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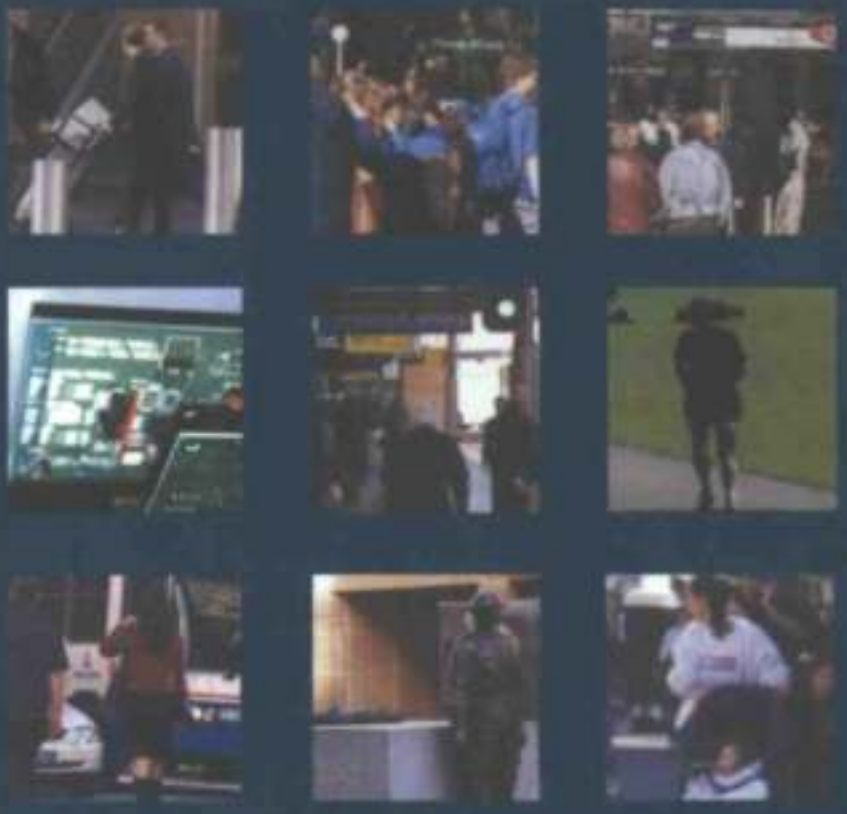

State of the Nation 2001

A Century of Change

Jennifer Buckingham • Lucy Sullivan • Helen Hughes


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Introduction

The first edition of *State of the Nation* in 1997 showed in graphs and statistics, with accompanying commentaries, how much Australia had changed from the Australia of 100 years ago, or 50 years ago, or even 25 years ago. A second, substantially expanded edition was published in 1999, revealing continuing, even accelerating change—sometimes for the better, sometimes for the worse. At that time, new trends were identified tentatively, given the short time lapse.

There are no such limitations in 2001. This third edition of *State of the Nation* demonstrates that Australia is a country in the midst of profound social and economic change. For the most part, quality and duration of life have improved. Australians are, on average, wealthier, healthier, better educated and more active than ever before. Yet the picture is not entirely rosy. Where there have been changes for the worse, these have been dramatic and unrelenting. The family as the primary economic and social unit is still under threat, crime has escalated, and drug use has continued to rise unabated. It is hard to believe these trends are not connected.

Previous editions of *State of the Nation* have been very well received as fulfilling the need for a publication that brings together, in one volume, statistical evidence and informed commentary on the major aspects of society and the economy. This new edition is even more comprehensive and up-to-date than the second edition. It is useful either alone or in accompaniment with the previous editions. Because of the increased breadth of material, several new sections have been added. Section 3 deals with the changing circumstances of children and families, and Section 9 provides details on Communication and Technology. The Economy section has again been substantially expanded, reflecting the increased interest in, and community awareness of, economic issues.

The usefulness of a publication such as *State of the Nation* lies in the contribution it can make to informed public debate of social issues and government policy. More generally, it is a source of reliable information on a host of subjects of intrinsic interest to the general reader as well as to those with a professional or scholarly purpose, such as academics, students, journalists, politicians, and many others. Many of the trends depicted in this volume will be familiar, and the graphs and text will serve to confirm and quantify. Some graphs may surprise, while others will challenge what people have been led to believe.

Data from the 2001 Census is not yet available, and the last Census was in 1996. On subjects where data is collected only at Census, graphs could not be updated. Graphs based on the 1996 Census have therefore been included only if they provide an important perspective.

