

Metropolitan Dominance in Population and Retail Sales in the Australian Urban System, 1961 – 86

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1. Background

A change from metropolitan concentration to metropolitan deconcentration, or from urbanization to counterurbanization⁽¹⁾ in more general terms, has been identified as a new trend since the early 1970s in many national urban systems in North America and Western Europe, especially in the United States (Berry 1976, Herbert & Thomas 1982 and Morrill *et al.* 1984) :

A turning point has been reached in the American urban experience. Counterurbanization has replaced urbanization as the dominant force shaping the nation's settlement patterns (Berry 1976: 17) ;

Since 1970 in the United States, metropolitan areas — particularly the larger north-eastern seaboard agglomerations—have shown slower growth and a reversal of migration trends. Many factors are involved which include economic and technological change, demographic shifts and the state of the housing market, but they all seem to point to the diffuse form of a postindustrial, tertiary society (Herbert & Thomas 1982: 75).

The change from metropolitan concentration to metropolitan deconcentration can be interpreted in the context of the general conceptual framework of changing urban system presented in Table 1, which has been derived from the “general scheme of urban change” by Hall (1984: 248) and the “stages of urban development” by Vanhove & Klaassen (1980: 188). The first stage of concentration both in the metropolitan vs. non-metropolitan dimension and in the inner area vs. outer area dimension is followed by the second stage of concentration with suburbanization,

Table 1 Stages of Metropolitan Concentration and Deconcentration

		Metropolitan			Non-metropolitan	
		Inner area	Outer area	Total	Major centres	Minor centres
Stage 1: Concentration	1A	++	—	+	—	--
	1B	++	+	++	+	—
Stage 2: Concentration with suburbanization	2A	-/+	++	++	—	—
	2B	-/+	++	++	+	-/+
Stage 3: Deconcentration with suburbanization	3A	—	+	+	++	-/+
	3B	--	+	—	+	+
Stage 4: Deconcentration	4A	--	—	—	+	++
	4B	--	--	--	—	+

Sources: Arranged and modified from Hall (1984) and Vanhove & Klaassen (1980).

where concentration in the metropolitan vs. non-metropolitan dimension is accompanied by deconcentration in the inner area vs. outer area dimension within the metropolitan area. The third and fourth stages are stages of counterurbanization with deconcentration both in the metropolitan vs. non-metropolitan dimension and in the inner area vs. outer area dimension. According to Hall (1984), Korea, Mexico, Brazil and the countries in southern and eastern Europe are in the stage 1 B, 2 A or 2 B, the countries in central, northern and western Europe are in the stage 3 A or 3 B, and Great Britain and the United States are in the stage 3 B.

As regards Australia, it is well known that a trend of metropolitan concentration was apparently evident in the 1960s mainly because of the high rates of net international immigration, but there were signs of net internal migration from metropolitan areas, especially from Sydney and Melbourne (Bourne & Logan 1976, Rowland 1979, Burnley 1980, and Taniuchi 1985) :

The dominance of the capital cities, in terms of size and rates of growth, is the outstanding characteristics of the Australian settlement system. And it is increasing. ... The Australian urban system is still clearly dominated by the state capitals, more particularly by Sydney and Melbourne, and this dominance has been remarkably stable over time. However, there remain some interesting recent indications of a possible change in the nature of that system—a movement from the metropolitan areas into physically separate but accessible urban extensions, rapid growth in a few large centres with strong industrial

bases, and a moderately high growth rate in a limited number of regional centres (Bourne & Logan 1976: 120 & 129 – 130).

In contrast to the 1960 s, studies on the Australian urban system which covered the periods after 1971 have identified a trend of metropolitan deconcentration mainly due to declining net international immigration, with a varying extent of negative or positive appreciation of the trend of counterurbanization (Rowland 1979, Whitelaw *et al.* 1984, Taniuchi 1985, and Holmes 1987) :

During the first half of the 1970 s, population growth fell substantially in all capital cities except Brisbane, particularly reflecting the reduction in immigration from overseas. ... In the 1970 s, there also occurred a revival or heightening of population increase in many other non-metropolitan districts of New South Wales, Victoria and South Australia. ... Because of the coincidence of the worldwide economic recession with changes in population redistribution, it is uncertain whether the events of the 1970 s are a suitable basis for speculation about the future directions of urbanisation in Western countries (Rowland 1979: 81 & 94) ;

