

'HOT SPOTS' IN THE AUSTRALIAN SPACE ECONOMY¹

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ABSTRACT Where were the 'hot spots' for growth in Australia's space economy in the decade 1981 to 1991? Were these the same for population and employment? This paper identifies those regions which garnered the greatest shares of the nation's changing employment numbers in selective industry sectors. It shows how there were important spatial mismatches in these patterns of growth and decline. It emphasises that regions with declining shares of national population can still be hot spots of growth for employment in some activities.

1. INTRODUCTION

Demographic change fuelled much of the regional growth or decline in jobs in Australia through the 1980s. For several regions and for employment in particular industry sectors, however, this was not the case. Specific demands resulting from the latest round of globalisation processes may confer upon select locations and regions strategic advantages in some key sectors. Therefore regions might experience a fall in national population shares or even absolute population decline, yet at the same time undergo considerable gains in employment in particular industry sectors because of their ability to efficiently serve national and international markets.

The mismatches identified in this paper between increasing or declining national shares of both population and employment provide a preliminary overview of regions (delineated in this analysis as the Statistical Divisions - SDs - by the Australian Bureau of Statistics - ABS) which may be 'hot' or not in securing for themselves successful outcomes from economic restructuring, a key component of the ongoing transformation of the Australian economy. An investigation of the extremes of the regional shift in the national share of employment by selected single and double digit industry sectors between 1981 and 1991 for each of the 58 SDs in Australia, has been undertaken. From that analysis, several have stood out as 'hot spots' - here defined as those regions

¹ This paper is based on research funded by ARC Large Grant No. A79531731.

where there has been more than a 1.5 point gain of the national share of jobs in a particular sector over the decade in question. This shift is plotted with the change of each SD's share of the national population over the same period.

2. CHANGING DEMOGRAPHY OF AUSTRALIA - POPULATION 'HOT SPOTS'

Recently the sunbelt - rustbelt phenomenon of population redistribution has received a great deal of attention in Australia (for example, Flood, 1992; Maher and Stimson, 1994; Stimson *et al.*, 1996b) as it has in the USA and elsewhere. An overview report by Bell (1995) identified three main patterns of population redistribution between the regions during the 1980s:

- movements away from the southeast of the continent towards the north and the west, especially to Queensland and, to a lesser extent, to Western Australia.
- net losses from much of the interior, especially rural areas and inland towns, in favour of the major metropolitan centres and
- outflows from the cities themselves to adjacent areas and amenity-rich coastal regions.

Many studies have indicated where Australia's population 'hot spots' are - those regions which have experienced growth rates far higher than national and state population growth rates. As can be seen from Table 1, the classic sunbelt areas have garnered the greatest share of the nation's population over the 1981-1991 period.

Moreton and Brisbane SDs - collectively known as the Southeast Queensland (SEQ) Region - were the greatest 'winners' in the changing shares of national population over that decade. It became the major recipient of retirement migration (Stimson *et al.*, 1996b) and the flow was heavily biased to the Australian-born. The SEQ Region boosted its share of the nation's population from just over 9.3 per cent in 1981 to more than 11 per cent in 1991.

Other sub-tropical east coast SDs - the Mid North Coast of NSW, Far North Queensland, Richmond-Tweed and the Wide Bay-Burnett were also in the list of top 12 SDs which made the greatest gains in their share of the national population. Both Perth and the South West SD of Western Australia, Darwin and the Northern Territory Balance made the top 12 list as did Canberra and the South Eastern SD of NSW.

The greatest losses of the national share in population were made by Sydney, Melbourne and Adelaide (Table 2). Although the population in these three SDs increased over the ten years, their shares fell. Collectively, the national share of those three cities fell from 47.27 per cent in 1981 to just over 45 per cent by 1991. Two other urban SDs, Hunter and Greater Hobart, also were among the top 12 list of greatest losses in national population share and the remainder in the list were rural or remote SDs in NSW, Victoria, Tasmania or South Australia (i.e., in the Southeast of the country).