An effort has been made to trace each statistical indicator over as long a time period as possible. In some cases, whether due to changes in recording and publication, or because the developments concerned are recent (such as information technology), only a

short series is obtainable. An added impediment is the high cost of purchasing data that the Australian Bureau of Statistics has not published for public use.

The first edition of *State of the Nation* relied almost entirely on information available in the Australian Bureau of Statistics' *Yearbooks*. In recent years, the *Yearbooks* have become less consistent in their presentation of data and, because they are published annually, often do not contain the most recent available data. In this edition, a wide range of sources has been used to provide the broadest scope and most recent information available.

The decision to prepare and publish *State of the Nation* arose out of the work that The Centre for Independent Studies (CIS) has done in gathering essential and background data over several years as part of its continuing 'Taking Children Seriously' programme of research, publication and other activities. It will be seen that much of the material in this, as in previous editions, such as data on marriage, divorce, school education, juvenile crime and so on, is closely related to issues affecting the well being of children, which is the primary focus of the 'Taking Children Seriously' programme.

In 2001, CIS embarks on a new programme of research that follows on from 'Taking Children Seriously'. This new programme, 'Social Foundations', inherits an impressive and widely influential body of work on children and families, and extends the reach of such work into adolescence and young adulthood. This third issue of *State of the Nation* provides ample evidence of the need for such a programme at this time.

Jennifer Buckingham
The Centre for Independent Studies

About the Authors

Jennifer Buckingham is a Policy Analyst with The Centre for Independent Studies (CIS). Her previous publications for CIS include *Boy Troubles* (2000) and several *Issue Analysis* papers in 2000 examining private versus public schooling. She is also the author of *Families, Freedom and Education: Why School Choice Makes Sense* (forthcoming 2001), and co-author of *State of the Nation 1999*.

Lucy Sullivan is a Research Fellow at CIS. She has published widely in academic journals, including the *British Journal of Sociology* and the *Journal of Medicine and Law*. She was co-author of *State of the Nation 1997* and *State of the Nation 1999*. Her other CIS publications include *Rising Crime in Australia* (1997), *Behavioural Poverty* (2000), and *Taxing the Family: Australia's Forgotten People in the Income Spectrum* (2001).

Helen Hughes AO is Professor Emeritus, The Australian National University, and Senior Fellow at CIS. She co-authored *State of the Nation 1999* as well as several *Issue Analysis* papers including *Why Small Business Is Not Hiring: Regulatory Impediments To Small Business Employment* (1999)and *Noble Means, Flawed Ends: The Case Against Debt Forgiveness* (1999).

Thanks & Acknowledgements

Alex Calvo, John Stone, Andrew Norton, Geoff Hogbin.

Section 1

Population

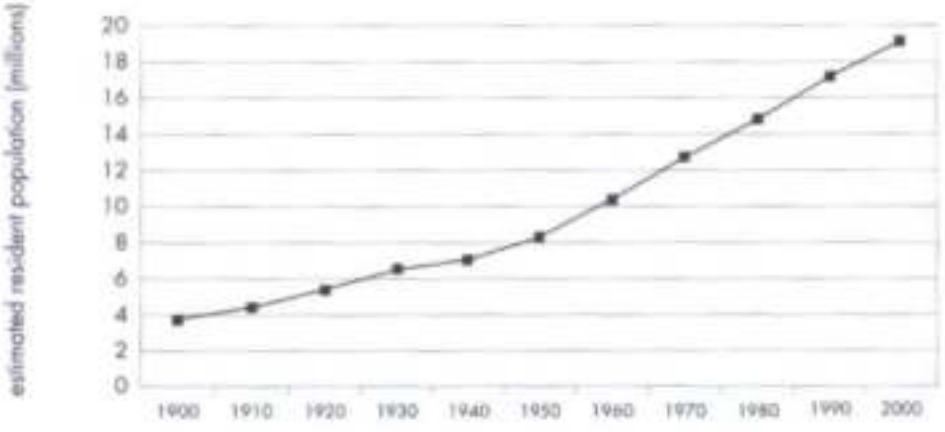
Australian Population

Throughout the 20th century, Australia has sought to increase its population. Australia was a 'small country' at mid-century, but in the last 50 years the population has grown to exceed that of many European nations over a period when the populations of many Western nations have remained steady or declined.

In Figure 1.1, it can be seen that the Australian population increased by a factor of more than five between 1900 and 2000. The growth rate was comparatively low and steady from 1894 to 1943, when expansion by natural increase was the favoured policy, and promotion of immigration from Great Britain was moderate and intermittent. In the immediate post-World War II period, strategies for population increase shifted to immigration, and population growth assumed a steeper gradient, which was sustained for the succeeding five decades.