In the most recent intercensal period, 1971 – 6, there is clear evidence of a major downturn in the growth rates of the large cities; in fact the rates of growth of Sydney and Melbourne, the two largest cities are now amongst the lowest in the nation. This is a reflection of changed economic circumstances, higher unemployment levels, lower birth rates, and most importantly, of the decline in immigration. It is important to note, however, that, unlike some other Western nations, there is no real evidence as yet in Australia of a major shift of the population from the metropolitan cities to smaller urban places; in fact some of the most rapidly growing areas are the statistical divisions abutting the Sydney, Melbourne, and Brisbane metropolitan boundaries. It would also have to be acknowledged that the concept of counter-urbanization is much less appropriate in the case of Australia simply because there are so few centres of any significant size to attract persons seeking a viable alternative to metropolitan living (Whitelaw *et al.* 1984: 88) ;

During the 1970s and early 1980s, Australia, as with most other western countries, experienced a clear reversal of the historical trend towards urbanization and metropolitan concentration of population. ... This remarkably widespread, persistent reversal, commonly described as 'counterurbanization' or the 'rural-urban turnaround', has been recognized only belatedly (Holmes 1987: 39).

Assuming that we tentatively accept the hypothetical development stages in Table 1 as an operational tool, can we positively identify that the Australian urban system has already entered the stage of metropolitan deconcentration or counterurbanization? This paper examines the Australian case since the early 1960s against the background above by changing population growth rates in the first part of the paper and by changing percentage shares in population and retail sales in the second part.

2. Analysis of Population Growth Rates

Changing population growth rates since 1961 are summarized in Table 2, and shown in detail in Tables 3 and 4. Table 5 shows an interpretation in terms of the stages of metropolitan growth in the context of Table 1, based on the comparisons of growth rates between metropolitan areas and non-metropolitan centres.

There are two technical problems concerning population data and definitions. The first problem is that the spatial definitions of metropolitan area in some preceding studies were too small to include rapidly growing suburban or satellite areas, which were misleadingly treated as non-metropolitan centres, resulting in underestimates of metropolitan growth and overestimates of non-metropolitan growth. A metropolitan area is defined in this paper as the state capital statistical division which is large enough to include suburban or satellite areas adjacent to the metropolitan agglomeration. Each metropolitan area (statistical division) is divided into inner and outer areas to identify suburbanization, where the inner area is defined by the author as an area consisting of a group of local government areas to represent a central part of the metropolitan agglomeration which had already been urbanized in 1961 with a substantial level of population density.

The second problem is that the population data used by many preceding studies

were those based on the census counts, which have problems of under-enumeration as well as of being defined as *de facto* population which is affected by temporary movements of people for holiday making, etc., resulting in overall underestimates of national and state totals as well as overestimates in some areas and underestimates in other areas. A series of revised population data adjusted to solve the under-enumeration problem became available from 1971, and another series of revised population data called "estimated resident population", based on *de jure* population as well as adjustment for under-enumeration to solve the problems, has been available since 1976, partly dating back to 1971. Figures for the periods after 1971 in the tables are based on the estimated resident population or equivalent estimates by the author.⁽²⁾

It is evident in Table 2 that a change from metropolitan concentration to metropolitan deconcentration in Australia as a whole, in the sense that population growth rates in the state capitals were higher than those in the non-metropolitan centres as well as those in the national total in the 1960s (stage 2 B in Table 5)

Table 2 Average Annual Population Growth Rates (a), Summary Table (%)

	1961-66	1966-71	1971-76	1976-81	1981-86
State capitals (b)	2.38	2.36	1.28	0.96	1.28
Inner areas (c)	0.47	0.36	-1.13	-0.89	-0.28
Outer areas (d)	5.98	5.31	4.00	2.68	2.49
Non-metropolitan centres (e)	2.02	2.13	2.05	1.57	1.47
Major urban areas (f)	3.26	3.06	2.70	1.92	1.60
Other centres (g)	1.56	1.77	1.70	1.50	1.44
Remainder	-0.18	-0.50	0.93	1.96	2.11
Australia	1.91	1.92	1.44	1.24	1.43
Natural increase	1.10	1.14	1.02	0.82	0.86
Net migration	0.81	0.78	0.42	0.42	0.56

Notes: (a) Based on census count from 1961 to 1971, and on estimated resident population by the Australian Bureau of Statistics or equivalent estimate by the author from 1971 to 1986. (b) Statistical division (1986 boundary). (c) Central part of the urban agglomeration defined by the author, which had already been urbanized in 1961. (d) Remainder of the statistical division. (e) Major urban areas and other centres. (f) Statistical division and/or statistical subdivision(s) containing a major urban centre with population over 100,000 in 1986 (1986 boundary). (g) Urban centre with population over 1,000 at the beginning of each period.

Sources: Various issues of census reports and year books, and information on estimated resident population with various titles published by the Australian Bureau of Statistics.

