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WHEN THE POPULATION CLOCK STOPS TICKING: AN INDICATIVE STUDY OF POPULATION AGEING IN TASMANIA¹

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ABSTRACT: Population ageing and its associated shift to natural decline are occurring unevenly across and within the various regions of the world. This regionality has particular implications for Australia, where the extent and speed of population ageing differs markedly across and within each State and Territory, but where essentially egalitarian federal policy holds sway over much that affects regional development. As Australia's fastest ageing state, Tasmania will be the first to deal with the major consequences of population ageing. But as the first 'cab off the rank', Tasmania will also in many ways have to define these consequences for the rest of Australia. This paper offers a conceptual and indicative look at just some of the associated issues.

1. INTRODUCTION

The salience of Australia's state and territory boundaries has often been appraised, especially with regard to federal migration and regional development policy (e.g. Poot, 1995; Forth, 1996; Howard, 2001). An emerging issue that has yet seen little mention in this literature is that of the regionality of population ageing and its associated shift to natural decline (cf. Hugo, 1999). This regionality, which is evident across and within the countries and major regions of the developed world, is especially notable within Australia, where the proportions aged 65 years and over currently vary from around 3.4 per cent in the Northern Territory, to 14.6 per cent in South Australia. The future momentum of ageing in each region will differ even more markedly, with Tasmania projected to overtake South Australia as Australia's oldest state in approximately 10 years, and the gap between the structurally youngest and oldest regions² opening up from its present 11.2 percentage points, to around 24.0 percentage points by 2051 (ABS Population Projections, 2000, Series II). Relatedly, Tasmania and South Australia will enter natural decline (where deaths exceed births) several decades ahead of most of the remaining states and territories. These disparate trends mean that ageing-related matters that Tasmania and South Australia will have to contend with in the 2020s will not have to be dealt with by the youngest states and territories until mid-century and beyond.

Such disparate trends can be expected to have significant implications for Australia's internal political jurisdictions. As indicated by the United Nations

¹ This paper is one of a series of three funded in part by an Institutional Research Grant Scholarship (IRGS). The author gratefully acknowledges this funding.

² Among other indices, a population is considered 'young' when less than 5 per cent is aged 65+ years, and 'old' when this proportion exceeds 10 per cent.

Expert Group on Population Ageing for the European Union (2000a; see also House of Lords, 2000), they can be expected to affect everything from internal labour supply and demand to migration flows, state and local government funding and political legitimacy. As regards funding and political legitimacy, for example, Australia's 727 local government bodies are currently compensated through their respective states via the Commonwealth Grants Commission (CGC), for a range of 'disability factors' (relative cost disadvantages) that affect their capacities to provide certain goods and services³. These factors extend across population indices such as dispersion, growth/decline, isolation, unemployment levels, and age profile. However, population ageing, as it will be outlined in this paper, is not currently one of these factors. Furthermore, as the gaps between the younger and older states and territories, and between younger and older local government areas within these regions, open up, some of the above disability factors are likely to become highly problematic, even auto-correlative⁴. They will almost certainly affect state and local government revenues, and, ultimately, the economic contribution of States. Yet, at this juncture, almost all 'impact studies' of population ageing in Australia have been undertaken at the national level (e.g., Clare and Tulpulé, 1994; Crowley and Cutbush, 2000; McDonald and Kippen, 2001; Healy, 2001; Kinnear, 2001; Quiggin, 2001; Guest and McDonald, 2002).

While the CGC and its funding arrangements are beyond the scope of this paper to consider in any more detail, the paper provides a related overview of the demography of Tasmania, which, as Australia's fastest ageing State, offers a useful case study. The paper begins by teasing out the structural and numerical dimensions of population ageing, arguing that for judicious policy-making to take place, these dimensions need to be better understood. Relatedly, it draws attention to the fact that in Tasmania, population ageing is occurring somewhat prematurely, the result of substantial net migration loss over the key reproductive ages, rather than low fertility *per se*. Projected trends for key age groups in Tasmania are then considered in terms of changes in demand for primary, secondary and tertiary education, in labour force entry:exit ratios (the ratio of those approaching or entering the labour force to those approaching retirement and leaving), and in what might be termed the retirement adjustment age (the retirement ages that would be needed to keep the current ratio of elderly to working age constant). These complex inter-relationships—which are by no means exhaustive—illustrate the importance of understanding that population ageing is a phenomenon affecting *all* age groups, and that during the forthcoming decades, regional differences in interactions between these groups will raise many new conundrums. But they will also raise many opportunities, if

³ The main concern of this 'fiscal equalisation' policy is the *capacity* of states to provide goods and services, rather than the actual provision of equal goods and services, which are affected by state and local government policies. See <http://www.cgc.gov.au> for detail. NB. By 'states' is meant also the Northern Territory. The Australian Capital Territory is funded via different arrangements.

