PRODUCTIVITY COMMISSION
RESEARCH STUDY

IMPLICATIONS OF THE FUTURE AGEING OF AUSTRALIA'S POPULATION

SUBMISSION BY THE
SOUTH AUSTRALIAN GOVERNMENT

SEPTEMBER 2004

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Executive Summary

The South Australian Government welcomes the research study by the Productivity Commission (PC) into the implications of the future ageing of Australia's population.

The Australian population will age significantly in the coming decades as a result of declining birth rates, increased life spans and the ageing of the baby boomer generation. These demographic changes will have significant implications for society and all three levels of government.

This submission examines the potential impact of population ageing, together with other trends, on Government finances over the medium to longer term (a period of almost 40 years up to 2041-42) using a model developed by Access Economics. The results indicate that both State and Federal Governments face considerable budgetary challenges in the future as a result of population ageing.

The Government believes that the issues arising from the ageing of the population warrant a national approach in addressing them. Hence the South Australian Government reiterates its call on the Commonwealth Government to develop a national population policy.

A co-operative approach across all levels of government, in partnership with the wider community, would enable a national population policy to examine the medium- and long-term implications of Australia's rapidly ageing population and the growing population imbalance between Australia's states, cities and regions. While the South Australian Government has released its own policy, *Prosperity through People: A Population Policy for South Australia,* in March this year, it remains that the Commonwealth Government alone has direct control of the relevant policy levers.

The view taken by the South Australian Government is that a national population policy should aim to deliver more than just higher population growth (otherwise it would be almost all about migration). Such a policy should address a range of factors relevant to population size, distribution and make-up, including fertility, ageing, overseas and interstate migration, infrastructure, labour force participation, service provision, environmental sustainability and government finances.

To be effective, population policy must fit with the community's broader economic, social and environmental agenda. A responsible and sustainable national population policy would coordinate key areas of public policy to deliver these ends. It would also provide an opportunity to raise community awareness to the implications of Australia's ageing population.

As requested in the Terms of Reference to the study, this submission discusses the following with a focus on South Australia:

- the likely impact of an ageing population on South Australia's overall productivity and economic growth
- the potential economic implications of future demographic trends for labour supply and retirement age, and the implications for unpaid work such as caring and volunteering, and
- the potential fiscal impact of the above factors on the Commonwealth and State Governments.

The submission also details relevant studies that the Productivity Commission could take into consideration in its task.

Attachments include:

- Indicator series tables for Government service demands and revenues (Attachment 1)
- Employment for Older People Background and Summary papers (Attachment 2)
- Health and Safety source material (Attachment 3)

1. The likely impact of an ageing population on South Australia's overall productivity and economic growth

1.1 Workforce Participation

The ageing of the population, in combination with increased life expectancy, is expected to have a negative impact on overall workforce participation in Australia over coming decades as a greater share of the population moves into the 65-plus age bracket.

Nevertheless, increased levels of educational attainment in the community in coming decades are expected to partially offset a decline in labour force participation, particularly for older age groups. Similarly, female participation in the labour force across all age cohorts is expected to continue to increase in coming decades. The projected increasing levels of education in the community further influence this effect.

Despite the above, however, forecasts suggest that on current trends, growth in national GDP per capita will slow quite markedly as the population ages – from 2¼ per cent per annum in the last forty years to 1½ per cent per annum over the next forty years.

For South Australia the labour market and economic effects of an ageing population are more acute. As a result of lower fertility, disproportionately low overseas migration gain and net population loss to interstate, South Australia now has the oldest population of all the States and Territories. South Australia has a median age of 37.9 compared to 35.9 nationally and the proportion of its population aged 65 years or over stands at 14.7 per cent compared to 12.7 per cent nationally[1].

This ageing of the population is projected to continue. By 2050, it is projected that 31 per cent of the State's population will be 65 years or over, more than twice the current proportion. In the same time the number of people over 85 is projected to increase four fold[2].

As a result of a prolonged period of low fertility, the outflow of young people, and the 'baby boomers' moving through to retirement age, the number of South Australians of working age (15 to 64 years) is projected to start declining within the next decade, much sooner than the State's population as a whole[3].

The State's overall labour force participation rate (which decreases as the population ages) has remained well below the national average for many decades. South Australia's participation rate in July 2004 (61.5 per cent) was more than 2 per cent below the national average (63.6 per cent). At times this deficit has exceeded 3 per cent. Analysis by South Australian Department of Treasury and Finance suggests that around two thirds of this deficit is attributable to the State's older age profile. There has also been a strong trend towards early retirement, not all of which has been voluntary. South Australia has the highest proportion (47.6 per cent) of 50 to 64 year olds retired from full-time work in Australia[4].

[1] SA Govt (2004) *Prosperity through people: A Population Policy for South Australia*, March, www.premcab.sa.gov.au/release/population.pdf, p 5
[2] SA Govt (2004) *Prosperity through people: A Population Policy for South Australia*, March, www.premcab.sa.gov.au/release/population.pdf, p 5
[3] SA Govt (2004) *Prosperity through people: A Population Policy for South Australia*, March, www.premcab.sa.gov.au/release/population.pdf, p 7
[4] SA Govt (2004) *Prosperity through people: A Population Policy for South Australia*, March, www.premcab.sa.gov.au/release/population.pdf, p 7

Improved workforce participation rates in South Australia will ultimately lead to increased economic output, higher average GDP per capita and higher average per capita incomes.

1.2 Productivity

Population and participation trends for South Australia discussed above underscore the important role that improved productivity will need to play in generating sustainable economic growth in the decades to come.

Queensland Treasury has estimated productivity growth by State between 1985-86 and 2000-01[5]. Queensland experienced the fastest rate of annual growth in productivity over this period (1.6 per cent), followed by Western Australia (1.3 per cent) and New South Wales (1.2 per cent). South Australia (1.1 per cent), Victoria (1.0 per cent) and Tasmania (0.3 per cent) all recorded productivity growth below the national average (1.2 per cent) over the period.

The following table decomposes the contribution to real income per capita in each state over the period 1985-86 to 2000-01. For Australia as a whole, it shows that average annual productivity growth of 1.2 per cent was the main factor in improved living standards, comprising over 55 per cent of the annual growth of 2.2 per cent in real income per capita over the period. This finding is broadly consistent with previous studies that estimate productivity growth to account for 60-65 per cent of the rise in per capita real incomes over the past 35-40 years.

Table 1: Real Incomes By State, Average Annual Growth 1985-86 to 2000-01

	NSW	*Vic*	*Qld*	*SA*	*WA*	*Tas*	*Aust*
Terms of trade	*0.0*	*-0.2*	*-0.4*	*-0.2*	*0.4*	*0.0*	*0.0*
Capital deepening	*0.4*	*0.4*	*-0.1*	*0.3*	*0.4*	*0.5*	*0.3*
Multifactor productivity	***1.2***	***1.0***	***1.6***	***1.1***	***1.3***	***0.3***	***1.2***
Participation rate	*0.2*	*0.4*	*0.5*	*0.1*	*0.4*	*0.1*	*0.3*
Working age	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*
Average hours	*-0.1*	*-0.1*	*-0.2*	*-0.1*	*-0.2*	*-0.2*	*-0.1*
Unemployment rate	*0.2*	*0.1*	*0.1*	*0.1*	*0.2*	*0.1*	*0.1*
Real income per capita	***2.2***	***1.9***	***1.9***	***1.7***	***2.8***	***1.0***	***2.2***

The results for South Australia specifically are quite informative in identifying the reasons for the State's relatively poor growth in real per capita incomes over the fifteen years. The table illustrates that South Australia has performed comparably to Australia as a whole in relation to capital deepening (investment) effects, size of the working age population, average hours worked and unemployment. Our relatively poor growth in per capita income (better only than Tasmania) reflects most strongly a decline in the State's terms of trade (resulting from import prices rising more quickly than export prices, with variation between the states most likely reflecting differing export commodities) and slower growth in workforce participation rates. A slightly lower than national average growth in multifactor productivity has also contributed.

5 Queensland Treasury (2003) *Productivity and Regional Economic Performance in Australia*. Note Queensland Treasury's use of multifactor productivity as an indicator.

To highlight the challenge that South Australia faces, South Australian Business Vision (SABV) 2010, in its preliminary discussion paper *Towards a Blueprint for South Australia: Scenarios for Future Development,* investigated some of the implications of South Australia's lower level of population and employment growth, and estimated minimum required labour productivity growth rates to sustain three GSP growth rate scenarios. While making optimistic assumptions about how stronger growth would shape South Australia's future potential population, labour force and employment growth, this work indicated that the State will still need to achieve significant productivity growth in coming decades just to maintain, let alone improve upon, its current GSP growth rates.

2. The potential economic implications of future demographic trends for labour supply and retirement age, and the implications for unpaid work such as caring and volunteering

2.1 Implications of labour force trends for women's workforce participation

Much has been written about the importance of women's participation in the workforce. It is important to be clear about what these challenges may be and about the appropriate objectives of governments in responding to them. Strategies designed to increase women's participation in the workforce may have a number of objectives. One may be to increase the supply of labour to meet future demand as more people leave the workforce. Another may be to increase fertility rates to achieve population growth, which may be associated with broader economic growth strategies.

Women's participation rate[6] in the labour market has increased over the past 25 years from 44.6 per cent to 53.5 per cent, but remains well below the participation rate for males (69.9 per cent). Over the past 10 years, employment in South Australia has increased by 75,600. Increases in women's employment accounted for over half of this (54 per cent). Women also accounted for the majority of full-time employment growth in South Australia during this period (13,600 or 62 per cent) and just over half of part-time employment growth (27,300 or 51 per cent). Despite this strong increase in full-time employment, women still account for a minority of full-time jobs in South Australia (32 per cent in July 2004). In contrast, women account for the majority of part-time employment in South Australia (71 per cent). Overall, women account for 45 per cent of total employment.

One of the barriers to women's participation in the workforce (particularly the full-time workforce) is the balance many seek to achieve between paid work and child bearing and rearing. According to the ABS[7], women account for a significant majority of domestic activities and child care responsibilities. The overlap between part-time work and casual employment was mentioned above. Research suggests that women's options for combining work and family care responsibilities are limited and that while many choose to work on a part-time and/or casual basis, this may not necessarily be their preference. Those who choose part-time or casual work to balance other responsibilities may face a number of trade-offs, including job security, a career, higher earnings, training and development and promotion. Part time workers will also have significantly reduced superannuation income as a result (baby boomer women in particular).

[6] The Participation Rate is the number of people in the labour market (either employed or unemployed) expressed as a proportion of the population.
[7] How Australians Use Their Time, ABS (No. 4153.0), 1997

The difficulties that many women face in attempting to combine family and work results in some leaving the workforce altogether, with others opting for part-time employment. For other women, a focus on their career means that the number of children they have may be less than otherwise. The South Australian population policy outlines initiatives to assist people to strike a work-life balance that supports parents to combine work and family aspirations and provide them with more options[8]. It is important, however, to ensure that Federal Government initiatives (such as taxation and welfare arrangements), which also impact on participation and work-life balance are more coherent. A national population policy would help to tie these policies together.

The South Australian population policy called for the Commonwealth to investigate paid maternity leave arrangements. This should also be considered in a national population policy. Attractive paid maternity leave arrangements, together with a suite of work–life balance initiatives, would address falling fertility by allowing greater choice to working women of when to have a child rather than postponing due to financial reasons. It would also provide economic incentives for women to be employed prior to childbirth and to return to work following the birth. Access to paid maternity leave is considered a positive factor in assisting a couple's decision to have a child, which in turn would significantly reduce the nation's rate of ageing.

2.2 Older people as carers and volunteers

Older people already make a major social contribution as volunteer workers both in aged care and in the community more generally. They are also very important as care-providers not only for their aged partners but for other family members including grandchildren. According to the Australian Carer's Network women make up 70 per cent of carers in Australia. In this way older people facilitate greater female labour force participation, the importance of which for overall productivity is noted in Banks'[9] paper.

