price – whether directly through a carbon tax or as an outcome of an Emissions Trading Scheme – which must, as a matter of economic logic, result in lower *national* output and employment growth than would otherwise have been the case if it is to achieve its objectives – would produce some early-round regional winners.³ Regions which have a comparative advantage in the production of renewable energy – especially initially wind-power – would experience higher levels of regional output, employment and incomes than otherwise. Although possibly to a lesser degree, so, too, would regions with a comparative advantage in the production of large-scale carbon sinks – e.g., forests of trees – if the purchase of offsets is allowed. On the flip-side regions that are involved in the production of sources of carbon-based energy – especially coal, and more so brown coal, but also gas – would be adversely affected in the early rounds. Indeed, they probably would be sufficiently adversely affected that their regional incomes and employment might fall *in absolute terms*, not just relative to what they otherwise would have been. Between the two extremes of smallish groups of regions that are either substantial winners or substantial losers, other regions will be early round losers relative to the base case (expected growth trajectories in the absence of a carbon price) to a greater or lesser extent depending on the carbon-intensity of economic activities within them.

Conversely, a source of adjustment pressure that on the face of it is a boon to the national economy can nonetheless have adverse consequences for some regions. An obvious case-in-point is the China-led resources boom which began in early 2000s, punctured briefly by the Global Financial Crisis – which is expected to be long-lasting, producing structural, not just cyclical change. The associated surge in commodity prices especially for iron ore, coal and LPG and new investment expenditure in resource extraction not only has increased employment levels and business and employment incomes in regions in the resource-rich States, but also raised national income, including through the demand for goods and services produced in other regions including regions in other States. In fact, it is almost certain that, both in terms of employment and incomes, the bulk of even the first-round benefits are *not* captured by regions within which the resource extraction occurs and the more-so where mines are operated on a fly-in, fly-out basis.

The flip-side of a resources boom involves two consequences adverse to other sectors and the regions in which they exist. One of them is that the booming regions will increase their demand for labour and capital. On the labour market side, minF5 12 Tf4de, m their demandBhoe45w9T1 05-11(e)-5()

a squeeze on other economic activities either through loss of workers or increased wages and salaries or both. How regionally concentrated the other economic activities that are particularly squeezed is not obvious.

The second source of adverse consequences of resources booms, however, most likely will also have some regionally concentrated effects. The effect of a resources boom in response to overseas demand for minerals (iron-ore and coal especially) and sources of energy (especially LPG additional to coal) will be to push-up the real exchange rate. This will adversely affect sectors of the domestic economy that rely substantially on export market demand or are import-competing (trade-exposed sectors). In most cases, Australia is a price-taker in international markets – and profitability and possibly viability – of business in trade-exposed sectors will, fall eventually leading to reduced production and employment.⁴ Among Australia’s top exports some tend to be largely located in cities with diversified economic bases – for example, vocational and tertiary education and, to some degree, international tourism – while others are more predominantly based in non-metropolitan regions with less diversified bases – especially agricultural products, including, for example food and wine (sometimes with processing of them also occurring in regional hubs) and sheep and cattle; and also can be locations with significant tourist attractions.

From a regional structural adjustment perspective this resource boom case poses two particular challenges for policy-makers. First, the regions that most directly benefit from the boom – the resource extraction and (in the case of LNG) processing regions – are high among those regions facing substantial adjustment stresses: they typically face challenges in attracting the required supply of labour and in expanding required infrastructure. Second, since it is predictable that the commodity price rises which spark the initial boom will taper-off as supply expands, and eventually goes into reverse (particularly substantially when demand growth slows or halts), the exchange rate will fall (other things equal) resulting in a potential revival of economic activity in sectors and regions that were initially adversely affected. But if they had been allowed to hollow-out during a long-sustained mining boom, capturing the potential benefits of their revived potential might involve substantial adjustment pressures.