⁴ These issues are the topic of another paper currently being written.

they can be but recognised and grasped amid the complexity. (In order to acknowledge the range of possible population outcomes afforded by the use of population projections, the paper uses both the Australian Bureau of Statistics' (ABS) 'high' and 'medium' variant projection Series I and II.)⁵

2. POPULATION AGEING: STRUCTURAL AND NUMERICAL DIMENSIONS

Although widely acknowledged as reflecting both low birth rates and increased life expectancy, most policy-related (and media) discussion on population ageing has, until recently, focused on the latter (Rottier, 2001). Rightly, the increasing numbers of elderly can be attributed to the declines in infant mortality that occurred during the early part of the 20th Century, and to the substantial increases in life expectancy at older ages that have occurred since the 1980s. To these numbers will soon be added the baby boomers from that aberrant period of increased fertility between 1945 and 1966. However, this increase in the *numbers* of elderly—which demographers term *numerical ageing*—is technically independent of the primary cause of population ageing that is the real concern of policy-makers. This concern is *structural ageing*—the increase in the *proportion* of the population that is elderly, caused by low and still-falling fertility since the 1960s, and the concomitant decline in the proportion that is young⁶.

The reason for arguing that numerical ageing is not, in and of itself, 'the problem', is that the *numbers* of elderly have been increasing for millennia. What has changed fundamentally is that, because of structural ageing, the increasing numbers of elderly must in future be supported by a smaller *proportion* of the population—and, before long, by smaller numbers as well. It is, in fact, perfectly feasible for there to be an increase in the numbers of elderly, without there being a concomitant increase in their proportions: the latter is primarily dependent on trends in fertility.

This distinction between structural and numerical ageing is of major significance in a policy-making and, for the CGC, fiscal equalisation - context. On the one hand, it is numerical ageing that is driving up demand for age pensions, age-related health care, housing, transport and so on; on the other, it is

⁵ See ABS (2000) Population Projections, Catalogue 3222.0, Chapter 4, for the assumptions for each State/Territory. For Tasmania specifically, Series I assumes a continuation of fertility at 1.8 births per woman, an increase of 1 year in life expectancy at birth for each ten years projected, and an annual net migration loss of 313 across the 50 year projection period. Series II assumes a decline in the birth rate to 1.65 by 2008, then constant; an annual net migration loss of 1,870, and the same mortality assumptions. While Tasmania's current net migration is greater than -2,000, and has averaged -2,500 p.a. over the past decade, this loss has recently slowed. This situation, along with the proposed increase in Australia's net international migration gain to around 117,000 in the 2002-2003 year (from 100,000 in recent years), indicates that a scenario between Series I and II will prevail in Tasmania, at least in the short term.

⁶ That is, contrary to many popular views, structural ageing is not caused by the baby boomers themselves, but by the falling fertility rates that have occurred since.

structural ageing that is the constraining factor. The decline in the proportion and then number of the population at the key working ages (15-64 years) that structural ageing will soon bring about will also generate a decline in the primary tax base. But, as is well known, it will also bring declines in the number of children and young people requiring health services, schooling and so on, thus offsetting at least some of the overall 'dependency burden' on the tax base. This shift-share effect, along with acknowledgment of the growing spending power of the elderly, is causing many commentators to argue that the net outcome of population ageing may well be positive (e.g., Crowley and Cutbush, 2000; Kinnear, 2001; Guest and McDonald, 2002; p. 39).

However, as yet less well explicated are the regional and institutional implications of the structural/numerical distinction; indeed these are extremely complex and require much more deliberation than can be afforded them here. But as an indication, Age Pensions are currently funded from federal taxation, while they are spent locally; thus the differential speed of structural and numerical ageing by state and territory could see a circuitous redistribution of funds from younger to older regions. Furthermore, the extent of this flow into any state or territory will be determined by its numbers of elderly, rather than its proportions.⁷ And these two indices will at some point in time move in opposite directions, further complicating matters. In Tasmania, for example, numbers aged 65+ will peak and begin to decline around 2040, while the proportion aged 65+ will (at least under current assumptions regarding fertility) continue to grow.

Other regionally-disparate outcomes of population ageing will further confound this situation. As noted, also emerging is a related shift from natural increase to natural decline, which will surface in Australia's states and territories across a markedly different time-scale (see Figure 1). Where Tasmania and South Australia will enter natural decline around the second and third decades, this situation will not occur in Queensland, Western Australia and Northern Territory until the fifth and later decades. The shift, which is brought about by the changing ratio of old to young creating an excess of deaths over births, is now considered to be inevitable. It is already occurring in many European countries, and is projected to occur in all developed countries by mid century, even with sizeable net migration gains (United Nations, 2000b). That is, by mid century, all developed countries will be experiencing natural decline, and many, if not most, absolute decline as well, because the numbers required to offset low fertility are simply too great. In these regards, Tasmania will simply be Australia's first 'cab off the rank'. Importantly also, this *new* form of population decline does not occur evenly or even semi-evenly across a number of age groups, as with losses from migration and mortality, but rather, begins from the bottom of the age structure and moves upwards through it.

⁷ That is, aside from other issues such as the proportion with private superannuation etc.

