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The consequences of an ageing population for Australia's future productivity and economic growth, and the associated economic policy challenges

Second Prize

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The transforming age structure of Australian society may be one of the most challenging economic developments facing all levels of governments in the next thirty years. The proportion of the population aged over 65 years is projected to increase from 13.3% currently to around 25%, or 6.2 million people by 2042, mainly in response to beneficial social changes including increased life expectancy and controlled fertility. The wide-ranging economic effects of this change will become prominent when the first of the 'Baby Boomers', born during a period of post-war heightened fertility between 1946 and 1965, achieves the age of 65 in 2011. Two significant and interrelated economic consequences are predicted to arise; firstly the rate of participation in the workforce will fall from 65% currently¹ to approximately 56% in 2044-5,² reducing aggregate output and economic growth expressed as GDP growth per capita. Secondly, a decrease in income taxation revenue and an increase in government expenditure in the areas of welfare, health and aged care will result in pressure on the fiscal budget balance and levels of public debt. The complexity of these consequences necessitates a multifaceted response, with an emphasis on initiatives to increase productivity growth rates and workforce participation to stimulate economic growth, which will filter through to government tax revenues. Government expenditure outlays may be reduced via reducing dependence on welfare through encouraging mature aged employment and increasing incentives to superannuation, and by increasing cost-effectiveness in the health and aged care sectors.

¹ Australian Bureau of Statistics, Labour Force, Australia, Jul 2007, Cat. No. 6202.0, ABS Ausstats, 2007, retrieved 27th August 2007
<<http://www.abs.gov.au/ausstats/abs@.nsf/ProductsbyTopic/362607CA0519045ACA25712B000D0425?OpenDocument>>

² Productivity Commission, *Economic Implications of an Ageing Australia*, Research Report, Canberra, 2005, pp XII

The reduced participation rate will constrain labour supply growth, a major determinant of GDP, forecasted to result in levels of GDP growth falling to around 1.25% per year in the mid 2020s, roughly a third lower than without the effects of ageing.³ The loss in productive capacity to the economy will accumulate over the forty years from 2005 to a total of \$4100 billion.⁴ The labour shortages which ensue, while having the positive incidental effect of decreasing the rate of unemployment, may result in an increase of the cost of production which may result in cost-push inflationary pressures. However, in this case the GDP per capita figure may be an ineffective measurement of population welfare, as the appreciation of leisure in retirement, the contribution of retirees to the community through volunteer associations, and providing care for family members cannot be quantified by this method. The ‘crisis’ of an ageing population can therefore be overdramatised by projected GDP growth figures, which also expect Australia’s forecast GDP per capita to reach \$73,000 in 2002-3 prices, almost double the current level without factoring in any corrective policy measures.⁵

The effects of ageing on labour productivity growth are unclear, as they are dependent on the net impact of gains from a reduced share of inexperienced youth entering the workforce, and losses from a large number of older workers retiring. The traditional view of the correlation between age and productivity posits that an individual’s productivity rises with age, until peaking in middle age and declining as the benefits of experience are outweighed by the detrimental physical and mental effects of ageing. However this analysis may be challenged by the next generation of older workers, who will be more highly educated and are likely to be healthier than

³ Productivity Commission pp.125

⁴ Ibid

⁵ Productivity Commission pp.126

previous cohorts, and may consequently only reach their prime in their late 60s or even early 70s. As the nature of employment evolves to decrease the physical demands on workers through an increased services-based economy, the productive disparity between age cohorts will diminish, as already evident in innumerable positions of public importance fulfilled by older employees. The Productivity Commission forecasts that the aggregate effect of these changes will be “negative but negligible”, as the majority of the workforce remains in the most productive stage of their careers.⁶

Ageing may also indirectly affect the capital-to-labour ratio, another key determinant of labour productivity. The depletion of savings of retirees may decrease the national savings rate, from which funds for investment are derived – lower capital per worker and decreasing productivity. However, as the Commission demonstrates, Australia has sustained remarkably stable levels of capital deepening over the past forty years, and the international mobility of capital in addition to the large superannuation holdings of Australians, capital deepening should remain unaffected, and may even increase due to the fall of the effective labour supply.