Finally, in the more common, recurring cases where market-driven or policy changes are more moderate and/or incremental, the initial impact effects and subsequent adjustment pressures will involve much less adjustment stress and lower transitional costs. This will be so whether the initial impacts are adverse (e.g., growth in competition from low-wage overseas economies that have been first-adopters of innovations in technology or management processes; or from changes in consumer preferences that are adverse for production of commodities in which Australian regions have been particularly specialised) or are beneficial (e.g., increased overseas demand for products in which Australia has a competitive advantage or have adopted cost-reducing or quality enhancing new innovations). Nonetheless, the impacts can be relatively

substantial for regions highly concentrated in the provision of the affected goods or services.

The Potential for Benefits Nearly-all-Round

While the initial effects of structural adjustment pressures will unquestionably be adverse for some communities and regions and beneficial for others, it can often be the case that in the longer-term the adjustment process can lead to benefits to a number of regions (possibly most) that initially were adversely affected. This is especially the case where structural change is initiated by (economically rational) microeconomic policy changes (reforms) since its deliberately intended effect is to shift some resources from lower productivity to higher productivity uses.⁵ As a consequence, national aggregate output and incomes will eventually be higher than previously and at least some of the resulting increased consumption of goods and services will flow to regions initially adversely affected. That is, in a manner of speaking, there sometimes (often?) might be benefits almost-all-round when the process of structural change has substantially worked its way through the broader economy.

For example, while the introduction of water trading in Victoria resulted in employment in Agriculture, Forestry and Fisheries falling in all irrigation areas except Sunraysia (which had been the only net-purchaser region of permanent water entitlements), all but one significant other irrigation area has eventually achieved a net increase in total employment through expansion of other economic activities. Similarly, a Productivityms) since s

the preferred forms of support to businesses are either to assist them to exit the industry or to assist them to adopt cost-saving innovations in their business practices or production technology.

There are numerous reasons for the general presumption against providing structural adjustment assistance to businesses, of which two are particularly important, both of which are explained more fully later. First, investors in businesses – small as well as large – are, or ought to be, aware that they are taking-on market-specific risks: if they have reason to believe (from observation or experience) that governments are likely to, in effect, compensate them if their judgement proves to have been wrong, their incentives to adequately assess the risks and to make provision for absorbing the effects of unfortunate outcomes is diminished. Second, providing assistance to business actually feeling adjustment pressures can diminish their incentives to release resources (labour and capital) to enable them to flow from now less productive uses to now more productive uses.

Policy responses to moderate structural adjustment pressures

It is hard to see how any case, less still a strong one, could be made for governments to provide regionally-targeted structural adjustment

stronger than usual, a culture of dependence on assistance is likely to develop, wasting resources devoted to capacity-building as well as using-up resources in the provision of structural adjustment assistance.

All that said about the general case *against* providing regional structural adjustment assistance, we turn now to consider in what circumstances such assistance might be economically desirable. The focus on the *economics* of structural adjustment and policy responses to it is *not* because we think social and political considerations are unimportant. Rather it is because we wanted to comprehensively codify the economic considerations before attempting to build into the analysis broader – including social and political – considerations and both the interconnections and the trade-offs between all particularly relevant considerations, though we do touch on both social and political considerations in Attachment A. For what it’s worth, our intuition suggests that the nexus between economic and social perspectives is at least moderately strong in our analysis to this point, though we concede that that intuition hinges to a significant degree on substantial resilience in regional communities, based on strong social as well as business networks, and that moderate structural change isn’t so persistently adverse to some communities that they become hollowed-out to a point at which their social capital is lmrrdr and their]TJETBT1 0 0 1 462787 T69.27 Tm[

absence of fully complete and flexible markets for water, up-stream

employment. For these (and other) reasons, governments sometimes might supplement adjustment assistance measures with others directed at a broader array of policy objectives, some of which are themselves inherently regional in their consequences.

A number of newly emerging (inter-related) sources of adjustment pressures – in particular, a higher degree of climate variability, reduced security of water supplies and the longer term consequences of climate change – are taking people, businesses and governments into relatively unfamiliar circumstances. They raise particular challenges for the design of adjustment assistance policies and programs which require special attention, including the need to recognise interdependencies between them. It is important that there be consistency in policies and initiatives aimed at addressing their particular consequences.