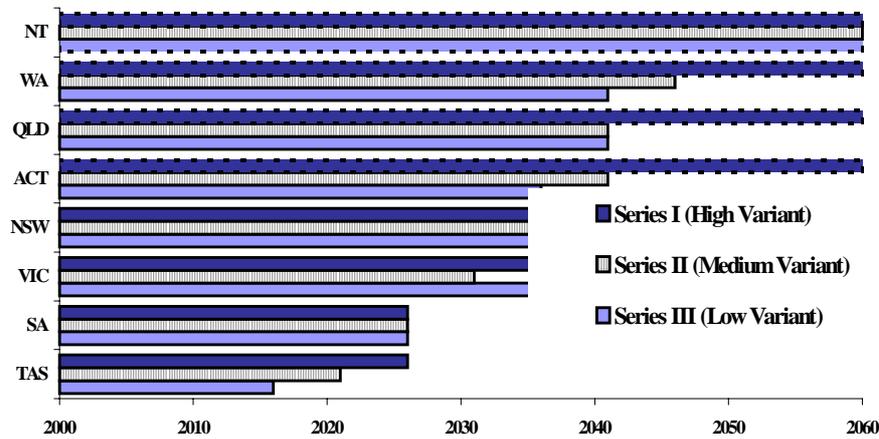


Figure 1. Natural Population Decline: Projected Year of Onset (on or before) by Australian State/Territory and ABS Projection Series.

3. POPULATION AGEING AND TASMANIA’S UNIQUE EXPERIENCE OF IT:

Australia’s shift to natural decline will thus be highly differentiated regionally, with Tasmania becoming Australian’s first state to experience this condition, several decades ahead of the youngest regions. Very important in Tasmania’s case, however, is that its shift to natural decline is not being caused by the conventional harbinger, very low fertility, but rather, by a sizeable bite in the age structure over the key reproductive ages (Jackson and Kippen, 2001). Indeed, at around 1.8 births per woman, Tasmania’s birth rate is the second highest in Australia. Offsetting this, Tasmania has, since 1990, experienced a net loss of over 21,000 people aged 18-38 years, a decline of 14.0 per cent of the 1990 cohort (see Figure 2). This loss has been almost exactly offset by natural increase, resulting in minimal overall decline to the total population. But, as indicated, this situation cannot continue for long. By contrast with total Australia (where birth numbers are declining only very slowly), the bite in Tasmania’s age structure means that the numbers of births now entering its base each year are declining rapidly. At the same time, the numbers of deaths are slowly but inexorably increasing. Despite constant and considerable efforts on the part of Tasmania’s Government to ‘get the population growing again’, migration is unlikely to resolve ‘the problem’ in either the short or long term. With the exception of three brief bursts of net migration gain (1918-19, 1947-53, and 1989-90), Tasmania has never been a strong attractor of migrants, while the numbers required to offset natural decline - around 1,400 net per annum from its

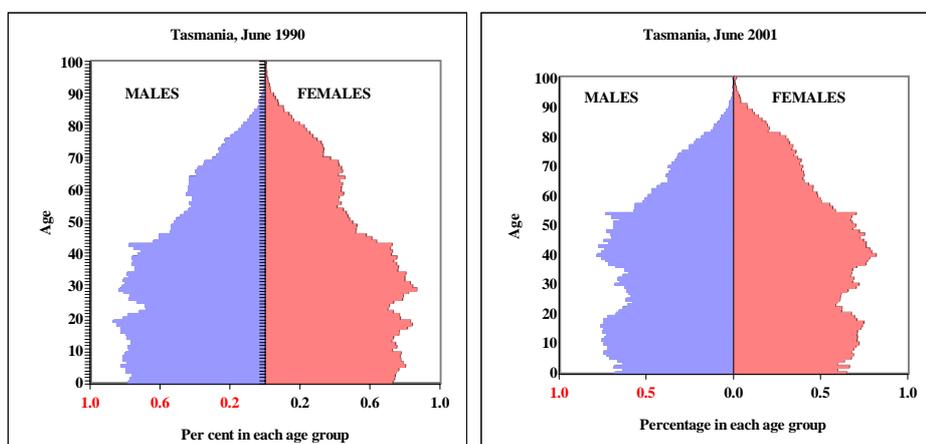


Figure 2. Age-Sex Structure of Tasmania, 1990 and 2001.

onset - will be substantially above most past experience⁸.

Equally noteworthy, although impossible to do justice to in this paper, is the sub-regionality of these trends and patterns within Tasmania, and thus at the level of local government (see Felmingham, Jackson and Zhang, this volume). Occurring in all states and territories, sub-regional demographic differences are perhaps better acknowledged than those at state and territory level. However, where, in the past, the primary driver of these trends has been differential internal migration patterns and flows, from here on in they will also be differentially affected by the shift towards natural decline. Again these emerging dynamics indicate the complexity that will surround the forthcoming development of regionally appropriate population ageing related policies and principles.

4. THE CHANGING SIZE AND STRUCTURE OF TASMANIA'S AGE-GROUPS

The dynamics outlined above will manifest for the next several decades as dramatic changes in the size of all Tasmania's age groups, but most particularly at the youngest and oldest ages, and in the ratios between them. First, Figure 3 shows the relative effects of structural ageing (that is, falling fertility, compounded, in Tasmania's case, by the migration-driven loss of people in the key reproductive age groups) on age groups at the younger end of the age spectrum, for each state and territory. These groups, indexed to their respective numbers in 1999, represent the main primary, secondary, and key tertiary education ages: 6-11 years, 12-16 years, and 17-24 years. In all cases, Tasmania,

⁸ Tasmania has experienced a net migration loss in 64 of the past 100 years, while net gains of 1,000 or more have been experienced only five times since 1960, the last time being 1991. Although the loss is now slowing, the past decade has seen an average net migration loss of 2,500 each year.