Though there is little evidence to suggest that productivity will be significantly affected by ageing, the importance of productivity may arise as a key counterbalance to the economic effects of ageing. GDP growth per capita is broadly dependent on population growth, effective participation rates (measured in amount of hours worked), and productivity. The essence of the Productivity Commission’s 2005 Research Report is that, in a period in which effective labour supply growth will be

⁶ Productivity Commission, pp.68

close to zero, the GDP growth rate will become largely dependent on productivity growth. Therefore, improving productivity growth is expected to provide a key solution to the detrimental economic effects of ageing – a stimulus which would not only increase economic growth alone but contribute to correcting the fiscal balance through increased taxation revenues. In fact an increase in annual productivity growth rates to 2.05% instead of the assumed 1.75% until 2044-5 would correspond to a dramatic positive difference in cumulative GDP of approximately \$4200 billion – enough to displace the entire predicted impact on GDP from ageing.⁷ Though that particular increase in productivity to match the miraculous performance of the 1990s would be very difficult to sustain for forty years, a continued emphasis on increasing productivity by increasing the qualitative stock of human capital through education and training, encouraging research, innovation and entrepreneurship, and capital deepening may contribute to alleviate the negative effects on GDP growth and the fiscal balance.

The effect of the gap which will arise between decreased income tax revenue and increased expenditure will be to push the government budget towards deficit and increased public debt. The Productivity Commission projects the fiscal pressures to accumulate a gap amounting to an 8% rise in taxes, or alternatively a \$4.2 trillion stock of public debt by 2044-5 (in 2002-3 prices) mainly a response to increased expenditure rather than to decreased revenue.⁸ In a sense, this expansionary fiscal movement may offset the slowed GDP growth caused by the lower participation rate, by increasing aggregate demand. However, increased government spending may also cause inflationary pressures to mount, and in addition to increased public debt, may

⁷ Productivity Commission, pp.126

⁸ Productivity Commission, pp.XXXVII

contribute to a reactionary interest rate rise. There is a risk that these factors may cause a 'crowding out effect', where private investment is displaced due to its interest rate sensitivity, and such a fall in investment may place downward pressure on GDP growth.

The policy implementations of the Commonwealth Government have already been relatively successful in encouraging financial self-sufficiency in retirement, thus reducing reliance on future welfare expenditure. Though the average superannuation balance across all ages is only \$39,663 currently, Access Economics has most recently projected that more than 80% of workers are likely to retire with enough to drop their working income by only a third, due to the maturing of the mandatory employer contribution scheme, the large capital gains of recent years, and an increase in voluntary contributions.⁹ The 1992 Superannuation Guarantee¹⁰ required mandatory contributions to superannuation funds by employers, which in 2002 was raised to 9% of income, a policy which resulted in over 90% of those intending to retire belonging to a superannuation scheme.

Two recent policy developments have sought to encourage increased superannuation holdings through the Government Co-contribution Scheme¹¹ and the Simplified Superannuation program. The former was introduced in 2003, and commits the government to match the voluntary contributions to superannuation up to \$1500 per lower or middle income earner. Half of all employers voluntarily contribute to superannuation funds, an average of 3.6% of their salary, and voluntary savings have

⁹ Access Economics, AMP Superannuation Adequacy Index, 25th July 2007, Australia, retrieved 27th August 2007, <http://www.amp.com.au/group/2column/0,2445,CH942%25FCT5%25FCI171863%25FSI3,00.html>

¹⁰ Superannuation Guarantee (Administration) Act 1992

¹¹ Superannuation (Government Co-contribution for Low Income Earners) Act 2003

been identified as a crucial third pillar (in addition to the age pension and mandatory superannuation) to financial security in retirement.

