

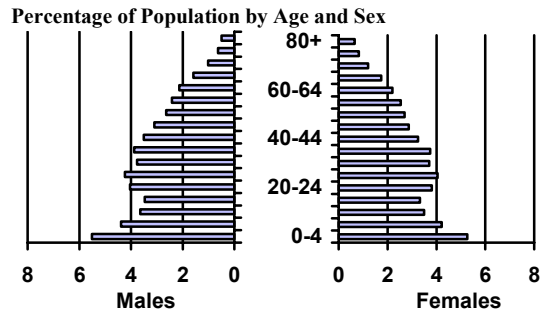
AUSTRALIA

Australia's population has aged considerably over the past 50 years. The figures at right show the percentage of Australia's total population by five year age groups for males and females. In 1950, Australia's population formed a classic pyramid, where each successively younger age cohort represents a larger portion of the total population. However, the drop in fertility rates during the Depression and WWII created a slight indentation for several younger cohorts.

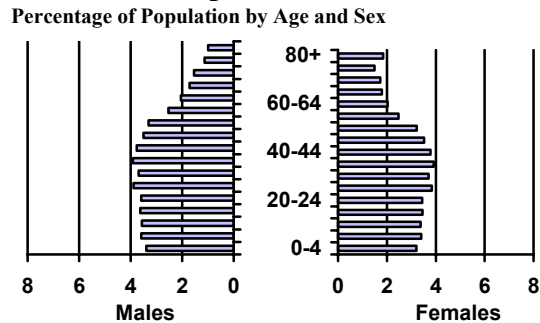
By 2000, Australia's population structure diverged from the classic pyramid shape and was replaced by a pillar formation, where the percentage of the population in each age cohort is more evenly distributed. This change is due to a decrease in the country's birth rate from 3.2 in 1950 to 1.8 in 2000 and to a rise in life expectancy of 9 and 10 years for males and females, respectively. The bulge in the middle aged cohorts represents the surge in fertility rates following WWII that produced the baby boom generation.

Looking to the future, the anticipated mix of low fertility with rising life expectancy will lead to a fulfillment of a pillar formation. By 2030, Australia will have an average age of nearly 42 years old compared to today's average age of 37.

Australia's Population Structure in 1950



Australia's Population Structure in 2000



Australia's Population Structure in 2030



Source: UN Population Division, World Population Prospects (The 2000 Revision).