Table 1. Top 12 Statistical Divisions Ranked by Greatest Gains in Share of National Population 1981-1991

SD Name	Population 1981	National Proportion 1981	Population 1991	National Proportion 1991	Change in National Share
Moreton	314,159	2.16	513,798	3.05	0.89
Brisbane	1,048,224	7.20	1,334,055	7.92	0.72
Perth	898,978	6.17	1,143,277	6.79	0.62
Mid-North Coast (NSW)	178,972	1.23	240,765	1.43	0.20
Far North (QLD)	146,084	1.00	201,937	1.20	0.20
Canberra	220,378	1.51	278,849	1.66	0.14
Richmond-Tweed	135,882	0.93	179,778	1.07	0.13
South West (WA)	97,802	0.67	134,635	0.80	0.13
Northern Territory - Bal	65,796	0.45	96,096	0.57	0.12
South Eastern (NSW)	140,584	0.97	178,854	1.06	0.10
Wide Bay-Burnett	154,946	1.06	195,238	1.16	0.10
Darwin	56,742	0.39	78,428	0.47	0.08

Source: ABS cdata time series profile tables (enumeration population)

Table 2. Bottom 12 Statistical Divisions Ranked by Greatest Losses in Share of National Population 1981-1991

SD Name	Population 1981	National Proportion 1981	Population 1991	National Proportion 1991	Change in National Share
Wimmera	52,484	0.36	51,080	0.30	-0.06
Greater Hobart	168,369	1.16	181,851	1.08	-0.08
Western District (VIC)	96,932	0.67	97,863	0.58	-0.08
Mersey-Lyell	106,028	0.73	107,983	0.64	-0.09
Hunter	458,704	3.15	513,698	3.05	-0.10
Northern (SA)	92,510	0.64	88,368	0.52	-0.11
Murrumbidgee	139,787	0.96	143,012	0.85	-0.11
Central West (NSW)	159,762	1.10	165,665	0.98	-0.11
Northern (NSW)	174,313	1.20	180,979	1.07	-0.12
Adelaide	931,258	6.39	1,023,608	6.08	-0.32
Melbourne	2,750,282	18.88	3,022,433	17.95	-0.94
Sydney	3,204,697	22.00	3,538,744	21.01	-0.99

Source: ABS cdata time series profile tables (enumeration population)

However as identified elsewhere (O'Connor and Stimson 1995), there are conflicting trends of population dispersal (from *internal* migration) as well as concentration - particularly in Sydney and Melbourne (from *international* migration). The arrival of overseas migrants has offset greater proportional losses in the country's two largest metros and with the entry system in recent years placing greater emphasis on immigrants with higher levels of skills and capital, the population composition and characteristics are also changing there.

Table 3. State and National Ratios of Workers by Sector per 1,000 Residents, 1981 and 1991, Extractive and Transformative Industries

	Agriculture		Mining		Manufacturing		Electricity, Gas, Water		Construction	
	1981	1991	1981	1991	1981	1991	1981	1991	1981	1991
NSW	21.63	16.46	6.10	4.15	80.90	54.99	9.13	5.96	27.38	25.85
Victoria	23.41	16.91	1.39	1.34	96.74	70.21	9.76	6.10	24.40	22.98
Queensland	34.20	23.85	8.58	6.95	55.00	44.60	6.83	3.66	31.81	28.05
South Aust	32.71	23.42	3.24	2.85	80.79	62.59	7.91	5.22	23.24	21.36
Western Aust	34.53	22.70	17.43	17.14	54.74	41.96	7.55	5.53	33.00	25.80
Tasmania	30.92	25.21	10.28	5.06	62.09	51.10	11.07	6.54	26.05	20.80
N Territory	19.08	12.17	22.05	13.66	22.23	17.67	8.94	4.04	44.23	23.36
ACT	3.15	1.91	0.89	0.51	16.47	17.37	3.23	1.73	23.16	25.60
AUSTRALIA	26.13	19.00	6.14	5.12	76.78	55.27	8.66	5.41	27.43	24.97

Note: ABS usual residence data are used here.

3. SHIFTING SECTORAL EMPLOYMENT SHARES: AN AGGREGATE ANALYSIS

As seen in Tables 3 to 5, even at the state (and territory) level there are considerable differences in the ratios of residents to workers in each of the sectors. This ratio expresses succinctly the demographic shifts as well as changing fortunes of employment in the sectors over the decade. All extractive and transformative activities (Table 3) saw declining ratios of workers to residents in all states and territories over the decade (except for the small numbers in ACT manufacturing and construction) with changing technologies, new trading regimes and international divisions of labour contributing to this. Of the distributive activities, wholesale and retail trade alone saw across-the-nation increases in this ratio, albeit with considerably different rates of change, transportation and storage ratios changed very little over the decade, with a slight increase nationally, while state and territory ratios of communications sector workers to residents dropped in every case.