The relevance of other regional policy objectives

Regions that cannot cope with on-going pressures for structural change or, more broadly, would have their economic prosperity, social vitality and community sustainability substantially diminished, despite both general adjustment assistance and additional targeted, context-specific forms of structural adjustment assistance available to them, typically will have more intractable problems such as a disproportionate reliance on a narrow and fragile economic base, especially one based on a declining industry or sector. Where it would be consistent with State and national policies to do so, such regions might be provided with more fundamental pro-active ***regional development assistance***, focused explicitly on building and/or diversifying their economic base. Many rural and remote regions are particularly likely to be candidates for this form of additional assistance: among other things, they are most often regions with both narrow and fragile economic bases, local governments and regional development organisations within them often have limited capacity to contribute to facilitation of adjustment, their residents typically have particularly strong attachments to them, and there may be more-than-usually limited information readily-accessible about employment, housing and/or business opportunities elsewhere.

However, the issues involved and the nature of the regional development assistance potentially to be provided are conceptually different from those involved in the provision of regional structural adjustment assistance *per se*.

Regional structural adjustment assistance aims to manage the process of change while not interfering with resources (labour and capital) ultimately being (re)allocated to their most productive uses, wherever that might ultimately lead them to be located.

Regional development assistance aims to influence the allocation of resources between locations, and within them, so as (to the extent possible) to underpin the economic prosperity, social vitality and community sustainability of regions.

In short, regional structural adjustment assistance is essentially about promoting economic efficiency whereas regional development assistance

Within the context of the overarching objectives and broad principles identified in the previous section as the core elements of a framework for the provision of regional structural adjustment assistance, there is potentially substantial flexibility in the design and implementation of adjustment assistance programs and initiatives. However, a number of more detailed principles and practices can usefully be identified.

| PRINCIPLE | OBSERVATIONS |
|--|--|
| <p>1. <i>A clear distinction should be maintained between policies, programs and initiatives designed to provide regional structural <u>adjustment assistance</u> and those designed to provide structural adjustment <u>compensation</u> or to give regional <u>development assistance</u>.</i></p> | <p>☒ Adjustment <i>compensation</i> policies aim to offset the consequences of structural change for household incomes or business profits (asset values) and are generally to be considered of dubious merit other than when the changes involve, in effect, expropriation of property rights.</p> <p>☒ regional <i>development</i> assistance is generally explicitly designed to attract business investment and people to locations they otherwise would not, or might not, have chosen: that is, it seeks</p> |

| PRINCIPLE | OBSERVATIONS |
|--|--|
| <p>4. <i>Relying on the social safety net and generally available adjustment support measures should be regarded as likely to be the most appropriate vehicle for assisting the process of adjustment and moderating adverse distributional impacts in most cases</i></p> <p><i>the context of market-driven evolutionary structural change.</i></p> | <p>☐ While they cannot handle all circumstances and their design might be capable of being improved, generally available adjustment support mechanisms have the advantages of, for example: treating individuals in similar circumstances equally, wherever they live or work; addressing the <i>net</i> effects of varying influences on the circumstances of individuals and families; and supporting individuals and families rather than particular sectors, industries or businesses.</p> |
| <p>5. <i>While both market-driven evolutionary forces and economic policy changes implemented by governments impact on the efficient and sustainable size, composition and location of economic activity in regional areas across Australia, the case for governments providing targeted structural adjustment assistance should be regarded as likely to be strongest in the context of substantial changes to economic, social or environmental <u>policies</u>.</i></p> | <p>☐ Evolutionary structural change arising from on-going changes in underlying market forces and government policies external to individual regions is simply a (generally desirable) fact; decon63(o)-17</p> <p>nbe -35is a</p> |

| PRINCIPLE | OBSERVATIONS |
|--|--|
| <p><i>15. Proposed adjustment assistance strategies and programs preferably should be developed prior to implementation of policy changes which are likely to result in significant structural change, and preferably should be unveiled at the time of the announcement of the policy change itself: it often is good politics as well as good policy to pre-announce both the content of the proposed strategies and the processes by which they will be reassessed over time.</i></p> | <p>☐ Pre-announcement of measures that will have the effect of ameliorating how government (and the state) subject structural changes impact on people and businesses facilitates forward planning for adaptation to new circumstances by those likely to be</p> |

Attachment A which follows examines market failures and other pertinent policy issues in some detail for those who might be interested in an exposition of the concepts involved.