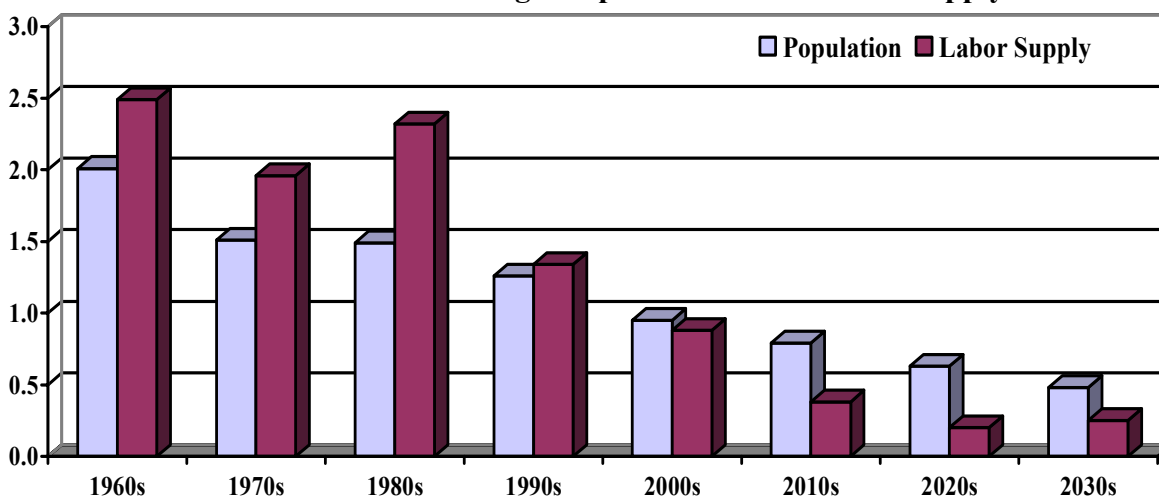
Demographic History

	1950	1960	1970	1980	1990	2000
Life Expectancy at Birth						
Males	66.90	67.80	68.40	71.94	74.66	76.36
Females	72.40	74.20	75.20	78.66	80.61	82.02
Life Expectancy at 65						
Males		77.36	77.44	79.02	80.90	81.56
Females		80.64	81.24	83.12	84.44	85.34
Fertility Rate	3.18	3.27	2.54	1.93	1.87	1.75
Net Migration Rate	4.72	3.93	5.08	3.07	2.98	2.35

A critical component of a society's ability to expand its production of goods and services is the growth of its labor force. As Australia's population aged over the past half-century, its labor force changed as well. Soon after the end of World War II, many industrialized societies, including Australia, experienced a significant spike in birth rates that produced the generation known as the baby boom. Labor supply growth increased dramatically during the 1960s and 1970s as the baby boom generation, including an unprecedented number of its female members, entered the workforce. Labor supply growth was also supported by high rates of net migration, which reached as high as 5 percent in 1970. Decreased fertility rates over the past few decades have caused population growth to slow. This created a temporary boon where a high proportion of the population was economically active – often referred to as a “demographic dividend”. Between the 1970 and 2000, total dependency rates in Australia dropped 28 percent, while youth dependency dropped 46 percent.

Australia has enjoyed robust labor supply growth over the past 50 years; however, this trend will not last indefinitely. As the baby boom generation begins to retire, the labor supply will grow more slowly than the population beginning in the current decade. This is caused by a prolonged period of low fertility rates, increasing life expectancy and a greater portion of the population falling into age groups that have a lower propensity to work. The high immigration rates in Australia compared to other developed societies have kept this reduction from being more severe; however, by 2030 a greater portion of the population will be inactive, shifting Australia's total dependency up 25 percent, and old age dependency up 71 percent from 2000 rates.

Annual Percent Change: Population versus Labor Supply



Source: World Bank, World Development Indicators database

Dependency Ratios

	1970	2000	2030	% change 1970-2000	% change 2000-2030
Youth- (Inactive pop 0-19)/ LF 15+	0.83	0.45	0.41	-45.63	-8.62
Aged- (Inactive pop 55+)/ LF 15+	0.30	0.32	0.55	8.28	71.16
Total- (Inactive pop 0-19 and 55+)/ LF 15+	1.10	0.79	0.99	-28.08	24.99

Source: Sources: International Labor Office, LABORSTA database, current through 2001; UN, Population Division, World Population Prospect (The 2000 Revision); OECD, CDE database on labor statistics, current though 2002

Old Age Pension System

Australia's mandatory pension system has two parts, a means-tested age pension and a superannuation guarantee. The maximum full means-tested benefit in 1999 was equal to 25 percent average earnings for a single person, and 42 percent average earnings for a married couple. The age pension is withdrawn at a rate of 50 percent once a pensioner's annual income from additional sources exceeds about 6.7 percent average earnings. About a third of pensioners have their benefit reduced by this means test. The age pension is payable at age 65 for men and 62.5 for women (in 2000), which will rise to 65 by 2013.

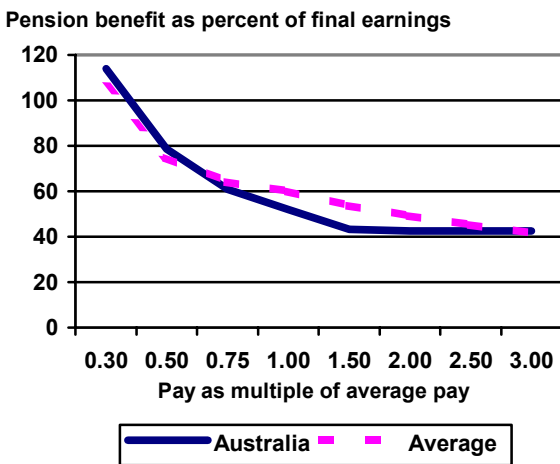
The superannuation guarantee was instituted in 1992 and is a mandatory occupational pension scheme that requires employer contributions to a private pension plan. Employers must contribute, on an employee's behalf, to an industry wide plan or one operated by a financial services company. The mandatory contribution will reach 9 percent in 2002. Employees who earn less than 14 percent average earnings are not required to contribute to the plan. Currently, employers are able to opt out of the superannuation guarantee, if they can prove that the benefits offered in their occupational plan are at least equivalent to what employees would receive. Employees are able to withdraw this portion of their benefit at age 55, but will increase gradually to 60 by 2025.