It was in the service sectors (Table 5) where the most resounding increases in workers to residents ratios in Australia's states and territories were found. This was especially so for finance, property and business services, where the national ratio increased from over 36 workers per 1,000 residents in 1981 to over 46 by 1991. NSW and Victoria had even more impressive increases as did the ACT where this ratio increased from 34.6 per 1,000 in 1981 to over 54 by 1991. Recreation and personal service workers increased in number per 1,000 residents fairly consistently in all states, as did community service workers with the exception of the Northern Territory where the ratio fell. Public Administration and Defence was the only service sector where the national ratio fell over the decade, largely as a result of the declining ratio in the ACT and to a much lesser extent, Northern Territory, Queensland and NSW.

Table 4. State and National Ratios of Workers by Sector per 1,000 Residents, 1981 and 1991, Distributive Sectors

	Wholesale/Retail		Transport/Storage		Communications	
	1981	1991	1981	1991	1981	1991
NSW	75.85	79.42	20.30	20.85	8.92	7.25
Victoria	73.95	82.15	17.21	18.00	8.61	8.12
Queensland	77.58	79.46	22.17	20.82	9.15	6.14
South Aust	77.59	78.14	16.45	16.20	8.05	6.14
Western Aust	78.02	78.41	21.01	18.44	7.80	5.68
Tasmania	69.12	69.43	16.96	15.97	8.10	5.71
N Territory	57.18	59.18	18.37	19.95	8.58	5.27
ACT	58.85	67.80	10.40	14.04	7.28	6.30
AUSTRALIA	75.35	79.24	19.23	19.26	8.65	6.96

Note: ABS usual residence data are used here.

Table 5. State and National Ratios of Workers by Sector per 1,000 Residents, 1981 and 1991, the Service Sectors

	Finance, Property, Business Services		Public Administration & Defence		Community Services		Recreation, Personal Services	
	1981	1991	1981	1991	1981	1991	1981	1991
NSW	42.16	53.37	22.42	21.00	60.90	71.00	24.34	30.43
Victoria	34.95	47.19	22.18	22.24	64.65	76.17	19.64	26.45
Queensland	33.16	39.96	24.08	22.80	58.03	68.64	23.29	31.17
South Aust	29.85	41.46	20.65	20.72	74.28	84.80	21.51	28.42
Western Aust	37.32	43.95	18.90	20.11	71.25	78.10	23.45	29.13
Tasmania	25.54	29.44	21.04	22.61	70.40	77.62	24.23	29.13
N Territory	26.40	28.34	62.00	50.34	93.57	88.96	28.40	35.80
ACT	34.63	54.19	148.83	138.81	102.50	103.25	27.04	33.62
AUSTRALIA	36.61	46.68	24.36	23.83	64.71	74.60	22.67	29.34

Note: ABS usual residence data are used here.

4. CHANGING SPATIAL PATTERNS OF LABOUR - EMPLOYMENT 'HOT SPOTS'

At the disaggregated level of SDs, analysis of patterns of changes in national shares of population and of employment in specific industry sectors for two and four digit ASIC codes for 1981 to 1991 has been undertaken by the authors. Space does not permit all the results to be presented here. Rather emphasis is on a selected range of industry sectors in which interesting patterns of regional competition and specialisation are evident.

Communications Concentration in Melbourne

The Communications sector has seen output grow more than three times the average for all industry sectors since 1990-91 (Industry Commission, 1995, p. 4). However, it also grew strongly over the period 1982-93 to 1990-91 at more than 7.9 per cent per annum. It has emerged as a key sector in the globalisation process. As seen above (in Table 4) the ratio of workers in this sector to residents has fallen in all states, nevertheless the communications sector based in Melbourne proved to be one of the hottest spots in the nation for any industry sector. As seen in Figure 1, despite losing in its share of national population, Melbourne considerably increased its share of employment in the Australian communications sector. By 1991 there were over 9 communications workers for every 1,000 usual residents in the Melbourne SD, higher than Sydney's ratio of 8.45, and South West Queensland was the SD with the nation's third highest ratio at just above 8 per 1,000 (that SD includes the town of Roma - an important regional centre for communications). For Australia as a whole the ratio was 6.96. Although there was an Australia-wide net decrease of communication sector jobs of over 8,000 persons between 1981 and 1991, Melbourne experienced a net gain

of over 1,500 communications sector jobs. This equated to an increase in its share of these jobs nationally, from 20.54 per cent in 1981 to 23.19 per cent in 1991.