Small business owners *might* sometimes be an exception to the general rule because they often (have to) commit all or most of their assets to their businesses, at least at start-up. However, they know (or should know) the risks they are accepting and compensating them for the effects of policy changes could be seen as akin to repaying bets on losing horses. The predictability of policy changes, and the magnitude of their effects, however, might be considerations in deciding whether assistance might appropriately be given to small businesses.

Community Sustainability

Closely related to the equity component of social well-being is the question of community sustainability (or critical mass). In current context, this has two policy-relevant components. The first is the generic issue arising from the fact that people have attachment to locations for many reasons relevant to their well-being and are willing to trade-off income and even, to some degree, local amenity, to remain. While the optimally *efficient* response to structural adjustment pressures might be to let communities decline, those that choose to remain face the risk that the quality and quantity of local economic and social infrastructure, and of social capital, will at some point fall below a critical mass necessary for community sustainability, significantly reducing their well-being. The question for policy-makers is whether it would be appropriate to let the relevant community go into (possibly spiralling) decline and, if not, what to do about it. Again, there are no general policy principles. Decisions are likely to be built around a mixture of assessments of fairness and of prospects for new economic opportunities eventuating. They will also appropriately be shaped by other policies close to governments' h r s -

This leads to the standard recipe of regional development agencies – and often State governments – preparing information packages for distribution elsewhere, including in other States, especially targeted at businesses. Transmission of information, other than through job ads, is more problematic in getting the attention of workers and families: as a result, this activity tends to be concentrated around significant change events through enhanced job search and training programs – whether because of the relevant region being in decline or another region facing acute scarcity of workers.

(ii) *Public Goods*

Public goods are goods for which their consumption or use by one user/consumer does not reduce the amount available to others (they

development in all dimensions, and the fact that, in budgets, funds for roads are in competition with other political priorities can result in under-investment, or undesirably delayed investment, in some regions compared to others (i.e., there can be government, as well as market, failure).

Even where access to infrastructure with substantial capacity can be charged for, and hence privately provided, there can be policy-relevant considerations concerning not only efficient access pricing but also first-user issues. For example, new electricity transmission infrastructure that would be needed to connect remote wind-farms might (at least initially) have few other potential users over which to spread the costs and might delay investment in the potential generation facility. In some

(iv) Irreversibilities

Irreversibilities exist where a decision taken today has consequences that cannot be undone (reversed) in future. These circumstances call for an approach of limiting potential regrets.

The most clear-cut cases of irreversibilities lie in ecological context where species of flora and fauna can be, in effect, wiped-out. This can have regional dimensions when decision-makers subjugate environmental consequences to economic progress.

It might also have some application to the community sustainability issue. When a community's population and economic and social infrastructure fall below a (hard to define) tipping point, it can spiral

Any of these flaws can lead to the system as a whole being inadequate for its intended purposes. Some flaws might be easy to identify, if there's a will to do so, and might, or might not, be easy to fix. Others aren't so easy to identify, or there is resistance to changing the causes of them, resulting in sustained dysfunction in the system, and in the region's capacity to adapt to ongoing change. The issues surrounding leadership, governance and participation are bedrock issues for sustainable development and responsiveness to change. Without them being recognised and responded to, the system of regional development and adjustment can fail even if all else for effectively and efficiently promoting regional development is in place.

References

PC (1999), *The Impact of Competition Policy Reforms on Rural and Regional Australia*, Productivity Commission Report No. 8, Canberra.

Regional Development Council: *Framework for Cooperation on Regional Development*