The constant gradient of population increase masks a decrease in the contribution of natural increase with a rise in that of immigration from the 1970s through to the 1990s.

1.1 Australian Population 1900-2000



Sources: *Yearbook, Australia* (ABS Cat. 1301.0)
Population by Age and Sex, Australian States and Territories (ABS Cat. 3201.0)

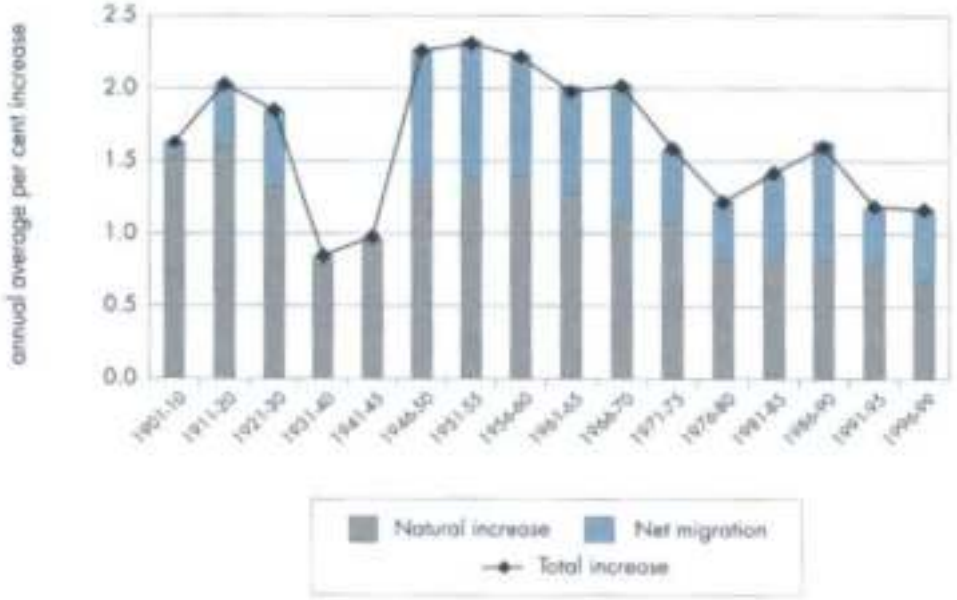
Rate of Population Increase

The percentage increase of the Australian population has been slower in the 1990s than at any other time this century, except for the decade encompassing World War II.

Figure 1.2 shows the average annual percentage increases in population from 1901 to 1999 by natural increase and by immigration. The period from 1946 to 1950 had the highest rate of immigration this century, but the period 1986-1990 had the highest proportion of growth by immigration compared with natural increase.

Natural increase is the amount by which the number of births exceeds the number of deaths. In each five year period, the contribution to population growth by natural increase was greater than that by immigration. But in the most recent period, from 1996 to 1999, almost as much of the growth in population was due to new settlers as was due to births and deaths of Australian citizens. If low birth rates and fertility rates persist, this trend will continue.

1.2 Rate of Population Increase 1901-1999
natural increase, net immigration & total increase



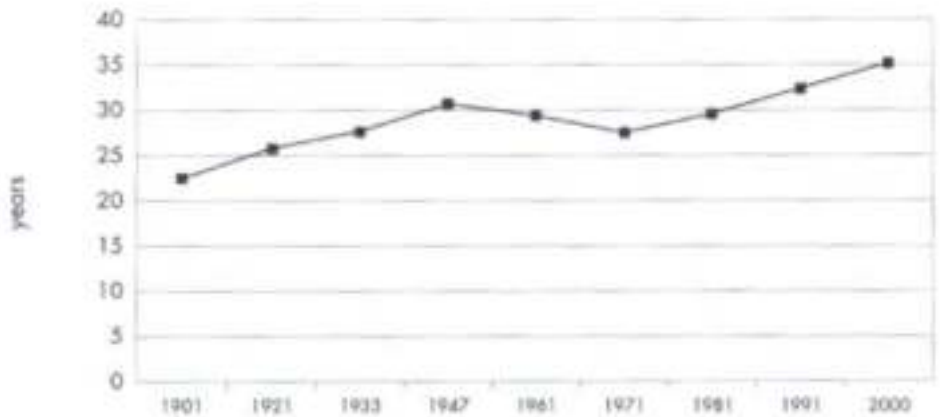
Sources: *Yearbook, Australia* (ABS Cat. 1301.0)
Australian Demographic Statistics (ABS Cat. 3101.0)

Median Age of Population

Figure 1.3 shows the median age of the Australian population from 1901 to 2000. Median age is slightly different from mean or average age, and is the middle value in the array of ages of the population, half the population being younger and half older. In 1901, the median age of Australians was 22.5; thus close to half of the Australian population were minors, the age of majority being then 21. By 1921, the median age had risen to nearly 26, and in 1947 it was just over 30.