In considering the increased participation of women in the work force the Productivity Commission should note the implications for child care provision. In 2003 an Australian Institute of Health and Welfare[10] study found that 1,019,200 children in Australia use informal care, either alone or in combination with formal care. Over half of all care (58 per cent) was provided free of charge by grandparents. Over half (53 per cent) of care by grandparents was for children aged under 5 years, with 9 per cent being for babies aged less than 1 year. Grandparents also tended to care for shorter amounts of time, though some provided extensive care — in 11 per cent of cases, children being cared for by grandparents were looked after for 20–34 hours per week.

An increase in participation in paid work by older workers is therefore likely to remove them from informal care arrangements and require increased provision of formal child care services.

In recognition of the broad range of challenges to children's services, including the ageing population and the subsequent impacts upon the role of grandparents as carers, the South Australian Government has recently commissioned an Inquiry into Early Childhood

[8] SA Govt (2004) *Prosperity through people: A Population Policy for South Australia*, March, www.premcab.sa.gov.au/release/population.pdf, pp 16-17

[9] Banks G (2004) *An Ageing Australia: small beer or big bucks?* Presentation to the South Australian Centre for Economic Studies, Economic Briefing, Adelaide, 29 April

[10] Australian Institute of Health and Welfare (2003) *Australia's Welfare 2003*, http://www.aihw.gov.au/publications/aus/aw03/aw03-c03.pdf

Services. The Terms of Reference for the Inquiry encompass factors such as the affordability, accessibility and appropriateness of child care services, including the development of an appropriate workforce. Of particular relevance to the issues associated with grandparents who care for children, the Inquiry will consider and make recommendations on the:

- Availability, adequacy and quality of services which meet the needs of parents and children;
- Most effective relationships with other family policy settings at State and Federal level;
- Affordability of the range of children's services;
- Seamless service delivery; and
- Future directions for children's services in South Australia[11].

The final report on the inquiry will be presented to the Minister for Education and Children's Services.

It is important to take account of the positive contributions and savings generated by the unpaid work of older people. It has been estimated that voluntary work by people aged 65 years and over was worth more than $43 billion nationally in 2002. On average, women contribute the equivalent of $30,000 worth of labour per annum and men around $20,000[12].

The extent to which older people contribute to society as both volunteers and carers over the coming decades will be a major factor in the impact of population ageing, including in relation to health care costs. The attitudes of older 'baby boomers' to volunteering and caring need further research so likely impacts can be gauged.

2.3 Workforce Issues

Improvements in productivity can be achieved by increasing the overall skill level of the workforce. This in turn would contribute to raising overall living standards and help alleviate the pressures from labour force decline. By providing opportunities for all Australians to learn, to retrain and to develop their skills and abilities, Australia can improve economic growth and prosperity. Other policy areas that impact on the labour market such as industrial relations, work-life balance strategies, superannuation and childcare will be critical to respond effectively to the effects of demographic change on the workforce.

A national population policy would coordinate policies covering education (primary, secondary, and tertiary), vocational education and training, and workforce participation. In doing so, a national population policy would encourage full participation of the community in the economy, thereby improving productivity.

2.3.1 Labour market trends

Recent trends in labour market growth indicate that:

[11] For further information see the inquiry's website http://www.ecsinquiry.sa.gov.au/
[12] The Advertiser (2003) *Working for nothing is worth* $43bn, 27 November, p 13 (based on report by the Australian Institute of Family Studies)

- 80 per cent of current labour market growth is in relation to workers aged over 45[13];
- In 2001, the ABS found that for every young person first entering the workforce, there were 7 workers over 45[14];
- Australians tend to leave the workforce at a younger age than in other developed countries[15];
- Since 1993 the number of Australians leaving the country long term each year for work reasons has doubled. The majority of those leaving are in 25 – 34 age bracket where we already have a demographic shortage in Australia[16];
- More than half of all Australian working women have retired by age 45[17];
- While women's participation in the workforce has increased substantially since the 1970s, it is still the case that only 1 in every 3 women over 55 are in paid employment (in Sweden, the figure is double)[18];
- Similar labour market challenges are also being faced in Europe, United States, and Japan. Ken Dychtwald from the Harvard Business Review looked at this issue from a global perspective. He found that by 2010 the United States would face a labour market shortage of 10 million workers[19].

Other general observations about changes in the labour market indicate that:

- There is now a more significant phase of life that exists beyond retirement
- In the past 40 years, the biggest economic challenge was reducing high unemployment rates – this created an employers' market. In the next 40 years, the focus will shift to increasing participation rates to offset labour shortages
- Without well thought out responses, we could see a degeneration into a global bidding war by employers trying to recruit from a shrinking talent pool.

2.3.2 Implications of labour force trends

One of the main concerns arising from population ageing is its impact on the labour force. There are impacts being felt now in our community with many older South Australians experiencing difficulty in reconnecting to employment and training for a variety of reasons. These reasons are cross-disciplinary and are influenced by taxation law, retirement entitlements, recruitment practices and work organisation practices, Occupational Health, Safety and Welfare issues, industrial issues, and anti-discrimination law.

[13] ABS Feature article. *Labour Force Projections 1999-2016*. www.statistics.gov.au/Auss
[14] ABS Cat No. 32222.0 – Economy: January 2001.
[15] Auer, P., & Fortunay, M. (1999). *Ageing of the labour force in OECD countries: Economic and social consequences*. Geneva: International Labour Organisation.
[16] Figures quoted from 2002 arrivals/departures data (Department of Immigration and Multicultural Affairs) in Business, Work & Ageing (2004). *Work and Ageing in Context.* Presentation Kit.
[17] Business, Work & Ageing (2003) *The Baby Boomers Retire: Emerging Trends in the Work-Life Continuum.* Presentation Kit.
[18] Auer, P., & Fortunay, M. (1999) *Ageing of the labour force in OECD countries: Economic and social consequences*. Geneva: International Labour Organisation.
[19] Dychtwald, K (2004) Labour Supply, *Harvard Business Review*

South Australia is Losing its Older Workers

A principal concern that will have a significant impact on the South Australian economy is the extent to which older workers have been leaving the labour market, both voluntarily and involuntarily. The forced redundancy of many older workers carries significant social and financial costs to government and the community. It also removes the opportunity to effectively utilise a pool of skills and experience that will be essential for productivity growth in the future. Evidence suggests that in Australia, there is a relatively high propensity to focus on older workers, when restructuring or downsizing activities occur.

Recent data indicates that large segments of the baby boomer cohort due to retire within the next decade may be heavily reliant on the provision of publicly funded support at both Commonwealth and State levels. The fiscal impact of this, and unemployment among older people more generally, is a reduction of revenue flow from various taxation sources, and an increased demand for public goods and services.

At the same time there will be those among the baby boomer cohort who opt to remain in the labour market well past traditional retirement age. They will potentially become an important element in meeting future labour demands when those demands cannot be fulfilled immediately by young people with limited skills entering the labour market (particularly skilled tradespeople and middle managers).

The Exclusion of Older Workers and their Experience of Unemployment

Lower labour force participation rates of older persons are due to a range of personal and social factors. However, in situations in which older workers are effectively excluded from the workforce there are damaging personal and broader socio-economic effects. In addition, being unemployed has a particular and unique impact on older workers, especially in relation to their duration of unemployment.

Older unemployed people generally experience a greater average duration of unemployment than the all-age average. In the July quarter 2004, the average duration of unemployment for older unemployed people in South Australia was 122 weeks, compared with 58 weeks for all ages. This has consistently been the case for the past 20 years.

Hidden unemployment is prevalent amongst older workers. Older unemployed people may include older people who are carers and those receiving disability assistance who are seeking paid employment and who are not reflected in 'official' unemployment statistics.

'Skills Mismatch' and the Gender Dimension

South Australia's economy has been making the transition from a regional to a global market. With the introduction of new technologies the nature of work and the skills sought have changed. The historical dependency of South Australians on employment within declining, tariff-protected manufacturing industries means that many older workers may have outdated skills, or skills that are no longer in demand ('skills mismatch'). From a gender perspective, the majority of the employees within these industries were male and employed on a full-time basis.

Further, much of the employment growth in South Australia has been in the service-related sectors such as hospitality, tourism and retailing with less tenured forms of employment. Additionally, the take up of casual and part-time vacancies within the service industries has favoured women, even though many would prefer to work more hours if work and family aspects of their lives could be better combined.

Therefore, the incidence of long-term unemployment is predominantly experienced by older males (on a nearly 2:1 basis). In addition, older unemployed males have a high propensity to suffer psychologically from low self-esteem and poor self worth. This can have a significant impact, socially and economically, on both local and regional communities.

2.3.3 Workforce Development Strategy

To address these issues, governments should consider strategies to ameliorate these issues. These would include:

- increasing the capacity of all workplaces to identify and respond to their workforce planning needs;
- increasing opportunities for individuals to participate in meaningful ways in the workforce;
- ensuring that education and training institutions provide flexible and responsive learning opportunities to assist the current and emerging skill needs of the South Australian workforce;
- identifying and responding to likely skill shortages;
- providing access to training for specific groups (such as older workers) who have been disadvantaged or under represented in the labour market;
- developing strong regional approaches to ensure all South Australians have access to employment and skill development; and
- encouraging and promoting lifelong learning and, in doing so, increasing workforce retention and productivity.

The South Australian Government is currently examining these issues in developing its own strategy.

2.3.4 Life Long Learning

Labour market projections indicate that the fastest growing occupations[20] are those that require high levels of literacy, communication and problem solving skills along with ongoing professional development to maintain the knowledge and skills required by the growing information economy. Hence there must be an emphasis on life-long learning to ensure that workforce participants are able to regularly update their skills. Tertiary education, and vocational education and training must be accessible for all participants.

2.3.5 Discrimination Against Older Workers

The discriminatory practices of some employers and recruitment agencies is making it difficult for older people to get a job and keep it. A considerable body of empirical and anecdotal evidence supports the view that employers screen applicants according to age criteria and judge by appearances. This is largely the result of the negative stereotyping of

[20] The fastest growing occupations over the next eight years include Business and Information Professionals (3.3 per cent increase) Business and Administration Associate Professionals (2.8 per cent increase), Specialist Managers (2.2 per cent increase) (Monash CoPs 2004, June).

older workers as being less productive and having outdated skills. They are seen to be unwilling to embrace new ideas and accept the many changes in the workplace brought about by new technologies and workplace practices. Therefore, many people who want to keep working are struggling to maintain employment at 45, let alone 65.

Many employers resist hiring someone over 45 years old. Executive recruitment firm Highland Partners recently surveyed Australian companies and found only 18 per cent of the organisations had any policies to attract and retain workers in the 50+ age bracket[21]. The principal challenge to increasing productivity and the workforce participation of older workers is to convince employers that negative stereotypes are inappropriate.

2.3.6 Flexible working conditions

Solutions to encourage labour force participation of older workers include flexible working conditions. Some suggestions about flexible work practices for older people include:

- phased retirement
- superannuation policies (current laws can actually work against people who want to phase in retirement)
- part-time work and job sharing
- grandparenting and carers leave
- step down options (from management back to project work).

3. The potential fiscal impact of the above factors on Commonwealth, State and Territory and, to the extent practicable, local governments.

3.1 Long term economic and fiscal projections

Since the release of the Commonwealth's *Intergenerational Report 2002-03* (the 'IGR') a significant amount of further work has been undertaken in both the public and private sectors to explore the economic and fiscal implications of population ageing.[22] The various projections each use different modelling specifications and underlying assumptions and have consequently produced a range of results.