Only 14 other SDs in Australia increased their share of the nation's communications employment. Moreton had the next largest shift in share of 0.43 (moving from 1.72 per cent of Australia's communications employment in 1981 to 2.15 per cent by 1991) although its gains in the share of national population were much greater. Perth and Brisbane SDs, which stand out as major population share gainers over the decade, had stationary or small losses of national share in communication sector jobs. Although Sydney lost considerably in its share of national population, its loss in communications jobs was much smaller - it had a net loss of just over 2,000 jobs for the decade taking its share from 25.45 to 25.35 per cent of the national totals.

Although in 1991 Sydney still had more persons employed in communications than Melbourne, the large shift in the national share of these jobs in favour of Melbourne as well as the very high ratio of these workers to residents there, signifies the growing importance of this hot spot in the Australian space economy. With the recent deregulation of communications in Australia it will be interesting to see whether the increasing concentration in Melbourne of this crucial sector will continue or not.

Mining Share Gains for the West

There were just over 5 workers in the mining sector in Australia for every 1,000 residents in 1991. Western Australia had over three times the national figure while Northern Territory and Queensland were also above the national ratio. At an even finer regional scale though, Pilbara in WA had the highest ratio of miners to residents at over 23 times the national ratio.

From Figure 2 it can be seen that the majority of SDs in Australia had virtually no shift in their share of mining employment and this was often because employment in this sector was low or negligible in those regions. For a dozen or so regions however, gains or losses in employment - coming with a nation-wide net loss of just over 3,000 jobs (88,800 mining jobs in 1981 and almost 85,800 in 1991) - produced the shifts in share seen in the outliers on Figure 2.

Regions in Western Australia saw the most favourable of these shifts. Perth had 5.4 per cent of the nation's mining employment in 1981 and this increased to 8.15 per cent ten years later - a shift in share of 2.75 percentage points and far higher than its gain in population shift. This was largely attributable to the sub-sector of "services to mining" which includes employment in the exploration companies - there its impact was greater so that by 1991, over 26 per cent of Australia's employment in that sub-sector was based in Perth.

The South Eastern region which includes Kalgoorlie also boosted its share of mining employment from 4.5 per cent to 6.9 per cent, far more significant than its increase in share of the national population which went from 0.29 to 0.30 per cent. In this case it was the sub-sector of metallic minerals mining (which includes Gold Ores) that was important in that increase. Central and South

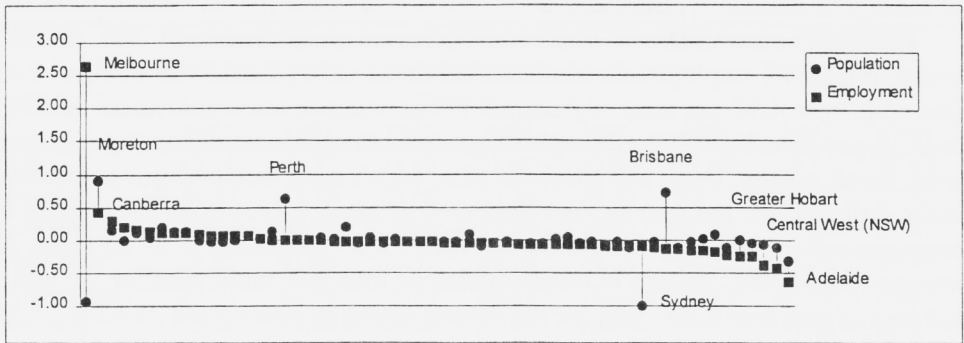


Figure 1. Changes in the National Share of Population and Employment in Communications 1981-1991

Note: SDs ranked from left to right in order of their greatest gains in national share of employment in this sector over the period.

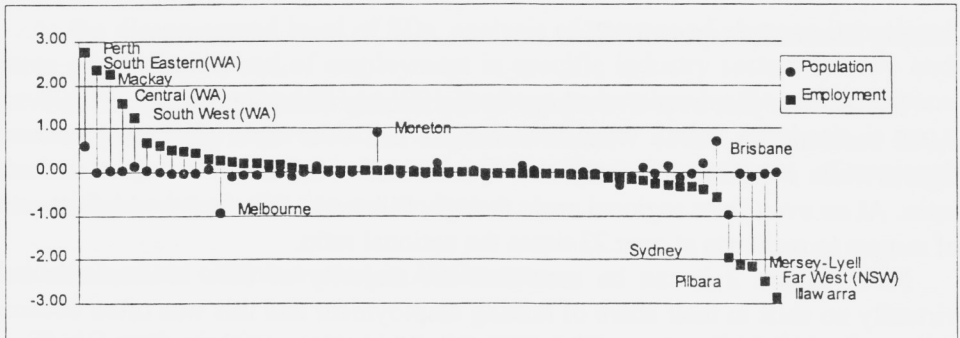


Figure 2. Changes in the National Share of Population and Employment in Mining 1981 - 1991

Note: SDs ranked from left to right in order of their greatest gains in national share of employment in this sector over the period.