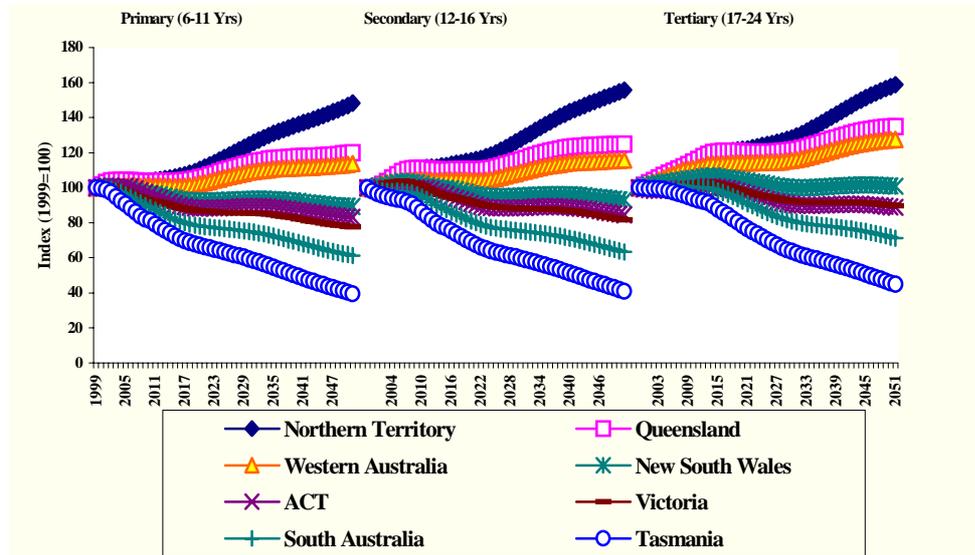


Figure 3. Projected Primary, Secondary, and Key Tertiary Education Ages (Indexed to 1999), By State/Territory (ABS Series II).

Source: Jackson and Thompson, 2002

and, to a lesser extent, South Australia and Victoria, experience substantial declines in numbers, while in the Northern Territory, Queensland, and Western Australia, these numbers soar. Note that these interstate comparisons are made on the basis of the ABS’ medium variant Series II projections; the high variant (Series I) projections with their assumptions of high fertility rates continuing across the projection period are less appropriate for comparative purposes.

If these Series II assumptions eventuate, the Tasmanian primary school age population will decline by 2051 from its current 40,000 to around 16,000 (a decline of 59 per cent); the secondary school age population, from 34,000 to 14,000 (-57 per cent); and the main tertiary age population, from 50,000 to 22,000 (-55 per cent). Under Series I (the ‘best case’) the respective numbers and percentage declines by 2051 would be 26,000 (-36 per cent), 22,000 (-34 per cent), and 34,000 (-32 per cent). Because participation is somewhat less than universal at the older secondary school and tertiary education ages, actual numbers attending these institutions would be somewhat lower. For example, at current age-specific participation rates, the number of Tasmanian university students would fall from their current 13,108 to around 6,500 under Series II, or 9,500 under Series I (Jackson and Thompson, 2002). Declines of this magnitude will obviously have far-reaching implications, not only for the affected institutions, but also the many down-line industries and occupations they will impact upon. Permanently declining school age populations may well involve greater ‘costs’ than did their increases during earlier periods, and these costs will be broad ranging.