The lowered birth rate during the Great Depression and the loss of young lives in World War II accelerated this rise, which nevertheless was fairly constant across the half century. The post-war baby boom is reflected in a fall in median age to 29.4 in 1961 and 27.5 (the 1930s level) in 1971. Thereafter, the median age climbs again to reach 35.2 years in 2000, the highest point in the century, reflecting both a fall in the birth rate and a marked rise in life expectancy over the period, as well as an increase in adult immigration.

1.3 Median Age of Population 1901-2000



Sources: *Yearbook, Australia* (ABS Cat. 1301.0)
Population by Age and Sex, Australian States and Territories (ABS Cat. 3201.0)

Age Distribution of Population

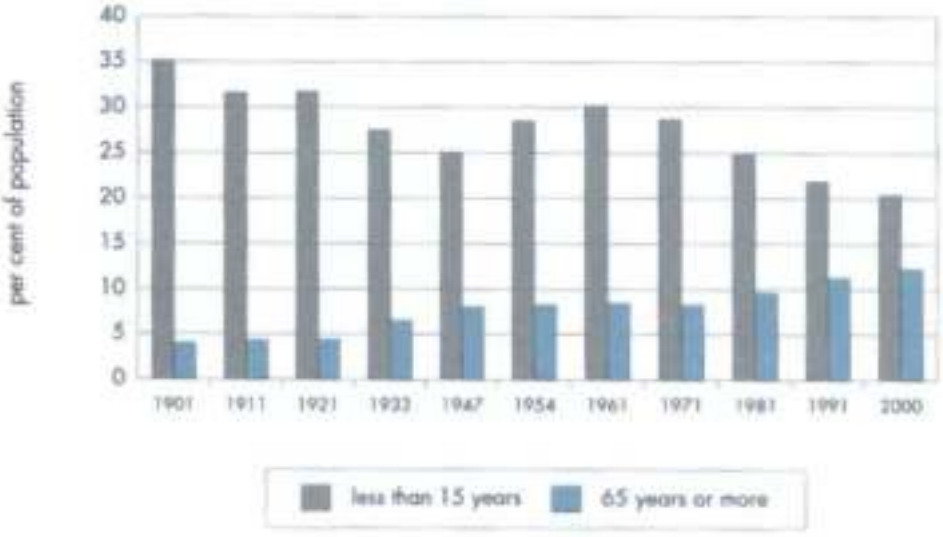
The 'ageing of the population' shown in Figure 1.4 is due to a combination of declining fertility rates and rising life expectancy together with adult immigration in the last half of the century. The proportion of Australians aged 65 years or more increased from 4% in 1901 to 8% in 1948, and to 12% in 2000. Over the same period, the proportion aged less than 15 years decreased from 35% to 20%.

The Aboriginal and Torres Strait Islander population, however, has a very different age structure, with 40% less than 15 years old, and only 3% 65 years or older in 1997.

The ramifications of an ageing population are primarily in terms of the labour force and the funding of social services, particularly health care and aged pensions. A growing group of people will be reliant on a shrinking workforce and therefore a declining number of taxpayers.

1.4 Age Distribution of Population 1901-2000

per cent of population aged less than 15 years and 65 years or more



Sources: *Yearbook, Australia* (ABS Cat. 1301.0)
Population by Age and Sex, Australian States and Territories (ABS Cat. 3201.0)

Sex Distribution of Population

Figure 1.5 shows the percentage of the Australian population which was female from 1901 to 2000. For most of the period, males have outnumbered females, despite the higher death rates of males in all but the oldest age groups.

In 1901, 47.6% of the population was female and 52.4% male, making a disparity of 4.8%. The percentage of females reached between 49% and 50% in the 1920s and remained at that level for six decades, with females finally just outnumbering males in the decades of the 1980s and 1990s.