Each set of results represents a possible outcome if a set of conditions prevails. Clearly there is much uncertainty about future trends in labour force participation, productivity growth, the price of health care and so on. This means there is much uncertainty about what the future holds even if changes in Australia's demographic composition are reasonably predictable (at least relative to other future events).

Given this uncertainty, the South Australia Government believes the value in long term projections like those presented in the IGR and the Productivity Commission's preliminary paper *An Ageing Australia: small beer or big bucks?*[23] is their ability to enhance

[21] Haynes, R. (2004). *Thinking of retiring? Keeping your mouth shut, survey shows.* CCH Australia. Monday 12 July 2004. See www.cch.com.au.

[22] For example, *Shaping a Prosperous Future: Prospects, Issues and Choices* by the Victorian Department of Treasury (www.dtf.vic.gov.au), *Intergenerational Modelling for Australian Families* by Access Economics and the Association of Superannuation Funds of Australia (www.asfa.asn.au), and the South Australian Centre for Economic Studies' *Budget Implications of South Australia's Demographic Trends* (www.bbb.sabv2010.com.au/sabv/site/indicators/indicators.html?l1=18).

[23] Banks, G (2004), available at www.pc.gov.au/speeches/cs20040429.

understanding about the challenges and opportunities ahead and how Governments and the wider community can adapt.

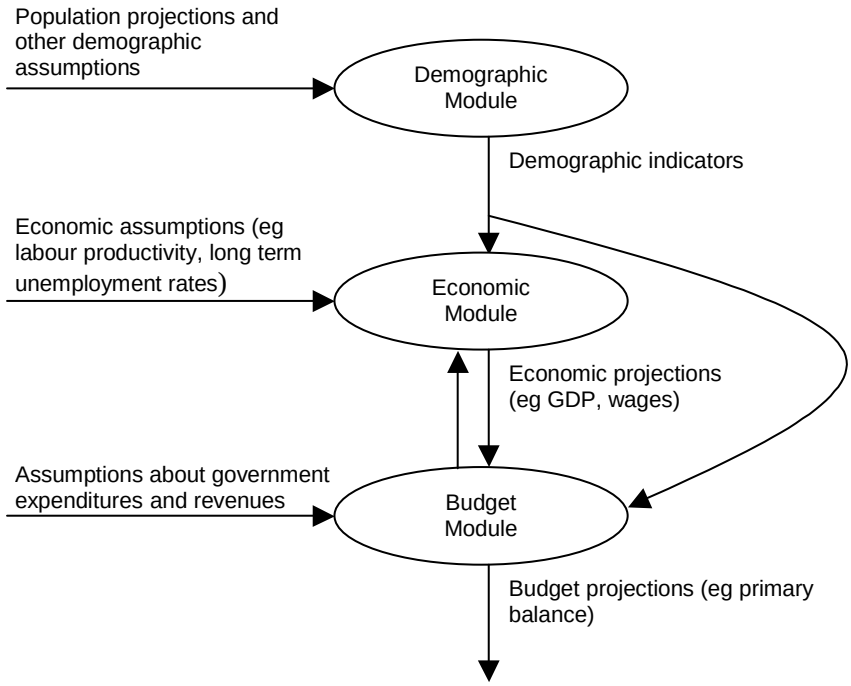
Using a modified version of a long term projection model developed by Access Economics for the other States and Territory Governments, the South Australian Department of Treasury and Finance (DTF) and Access have produced some projections of the fiscal impacts of population ageing for the Commonwealth Government, 'Combined States' and South Australia. The key results from this work are presented in this section.

It is important to understand that these projections are not predictions of actual future outcomes. Rather, they show possible future outcomes that could be expected should a particular set of assumptions prevail. In particular the scenarios presented assume that there are no changes in current Government policies and that current age-specific patterns of demand for publicly funded services do not change over time. The scenarios are also based on a particular set of ABS population projections and do not reflect South Australian Government population policy initiatives or targets.

3.2 Our modelling approach

The conceptual structure of our model is shown in Figure 1. Using a set of population projections by age, as well as assumptions about the relationship between age and demand for government services, the model calculates a set of demographic indicators. These indicators, together with additional economic and budgetary assumptions, drive the model's economic and budgetary projections.

Figure 1 Structure of the Access Economics intergenerational model



The projections start in 2003-04 (moving from 2002-03 outcomes) and end in 2041-42 (the end point of the projection period in the IGR). The final year of historical data is important because it serves as the platform from which the projections launch.

The model's economic projections follow the structure of the ABS State Accounts, with GDP and GSP assumed to change in line with total employment (the labour supply multiplied by the employment rate) and labour productivity growth. Output is then split between the components of Domestic Final Demand (DFD) and State Final Demand (SFD), with net external trade assumed to equal zero.

The budget projections adopt a structure similar to the ABS' accrual Government Finance Statistics (GFS) framework. Government expenditures are separated into a combination of 2, 3 and 4 digit Government Purpose Classification (GPC) codes. Expenditure in each program area increases over time in line with a weighted average of growth in output, wages, superannuation, 'other' and tied grants (the latter applies only to the Commonwealth). Output and wages grow by unit costs and wage rates respectively, as well as movements in the service demand indicators listed in Table 1 (Attachment 1) and assumptions about the standard of services provided by Government (eg the amount or quality of education per student). Superannuation growth is determined from the model's projections of public sector operating expenses and the employer superannuation contribution rate. 'Other' grows with nominal GDP. The 'base' assumption for tied grants (ie Specific Purpose Payments (SPPs)) is that they increase in line with the Consumer Price Index (CPI) and the national population.

Since the historical trend has been for Governments to increase service provision standards over time, our 'no policy change' assumption is that service provision standards increase with real GDP per capita. This assumption (often referred to as the 'real income effect') is intended to capture a perceived relationship between community income, community expectations about the level or standard of services Governments should be providing, and Governments' responses to those expectations.

Revenues are projected separately for each of the categories listed in Attachment 1. Taxes are largely driven by the economic projections with effective tax rates assumed to remain at existing rates to be consistent with the 'no policy change' approach on the expenditure side. This includes the implicit assumption of indexation of taxation brackets to remove 'bracket creep' on income tax, payroll tax, etc. Collections from the Goods and Services Tax (GST) are assumed to be distributed among the States according to Horizontal Fiscal Equalisation (HFE). Commonwealth SPPs to the States are modelled as State revenue the same as on the expenditure side of the Commonwealth budget (the 'base' assumption is that SPPs are maintained in real per capita terms).

For the overall measure of each Government's annual operating position we use the 'primary balance' (shorthand for GFS net lending excluding interest receipts and payments on both debt and superannuation). While the inclusion of interest flows gives a more complete picture of the overall financial pressure for each Government as budget deficits or surpluses accrue, the exclusion of interest flows reveals more about underlying operating positions. Abstracting from debt and net asset levels is also fairer for assessing the financial pressure facing one jurisdiction or level of Government relative to another because current debt levels and interest payments reflect past budget management practices. On projected GFS net lending alone one Government's budget position can seem worse than another purely because of debt run up in the past and the associated interest payments.

Superannuation interest expenses need to be excluded because unfunded superannuation liability is effectively a borrowing from employees. The split between 'borrowing' and 'unfunded superannuation liability' is arbitrary – Governments can choose to increase borrowing in order to pay off their unfunded superannuation liabilities or vice versa.

While most intergenerational modeling work has focused on measuring fiscal aggregates as a percent of GDP/GSP, we focus on *per capita* primary balances in our reporting. Because South Australia's GSP per capita is lower than GDP per capita, a 'percent of GDP/GSP' measure would make South Australia's operating position look worse than that of other Governments even if its per capita operating position is not (this point is apparent when comparing the charts in Figure 9). Under HFE the size of an individual State's economy is not a valid indication of its total all-source revenue capacity.

3.3 Population projections

Although demographics are reasonably predictable, the size, make-up and distribution of the future Australian population is not certain. Consequently a degree of judgment must be exercised when choosing demographic projections (or range of projections) on which to base long term economic and budgetary projections.

For the purpose of this work the ABS' series 11 was selected as the 'baseline' population projections. These projections were released in September 2003 as part of the latest update of the ABS' *Population Projections, Australia* (Catalogue No. 3222.0). Series 11 uses the ABS' medium assumptions for fertility (from 2011 total fertility rates of 1.59 babies per woman in South Australia and 1.60 babies per woman in Australia), net interstate migration (a net loss of 2,500 persons from South Australia each year) and life expectancy (continued improvement, albeit at declining rates), together with a high assumption for net overseas migration (Australia gains 125,000 persons each year, of which South Australia gains 3,600).

Series 11 differs from the ABS' more commonly used series 29 (often termed series B) only in the net overseas migration assumption. Series B uses the ABS' medium net overseas migration assumption – Australia gains 100,000 persons each year, of which South Australia gains 2,800. Series 11 was chosen over series B as the high net overseas migration assumption is more in line with recent experience.

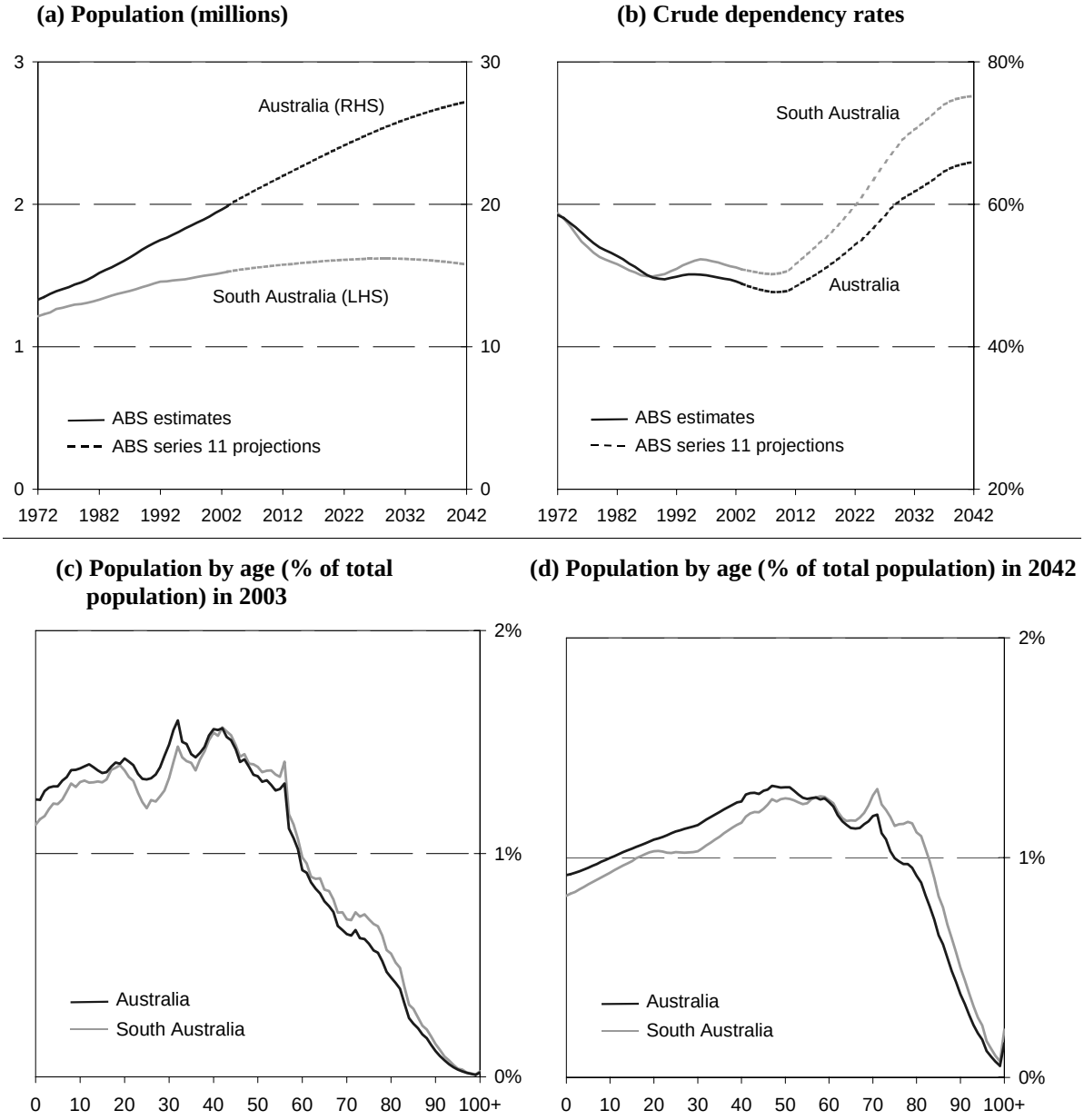
An overview of the series 11 projections is provided in Figure 2 below. The Australian population continues to grow in these projections over the next 39 years but at a slowing rate. South Australia's population grows more slowly than the national population and starts falling in 2029-30.