The recent Simplified Superannuation reforms¹² aim to reduce the prevalence of early retirement, a recommendation of the OECD report, and to increase incentives to delay withdrawal of superannuation past the statutory preservation age of 55, by making superannuation tax-exempt from the age of 60. In increasing superannuation holding, the program has been overwhelmingly successful, leading to an estimated \$10 billion of extra funds contributed in the June quarter¹³. The preservation age is legislated to increase from 55 to 60 years between 2015 and 2025 in response to the aging population. These reforms have evidently contributed to the approach of workers to their financial security during retirement, with only 25% of those intending to retire expecting the aged pension to provide their main source of income, whereas 44% of intending retirees expected superannuation to provide the bulk of their retirement income. This compares to the 44% of retirees who currently rely on the aged pension for primary support.¹⁴ The financial independence of a high proportion of self-funded retirees will significantly reduce the welfare costs of supporting an aging population.

Increasing the level of mature aged employment may be another useful policy initiative to dually decrease dependency on government welfare in retirement, and to increase the participation rate, thereby contributing towards increased GDP. The

¹² Tax Laws Amendment (Simplified Superannuation) Act 2007

¹³ Association of Superannuation Funds of Australia, A Stunning Sunday for Super, Australia, retrieved 27th August 2007 <http://www.superannuation.asn.au/mr070704/default.aspx>

¹⁴ Australian Bureau of Statistics, Barriers and Incentives to Labour Force Participation, Aug 2004 to Jun 2005, Cat. No. 6239.0, retrieved 27th August 2007, <http://www.abs.gov.au/Ausstats/abs@.nsf/39433889d406eeb9ca2570610019e9a5/7e7adc44fef2c0a9ca25710c00748337%21OpenDocument>

Commonwealth and State governments have been actively promoting mature aged employment, emphasising the accumulated experience, skill and work ethic of older workers and debunking assumptions linking older workers with inefficiency, low productivity, and mental incapacity. The perception that employers are reluctant to recruit mature aged employees is reinforced by ABS figures in which 65% of 125,000 discouraged job-seekers aged from 60-64 cited the main reason they were not actively seeking work was “being considered too old by employers”¹⁵. The emphasis must be in reducing the barriers to participation in the workforce which have caused the mature aged population to have the highest levels of long-term unemployment, most importantly the provision of education and training to reduce skills obsolescence. Other recommendations of the Standing Committee on Health & Ageing include providing training to managerial staff to reduce discrimination against older workers, encouraging flexible working arrangements to cater for family obligations, and to prepare mature aged workers for the job market through career planning programs. In particular, the policy approach has been to encourage the promotion of mature aged employment as not only the responsibility of government, but of collaboration with business through the principles of corporate social responsibility.¹⁶

The projected costs of health expenditure are projected to rise from around 6% of GDP currently to 10.3% by 2044-5, whilst aged care expenditure is expected to rise

¹⁵ Australian Bureau of Statistics, Persons not in Labour Force, Cat. No. 6220 Australia, September 2006, retrieved 27th August 2007

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6220.0Sep%202006?OpenDocument>

¹⁶ Parliamentary Standing Committee on Health and Ageing, Future Ageing, Parliament of the Commonwealth of Australia, Canberra, 2005

from 0.86% of GDP currently to 2.24% in the same period¹⁷, though projections are sensitive to assumptions regarding technology, demand and sector productivity..¹⁸ Encouraging productivity and cost-effectiveness in these sectors will become vital to maintaining fiscal control, though any reduction in expenditure can be politically sensitive. The encouragement of private health insurance could alleviate pressures on the public system, as has been partially achieved by the Commonwealth government rebates on insurance which increase for over 65s, however only 43.5% of Australians hold private cover.¹⁹ In aged care, the focus is on providing services to older Australians in their own homes, through programs such as Meals on Wheels, increasing self-sufficiency and decreasing residential care costs. These expenditures will pose perhaps the greatest challenge to the State and Commonwealth governments, and the solution may be to adopt more user-pays schemes or face drastically increasing taxation.