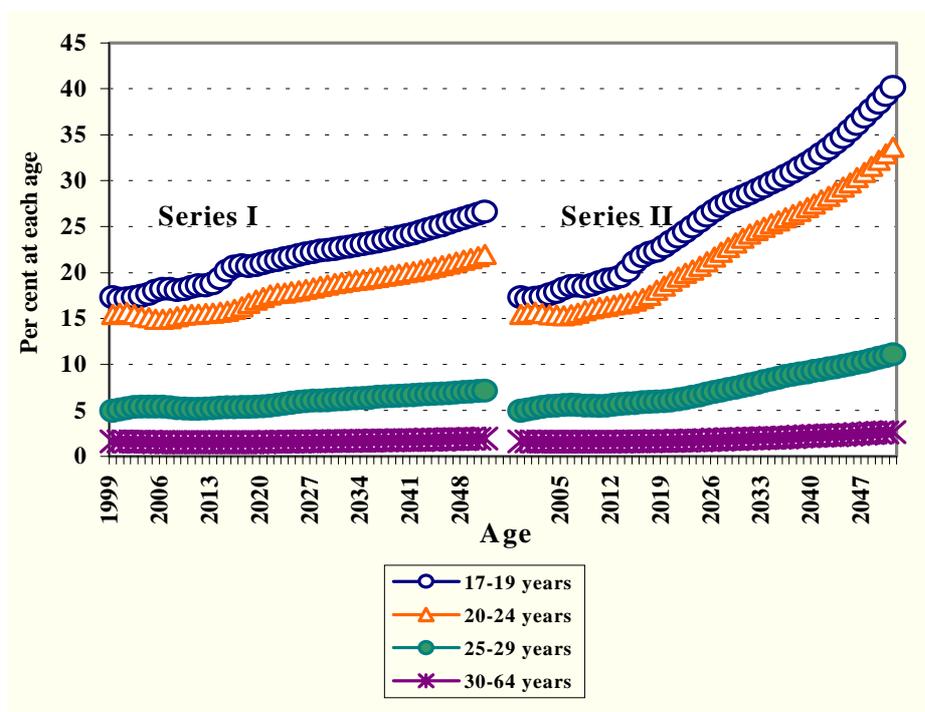


Figure 4. Tasmania: Age-Specific Participation Ratios* Required to Maintain Current University Numbers (13,108*), According to ABS Projection Series I and II.

Source: Compiled from DETYA, 2000 unpublished student data; ABS Population Projections, 2000, 3222. (NB * Data include overseas students).

Jackson and Thompson (2002) examine the trends for Tasmanian and South Australian public and private schools, matriculation colleges and universities in more detail. They show that declining cohort size in these states is so pronounced that within a few decades, total cohort sizes will be smaller than total enrolments today. Figure 4 illustrates the argument in terms of the increase in age-specific university participation ratios that would be required to maintain the Tasmanian university population *at or near its current size* (13,108, inclusive of overseas students). Under Series I, participation at 17-20 years would need to increase across the projection period by 53 per cent, and at 21-24 years, by 42 per cent. Under Series II, the proportions at these ages would have to more than double (132 and 117 per cent respectively).

It cannot be assumed, however, that such increases in university participation rates (should they be desired) will be readily forthcoming. The same structural ageing that is bringing about the declines in cohort size at the younger ages is also ushering in a significant change for the labour market: a substantial decline in the ratio of young people reaching the age of labour force entry, to those approaching retirement age and leaving. The emerging situation implies an

increase in competition for the participation of the young, between the labour market on the one hand, and tertiary education institutions on the other. This issue is examined further below. In the interim, it is worth making the point that recent increases in university participation rates - across most of the developed world - have been argued by many to reflect hidden unemployment. The emerging situation could thus see a reduction, rather than increase, in university participation, irrespective of the fact that the same dynamics will likely see an increase in the financial return for education. That said, counter arguments must also be acknowledged. If university participation rates have genuinely increased in response to, for example, increasing demand for higher skills, it will be labour market supply that will be the more affected. Such a scenario implies that it would be older rather than younger workers who would fill the void. Either way, the point needs to be made that because this scenario will differ so markedly across Australia's states and territories, it will have correspondingly complex implications.

Another important point also needs to be reiterated here. These changes reflect the internal momentum of decline set in place by the demographic transition and its continuing decline in fertility, and will occur, with a small time lag, even if Tasmania's current net migration loss was to become positive. For example, despite Victoria being a disproportionate receiver of Australia's international migrants (approximately 23 per cent of the net gain), structural ageing will soon see the same downward pressures on Victoria's school- and university-age populations as will occur in Tasmania and South Australia in the shorter term (Jackson and Thompson, 2002). The importance of understanding the inevitability of these shifts cannot be over-estimated: it is simply not possible to 'create' more five or ten or fifteen year olds. The 'lost' births are, indeed, lost forever.

Turning our attention to the age groups between the youngest and oldest, we find another trend of emerging importance - but also possible opportunity - for Tasmania. Whereas the proportion of the total Australian population that is at the key working ages (15-64 years) is projected to decline very slowly across the next fifty years (from 67 to 59 per cent), and numerically, to increase some 19 per cent, in Tasmania the numbers are already declining, while the proportion is projected to begin declining within the next few years (from 65 to 56 per cent, under the 'best case' Series I; and to 53 per cent, under Series II). Figure 5 illustrates these trends in terms of numbers (indexed to 1999) for each state and territory; the trend for New South Wales approximates that for total Australia.

Assuming a near-immediate shift to the lower net migration loss assumed in the Series I ('best case') projections, the Tasmanian working age population would experience a very slight increase until around 2010, then slowly decline, falling by over 50,000 across the projection period. Under these auspices, Figure 6 gives a breakdown for three main age groups that comprise the working age population, those aged 15-34, 35-49, and 50-64 years. Trends in each of these age groups clearly attribute the minor amount of intrinsic growth potentially remaining to those in the 50-64 year age group—the reason being that the baby boomers are currently shifting into this group (see also DHAC, 1999; Healy,

2001). The finding, which is evident nationally but again differs substantially by state and territory, has important implications for Tasmania in terms of its relatively high levels of early retirement. That is, as the only age group showing any sign of growth within the working age population, the contribution of 50-64 year olds to the Tasmanian economy over the next several years will be critical.