Crude dependency rates[24] (a rough gauge of how many people will be supported by each worker) are projected to stay around current rates for another 8 years or so. But as the baby boomer generation reaches retirement age there is a quite rapid increase. The increase is faster in South Australia because the State already has an older age structure (see the ABS estimates in Figure 2c). While there may be legitimate debate surrounding the contemporary and future demarcation of the 15-64 age cohort as the 'working age' population, dependency rates constructed using different definitions would show similar trends.

The crude dependency rates projected for 2042 would not be completely unprecedented – rates were almost as high for Australia in 1901 and the late 1950s/early 1960s. South Australian crude dependency rates were as high back in the late 1800s. However, in the past most of the dependents were children. In the foreseeable future most of the dependents will be elderly (Figure 2d).

[24] The number of people aged 0-14 and 65+ as a percentage of the population aged 15-64.

Figure 2 Demographic estimates and series 11 projections



3.4 The economic implications of population ageing

Translating these demographic projections into a set of economic projections are the following key assumptions.

- Age-specific participation rates remain unchanged from 2002-03.
- The national unemployment rate moves to a Non-accelerating Inflation Rate of Unemployment (NAIRU) of 6.0 per cent.
- Labour productivity increases by 1.75 per cent per annum (the same as in the IGR).
- GDP and GSP are assumed to grow in line with the number of people employed and increases in labour productivity.

- Domestic Final Demand (DFD) and State Finald Demand (SFD) growth equal GDP and GSP growth respectively. Imports are assumed to increase at twice the rate of GDP to reflect the continuation of globalization.

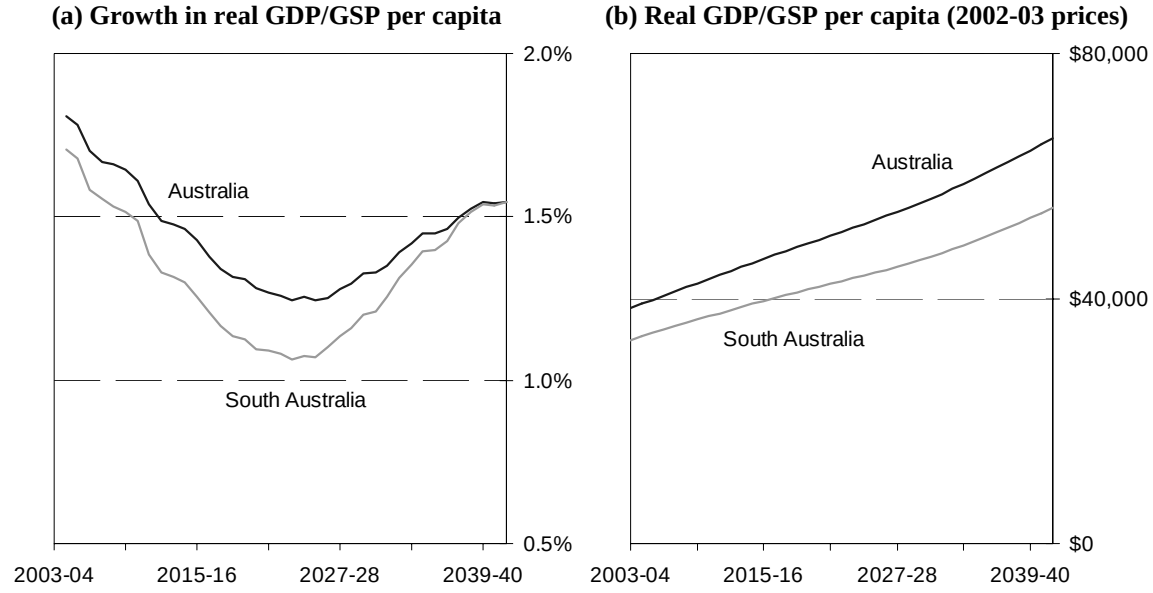
As with population projections, the assumptions are all debateable. The Commission's 'cohort' approach to projecting labour force participation will be a useful refinement, but there are also other economic factors to consider. For example, the assumption here is that the domestic labour market does not adjust in response to changes on the supply side. As the baby boomers retire it is possible that changes in labour supply will in fact cause unemployment rates to decrease while wages and age-specific participation rates increase.

Another possibility is that, contrary to the assumption here, growth in DFD/SFD will outpace GDP/GSP. As the population ages and people leave the workforce household spending may continue to be fuelled by income support payments for the aged, investment income earned on retirement savings (much of this may be invested overseas), as well as the drawing down of retirement savings. In such a scenario Federal and State tax bases would probably grow more strongly than GDP/GSP.

The South Australian Government believes it would be useful for the Commission to consider these types of scenarios.

As they are, our economic projections show per capita output growth slowing in the future because of Australia's changing demographic composition (output growth per capita without ageing would be a horizontal line sitting at 1.75 per cent in Figure 3a). Even at these slower growth rates, Australian real GDP per capita would still be 74 per cent higher in 2041-42 than in 2002-03 – suggesting significant increases in the community's material living standards. South Australia's real GSP per capita would grow by a slightly lesser 66 per cent over this period.

Figure 3 Economic projections with population ageing



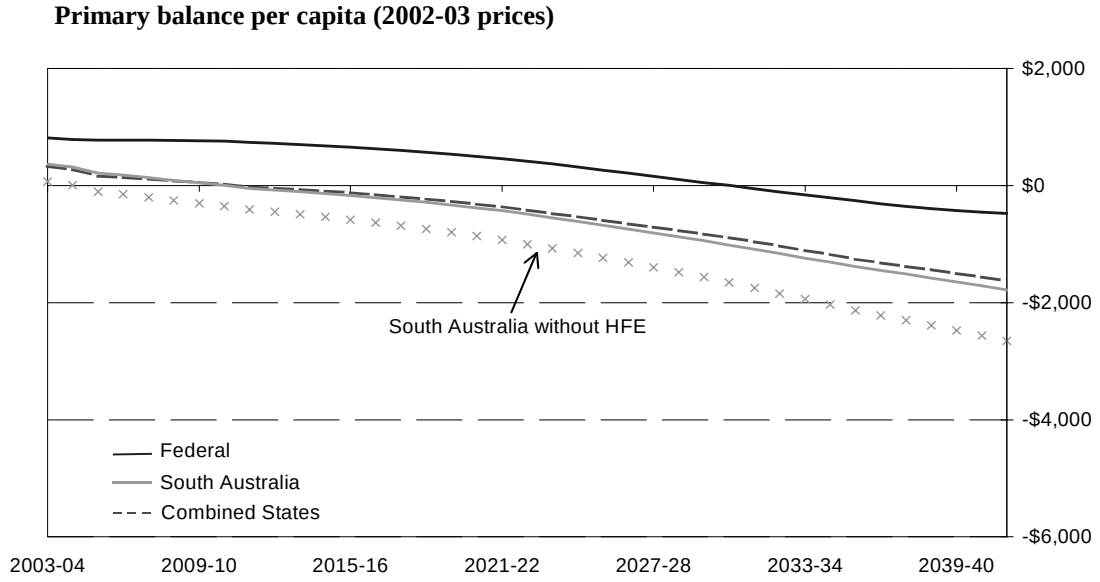
3.5 Government finances under population ageing

If Government policies were to remain unchanged from 2002-03, as were the current relationships between age and Government revenues and expenditures, our model and

underlying assumptions suggest the States and Territories would collectively go into primary deficit by 2011-12 (the 'primary balance' being GFS net lending excluding interest receipts and payments on both debt and superannuation). Similar financial difficulties would not hit the Commonwealth until 2031-32 (although this changes significantly if we introduce non-demographic cost pressures in health or change our assumptions about SPPs).

Without Horizontal Fiscal Equalisation (ie if the GST pool were distributed on an equal per capita basis) States like South Australia and Tasmania which are projected to age more rapidly would experience considerably more fiscal pressure than the average State. In South Australia's case this is shown in Figure 4 by the gap between the 'South Australia without HFE' line and the Combined States projection. Because of HFE, however, South Australia's primary balances per capita would be nearly identical to those of the average State even though its demographic make-up is relatively less budget-friendly.

Figure 4 Government finances with population ageing



Since HFE equalises the capacity of State Governments to deal with differing demographic-budget trends there is little value in the Commission exploring the fiscal impacts of population ageing between individual State Governments. A much more relevant line of inquiry is the fiscal impacts of population ageing between levels of Government (ie Federal versus State and Local).

In 2041-42 the primary balances in this 'ageing only' scenario represent a gap between non-interest revenue and non-interest expenditure in 2002-03 prices[25] of $13 billion for the Federal Government, $44 billion for the Combined States, and $2.8 billion for South Australia ($4.2 billion without HFE).

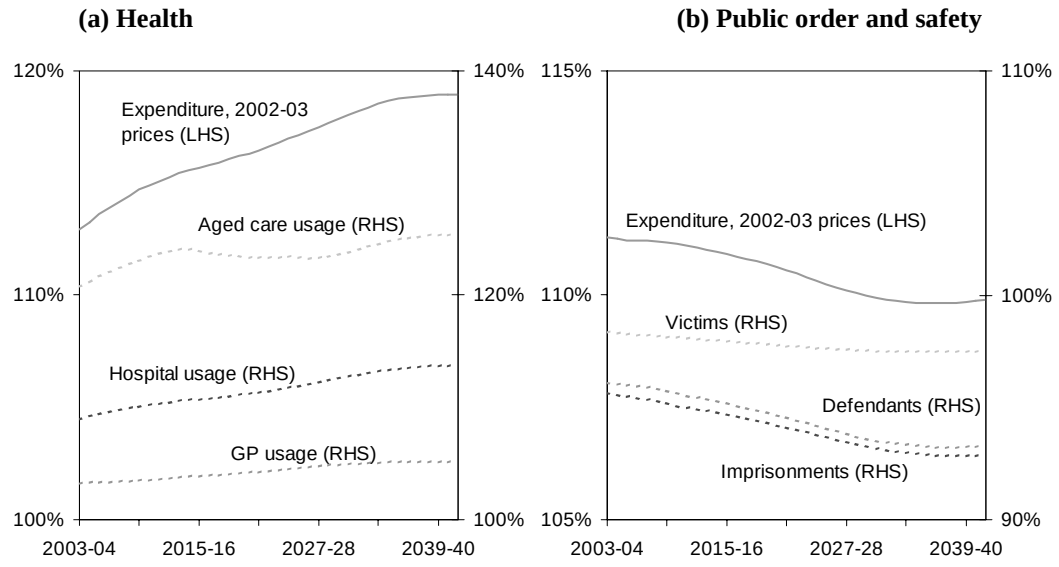
[25] The conversion from nominal to real values is based on the GDP deflator. We have not used the GSP deflator to convert values for South Australia because the slight differences between the two price indexes (due to differences in the composition of expenditure) could obscure the messages of this analysis.