Prior to 1992, about 50 percent of Australians participated in occupational pension plans (both defined benefit and defined contribution schemes). That number is now up to 91 percent, due to the superannuation guarantee. The government hopes that this segment of the pension system will reduce retirees' dependence on the means-tested segment of the pension, thus eliminating the some of the burden that an aging population will place on the system. In fact, projections of the overall burden of the public pension program as a percentage of GDP by 2050 is one of the lowest of the developed nations, although its projected growth from its current rate is roughly in line with the OECD average.

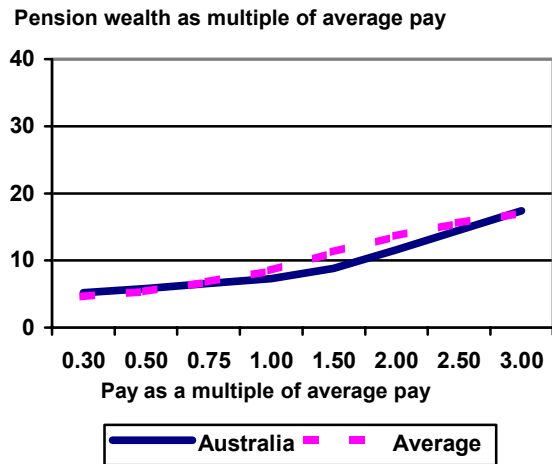
As shown in the figures below, the combination of a means-tested program with a compulsory private pension scheme results in a rather progressive, targeted pension system that is comparable to the OECD average. This is particularly noticeable by the relatively low flat gross replacement rates for upper income workers and high replacement rates afforded to low-income workers.

Source: Whitehouse, Edward (2003), Social Security Administration, Social Security Programs Throughout the World (2002) and Dang et al. (2001) and Watson Wyatt Data Services (2003) "Benefits Report Asia Pacific".

Gross Replacement Rates
Australia v OECD Average



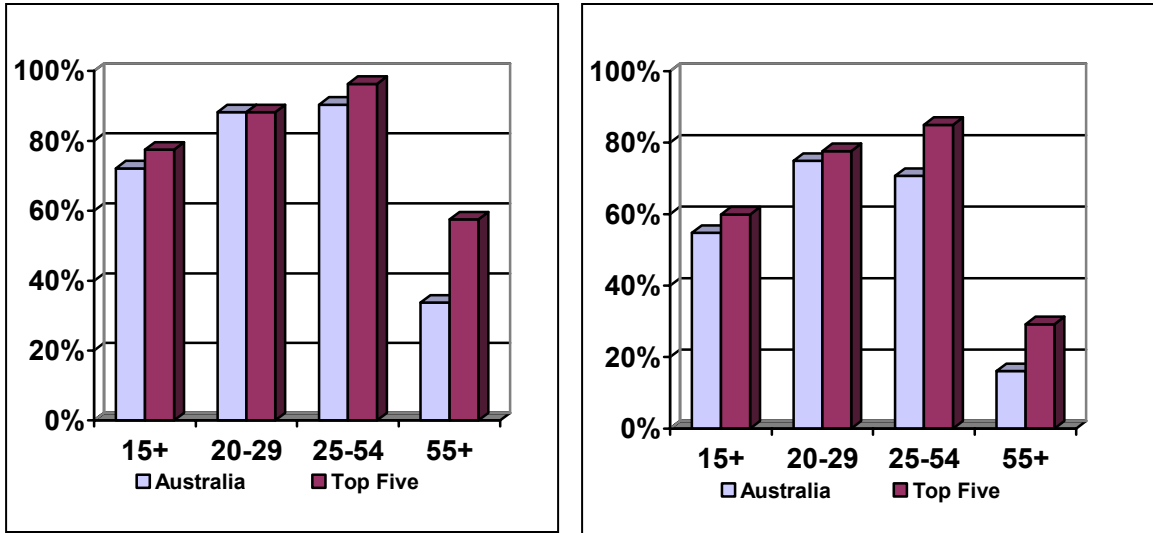
Gross Pension Wealth
Australia v OECD Average