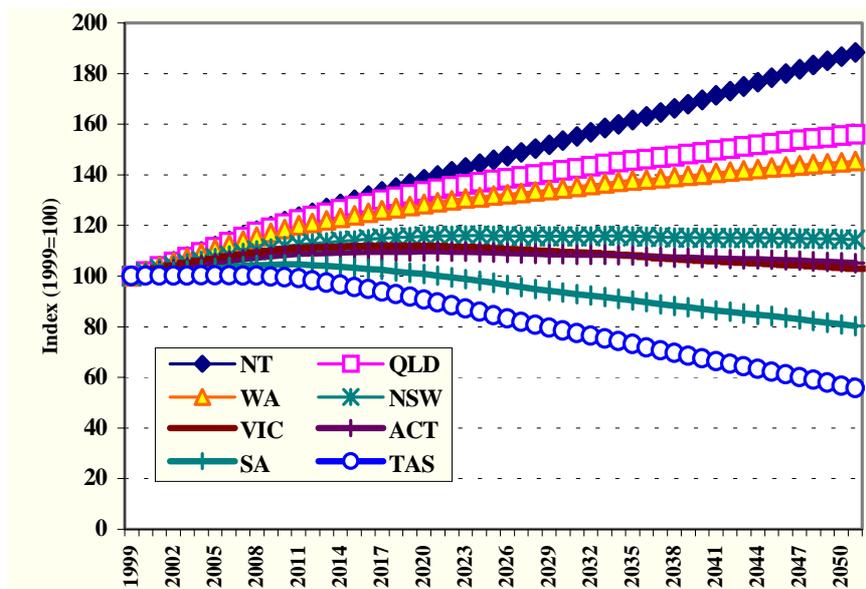


Figure 5. Projected Size of Working Age Population (Numbers Indexed to 1999) By State/Territory (ABS Series II).

Source: Jackson and Felmingham, 2002.

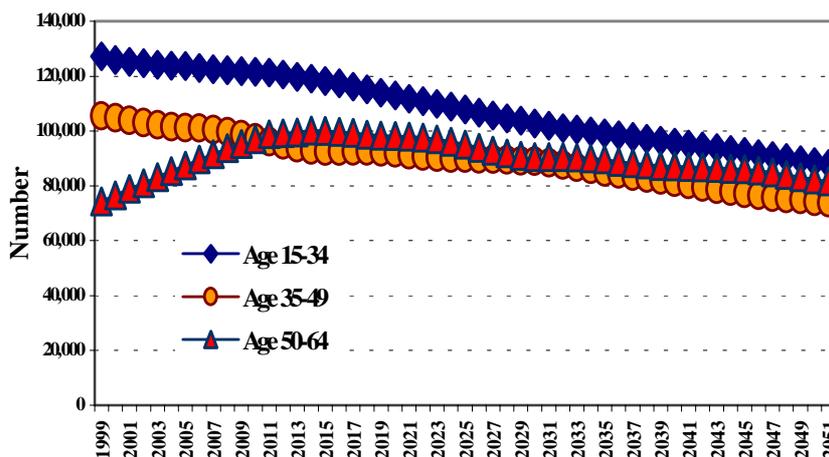


Figure 6. Tasmania: Projected Working Age Population, By Broad Age Group (ABS 2000, Series I).

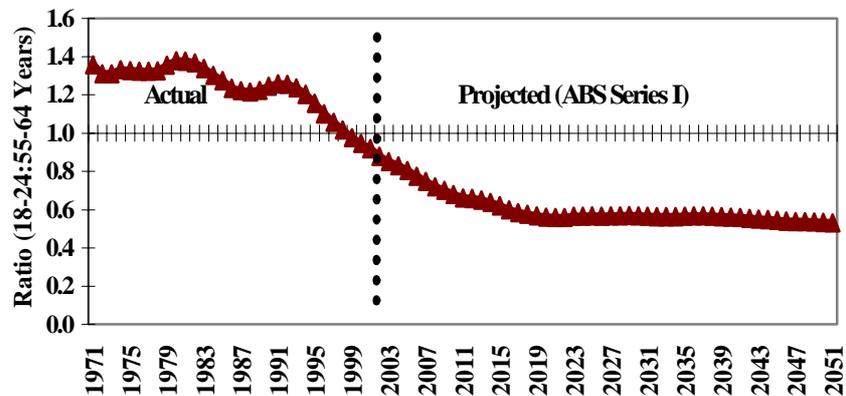


Figure 7. Tasmania: Estimated and Projected Labour Market Entry:Exit Ratios, 1971-2051.

McDonald and Kippen (2001) argue that regions faced with the above circumstances—that is, falling labour force supply exacerbated by negative, zero, or low net migration gains—have three other options for increasing the relative size of their labour forces. These are: a decrease in the age of entry to the labour force, an increase in the labour force participation rate, especially for women, and an increase in the age of retirement.

While the first of these options seems antithetical to current thinking, it could, as argued above, come about as a response to falling entry:exit ratios. Illustrated in Figure 7, this ratio counterpoises the number of people (here, males and females combined) aged 18-24 years and arriving at labour force entry age, with the number aged 55-64 years and nearing or entering retirement. For Tasmania this ratio has already fallen from 1.4 in the 1970s to less than 1.0 in 2001. By 2015, assuming current entrance and exit patterns, it will have fallen to around 0.6. That is, for every 6 young people endeavouring to enter the Tasmanian labour force around 2015, there will be 10 people approaching the age of retirement and/or leaving the labour force. Ratios like this, which have not been observed in Tasmania before (or indeed, Australia or the developed world), are likely to see a substantial increase in demand for the labour of young people.