While the changing age structure of the Australian society will pose significant challenges for government, and as a global reality in both developed and developing nations, it should not be perceived as a crisis, but rather the result of trends which have been beneficial both economically and socially. The OECD report compares Australia's preparation favourably with that of other developed countries, and steps have already been taken to reduce public debt, reform superannuation regulations, and encourage mature aged employment.²⁰ By gearing the economy towards high productivity growth and an increased participation rate, and increasing the self-

¹⁷ Productivity Commission, pp.144, 183

¹⁸ Productivity Commission pp.150

¹⁹ Private Health Insurance Administration Council, Annual Coverage Survey, Australia, retrieved 27th August 2007,

<http://www.phiac.gov.au/statistics/survey/aust.htm>

²⁰ Carey, David, Coping with Population Ageing in Australia, Economics Department Working Papers No.217, Organisation for Economic Co-operation and Development, July 30th 1999

sufficiency and independence of the older population in terms of retirement income, aged care and private health insurance, the benefit of foresight and appropriate response should alleviate many of the problems associated with an older population.

Bibliography

Productivity Commission, *Economic Implications of an Ageing Australia*, Research Report, Canberra, 2005

Parliamentary Standing Committee on Health and Ageing, *Future Ageing*, Parliament of the Commonwealth of Australia, Canberra, 2005

Jackson, Natalie, *The policy-maker's guide to ageing: key concepts and issues*, Policy Research Paper Number 13, Department of Family and Community Services, Canberra, 2001

Johnson, Paul, *Ageing in the twenty-first century: implications for public policy*, in Productivity Commission and Melbourne Institute of Applied Economic and Social Research 1999, *Policy Implications of the Ageing of Australia's Population*, Conference Proceedings, AusInfo, Canberra

Commonwealth Department of Family and Community Services, *Inquiry into the long-term strategies to address the ageing of the Australian population over the next 40 years*, Canberra, 2003

Healthy Ageing Taskforce, *Commonwealth State and Territory Strategy on Healthy Ageing*, Canberra, 2000

Day, Lincoln H, *The Future of Low-Birthrate Populations*, London & New York, Routledge, 1992

Australian Bureau of Statistics, *Building approvals, Australia*, cat. no. 8731.0, ABS Ausstats, 2004, retrieved 3 November 2004,
<www.abs.gov.au/Ausstats/abs%40.nsf/mf/8731.0?OpenDocument>.

Australian Bureau of Statistics, Labour Force, Australia, Jul 2007, Cat. No. 6202.0, ABS Ausstats, 2007, retrieved 27th August 2007
<http://www.abs.gov.au/ausstats/abs@.nsf/ProductsbyTopic/362607CA0519045ACA25712B000D0425?OpenDocument>

Australian Bureau of Statistics, Persons not in Labour Force, Cat. No. 6220 Australia, September 2006, retrieved 27th August 2007
<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6220.0Sep%202006?OpenDocument>

Private Health Insurance Administration Council, Annual Coverage Survey, Australia, retrieved 27th August 2007,
<http://www.phiac.gov.au/statistics/survey/aust.htm>

Association of Superannuation Funds of Australia, A Stunning Sunday for Super, Australia, retrieved 27th August 2007
<http://www.superannuation.asn.au/mr070704/default.aspx>

Australian Bureau of Statistics, Barriers and Incentives to Labour Force Participation, Aug 2004 to Jun 2005, Cat. No. 6239.0, retrieved 27th August 2007,

<http://www.abs.gov.au/Ausstats/abs@.nsf/39433889d406eeb9ca2570610019e9a5/7e7adc44fef2c0a9ca25710c00748337%21OpenDocument>

Carey, David, Coping with Population Ageing in Australia, Economics Department
Working Papers No.217, Organisation for Economic Co-operation and Development,
July 30th 1999

Access Economics, AMP Superannuation Adequacy Index, 25th July 2007, Australia,
retrieved 27th August 2007,
<http://www.amp.com.au/group/2column/0,2445,CH942%255FCT5%255FCI171863%255FSI3,00.html>