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Table 3 Average Annual Population Growth Rates, States, State Capitals and
Non-metropolitan Centres (%)

	1961-66	1966-71	1971-76	1976-81	1981-86
NEW SOUTH WALES	1.57	1.66	0.97	1.09	1.11
Sydney	2.03	2.12	0.77	0.85	1.15
Inner area	0.43	0.77	-0.75	-0.71	0.06
Outer area	5.33	4.41	2.93	2.72	2.28
Non-metropolitan centres	1.51	1.77	1.49	1.15	0.85
Remainder	-0.82	-1.60	0.83	2.62	1.42
VICTORIA	1.90	1.69	1.14	0.71	1.06
Melbourne	2.36	2.33	1.10	0.60	0.88
Inner area	0.15	0.19	-1.56	-1.21	-0.72
Outer area	7.19	5.76	4.32	2.32	2.17
Non-metropolitan centres	1.53	0.87	1.36	0.67	1.11
Remainder	0.02	-0.89	1.00	1.49	2.20
QUEENSLAND	1.84	1.76	2.48	2.31	2.28
Brisbane	2.34	2.20	2.23	1.84	1.76
Inner area	0.98	-0.01	-1.36	-0.67	-1.02
Outer area	4.62	5.22	5.70	3.64	3.37
Non-metropolitan centres	2.37	2.41	3.07	2.31	2.46
Remainder	-0.13	-0.38	1.97	3.62	3.28
SOUTH AUSTRALIA	2.41	1.40	1.20	0.69	0.95
Adelaide	3.19	1.78	1.35	0.64	1.03
Inner area	1.11	0.21	-0.71	-0.85	-0.02
Outer area	8.28	4.66	4.31	2.30	2.08
Non-metropolitan centres	2.32	2.09	1.26	0.28	0.58
Remainder	-0.59	-1.03	0.37	1.41	0.91
WESTERN AUSTRALIA	2.58	3.97	2.26	1.99	2.33
Perth	3.29	4.69	2.79	1.88	2.64
Inner area	0.57	-0.51	-2.01	-0.84	0.51
Outer area	5.55	7.88	4.48	2.96	3.20
Non-metropolitan centres	1.60	3.28	1.92	2.50	1.83
Remainder	0.98	1.93	-0.10	1.94	1.20
TASMANIA	1.18	1.00	0.71	0.71	0.89
Hobart	1.65	1.63	1.06	0.80	0.91
Inner area	-0.28	-0.31	-0.88	-0.94	0.02
Outer area	2.93	2.74	1.98	1.53	1.24
Non-metropolitan centres	1.51	1.96	0.54	0.66	0.42
Remainder	0.14	-1.25	0.38	0.64	1.60

Notes and Sources : See Table 2.

and that population growth rates in the state capitals have been lower than those in the non-metropolitan centres and in the national total since the early 1970s (stage 3⁽³⁾B).

It should be taken note, however, that there are regional differences among the state urban systems and differences among the groups of the non-metropolitan centres in terms of size, function and location.

Table 4 Average Annual Population Growth Rates, Major Urban Areas and Other Centres (%)

	1961-66	1966-71	1971-76	1976-81	1981-86
Major urban areas					
Newcastle (NSW)	1.20	1.42	0.91	1.18	0.61
Wollongong (NSW)	3.36	2.32	1.43	0.81	0.10
Geelong (VIC)	2.68	1.86	1.88	0.53	0.55
Gold Coast (QLD/NSW)	6.29	5.66	7.09	7.98	5.14
Canberra (ACT/NSW)	9.71	8.08	6.26	1.70	2.64
Other centres (a)					
25,000+ (17)	1.51	1.81	2.08	1.24	1.42
10,000+ (43)	2.14	2.19	1.36	1.75	1.28
5,000+ (65)	1.56	1.59	1.87	1.41	1.28
1,000+ (348)	1.05	1.41	1.79	1.34	1.63
Other centres (b)					
Mining/industrial (48)	1.71	2.95	1.07	0.67	0.01
Resort (89)	2.71	4.61	6.05	6.31	3.60
Other (336)	1.50	1.58	1.57	1.01	1.30
Other centres (c)					
Coastal (197)	1.83	2.00	2.40	2.05	2.10
Inland (229)	1.32	1.27	1.32	0.77	0.61
Remote (47)	1.68	4.40	1.31	1.84	2.08

Notes and Sources: See Table 2. Figures in brackets are number of centres in 1981-86. (a) Classified by population size at the beginning of each period. (b) Classified by function (see text). (c) Classified by location (see text).