HFE's role in offsetting the State-by-State impacts of population ageing (and other factors) is illustrated by Figures 5 and 6. As South Australia's population composition becomes relatively 'old' compared with the rest of Australia, South Australia's per capita expenditure requirements are projected to rise in some areas (eg health) relative to the expenditure requirements of the average State. At the same time there is a fall in South Australia's relative per capita expenditure requirements in other areas (eg public order and safety and education). With South Australia's per capita economic growth lagging the national average, South Australia's per capita own-source tax collections are projected to fall relative to the average States. These changes in the *relative* cost of service provision and capacity to raise revenue cause South Australia's GST grants relativity to increase over time.

Despite having an increasing GST relativity, South Australia's share of GST grants falls over time because of its declining share of the national population.

Gaps which do develop under HFE between the Combined States per capita primary balance and those of individual States are explained primarily[26] by State departures from 'Australian standard' revenue and expenditure policy settings. As revenue bases grow over time, States with above average revenue efforts will generally see the dollar value of their 'over taxation' ramp up. Likewise, as expenditures grow over time States with above average expenditure efforts will see the dollar value of their 'over spending' become larger. In an environment where expenditures increase more than revenues, above average policy efforts will typically mean that a State's primary balances per capita will worsen relative to the average States. That said, each State's policy efforts vary across revenue and expenditure categories, and ageing will mean that the dollar value of policy efforts above or below the Australian average will possibly scale-down in some areas (eg education) and dial-up in others (eg health).

Figure 5 State Government per capita service demands, expenditure and taxation – South Australia as a percentage of the Combined States



[26] Another more technical reason for the gap between South Australia and the Combined States is the initial 2-year lag and 5-year averaging of CGC assessments. This process causes a delay between the time South Australia's increased per capita share of GST grants is 'required' and actually delivered.

Figure 5 State Government per capita service demands, expenditure and taxation – South Australia as a percentage of the Combined States (cont)

(c) Education

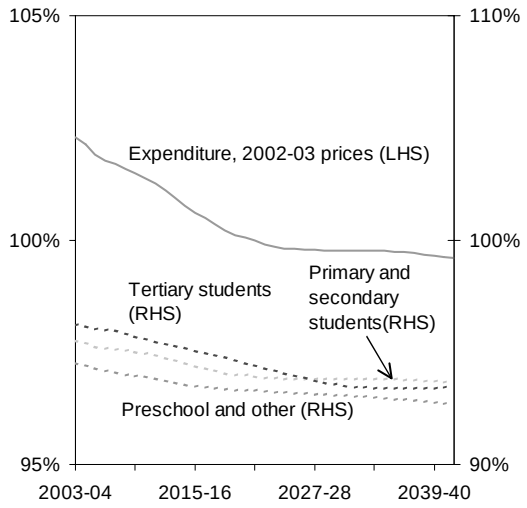
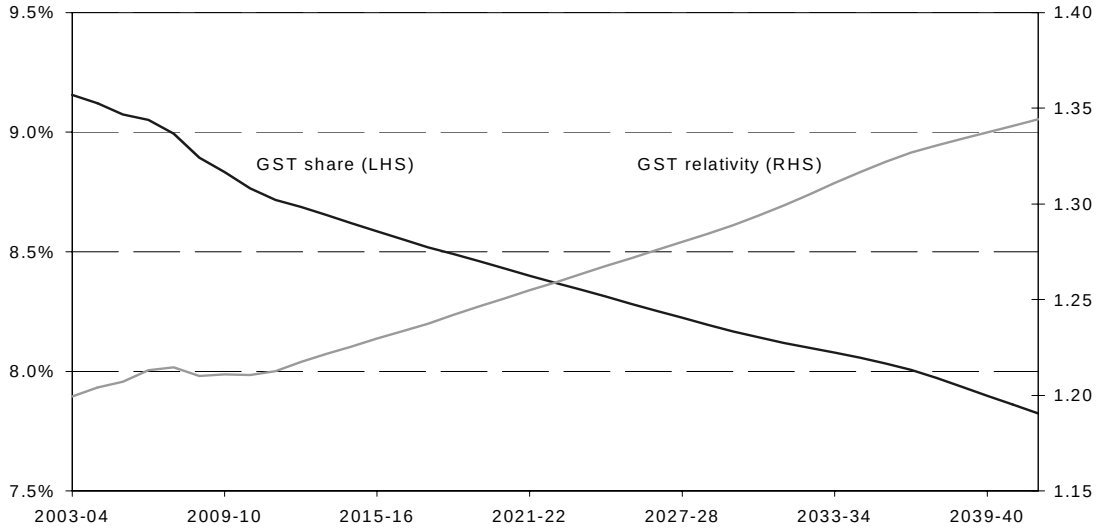


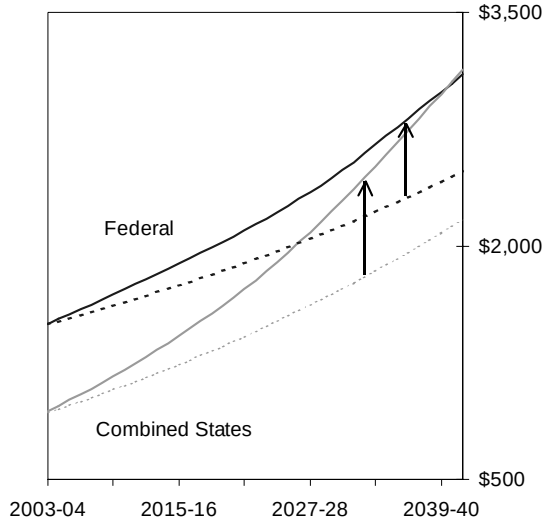
Figure 6 HFE at work – South Australia's GST relativity and grant share



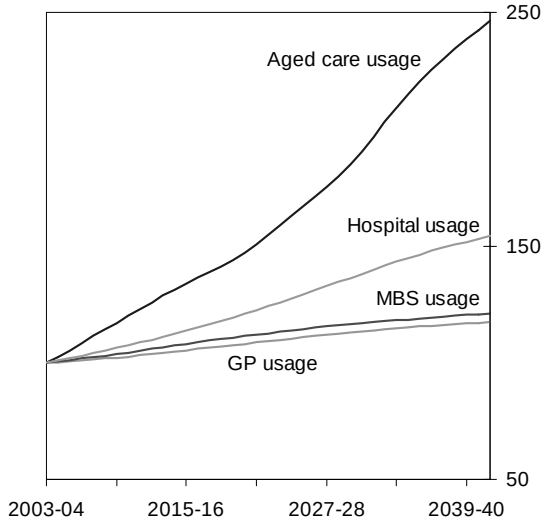
The major trends for State and Federal expenditures and revenues are contained in Figure 7. In these charts the dashed expenditure lines are the 'no ageing' projections (ie what the model predicts if the population age composition does not change), while the solid lines are the projections with ageing. In the charts showing 'service demands' (ie the volume effect of ageing), the 'no ageing' projections would simply be horizontal lines at 100. SPPs are included in Commonwealth expenditures but excluded from both State revenue and expenditure in order to avoid double counting.

Figure 7 Per capita expenditure, service demands and revenue

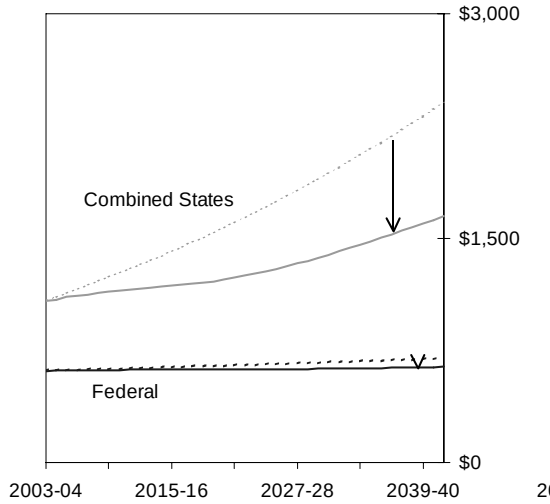
(a) Health expenditure (2002-03 prices)



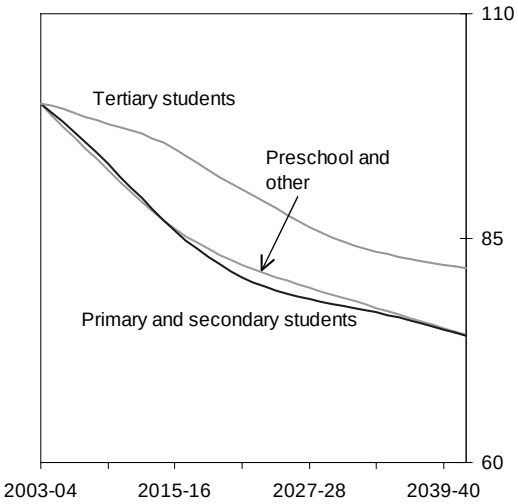
(b) Health demands (2002-03 = 100)



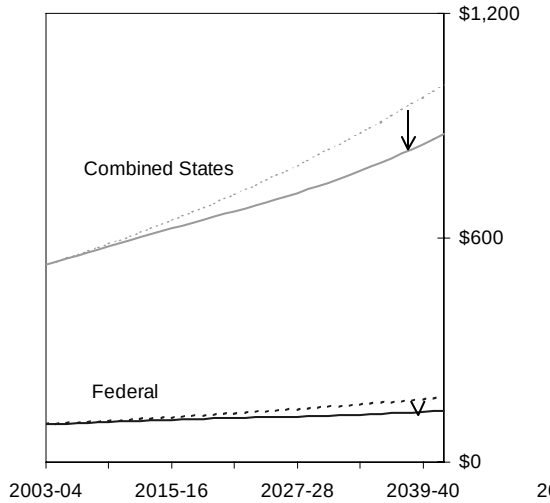
(c) Education expenditure (2002-03 prices)



(d) Education demands (2002-03 = 100)



(e) Public order and safety expenditure (2002-03 prices)



(f) Public order and safety demands (2002-03 = 100)