Western WA also featured prominently in gaining shares of the nation's mining employment as did Mackay in Queensland. In the Mackay region's case, growing employment in the inland coalfield towns was largely responsible, although that SD went from 3 to 5.25 per cent of the nation's mining employment, in the sub-sector of coal mining it increased its national share from 7.8 to 15.8 per cent. However, in contrast, Illawarra's national share of coal mining employment plummeted nearly 8 points - from over 18 per cent in 1981 to 11.36 per cent in 1991.

Despite the high ratio of miners to residents in the Pilbara region of WA it was nevertheless one of the regions which lost its share of the nation's mining employment over the decade - it had over 10 per cent of mining employment in 1981 and this fell to 8.11 per cent ten years later. Even greater losses in mining employment shares were felt in Illawarra and the Far West of NSW, as well as Mersey-Lyell in Tasmania.

Selective Manufacturing Employment Gains in the Sunbelt

Between 1982-83 and 1990-91, the average annual growth in real output by the manufacturing sector was just 2.3 per cent, compared with 3.7 per cent across all industries in Australia. This was one of the lowest performances of any industry sector for that time (Industry Commission, 1995, p. 4), although subsequently between 1990-91 and 1994-95 the manufacturing sector has grown much faster. The 1980s was a decade during which the impacts of industry restructuring, as Australia moved from a protected to an open economy, were considerable and widespread with a large amount of 'job shedding' occurring widely across the manufacturing sector.

Not surprisingly, the urbanised SDs of Victoria and New South Wales have the highest ratios of manufacturing workers to residents, although these are lower than in 1981. For most of the sub-sectors in manufacturing, numbers employed fell over the 1981-91 decade; some of the most painful effects of industry restructuring in the 1980s (and some would argue still in the 1990s) were in the manufacturing industries. For example, the number employed nationally in the manufacturing of basic metal products in 1991 was almost half that of the 1981 figure. From a spatial point of view, these losses implied the disemployment of a significant proportion of the job base of many areas below the metropolitan SD level - parts of Western Sydney and Melbourne were notable.

However in some regional areas, those same manufacturing sub-sectors maintained or even increased and diversified those manufacturing job bases. Analysis of most of the changing shares of employment in the various sub-sectors within manufacturing show that as a result of declines in the SDs of Melbourne, Sydney and sometimes Adelaide and Hunter, there have been compensating small gains in share across a number of other regions.

Employment in the manufacturing sub-sector of fabricated metal products has been shown here for as seen in Figure 3, a large loss of national share of these jobs by Melbourne, Sydney and to a lesser extent, Adelaide, Hunter and Perth has resulted in small share gains for many SDs. The most notable hot-spots were Brisbane and the surrounding Moreton SD, followed by the Mid North Coast SD of NSW and Illawarra as the regions where share gains were most significant. Given that fabricated metal products include such items as structural metal products, sheet metal products, metal blinds and awnings, etc., it could be that the housing boom associated with the South-East Queensland population increases have helped it become a hot-spot for employment in this type of manufacturing.

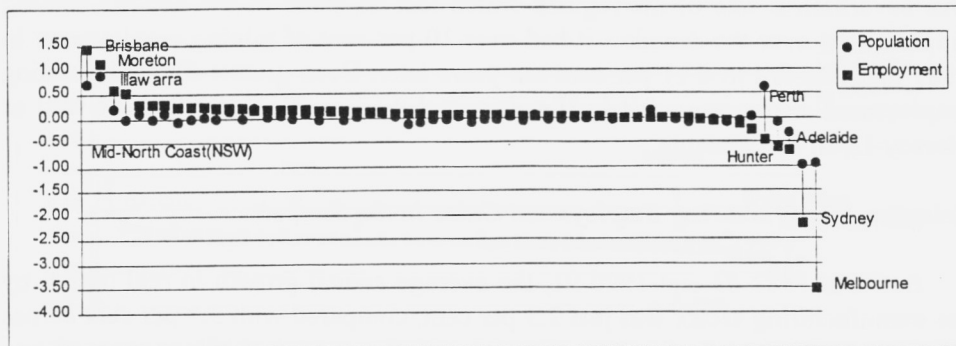


Figure 3. Changes in the National Share of Population and Employment in the Manufacturing of Fabricated Metal Products 1981 - 1991

Note: SDs ranked from left to right in order of their greatest gains in national share of employment in this sector over the period.