Table 5 Stages of Metropolitan Concentration and Deconcentration in Australia by Population Growth Rates

	1961-66	1966-71	1971-76	1976-81	1981-86
Australia	2B	2B	3A	3A	3A
New South Wales	2B	2B	3A	3A	2B
Victoria	2B	2B	3A	3A	3A
Queensland	3A	3A	3A	3A	3A
South Australia	2B	3A	2B	2B	2B
Western Australia	2B	2B	2B	3A	2B
Tasmania	2B	3A	2B	2B	2B

Notes and Sources: See Tables 1-3 and text.

The regional differences among the state urban systems are shown in Table 3 and summarized in Table 5. The six states are classified into three types according to the trend in each state urban system: New South Wales and Victoria generally followed the national trend from the stage 2B in the 1960s to the stage 3A after the early 1970s except New South Wales in 1981-86; Queensland has been in the stage 3A in all through the periods; and South Australia, Western Australia and Tasmania have been generally in the stage 2B with minor exceptions. In fact the trend of metropolitan deconcentration since the early 1970s in Australia as a whole

has been mainly affected by the trends in New South Wales and Victoria, the two largest states in terms of population.

Interstate comparisons of the growth rates among the state capitals and among the non-metropolitan centres in Table 3 reveals that the growth rates in Brisbane and Perth as well as the non-metropolitan centres in Queensland and Western Australia were much higher than the state capitals and non-metropolitan centres in the other states in most of the periods, showing a trend of spatial decentralization. The lower growth rates in the state capitals in the other states, especially in Sydney and Melbourne, reflect not only a trend of vertical (hierarchical) deconcentration but also the trend of spatial decentralization from the core areas (New South Wales and Victoria) to the peripheral areas (Queensland and Western Australia) in the national urban system (Taniuchi 1985).

Growth rates in the major urban areas (Table 4) are strongly affected by their own special functions rather than general central functions or relative positions in the national or state urban system: Newcastle, Wollongong and Geelong are major industrial centres and affected by growth and decline of their industrial activities; Gold Coast is a rapidly growing resort centre; and Canberra is growing by its special function as the national capital.

Finally, the other centres can be classified by size, function and location (Table 4). Differences in the growth rates among the groups classified by function or location are much greater than those by size. Growth rates in the mining/industrial towns defined by the author are subject to substantial fluctuations, ranging from the highest growth rate in 1966-71 to the lowest growth rate in 1981-86. Growth rates in the resort towns defined by the author have been very high in all through the periods. Growth rates in the other towns, which are regarded as being dependent on ordinary central functions, have been relatively steady with a declining trend. They have been only slightly higher than those in the state capitals since the late 1970s, almost discounting the interpretation of metropolitan deconcentration noted above. This discount is also supported by the comparison of growth rates among the groups classified by location defined by the author: growth rates in the coastal towns have been much higher than those in the inland towns.

3. Analysis of Percentage Shares in Population and Retail Sales

Changing percentage shares of the national total in population and retail sales⁽⁷⁾ are summarized in Table 6 and in detail in Table 7, and those of the state total in each state are shown in Tables 8–11. The study period is divided into two periods: the “industrial” period before 1974 and the “post-industrial” period after 1974. Table 12 shows an interpretation of stages for Australia and each state, based on the comparisons of percentage gains or losses between the state capitals and the non-metropolitan centres.

Spatial definitions for the state capitals and the major urban areas are maintained to be the same as those in the previous section. Selected centres and other centres (major and minor centres) are defined according to percentage share of the national total in retail sales. An “overflow” is an operational indicator of

Table 6 Percentage Shares of National Total in Population and Retail Sales, Summary Table (%)

	Population (a)			Retail sales (b)			Overflow (c)		
	1961	1974	1986	1962	1974	1986	1962	1974	1986
State capitals(d)	60.26	62.78	61.48	63.25	65.94	66.95	10.91	11.42	13.56
Inner areas	40.92	33.13	25.63	51.68	43.66	34.36	16.14	14.89	12.09
Outer areas	19.35	29.65	35.85	11.57	22.27	32.59	-5.23	-3.47	1.46
Non-metropolitan centres(e)	18.74	20.11	20.75	23.56	24.74	24.66	7.29	7.27	6.64
Major urban areas(d)	6.36	7.48	8.02	6.45	8.03	7.89	0.93	1.54	0.92
Selected centres(f)	4.16	4.48	4.74	5.49	5.83	6.31	1.87	1.94	2.20
Other centres									
Major centres(g)	5.63	5.63	5.37	7.75	7.47	7.21	2.86	2.59	2.55
Minor centres(h)	2.59	2.52	2.62	3.88	3.40	3.25	1.63	1.21	0.98
Remainder	21.00	17.39	17.86	13.19	9.33	8.39	-5.05	-5.78	-7.12