1.5 Sex Distribution of Population 1901-2000

per cent female

Sources: *Yearbook, Australia* (ABS Cat. 1301.0)
Australian Demographic Statistics (ABS Cat. 3101.0)

Aboriginal and Torres Strait Islander Population

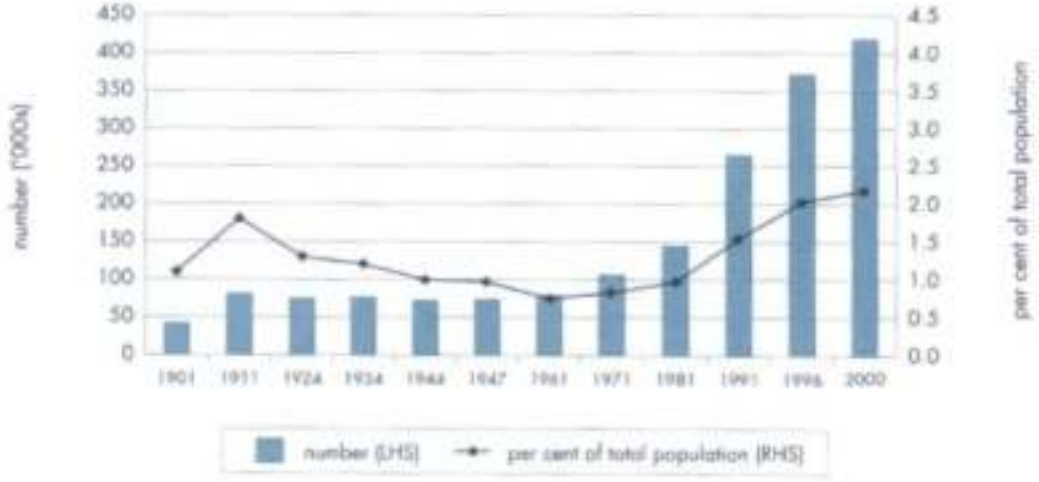
Figure 1.6 presents the *Yearbook* record of the Aboriginal and Torres Strait Islander population since Federation, updated to 2000 using an estimation based on births and deaths since the 1996 Census. In 2000, the Indigenous population was estimated at 418,000 or 2.2% of the population.

There is considerable uncertainty about the figures throughout the century. The early figures vary between enumerated and estimated sources, resulting in large fluctuations, and there are sometimes references to unrecorded numbers 'outside the influence of Europeans'. After 1961, the distinction between 'full-blood' and 'half-caste' Aboriginals ceases, and from 1971 the numbers include unregulated numbers of persons who are less than half Aboriginal (that is, primarily of non-indigenous race), depending on self-nomination.

The large increases over the last two decades are explained by the Australian Bureau of Statistics as being a consequence of the increasing prevalence of persons identifying themselves as indigenous on Census forms, rather than as natural increase. This new willingness to be identified as indigenous may be related to a change in social opportunities and/or changes in the wording of the Census question. In particular, the words 'race' and 'racial' were replaced in the 1996 Census by the word 'origins'.

1.6 Aboriginal and Torres Strait Islander Population 1901-2000

number and per cent of total population
(1901-1996: Census; 2000: Estimated)



Sources: Yearbook, Australia (ABS Cat. 1301.0)
Australian Demographic Statistics (ABS Cat. 3101.0)

Population Born Overseas

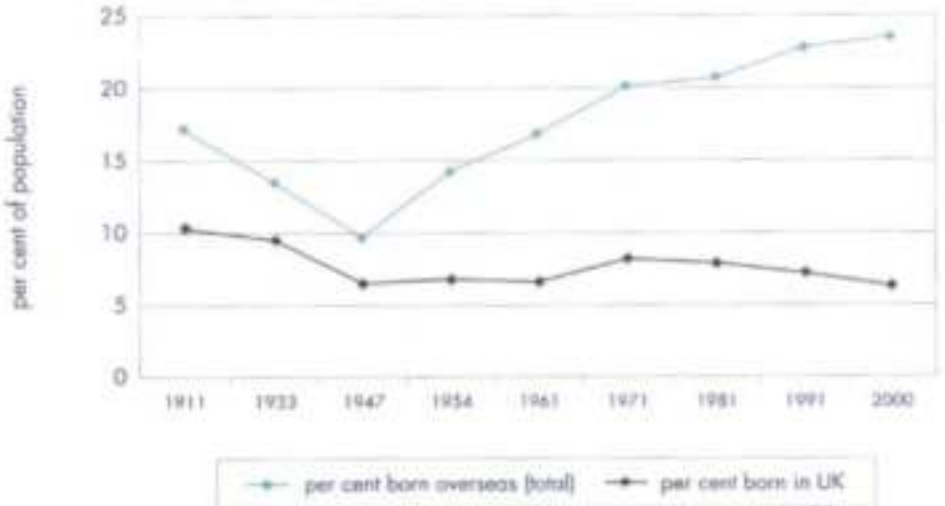
The overseas-born population in Australia was at its lowest at 10% in the 1940s. In the 1990s, the Australian population was still largely native-born with more than three quarters of the population born in Australia in 2000.