Nationally there was a net loss of jobs in this sub-sector of 20,000 over the ten years, with around 8,000 of those in each of Sydney and Melbourne. Although Brisbane had a small net loss of less than 1,000 jobs in this sector, this was enough to give it the greatest proportional gain of any region in the country - increasing its national share of just over 9 per cent in 1981 to 10.6 per cent by 1991 (see Figure 3). This was a gain greater than that of its share in national population for the same period, as was the case for Moreton, Illawarra and the North Coast SD of New South Wales, which had the next greatest gains. These were also usually areas of notable population growth.

Construction Employment Shares Increase in the Cities

There were almost 25 construction workers for every 1,000 residents in Australia, and the ratios for the states and territories varied only between 28 for Queensland to just under 21 for Tasmania. At the regional level however it was the Moreton SD (with both a rapidly expanding population and globalising tourism sector), that topped the nation with a ratio of nearly 36 construction workers per 1,000 residents by 1991. Four of the five highest ratios are in Queensland - after Moreton came WA's Pilbara, along with Brisbane, the Central West of Queensland and Fitzroy. Perth and Sydney are the only other capital city SDs to reach the top 12, as did two SDs adjacent to Sydney - Hunter and Illawarra.

In the sub-sector of general construction, which incorporates housing as well as non-residential construction, significant mismatches are identified with Sydney and Melbourne - the two SDs with the greatest declines in national population shares over the ten year period - having the greatest gains in the national share of employment in general construction (see Figure 4). Over the ten years,

Melbourne's share of national employment for this sector increased by nearly 1.5 per cent, from 14.01 per cent in 1981 to 15.49 per cent in 1991, equating to a net gain of 2,700 employed persons during that time. Sydney's national share increased a little less over that same period but from a bigger base - it had 20.14 per cent of general construction employment in Australia in 1981 and this boosted to 21.49 per cent by 1991. Moreton, Brisbane, Far North Queensland and Canberra SDs all had the next largest gains in national share over the decade.

Another sub-sector, special trade construction, refers to the 4 digit sub-sectors of concreting, bricklaying, carpentry, plumbing etc. Nation-wide there was a net

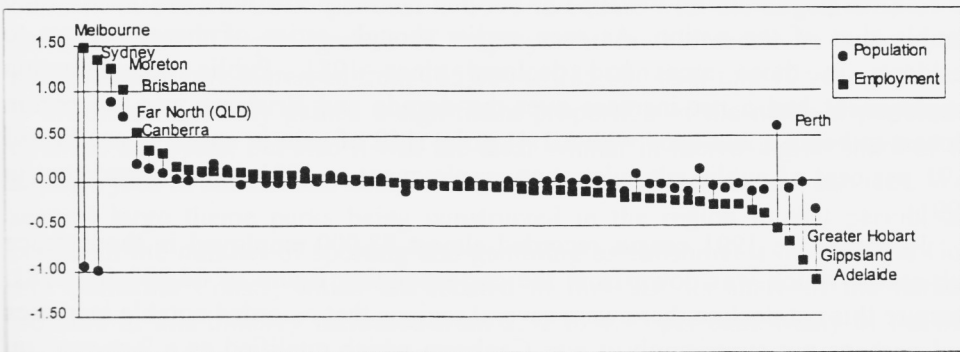


Figure 4. Changes in the National Share of Population and Employment in General Construction 1981 - 1991

Note: SDs ranked from left to right in order of their greatest gains in national share of employment in this sector over the period.

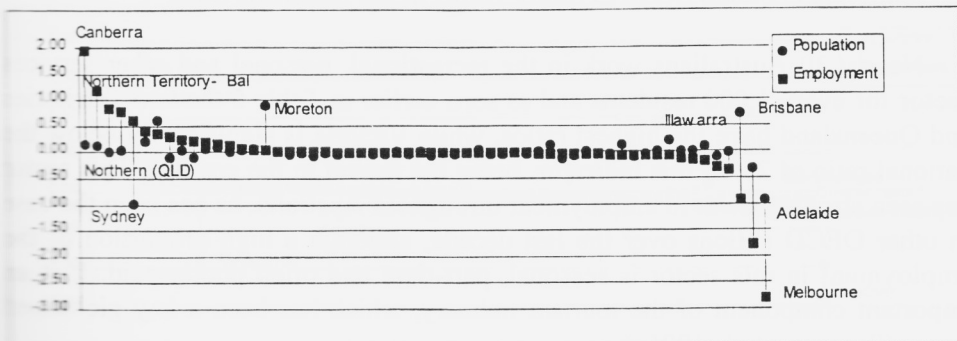


Figure 5. Changes in the National Share of Population and Employment in Defence 1981 - 1991