Notes: (a) Census count for 1961, estimated by the author for 1974, and estimated resident population for 1986. (b) Retail sales of goods by retail establishments for 1961/62, retail sales of goods by retail and selected service establishments or equivalent estimate for 1973/74, and turnover of retail establishments for 1985/86. (c) See text. (d) See Table 2. (e) Major urban areas, selected centres and other centres. (f) 13 urban centres which recorded retail sales over 0.3% of the national total twice or more in the three dates. (g) 46 urban centres which recorded retail sales over 0.1% of the national total twice or more. (h) 48 urban centres which recorded retail sales over 0.05% of the national total twice or more.

Sources: Australian Bureau of Statistics, *Retail industry: small area statistics 1985–86* for each state and equivalent earlier issues, various issues of census reports and year books, and information on estimated resident population with various titles published by the Australian Bureau of Statistics.

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Table 7 Percentage Shares of National Total in Population and Retail Sales, State Capitals, Major Urban Centres and Selected Centres (%)

	Population			Retail sales			Overflow		
	1961	1974	1986	1962	1974	1986	1962	1974	1986
State capitals									
Sydney	22.75	22.53	21.77	24.76	24.49	23.02	5.00	4.93	4.11
Melbourne	18.89	19.54	18.30	19.81	20.14	21.76	3.40	3.17	5.86
Brisbane	6.59	7.19	7.47	6.27	7.27	7.79	0.54	1.02	1.30
Adelaide	6.27	6.61	6.27	6.16	6.64	6.23	0.71	0.90	0.79
Perth	4.52	5.72	6.56	4.87	6.15	7.10	0.94	1.18	1.40
Hobart	1.24	1.18	1.12	1.39	1.24	1.06	0.31	0.22	0.09
Major urban areas									
Newcastle	2.94	2.70	2.60	2.86	2.66	2.58	0.31	0.32	0.33
Wollongong	1.43	1.58	1.45	1.34	1.58	1.13	0.09	0.21	-0.13
Geelong	0.90	0.95	0.91	0.95	1.08	0.97	0.16	0.25	0.18
Gold Coast	0.43	0.77	1.31	0.50	1.06	1.43	0.13	0.38	0.30
Canberra	0.65	1.48	1.76	0.80	1.66	1.78	0.23	0.37	0.26
Selected centres									
NSW/VIC/TAS (a)	2.24	2.18	2.33	3.14	2.97	2.92	1.19	1.08	0.90
QLD/NT (b)	1.92	2.30	2.41	2.35	2.86	3.39	0.68	0.86	1.30

Notes and Sources : See Table 6. (a) Wagga Wagga, Tamworth, Albury-Wodonga, Ballarat, Bendigo, Shepparton and Launceston. (b) Townsville, Toowoomba, Cairns, Rockhampton, Mackay and Darwin.

centrality in terms of retail activities to show relative importance of retail sales in relation to population, defined by the author as an excess amount of retail sales over the expected amount of minimum retail sales proportional to population based on the relative level of average per capita retail sales in the areas other than the state capitals and the major urban areas (i.e. in the selected centres, the other centres and the remainder combined) in Australia or in each state, conveniently expressed as a percentage of the national total of retail sales in Tables 6 and 7 and of the state total in Tables 8–11.

An overall trend in retail sales for Australia as a whole in Table 6 is that the metropolitan dominance has been maintained and reinforced (from stage 2 B to 2 A in Table 12), in contrast to the change from concentration to deconcentration in population (from stage 2 B to 3 B), resulting in a trend of reinforced concentration in overflow (stage 2 A). As far as the changing percentage shares in retail sales and overflow concerned, a trend of metropolitan deconcentration has not yet been evident and rather a trend of metropolitan concentration has been evident and reinforced.

As in the analysis of population growth rates in the previous section, there are signs of the spatial decentralization, which is generally supported by the percentage

gains in population, retail sales and overflow in Brisbane, Perth and the selected centres in Queensland, Western Australia and Northern Territory, in contrast to the percentage losses in Sydney, Hobart and the selected centres in New South Wales, Victoria and Tasmania in both periods and also in Adelaide in the later period (Table 7⁽⁹⁾).

The major urban areas have been affected by their special functions (Table 7), as noted in the previous section. Percentage losses in population and retail sales in Newcastle and later in Wollongong and Geelong reflect the declining trend of industrial activities as already noted in the previous section. Gold Coast and Canberra are growing in terms of both population and retail sales, but the percentage gains in retail sales have failed to catch up with the population growth. In spite of the percentage gains in Gold Coast and Canberra, the relative declines in retail sales and overflow in the major industrial centres have affected the percentage losses in retail sales and overflow in the major urban areas as a whole and hence in the non-metropolitan centres as a whole, cancelling out the percentage gains in the selected centres which can be interpreted as a sign of deconcentration to some extent in the national urban system (Tables 6 and 7).