As implied above, such a scenario has a number of implications. On the one hand, young people can anticipate an increase in competition for their labour, with attendant implications for improved wages and conditions. Such a situation could well see Tasmania become a net attractor of young people from other regions, reversing recent and current out-migration trends. The equivalent ratios in Western Australia, Queensland and the Northern Territory, for example, will in 2015 still be above 1.0. On the other hand, increased competition for labour implies cost implications for individual employers, which could see a reduction in some jobs. But again, at least at the macro-level, better employed, better paid young people imply an increase in consumption, and thus the potential to offset

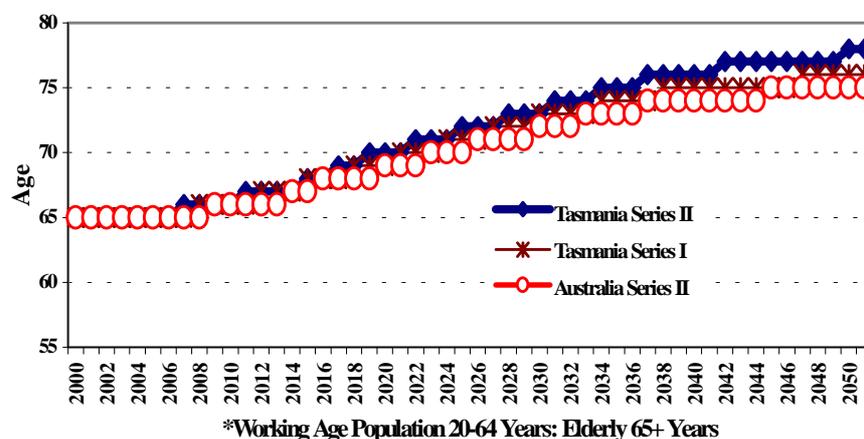


Figure 8. Retirement Adjustment Age Needed to Maintain Current Ratio of Working Age Population to Elderly (Working Age Population 20-64 Years: Elderly 65+ Years), Tasmania By ABS Projection Series I and II, and Australia Series II.

the reduced consumption that occurs with high levels of unemployment.

The second option, an increase in Tasmania's labour force participation rate, which is currently lower than that for all other states and territories, especially for women, is likely to be positively impacted upon by the previous factor: a decline in the supply of youth available for work is likely to see a concomitant increase in demand for the labour of older workers. Additionally it takes little imagination to link a numerically and proportionately shrinking labour force *vis-à-vis* increased numbers and proportions of elderly with a decline in unemployment, for both men and women. By contrast with the offshore manufacturing of clothing, electrical and other consumer goods, population ageing - as an emergent 'industry' - is likely to generate jobs that cannot be so readily exported offshore (McDonald and Kippen, 2001). If this is going to happen, it should happen in Tasmania first.

Relatedly, Figure 8 illustrates the third of the above options: an upward shift in the age of retirement. As an alternative to an increase in the employment rate of younger people, and thus a possible stabilising, or even reduction, in the proportion of younger people undertaking higher education, an increase in the proportion of older people in employment may be the more desirable option. Currently the ratio of Tasmania's working age population (defined here as 20-64 years) to the elderly (65+ years) stands at 4.3. To maintain this ratio across the projection period, the average retirement age would have to increase to around 75 years of age by 2038 and 76 years by 2048 (Series I). Should the assumptions in Series II (the medium case) prevail, the relatively greater loss of working age people to the elderly would result in a slightly higher average age of retirement being needed, and this margin would increase over time, reaching 78 years in 2051.

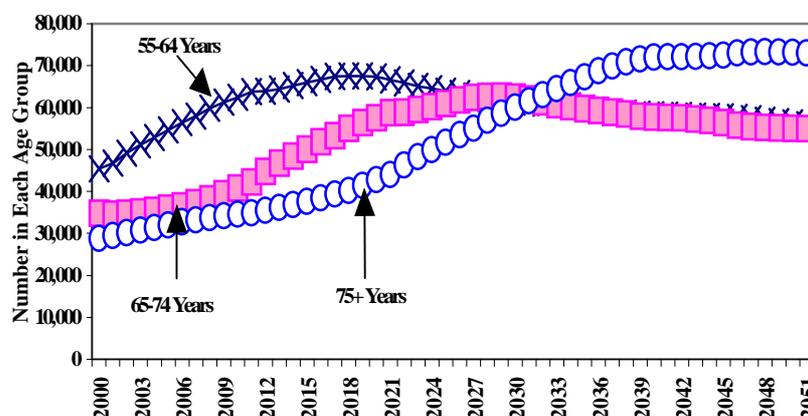


Figure 9. Tasmania: Projected Population Ageing by Broad Age Group (ABS, 2000 Series I).