Note: SDs ranked from left to right in order of their greatest gains in national share of employment in this sector over the period.

gain of over 52,000 persons employed in these jobs over the ten year period, and although Melbourne gained over 6,000, it could not keep pace with the other capital SDs with its national share of employment falling from 18.76 per cent in 1981 to 17.43 per cent in 1991. Perth and Gippsland revealed similar losses of national shares, this occurring at a time of significant gain of the national population share for Perth. Sydney again increased its national share of this employment, taking a larger share than both Brisbane and Moreton SDs which were next ranked.

Defence Employment - Of Importance for the Territories

There was an enormously high ratio of public administration/defence workers to resident population in the ACT, while the Northern Territory also had a ratio double that of the nation. As seen earlier though, ratios of these workers to residents in those areas had declined since 1981. Public administration employment had a net increase over the decade and Brisbane was the region closest to being a 'hot-spot' with a 1.41 point shift of gain in employment (it had 7.71 per cent of public administration employment in 1981 and 9.12 per cent in 1991).

However the 1991 census recorded almost 82,000 employed in the defence sub-sector which was down from the corresponding figure of 88,000 for 1981. Despite this net decline there were several regions that recorded notable increases and perhaps not surprisingly it was Canberra which qualified as a 'hot-spot' on this occasion (see Figure 5). Canberra had 9.17 per cent of the nation's defence employment in 1981 and by 1991 this had expanded to just over 11 per cent. Not far behind it was the Northern Territory Balance and North Queensland, while Sydney, despite its loss of share in national population, had the nation's next largest gain in share of defence employment. These gains were made as losses of share were recorded most noticeably in Melbourne, Adelaide and Brisbane.

Recreational/Personal Services Share Gains in the Sunshine State

Nearly 30 Australians work in the recreational, personal and other services sector for every 1,000 residents and as seen earlier in Table 5 the two Territories and Queensland have the highest ratios, while Victoria is significantly below the national ratio of 29 on this indicator, being the lowest in the country. This sector has seen strong growth in employment throughout Australia, as has been the case in other OECD nations over the last decade, although a high proportion of the employment in this sector is seasonal, part-time and often poorly-paid. It is an important component of the tourism industry, which has been a key globalised sector (Stimson *et al.*, 1996a).

At a finer geographical level, four of the 12 regions with Australia's highest ratios were located in Queensland, led by Moreton, and followed closely by Far North Queensland because of the rapid growth of tourism in Cairns and Port Douglas. All four territorial SDs made it into the top 12 - Darwin (with nearly 41

per 1000), Canberra (over 33 per 1000), the Northern Territory Balance (32 per 1000), and the ACT Balance (with just over 31 per 1000). The lowest ratio of personal/recreational services workers to residents was found in the Upper Great Southern SD of Western Australia (with just under 16 per 1,000), with several land-locked SDs also with quite low ratios.

Over the ten year period, Queensland regions captured among the greatest shares of employment gain in the sub-sector of restaurants, hotels and clubs over the ten year period (see Figure 6). Moreton proved to be the nation's 'hottest-spot', while the second largest gain of share was for Far North Queensland. In 1981, only 1.28 per cent of the nation's employment in this sub-sector was in Far North Queensland, yet by 1991 this had been boosted to nearly 2.5 per cent - an impressive increase coming off a small base. Sydney's share dropped from 22.35 per cent in 1981 to 20.95 per cent in 1991 to equate with the largest drop of the national share. Despite growth of employment in this sector in Sydney, the nation-wide figure increased from 185,000 to 285,000 over that 10 year period.

Moreton not only gained a significant proportion of the national population over the ten years, but also it was the clear winner in increasing its share of the nation's jobs in another sub-sector - entertainment and recreational services. With several large theme parks being constructed in the region in that period, and boosts in the number of sporting and gambling establishments on both the Gold and Sunshine Coasts, which are located in this SD, its share of the nation's workers in this industry increased from 2.32 to 4.95 per cent. Many of the SDs recorded absolute gains in this sector, among them Sydney which, although having well over 5,000 more persons employed in this sector by 1991, saw its national share drop from 28.43 to 25.23 per cent.