The state urban systems have followed the national trend of metropolitan

Table 8 Percentage Shares of State Total in Population and Retail Sales, New South Wales (%)

	Population			Retail sales			Overflow		
	1961	1974	1986	1962	1974	1986	1962	1974	1986
Sydney	61.03	63.30	62.78	63.92	66.23	66.59	9.18	9.46	10.28
Inner area	42.35	36.47	30.86	51.42	44.99	38.46	13.44	12.28	10.78
Outer area	18.68	26.83	31.92	12.50	21.24	28.13	-4.25	-2.82	-0.50
Non-metropolitan centres(a)	22.44	23.19	23.26	26.08	26.57	26.47	5.96	5.82	5.61
Major urban areas									
Newcastle	7.90	7.57	7.52	7.39	7.19	7.47	0.31	0.40	0.72
Wollongong	3.84	4.44	4.21	3.45	4.28	3.27	0.01	0.30	-0.51
Selected centres									
Wagga Wagga	0.56	0.63	0.69	0.89	0.90	1.00	0.38	0.33	0.37
Tamworth	0.49	0.54	0.56	0.70	0.84	0.90	0.26	0.36	0.40
Albury-Wodonga(b)	0.55	0.65	0.68	0.91	1.00	0.96	0.42	0.42	0.34
Other centres									
Major centres(16)	5.61	5.53	5.62	7.35	7.30	7.60	2.28	2.30	2.51
Minor centres(21)	3.15	3.05	3.12	4.59	4.20	4.25	2.01	1.43	1.42
Remainder	16.53	13.57	13.96	10.00	7.20	6.94	-7.57	-7.11	-7.74

Notes and Sources : See Table 6. (a) Include NSW parts of Gold Coast and Canberra.
(b) NSW part.

Table 9 Percentage Shares of State Total in Population and Retail Sales, Victoria (%)

	Population			Retail sales			Overflow		
	1961	1974	1986	1962	1974	1986	1962	1974	1986
Melbourne	67.74	72.28	70.46	70.43	75.12	77.43	13.99	14.91	18.73
Inner area	48.40	39.47	29.95	58.99	49.59	36.61	18.67	16.71	11.66
Outer area	19.34	32.81	40.51	11.44	25.53	40.82	-5.28	-1.80	7.07
Non-metropolitan centres	14.05	13.67	13.86	18.58	17.64	16.60	6.87	6.25	5.05
Geelong(a)	3.24	3.50	3.51	3.38	4.01	3.45	0.67	1.09	0.53
Selected centres									
Ballarat	1.83	1.64	1.60	2.19	1.76	1.71	0.67	0.40	0.37
Bendigo	1.35	1.31	1.35	1.68	1.56	1.45	0.56	0.47	0.33
Shepparton	0.56	0.68	0.76	1.00	1.20	1.20	0.54	0.63	0.57
Albury-Wodonga(b)	0.25	0.31	0.51	0.24	0.41	0.56	0.03	0.15	0.13
Other centres									
Major centres (13)	5.03	4.61	4.58	7.72	6.70	6.69	3.53	2.86	2.87
Minor centres (8)	1.79	1.62	1.56	2.37	1.99	1.56	0.88	0.21	0.26
Remainder	18.21	14.05	15.68	11.00	7.24	5.97	-4.17	-4.47	-7.09

Notes and Sources : See Table 6. (a) Major urban area. (b) VIC part.

concentration in retail sales except Queensland and Tasmania, and the metropolitan dominance in retail sales and overflow in the state urban systems has generally been maintained and reinforced, in contrast to the changes to deconcentration in population (Tables 8 – 12).

The state urban systems in New South Wales (Table 8) and Victoria (Table 9) have followed the national trend of metropolitan concentration in terms of retail sales (from stage 2 B to 2 A in New South Wales and 2 A in Victoria in Table 12) and overflow (stage 2 A), with percentage gains in retail sales and overflow in Sydney and Melbourne and percentage losses in the non-metropolitan centres, although the percentage shares of the national total in Sydney were declining as shown in Table 6. This is an example of different interpretation of the changing metropolitan dominance between the national and state contexts. If we set aside the major urban areas, percentage gains in retail sales and/or overflow in the selected centres and/or in the other centres in New South Wales, especially in 1974 – 76, are worth noting as a sign of deconcentration within the state urban system.