Figure 1.7 shows that the proportion of the population born in an overseas country has grown substantially since 1933, while the proportion of the overseas-born population born in the United Kingdom has declined from 70% in 1933 to 26% in 2000.

From 1911 to 1947, over 95% of the population were born in Australia, New Zealand or Britain. The figure in 2000 was 84%—still a substantial proportion of the population. People born in Asia comprised the next largest group, accounting for a further 6% of the population.

1.7 Population Born Overseas 1911-2000

per cent of population born in UK and total per cent born overseas



Sources: *Australian Demographic Trends* (ABS Cat. 3102.0)
Australian Demographic Statistics (ABS Cat. 3101.0)

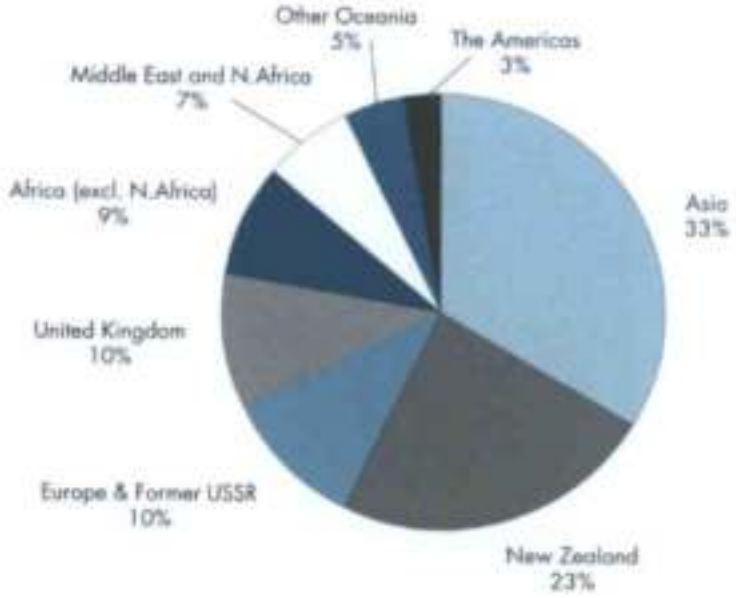
Permanent Settler Arrivals

In the half-century since World War II, almost six million people have come to Australia as new settlers. Around 10% of these arrived as 'displaced persons' or, later, as refugees.

In the year 1999-2000, 92,272 people arrived in Australia to live permanently. Almost half of these were from New Zealand, Europe and the United Kingdom. Thirty three per cent of immigrants that year were from Asian countries.

Under the 'Trans-Tasman Travel Arrangement' New Zealand and Australian citizens are free to migrate to each other's country to live and work. They are also entitled to all the public benefits of citizens, such as public education, health care and social security. From February 2001, new arrivals in Australia from New Zealand are required to obtain a permanent residency visa if they wish to access social security payments or Australian citizenship.

1.8 Permanent Settler Arrivals 1999-2000
country of birth



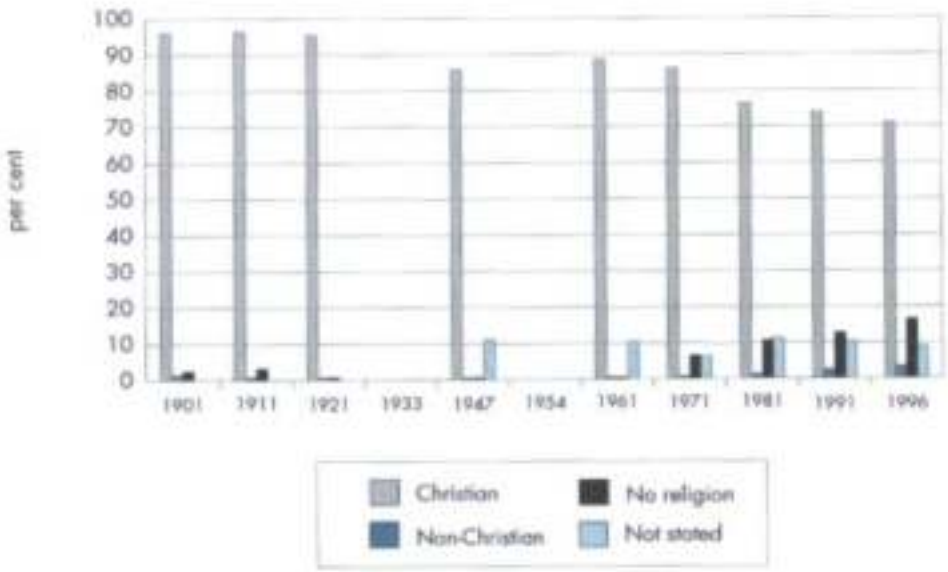
Source: *Australian Demographic Statistics* (ABS Cat. 3101.0)