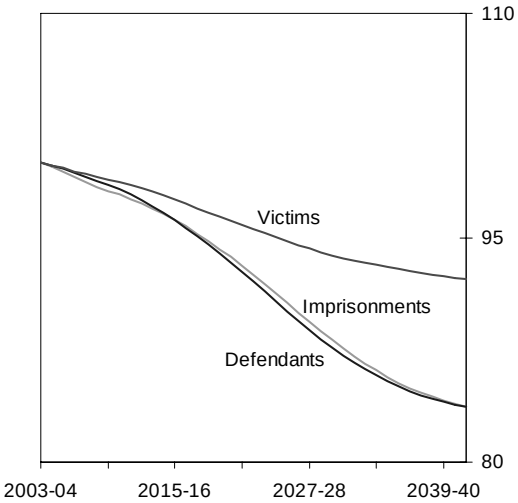
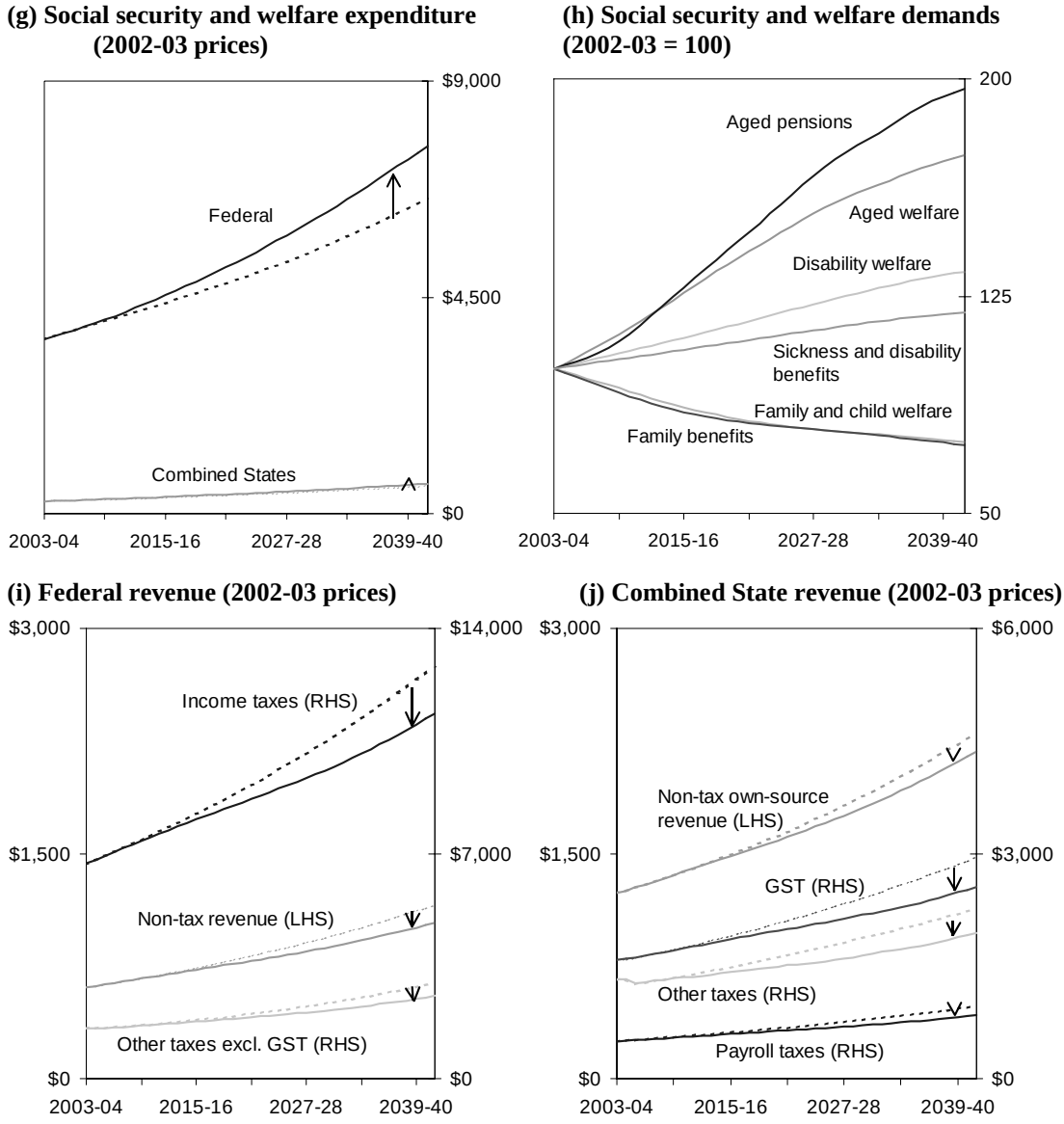


Figure 7 Per capita expenditure, service demands and revenue (cont)



The results for health in Figures 7a and 7b are based on the assumption of static age-profiles for health demands. If instead we assume that the age-profiles for health shift over time as life expectancies increase (ie a 'time from death' approach) our model suggests significant reductions in demand for aged care and hospital services (relative to the demand using static age-profiles), with minor reductions in other areas. Overall the model projects a 'time from death' phenomenon would generate savings of $277 per capita for the Federal Government in 2041-42 (2002-03 prices) and $326 per capita for the Combined States (totalling $7.5 billion and $8.9 billion respectively). Life expectancy, morbidity rates and growth in new health technologies are all extremely important factors in determining the demands for health services as the population ages.

The South Australian Government would encourage the Commission to consider a range of plausible scenarios.

Because the modelling here assumes Government service provision standards increase with real GDP per capita, and because ageing causes economic growth to slow, the transitions from 'no ageing' expenditure to 'ageing' expenditure in Figure 7 also incorporate savings from a reduced 'real income effect'. If it were assumed that service provision standards remain at existing levels – leaving only the 'volume' effects of ageing – the 'pure ageing' effect would obviously be smaller.

State concessions, a highly age-sensitive area of State Government expenditure and revenue forgone, are a noteworthy omission from these projections. Although State Government expenditure on concessions for water and sewerage rates, council rates, electricity, public transport, etc are included within the model's historical data, the costs are not identified individually and modelled in line with their demographic drivers (the same is also true for the first home owners grant). If modelled separately, the effect would be to increase the primary deficits of the Combined States. The Commission may wish to address concessions in its own work.

While the projections in Figure 7 are likely to be indicative of the underlying forces at work in each expenditure and revenue program, there is clearly much complexity and we would not claim that this work fully captures all the relevant factors. The age-profiles for many service demands and tax bases may not, as assumed here, be static in nature. The 'cohort' approach adopted by the Commission in *An Ageing Australia: small beer or big bucks?* is appealing in this regard.

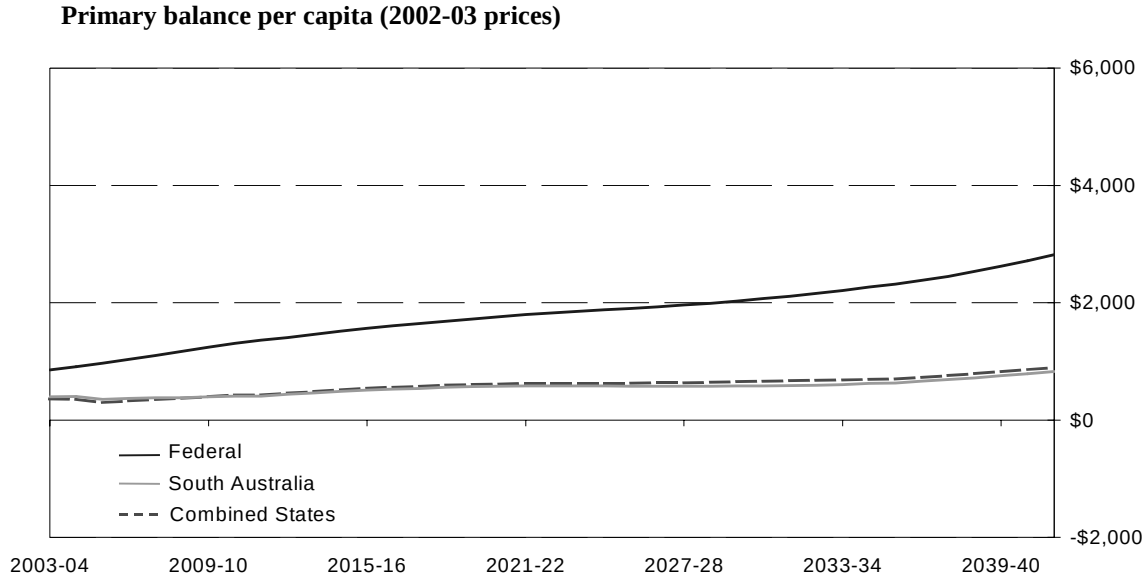
3.6 A closer look at two critical assumptions

Critical to the results of our modelling are the assumptions about SPPs and the 'real income effect'.

In the 'ageing only' scenario above we assume Commonwealth SPPs to the States increase only with the CPI and national population. More importantly, it is assumed that the States will 'pick up the slack' in SPP-funded programs if the Commonwealth's funding contributions lag growth in service demands, service standards and unit costs (which they invariably do if SPPs are maintained only in real per capita terms). The results of our model suggest changing these assumptions will have a very large impact on the amount of fiscal pressure facing each level of Government.

If instead we were to assume that ageing and income growth only drive the State funded component of SPP-funded programs the impact is to reduce Combined State non-interest expenditure (and hence the Combined States primary deficit) by $1,116 per capita or $30 billion in 2041-42 (2002-03 prices). Alternatively, if we assume the Commonwealth maintains SPPs at their current shares of State spending in each portfolio, Combined State SPP revenue (and hence the Combined States primary balance) improves by $30 billion in 2041-42, while the Federal primary balance worsens by $30 billion.

Figure 8 Government finances with population ageing but no 'real income effect'



In terms of the amount of fiscal pressure on all Governments, the 'real income effect' assumption is even more important. As shown in Figure 8, without Government service standards rising with real GDP per capita our model suggests an 'ageing only' scenario would deliver strong surpluses for the State and Federal Governments throughout the projection period providing that revenue policy settings are unchanged. The primary surpluses in Figure 8 imply some scope for Governments to raise service standards from their 2002-03 levels, even in the context of population ageing.

3.7 Population ageing and non-demographic cost pressures in health

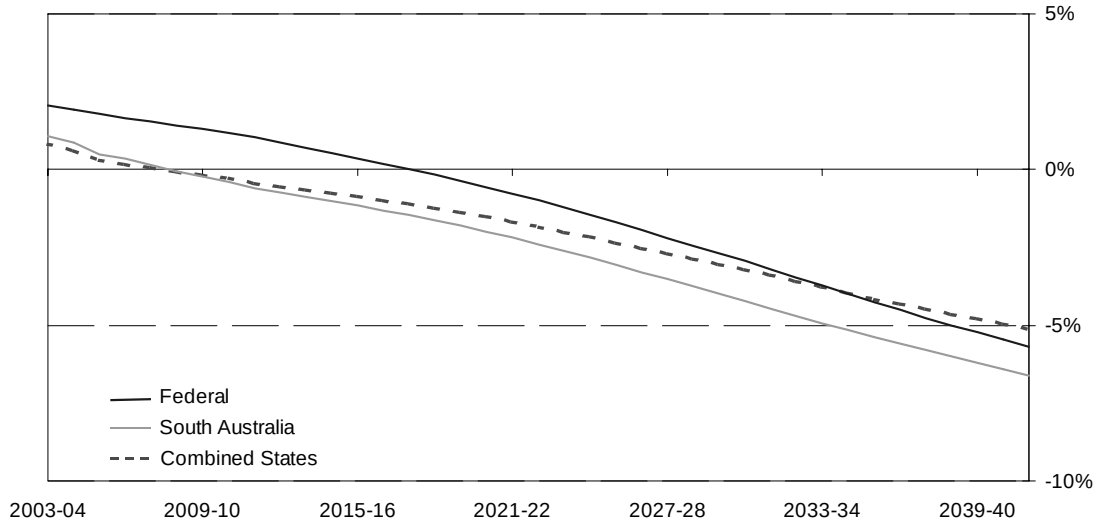
Figure 9 shows the results of our model under our standard 'no policy change' settings when it is assumed that, on top of the demographically driven 'demand volume' effects of population ageing, unit health costs increase by 2.6 per cent per annum in real terms for the Commonwealth Government and 1 per cent per annum in real terms for State Governments.

Figure 9 Government finances with population ageing and health cost inflation

(a) Primary balance per capita (2002-03 prices)

Figure 9 Government finances with population ageing and health cost inflation (cont)

(b) Primary balance as a per cent of GDP/GSP



The assumption for Federal health is selected to be consistent with the assumption used by the IGR. The assumption for State health is not based on any significant analysis – it is intended as a reasonable allowance consistent with the IGR's view that non-demographic cost pressures have been stronger for the Commonwealth because of its exposure to the Pharmaceutical Benefits Scheme. In any case, the rate of real non-demographic growth in health costs is highly uncertain and higher rates in one program may change usage patterns. For example, increases in the purchase cost of pharmaceuticals could cause a shift away from pharmaceutical usage, which in turn could increase demand for hospital procedures. These kinds of shifts are not factored into our modeling but they would have consequences for the spread of fiscal pressure between the Commonwealth, State Governments and the wider community.