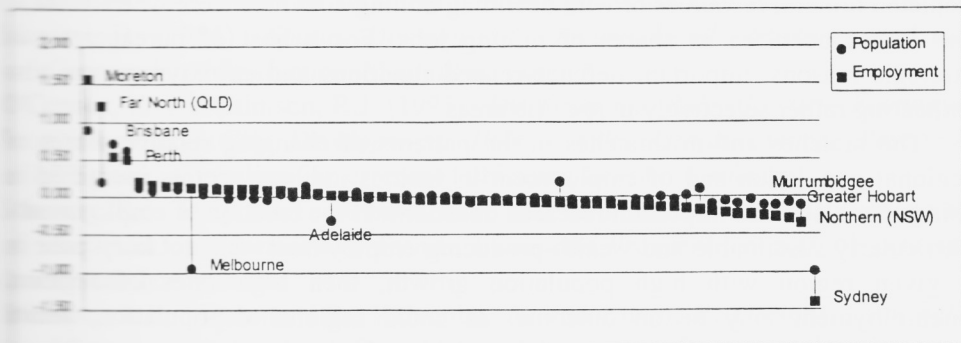


Figure 6. Changes in the National Share of Population and Employment in Restaurants, Hotels and Clubs 1981 - 1991

Note: SDs ranked from left to right in order of their greatest gains in national share of employment in this sector over the period.

5. CONCLUSIONS

Although globalisation processes contribute to homogenisation at a global scale, they do not have uniform impacts within countries, regions and cities. Globalisation is characterised by the uneven integration of different regions and localities into the global economy. Massey (1984) has argued that one needs a global sense of local place when trying to examine the links between regions and places with the outside world.

The interplay of many global, national or local factors will continue to influence the fluctuating national shares of population and employment. These impacts will not be even across space as Australia's regions have attributes and makeups which will either cushion or exacerbate such changes. Broad structural factors at the international and national levels are being felt at the regional level, and can be expressed in terms of both production and consumption. They are illustrated here by shifts in population shares and in jobs shares in specific industry sub-sectors over the decade 1981 to 1991.

Output growth has varied considerably across Australia between the industry sectors as the emerging global system of production and services has intensified. This has resulted in the diffusion of some internationally-linked activities, such as the growth of employment in tourism in regions like Far North Queensland; but it has tended mostly to concentrate activities, such as communications in Melbourne; and, though not examined here as the shift was not large enough to qualify as a hot-spot - producer services, like finance, have concentrated in Sydney.

In contrast, regional population growth differentials have created local demand for many goods and services, leading to the diffusion of employment in some industry sectors, and especially in consumer driven activities like retailing and community services. For mining, special places - those that remain mineral rich and productive - won shares of jobs at rates often disproportionately far higher than their changing shares of population. However those SDs with depleted mineral resources or with declining mining activities were where most of the losses occurred in shares of mining jobs. For a host of bureaucratic or strategic reasons, important defence-related functions and employment are also impacting rather selectively in specific areas.

The matches and mismatches in the patterns of changing relative shares of regional population and of employment in various industry sectors identified in this paper also raise important research questions. If the creation of employment - particularly sustainable and wealth-producing employment - cannot keep pace in a given region with high population growth, then high rates of regional unemployment may be an outcome, as could regional depopulation, return migration, or long commutes to work to neighbouring regions.

Such outcomes frequently have negative social and economic consequences which, in turn, can continue a spiral of decline if firms leave for other more attractive places. As population disperses over space, and as some key economic functions agglomerate in key locations, what role does technology play in

bridging such a mismatch? Can the two forces be reconciled, or will society become more divided between, on the one hand those people living in strategic areas of key cities holding crucial jobs linked firmly to the command and control of the global economy, and on the other hand those living elsewhere and who are engaged, if they are lucky, in routine production or processing of goods or of information in poorly paid occupations geared towards the lower levels of the international market or to domestic consumption?

The intention of this paper was to present a preliminary view of the diversity of regional population and employment trends across Australia at a broad SD level of scale for the decade of the 1980s, an important period in the post-mid 1970s era of globalisation and deregulation. This is done with the view to confronting the challenge of understanding how phenomena such as sun belt migration and globalisation, might be processes affecting the agglomeration or the dispersal of economic activities, of employment and of population. Some new dynamic regions have emerged as 'hot-spots', while others which were once endowed with generous employment opportunities in a specific sector, are declining. As regions jostle for the shares of population and employment, a new hierarchical structure of regions might be emerging which will encourage or discourage future opportunities.

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