Religious Affiliation

Religious affiliation is surveyed only at Census, so the most recent available data is from 1996. Figure 1.9 shows self-reported religious affiliation in the Census from 1901 to 1996. Approximately 70% of Australians in 1996 regarded themselves as Christians. This represents a considerable fall (from 96%) since the turn of the century, but it is still a large majority.

Recent immigration has resulted in an increase in the absolute numbers of persons practising non-Christian religions. Non-Christian religions comprised 1.4% of the population in 1901, fell to less than 1% by 1971, and rose again to reach 3.5% in 1996. However, the major factors in the decline in Christian affiliation are the declaration of 'no religion' and non-statement of religion. These, combined, in 1996 represented 26% of Australians, compared to 2.5% in 1901.

1.9 Religious Affiliation 1901-1996
per cent of population affiliated



Source: Yearbook, Australia (ABS Cat. 1301.0)

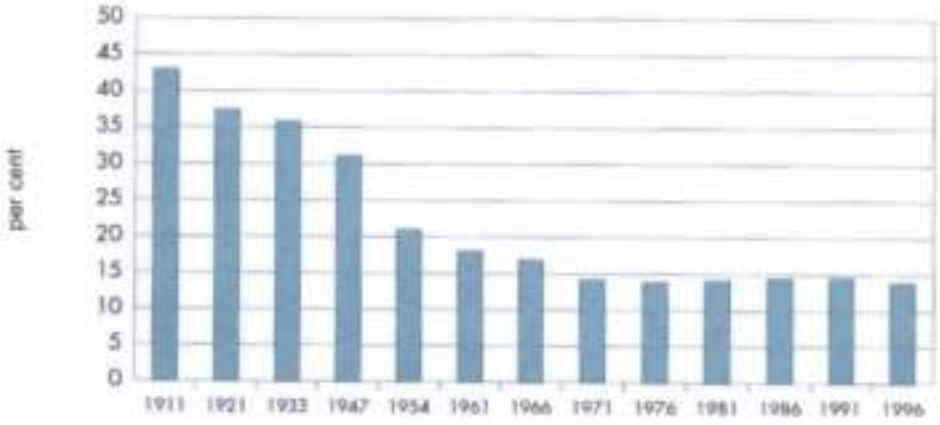
Rural Population

At the beginning of the century, the Australian population was divided fairly equally between city and country. It can be seen in Figure 1.10 that in 1911, 43% of the population lived rurally or in small towns (not defined by size of town) outside the major metropolitan areas. By 1954, this proportion had halved. Since the 1970s, the proportion of the population living in rural areas has remained at around 14%.

The decreasing rural population as a share of the entire population can be attributed almost entirely to the rapid growth of cities, rather than rural 'depopulation'. The number of people living in rural areas has in fact increased from less than 2 million to over 2.5 million over this period.

1.10 Rural Population 1911-2000

per cent of population residing in rural areas



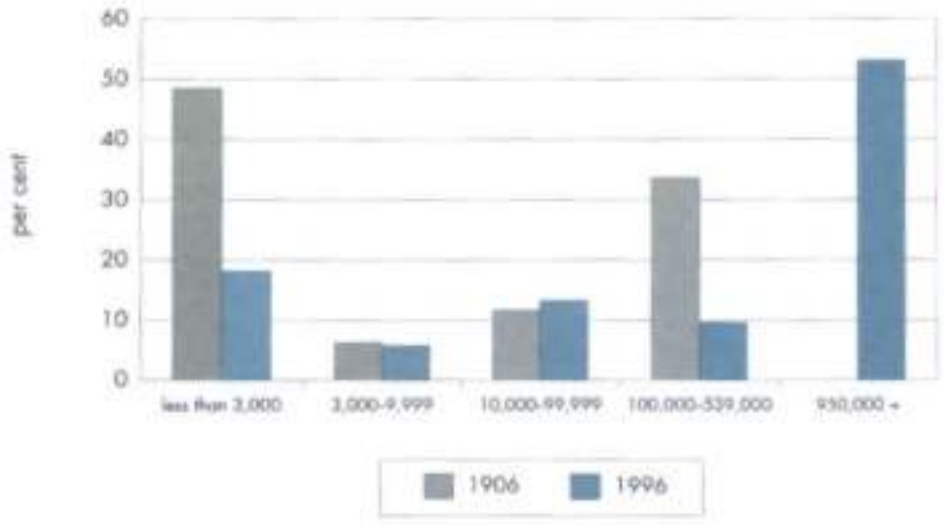
Source: Yearbook, Australia (ABS Cat. 1301.0)