Comparisons of percentage shares between Brisbane and the non-metropolitan centres in Queensland (Table 10) show a trend of deconcentration in population (from stage 3 A to 3 B) and a change from concentration to deconcentration in

Table 10 Percentage Shares of State Total in Population and Retail Sales, Queensland (%)

	Population			Retail sales			Overflow		
	1961	1974	1986	1962	1974	1986	1962	1974	1986
Brisbane	45.60	47.81	45.57	47.20	50.78	50.67	5.68	7.25	9.18
Inner area	29.30	23.66	15.39	37.26	33.38	23.74	10.58	11.83	9.73
Outer area	16.30	24.15	30.19	9.94	17.40	26.93	-4.90	-4.58	-0.55
Non-metropolitan centres	24.08	26.98	27.46	32.20	35.76	36.65	10.27	11.20	11.65
Gold Coast (a)	2.67	4.35	7.02	3.16	6.36	7.98	0.73	2.40	1.59
Selected centres									
Townsville	3.21	3.96	3.66	3.62	4.88	5.19	0.69	1.28	1.86
Toowoomba	3.08	3.05	2.89	4.07	3.76	3.85	1.27	0.98	1.22
Cairns	1.81	1.92	1.98	2.66	2.80	3.65	1.02	1.05	1.85
Rockhampton	2.82	2.55	2.09	3.35	3.23	2.95	0.78	0.91	1.05
Mackay	1.40	1.56	1.50	2.40	2.49	2.45	1.12	1.07	1.09
Other centres									
Major centres (5)	4.88	5.50	4.28	6.67	6.62	5.32	2.23	1.61	1.42
Minor centres (11)	4.21	4.09	4.05	6.28	5.64	5.26	2.45	1.91	1.57
Remainder	30.32	25.22	26.97	20.60	13.46	12.86	-7.00	-9.50	-11.69

Notes and Sources: See Table 6. (a) Major urban area (QLD part).

retail sales (from stage 2 B to 3 B), reflecting the growth in Gold Coast and the selected centres⁽¹⁰⁾ in spite of the relatively rapid growth in Brisbane in the national context as shown in Table 6. This is another example of the difference between the national and state contexts. The percentage gains in retail sales in Gold Coast, however, have failed to catch up with those in population, resulting in the trend of relative concentration in overflow (stage 2 B), although the selected centres have experienced substantial gains in overflow.

The state urban systems in South Australia and Western Australia (Table 11) have maintained and reinforced the metropolitan dominance in every respect (stage 2 A or 2 B), mainly due to the lack of major urban centres or selected centres. Percentage gains in Adelaide and Perth are evident in Table 10, in contrast to the percentage losses or smaller gains in the other centres, except in the case of Adelaide in population in 1974-86 when the other centres, however, experienced much larger percentage loss.

Finally, the state urban system in Tasmania (Table 11) shows a trend of deconcentration in retail sales (stage 3 A) accompanied by the change from concentration to deconcentration in population (from stage 2 B to 3 B), resulting in the change in overflow from deconcentration to concentration (to stage 2 A). The apparent concentration in overflow in 1974-86 is mainly due to the relative

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Table 11 Percentage Shares of State Total in Population and Retail Sales, South Australia, Western Australia and Tasmania (%)

	Population			Retail sales			Overflow		
	1961	1974	1986	1962	1974	1986	1962	1974	1986
SOUTH AUSTRALIA									
Adelaide	68.00	72.68	72.61	71.79	76.53	78.69	14.69	15.50	17.72
Inner area	50.18	43.09	35.33	62.40	56.18	49.71	20.27	20.00	20.05
Outer area	17.82	29.59	37.28	9.38	20.35	28.97	-5.59	-4.50	-2.33
Other centres	7.19	8.43	7.89	9.97	10.69	9.34	3.94	3.61	2.71
Major centres (5)	6.36	7.39	6.65	8.18	8.93	7.54	2.84	2.73	1.96
Minor centres (2)	0.82	1.03	1.24	1.79	1.75	1.79	1.10	0.88	0.75
Remainder	24.81	18.89	19.50	18.24	12.88	11.98	-2.59	-2.99	-4.40
WESTERN AUSTRALIA									
Perth	64.54	69.66	71.99	68.33	74.83	78.07	14.42	16.64	17.93
Inner area	30.90	19.66	14.09	53.91	39.92	28.67	28.09	23.50	16.90
Outer area	33.63	50.00	57.91	14.42	34.91	49.40	-13.68	-6.86	1.03
Other centres	10.06	9.03	9.28	13.91	12.17	11.47	5.51	4.63	3.72
Major centres (4)	7.58	6.26	6.01	10.12	8.57	7.89	3.79	3.35	2.87
Minor centres (5)	2.48	2.78	3.27	3.79	3.60	3.59	1.71	1.28	0.85
Remainder	25.41	21.31	18.73	17.77	13.00	10.46	-3.46	-4.80	-5.19
TASMANIA									
Hobart	37.16	40.29	40.12	43.79	44.33	44.67	9.72	7.38	7.89
Inner area	18.17	13.13	10.74	32.39	28.37	24.59	15.74	16.33	14.74
Outer area	19.00	27.17	29.37	11.40	15.96	20.09	-6.02	-8.95	-6.85
Non-metropolitan centres	25.92	28.03	32.65	36.77	40.40	42.06	13.01	14.70	12.13
Launceston (a)	16.11	15.84	20.38	23.22	22.84	23.45	8.45	8.32	4.77
Other centres									
Major centres (2)	8.10	10.08	9.94	11.28	15.31	15.87	3.85	6.07	6.76
Minor centre (1)	1.71	2.11	2.33	2.27	2.25	2.74	0.70	0.31	0.60
Remainder	36.92	31.68	27.32	19.44	15.28	13.26	-14.41	-13.77	-11.79