Source: Whitehouse, Edward (2003)

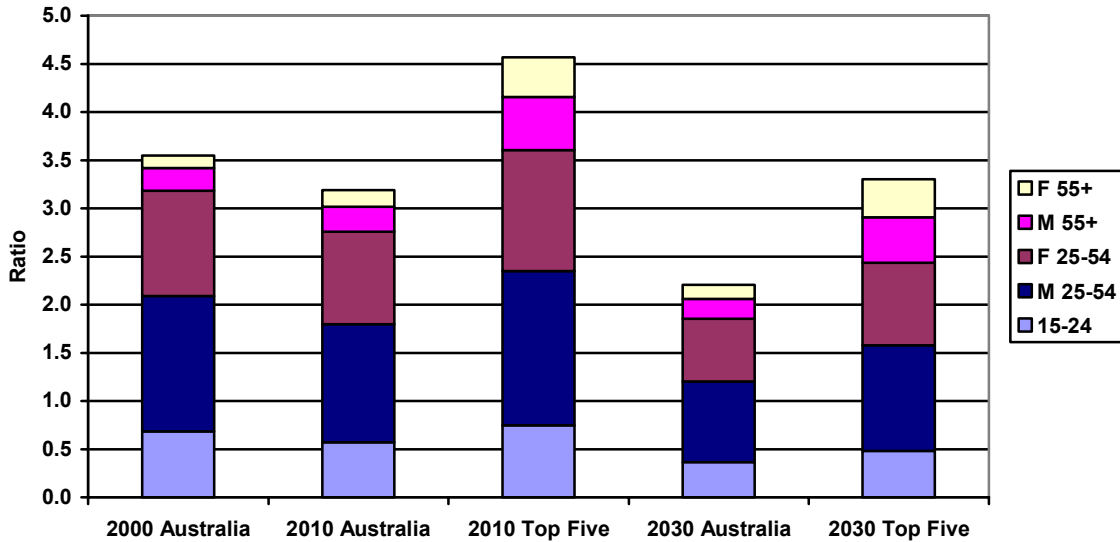
Notes: Pension wealth estimates are a multiple of economy-wide average.

Labor Force Participation Rates: Australia v Top Five OECD Country Composite
 Males Females



Source: OECD, Corporate Data Environment database on labor statistics, current though 2002

Ratio of Workers in Australia 15+ to Retirees 60+ in 2000, 2010 and 2030 and Under Alternative Assumptions of Old Age Participation Rates for the Top Five OECD Countries



Source: UN Population Division, World Population Prospects (The 2000 Revision); OECD, Corporate Data Environment database current though 2002

Much of the burden caused by demographic aging is due to the rising dependency burden. In the coming decades, Australia will need to figure out how to support a growing inactive population with fewer workers. A remedy to this problem is to adopt programs that promote greater workforce participation at all ages. Some countries excel at achieving high workforce participation across various age and gender groups. The figures above show how Australia's labor force participation stacks up next to the average of the Top-five OECD nations. Activity rates in Australia fall short of rates in the Top-five countries for nearly every age and gender group, but are in line for younger males. Most noticeably, older individuals participate in the labor force to a much lesser extent than those in the Top-five countries. If Australia adopts measures to increase labor force participation of older age groups (55+) to rates similar to the Top-five OECD nations, it could significantly reduce its old age dependency rates. As shown in the figure above, if Australia maintains its current activity rates between 2000 and 2030, the ratio of workers to retirees is expected to fall from 3.5 to 2.2. However, by adopting policies to entice workers to defer their retirement at rates similar to those achieved by the Top-five OECD nations, Australia could reduce its dependency burden by raising its activity rate to 3.3 workers per retiree in 2030 – roughly comparable to today's rate.