The merit or otherwise of these findings is not considered here; they are included for illustrative purposes only. However, since it seems that, from both a social and economic perspective, Tasmania's main option for offsetting declining labour supply at the younger ages will be an increase in the proportion of middle-aged to older workers in employment, the exercise is far from academic (for international comparisons see Zoubanov, 2000; Caldwell, Caldwell and McDonald, 2002). Also of relevance to the situation is that while people are living longer than ever before, males at least have been spending a much shorter period in the formal workforce. Nationally, Ruzicka (1986: p. 22) estimated that the average male aged 15 years in 1933 would spend approximately 44 years or 83 per cent of his life in the labour force. Over the 1940s and 1950s this increased slightly to 84 per cent, but by 1981 that proportion had declined to 72 per cent (41 years), despite an increase in life expectancy of more than four years. These data do not appear to have been calculated regionally, but a comparison of age-specific participation rates for Tasmanian males in 1981 and 2001, against a further increase in life expectancy of five years over the same period, indicates substantial further compression. In 1981, around 69 per cent of Tasmanian males had entered the labour force by age 15–19, while 50 per cent remained in it at age 60–64. By 2001, only 57 per cent had entered the labour force by age 15–19, and only 41 per cent remained there at age 60–64 (ABS, 2001, Catalogue 6291.0). Again, if the trends at older ages are going to reverse as a result of population ageing (e.g., McDonald and Kippen, 2001), we might expect to see them in Tasmania first.

Finally, Figure 9 shows the effects of numerical ageing on Tasmania's 55–64, 65–74, and 75+ age groups, according to ABS Series I (best case) projections. Reflecting the earlier discussion, the fastest growing age group is currently that at 55–64 years of age, into which the first of the baby boomers are now moving. Present numbers can be expected to increase by 2019 by nearly 50 per cent, but thereafter they will begin to decline, falling back to around 23 per cent above

their current levels by 2051. Between 2011 and 2029, as the baby boomers shift into the 65-74 year age group, present numbers will increase by some 80 per cent, but then also fall back to around 57 per cent above current levels by 2051. Between 2021 and 2041, numbers aged 75+ years will increase 150 per cent over their present levels, and remain around this level throughout the rest of the projection period. Overall, the number of those aged 65+ years will double over the projection period, but they will peak around 2041, and begin to decline. This is a somewhat different perspective to that gained from the typical illustration of population ageing, wherein the proportion aged 65+ years continues to increase across the entire projection period, and more so for Tasmania than any other state/territory (Jackson and Felmingham, 2002: Figures 1 and 11).

There would seem to be great value in disaggregating both population ageing, and the 'elderly' population, in this manner. While the major impact of population ageing—in terms of the massive increase in the 65+ population—is projected to occur in Tasmania between 2010 and 2020, the real impact in terms of costs may not begin until around 2020, when the populations aged 75-84 and 85+ years really begin to grow. Whether or not these cohorts will contain proportionately more who are sick or sicker than previously (e.g., Fries, 1980, 1989; Hugo, 1986: p. 6; Mathers, 1999), they will certainly contain increased *numbers* requiring care and other age-related services, and these numbers will have fiscal implications for states. But to end on a more positive note, these increased numbers may well draw additional funds into the state, both via the federal payment of Age Pension, and as Superannuitants 'cash up' their investments and spend them locally. From the latter perspective, the onset of decline in these numbers in Tasmania from 2040 may well come to be looked on with some dismay.

5. COMING TO TERMS WITH THE REGIONALITY OF POPULATION AGEING

'If half of the people are overfed, and half are underfed, on the whole they have a fine diet.' This wonderful quote, the citation for which I have lost, sums up the message of this paper. Population ageing has many more implications than the generally well acknowledged increase in the numbers and proportions of elderly. Among these implications are its regionality and 'institutionality', the latter referring to the range of institutions that will bear its various negatives and positives. Analysing likely impacts of the phenomenon at the national level is important, but Australia's complex system of federal, state and local government demands that more attention be paid its regional and sub-regional manifestations.

In Tasmania, where the phenomenon of population ageing and its associated shift to natural decline are being accelerated by a substantial net migration loss at the key reproductive ages, these implications will rapidly become evident. Importantly for Tasmania, as Australia's first 'cab off the rank', their major impact will occur over a relatively brief time span, with extremely significant simultaneity across a number of key indicators. Within the space of a single decade, say 2010-2020, Tasmania's total and working age populations will enter natural decline, primary and secondary school populations will plummet, a

declining labour force entry:exit ratio will compete with the university and other tertiary education institutions for participants, mature and/or female workers will also be competed for, wage rates and employment conditions should improve, the population over the age of 65 will substantially outnumber children; and the number of 65-74 year olds will increase by around forty per cent. With the exception of South Australia, this demography will differ markedly to that in Australia's youngest states and territories, where both natural and absolute population growth will continue for some decades.

Such disparate trends indicate that an urgent rethink of many of Australia's federal level policies and the principles on which they are based is needed. Among these issues will be the current system of state and local government funding, an issue that could be only alluded to here. Others might be certain aspects of economic rationalism that currently work against those who would otherwise increase their number of employees: falling entry:exit ratios will not necessarily deliver lower unemployment in and of themselves. Fortunately, Tasmania and Australia will not be alone as they grapple with these concerns. But for Tasmania specifically, it is necessary to understand that the population clock has stopped ticking, and that it is in the vanguard position. Rather than trying to 'fix the problem' by seeking to return to population growth *per se*, a phenomenon that everywhere will soon belong in the past, it would be better to begin investigating more thoroughly just what positives the new demography might deliver, and work towards these ends.

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