Notes and Sources : See Table 6. (a) Selected centre.

Table 12 Stages of Metropolitan Concentration and Deconcentration in Australia by Changing Percentage Shares in Population and Retail Sales

	Population		Retail sales		Overflow	
	1961-74	1974-86	1962-74	1974-86	1962-74	1974-86
Australia	2B	3B	2B	2A	2A	2A
New South Wales	2B	3B	2B	2A	2A	2A
Victoria	2A	3B	2A	2A	2A	2A
Queensland	3A	3B	2B	3B	2B	2B
South Australia	2B	(a)	2B	2A	2A	2A
Western Australia	2A	2B	2A	2A	2A	2A
Tasmania	2B	3B	3A	3A	(b)	2A

Notes and sources : See Tables 1, 6, 8-11 and text. (a) No type in Table 1 can be exactly applied. (b) A trend of deconcentration, although no type in Table 1 can be exactly applied.

decline in Launceston, and the relative growth in the other centres should be noted.

4. Conclusion

Changing metropolitan dominance in the Australian urban system has been examined by population growth rates and percentage shares in population and retail sales. A general trend of metropolitan deconcentration in the national and state urban systems in terms of population has been identified by the analyses of population growth rates and percentage shares, although this is discounted when the spatial decentralization and the limited nature of non-metropolitan growth in terms of size, function and location are taken into account.

A trend of metropolitan concentration in terms of retail sale, however, has been revealed by the analysis of changing percentage shares: the metropolitan dominance in retail sales has generally been maintained and rather reinforced in relation to population in the national and state urban systems. Although there are some signs of non-metropolitan growth in terms of retail sales, the findings in this paper suggest that it will be of more limited nature and to a less extent than in the case of population, and the metropolitan dominance in this respect will be maintained.

Notes

- (1) Counterurbanization is defined by Berry (1976) as a process of population deconcentration, a movement from a state of more concentration to a state of less concentration.
- (2) The estimates by the author are preliminary and subject to revision.
- (3) Growth rates in the remainder (smaller centres and rural areas) have been higher than the state capitals and the non-metropolitan centres since 1976.
- (4) A mining/industrial town is defined as an urban centre which is heavily dependent on extracting, treatment and/or export of mineral resources (Taniuchi 1987).
- (5) A resort town is defined as an urban centre which is known to be a holiday resort where more than 20% of the total dwellings are unoccupied (Taniuchi 1987).
- (6) Coastal towns are located in the densely populated coastal areas. They include larger centres in Queensland and most of the rapidly growing resort towns. Inland towns are located in the moderately populated areas including mainly inland farming areas as well as some less-densely populated coastal areas. Remote towns are located in sparsely populated outback areas. They include rapidly growing administrative centres (Darwin and Alice Springs), growing or declining mining towns and stagnating small service towns. The higher growth rates in the remote towns are mainly due to Darwin, Alice Springs and some mining towns.
- (7) A technical advantage of using percentage shares is that relative growth in retail sales

can be more easily identified by percentage shares than by growth rates which involve problems related to deflators (consumer price index, etc.).

- (8) Overflows in 1962 are based on population in 1961.
- (9) Melbourne which enjoyed percentage gains in retail sales and overflow in 1974 – 86 is an exceptional case in this context, which requires further studies.
- (10) The growth in the selected centres in central and northern Queensland away from Brisbane can be interpreted as a case of spatial decentralization in the state urban system.

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