With these additional cost inflation assumptions added, the Commonwealth's primary balance worsens in 2002-03 prices by $89 billion (moving to an IGR-like 5.7 per cent of

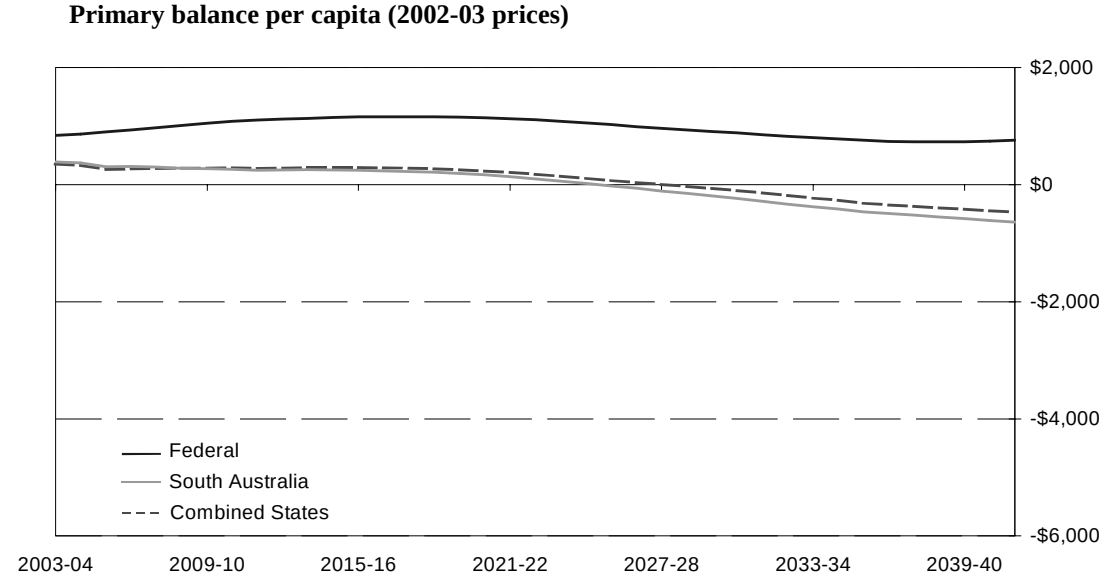
GDP) and the Combined States primary balance worsens by $47 billion (moving to 5.1 per cent of GDP). South Australia worsens slightly more than the Combined States on a per capita basis (another $2.9 billion in total) because it has an above average expenditure effort in health. Results of this magnitude suggest that, looking forward, non-demographic cost pressures are potentially just as important as demographic pressures, albeit much more uncertain.

The South Australian Government would urge the Commission to explore in some detail historical and likely future trends in cost inflation for Government services, particularly in the health sector. Analysis of past trends is only really useful if it can isolate unit cost trends. More simplistic analysis based on past growth in Government expenditures within particular portfolios or service categories is of limited use because it contains a mixture of demographic pressures, cost pressures and policy decisions regarding service standards.

In addition to the additional costs on the expenditure side, our modeling suggests that additional growth in private sector health costs will flow through to reduce GST collections. As more of household consumption expenditure becomes spent on health, it implies less will be spent on GST eligible items.

As in our 'ageing only' scenario, much of the fiscal pressure in this IGR-like scenario results from the assumed link between real GDP per capita and Government service provision levels (especially when combined with the additional assumptions about health costs). Figure 10 gives the projections when service standards are unchanged from 2002-03 levels.

Figure 10 Government finances with population ageing and health cost inflation but no 'real income effect'

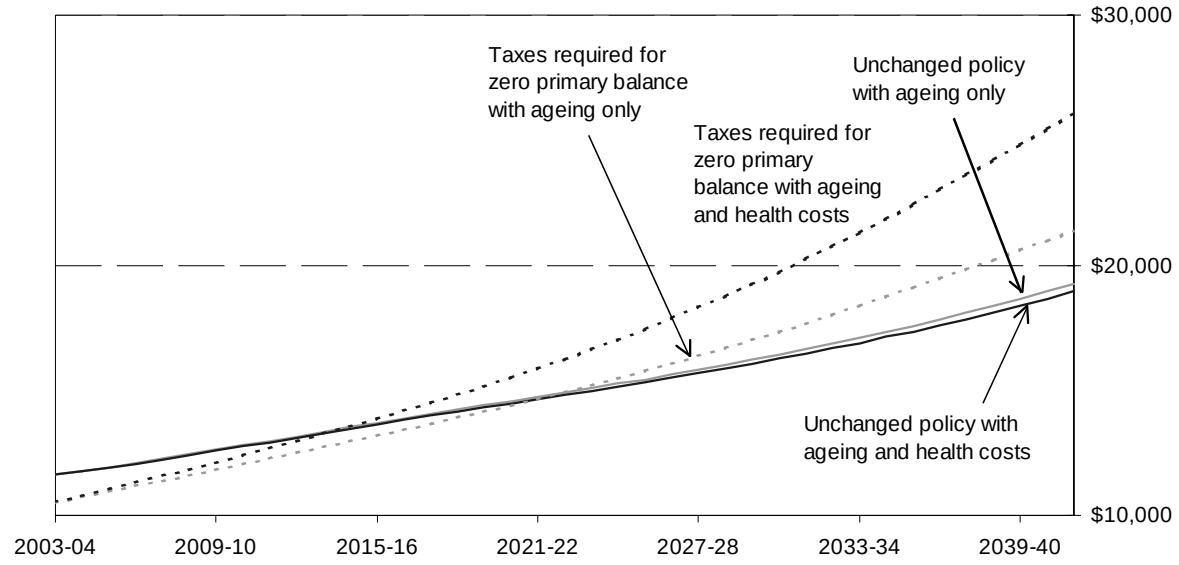


3.8 What are the implications for fiscal policy?

The fiscal 'gaps' projected by this type of modelling exercise could be addressed through a mix of, for example, expenditure restraint and higher economic growth.

As indicated by Figure 11, in order to fund the levels of expenditure projected under our 'no policy change' assumptions, significant increases in Government taxation would be required. To bridge the gap in 2041-42 in our IGR-like scenario, the model suggests the combined Federal and State effective tax rate would need to increase from its current rate by 38 per cent (abstracting from the negative effects higher tax rates might have on the size of tax bases). With 'ageing only', an upward adjustment of 11 per cent would be required.

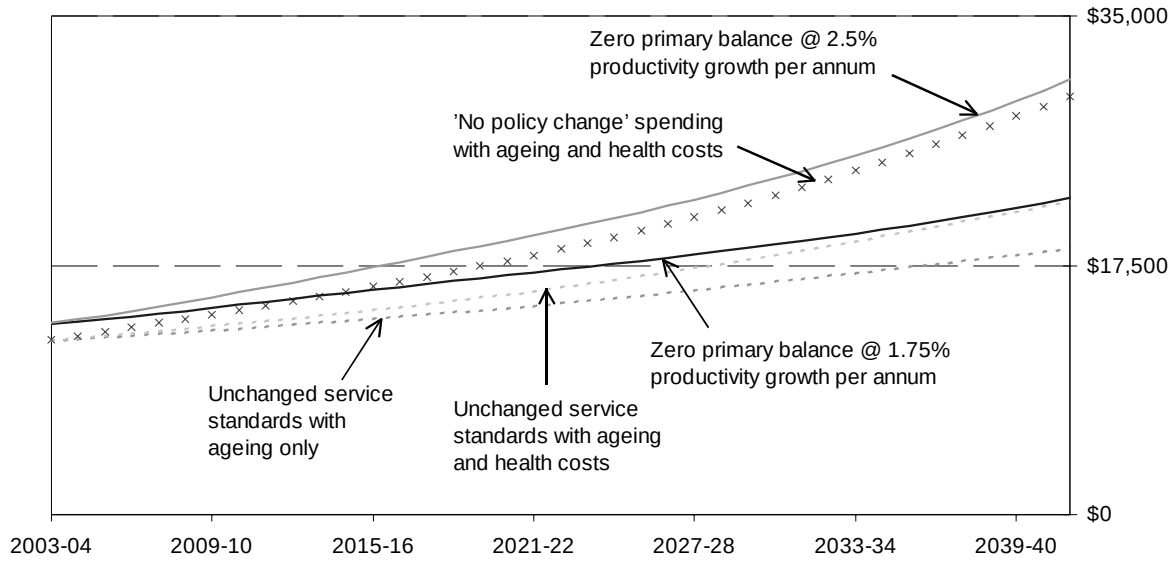
Figure 11 Total Federal and Combined State taxes per capita under unchanged policy and zero primary balances (2002-03 prices)



Much policy attention is currently focused on closing these sorts of fiscal gaps by improving labour market outcomes and productivity growth. Perhaps perversely, long-term models tend to suggest that improvements in economic growth per capita do not translate into improved budget outcomes over the longer term because of the expenditure-side ramifications of the real income effect. For that reason it makes sense to consider how much a Government will be able to spend under various scenarios, rather than what it would spend under particular policy settings.

The crosses in Figure 12 show how much collectively the Federal and State Governments are projected to spend per capita (excluding interest) under our normal 'no policy change' assumptions with both ageing and the additional health cost inflation (ie the expenditure side of Figure 9). The solid lines, on the other hand, show how much the Federal and State Governments could together afford to spend per capita in that scenario at current revenue policy settings while keeping zero primary balances. While the 'no policy change' expenditure is unaffordable if labour productivity grows at 1.75 per cent per annum (our standard assumption), that same level of expenditure does become affordable if labour productivity grows at 2.5 per cent per annum.

Figure 12 Total Federal and Combined States expenditure per capita (2002-03 prices) – 'no policy change', unchanged service standards and zero primary balances



The dashed lines in Figure 12 represent the minimum total expenditure per capita required to maintain 2002-03 service provision standards (ie the expenditure sides of Figures 8 and 10). Interestingly, the projected total Federal and State 'expenditure capacity' at both rates of productivity growth would actually be sufficient to fund an increase in service standards over the projection period.

It seems likely that this type of 'expenditure capacity' approach will, in fact, be how Governments approach ageing related pressures in the future. Rather than population ageing requiring drastic policy action, Governments will need to continue with prudent budget management and make trade-offs between service provision and taxation as they always have.

3.9 Further Possible Fiscal Impact Issues

The modelling above provides scenarios which assume no policy change and which generally assume that current age-specific patterns of demand for publicly funded services does not change over time. Of course the future will be quite different to the present, and the following section provides a qualitative discussion of possible future impacts on Government services in an ageing context.

3.9.1 Law And Order

The key elements concerning the effect of an ageing population on policing are fear of crime, mental health issues, and types of crime.

Fear of crime

While previous victimisation studies have shown that older people are the least likely to become victims of crime, particularly predatory crime, fear of crime or feelings of insecurity about their safety are more common in older people.

In 2001 Adelaide had the second highest proportion of people living alone of all Australian capital cities after Hobart, and people living alone were most prominent in the older age groups, with 38.2 per cent of people living alone being 65 years or older. Over 70 per cent of this group were widowed. Of all people living alone, 56.6 per cent were female. The proportions of females to males was most notable in older people (65 years or older), with females representing 75.7 per cent of this age group living alone. Historically, females and particularly those in an older age group, are most prone to fear of crime.

An increase in the number of older people fearing crime, may have an economic impact on policing through the need to provide more visible reassurance (patrols) and specific crime prevention measures in conjunction with other government and non-government agencies.

Health - Mental Health issues

Police officers will continue to have contact with people suffering from mental health conditions, including those age-related conditions more common in older persons. Appropriate training for police combined with closer formalised relationships between law enforcement and mental health agencies will be required, and may have an economic impact on police services.

Types of crime

Some types of crime may specifically affect older people as a vulnerable group. For example:

Elder abuse

Policing elder abuse may have an economic impact through the need to provide targeted strategies, some of which may require technological support/expenditure, such as establishment of data bases/information networks linked to other agency and community groups that deal specifically with older people.

Fraud

Australian Institute of Criminology research shows the elderly are more at risk of exploitation and fraud than assault or theft. The growth of identity crime and fraud through technology will have an economic impact on policing through the necessity for specialised training and technology/specialised equipment to enhance an operational response to this issue across all sections of the community.

3.9.2 Factors affecting Health and Health Care expenditure with an ageing population

As acknowledged by Banks[27] "the effects of an ageing population on healthcare expenditure is a complex process with many uncertainties". Modelling needs to be developed and refined over time which enables scenario analyses of health care costs to be undertaken. The Productivity Commission has to date followed the approach used for the Intergenerational Report which takes a simplistic approach to estimate future health related aged care costs based on projected populations and "an age profile that shifts out proportionately with higher demand". Banks states that the Commission has "considered variant models that incorporate credible assumptions about costs close to death and the notion of people living 'healthier longer'" but states the results are not "qualitatively different".

[27] Banks G (2004) *An Ageing Australia: small beer or big bucks?* Presentation to the South Australian Centre for Economic Studies, Economic Briefing, Adelaide 29 April, www.pc.gov.au/speeches/cs20040429

The Commission should release for public scrutiny and debate the assumptions it is using in its modelling on health-related aged care costs. It is not apparent from Banks' paper that the Commission has adequately considered the range of factors that might impact on these modelling results. These factors include:

- Compression of morbidity

  This is an overarching strategic aim of the health system and seeks to reduce morbidity prior to the end of life particularly by primary prevention of chronic diseases and injury, early detection and better management of chronic conditions and secondary prevention of complications of chronic disease. These strategies seek to minimise population morbidity prior to the final stage of life.

  Research, including research in SA, has shown that most health costs occur in the last 12 months of life irrespective of age at death. There is also some evidence that deaths of younger people are more costly in the last 12 months of life. As Dixon et al point out

  > the highest proportion of costs for acute care are incurred in the final years of life, no matter what age this happens to be, and that total costs of acute care are greater in elderly people simply because this age group makes up a larger proportion of dying people. [28]

  Further Australian research into these issues is needed to inform modelling of health care costs. Banks' paper potentially confuses the costs of dying with greater cost of health care for older people.

  Banks' paper does not give appropriate attention to the role primary prevention and public health programs have played in the improvement of population health and gives undue weight to the role of expensive medical interventions. This appears to lead to a view that further improvement in health outcomes will require additional expensive interventions.

  In fact, as cost-effective improvements in primary care and chronic disease management, as well as health promotion programs, can lead to major improvements in health outcomes equal or greater to those from costly clinical interventions. Banks refers to lifestyle changes such as reduced smoking but fails to acknowledge the key role of health promotion programs in producing these changes. Injury prevention programs, such as road safety and falls prevention, are also examples of highly cost effective programs that have led to improved health outcomes. Another example is a 'quality use of medicines' initiative in SA, which has demonstrated cost effective improvements in health outcomes as well as reducing the level of medication use.

  The Commission should provide evidence for its view that even if "lower age-specific disability rates could be achieved...the overall story for projected health care costs is likely to change little"[29] as this is a view not widely accepted in the health sector. There is much effort being directed in the public health system towards reducing hospitalisation, using strategies that focus on hospital avoidance, transition care and step down care, aiming for significant cost savings and improved health outcomes.

[28] Dixon T, et al (2004) 'Hospital admissions, age, and death: retrospective cohort study', *BMJ, doi:10.1136/bmj.38072.481933.E*E (published 16 April)

[29] Banks G (2004) *An Ageing Australia: small beer or big bucks?* Presentation to the South Australian Centre for Economic Studies, Economic Briefing, Adelaide 29 April, www.pc.gov.au/speeches/cs20040429, pp21

- Expanding medical technology

  There is debate about the extent to which increasing availability of new medical technologies puts upwards pressure on health care costs. Some new technologies enable cost reduction by reducing lengths of hospital inpatient stays but overall expansion of treatment options tends to increase costs. Some Australian researchers, such as Richardson and Robertson,[30] believe that new medical technology will be a greater driver of increased health care costs than population ageing. This is an important issue which should be investigated further and included in modelling of future health care costs.

- Health care funding and organisation

  The Banks paper (page 17) over-simplifies factors affecting demand for health services, implying demand is patient driven and associated with greater affluence. There is a strong provider-driven element to demand for health care including an imperative for providers to intervene if it is possible to do something, which is increasingly the case with expanded medical technologies. How such imperatives are met is affected by how health care is organised and financed. This limits the relevance of comparisons with other countries, particularly the US where there are major differences in how health care is funded compared with Australia.

  Health care financing issues, such as possible substantial changes in the levels of private health insurance, will affect publicly funded health care costs and need to be considered in modelling of future health care costs.

- Workforce issues

  Ensuring the provision of a sufficient, and appropriately trained health and aged care workforce should be a major focus in relation to population ageing. Workforce shortages are already a major challenge in health and aged care. Health and aged care employ a predominately female work force and any modelling work should be gender disaggregated to reflect this.

  The National Oral Health Plan recently endorsed by the Australian Health Ministers' Conference contains examples of the cross-sectoral workforce issues that population ageing will pose.

The South Australian Government supports the Commission's view that predicting future health care costs is a complex process with many uncertainties. There is a need for further research in specific areas to better inform modelling of health care costs. Modelling work needs to be open and transparent, have explicit assumptions, and be subject to debate and review. As Banks indicates, this work should be viewed as evolving over time as new information becomes available. States and Territories should seek assurances of access to all aspects of this work including assumptions, inputs of information and data, methodology and outputs.

3.10 Implications for Local Government

The terms of reference of the Inquiry refer to "the potential fiscal impact of the above factors on Commonwealth, State and Territory and, to the extent practicable, local

[30] Richardson J and Robertson I (1999) 'Ageing and the cost of health services', in *Policy implications of the ageing of Australia's population*, Productivity Commission, March, Melbourne

governments." This submission has not attempted to address the implications for Local Government in any detail.

It is understood that the Australian Local Government Association (ALGA) has recently met with officers from the PC to discuss the Inquiry. ALGA has undertaken some significant work in the area of ageing during 2004 and recently launched an "Australian Local Government Population Ageing Action Plan". This is designed to assist Local Government prepare for the challenges and opportunities presented by Australia's ageing population. The Federal Government and ALGA have entered a partnership arrangement for implementation of the Local Government Action Plan over the next four years.

In South Australia, as for local governments across Australia, councils are increasingly involved in a wide range of service provision, infrastructure and planning activities which serve or have relevance to the ageing population. Many of these activities are delivered in collaboration with other levels of government and non-government agencies. These may range across home support services, direct financial support to aged care facilities, library and recreation services, security and crime prevention, local community transport, land use planning, footpath maintenance, and so on.

ALGA, State Local Government Associations and individual councils can be expected to provide the PC with data on the increasing fiscal impacts of these issues and service pressures. Local Government is increasingly concerned about the inadequacy of its resources to meet current and future community demands for services and infrastructure at the local level, and this has been highlighted in the report of the Federal Parliamentary Committee "Rates and Taxes: A Fair Share for Responsible Local Government" (known as the Hawker Report).

In relation to the revenue base of Local Government, one specific issue noted here is the impact of the ageing population on the rating capacity of councils, with council rates being the principal revenue source of most councils. There is significant community debate in South Australia at present about the impact of council rates on the "asset rich, income poor" segment of the population, most of whom are retired and elderly. The Local Government sector in South Australia is currently working on developing strategies to address the impact of council rates on some particular sections of the community, with support from the State Government.

Increasing levels of concessions or rebates on council rates are being sought to assist the retired and elderly, as well as other residents who are financially disadvantaged, and the future impact of this on revenue raising capacity for councils is of significant concern to Local Government.

3.11 Regional South Australia

There are significant issues arising due to the demographic differences between metropolitan areas and regional areas. For example, amongst the Statistical Divisions (SD) in South Australia, the highest median age was recorded by Yorke and Lower North (43.8 years). The SD with the lowest median age was Northern (36.7 years)[31]. At the 2001 Census, labour force participation rates ranged from 47.0 per cent in the SD of Yorke to 67.6 per cent in the SD of the Upper South East, where the average age was 42 and 36 respectively.

[31] ABS (2004) *Population by Age and Sex, South Australia*, Cat No 3235.4.55.001

This raises a number of issues including:

- That real housing shortages are beginning to emerge in the more rapidly growing rural towns such as Mount Gambier where rental accommodation and house prices have increased recently to levels similar to that in Adelaide. This could pose real difficulties for the elderly in these towns if they are not living in their own home.
- In some of the very small centres such as Georgetown in the mid north, where only the general store and hotel remain, continued population decline may result in even these services moving elsewhere which could leave behind an extremely isolated elderly population without even the most rudimentary services. These people would not have the means to move elsewhere as their present homes would have a lowered value. Many of the very small settlements in the wheat belt of the mid north and Yorke Peninsula face these problems.
- The sea-change phenomenon and retirement migration to places such as Victor Harbor (which is the Statistical Local Area with the highest median age of 52.1 years) has placed huge demands on the specialised medical services of these centres. Many of these demands can never be met locally which means that elderly people, who may no longer be able to drive, will require high quality transport links to Adelaide or other centres that can provide these facilities.
- There also the issue of succession planning for many rural businesses.

3.12 Cultural differences

While the paper by Gary Banks is generally a constructive one, the difference in Aboriginal and Torres Strait Islander (ATSI) people's life experience is omitted. ATSI people's issues require specific attention to better understand and improve their generally lower life expectancy, employment prospects and economic circumstances.

The fastest growing segment in the older population is people from culturally and linguistically diverse (CALD) backgrounds. They are from diverse communities, and there are waves of various communities ageing and 'moving on' at any given time. As people age they often require more specialised and sensitive responses to their ageing needs.

In 2001 older people aged 55 years and over from CALD backgrounds represented 25 per cent of the total aged population of South Australia.

Research undertaken by Graeme Hugo of the University of Adelaide[32] has shown that the overseas-born older population has been growing faster than their Australian-born counterparts over the past three decades.

The net increase in the population 65 years and over, in the period 1996-2001 was

- Australian-born 66,554
- All overseas-born 105,689
- Born in non-English speaking country 80,685

Migrants, and particularly the non-English speaking origin migrants, often have specific needs during their older years. Many revert to their first language as they age. The older

[32] Hugo G (2001) *Australia's Most Recent Immigrants, ABS, Australian Census Analytic Program*

they get the more critical is their need for culturally and linguistically appropriate services and institutions.

In many instances the most appropriate way to deliver aged care for older migrants is to provide ethno-specific facilities and services. The need for ethno-specific facilities and services is further complicated by the continually changing composition of the ageing migrant population.

There are economic implications associated with the need to adapt the way services are delivered as the needs of the communities change. There is a need for people with relevant language and cultural skills working in the aged care field. The language and cultural skills needed will change over time.

It is also significant that migrants are less likely than those born in Australia to move out of a private home (theirs or their families') and into non-private accommodation (such as a nursing home or other aged care facility) as they get older.

Table 2 : Percentage of the population aged 60 years and over in non-private accommodation - 2001 Census

	Australian born		Migrants	
	Males	Females	Males	Females
60-64	2.9	2	1.7	1
65-69	3.1	2.5	1.6	1.2
70-74	3.9	3.5	2.1	1.9
75-79	5.7	6.3	3.1	3.6
80-84	9.7	13.9	5.2	8.3
85+	21.5	34.6	13.3	23

With migrants choosing to stay at home (often with their extended family) there is a need for different types of aged care and support. In particular there is a need for a greater emphasis on the provision of:

- appropriate home and community care services including home based services and respite care for carers and
- support for the ethnic community organisations that provide critical social and cultural support.

With more migrants staying at home rather than going into institutional care there is also the consequence that there are more carers remaining at home to support the older people.

This in turn has implications for the workforce as people are being unpaid carers rather than being members of the paid workforce. This is particularly important in a time when the proportion of the total population in the workforce is diminishing.

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