Urbanisation

Australian cities have grown rapidly over the century. Figure 1.11 shows that more than half of the population now live in cities of more than 950,000 people; that is, in five major cities. In 1906, cities of this size did not exist and only one third of the population lived in what were then the largest cities.

The largest proportion of the population—just under 50%—lived in the least populous towns (with less than 3,000 inhabitants) at the beginning of the century. The corresponding proportion in 1996 was less than 20%.

1.11 Urbanisation 1906-1996
per cent of population by size of population centre



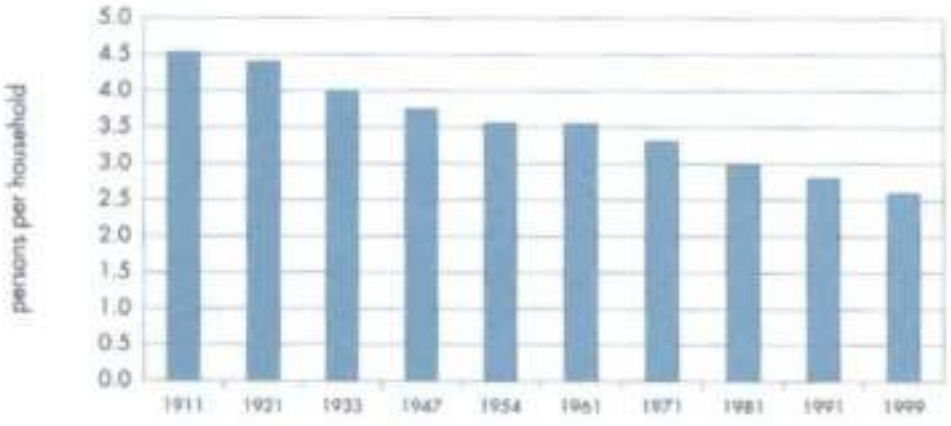
Source: Yearbook, Australia (ABS Cat. 1301.0)

Average Household Size

Figure 1.12 shows that average household size has declined steadily over the century, from 4.5 to 2.6 persons per household. There are several reasons for this, including declining fertility rates, the splitting of households with increased divorced rates, an increase in the number of young people moving out of home before marriage, people marrying later, and the increasing number of elderly people living independently.

1.12 Average Household Size 1911-1999

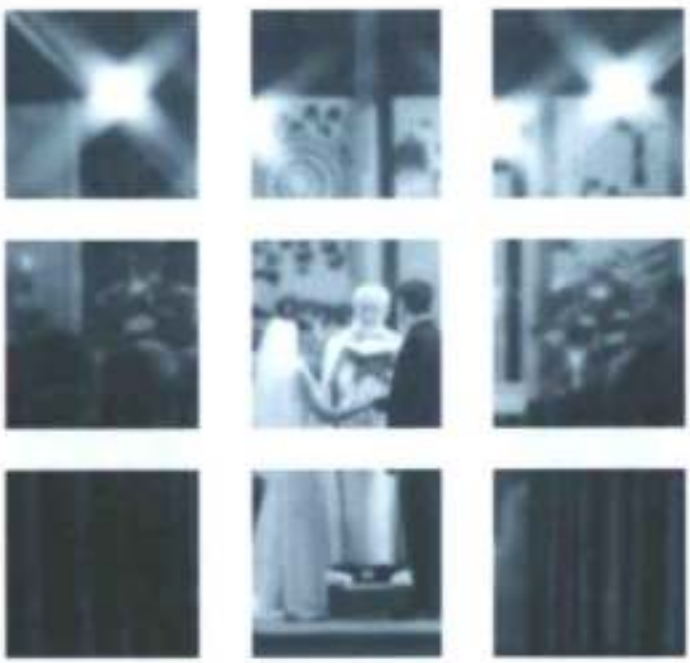
mean number of persons per household



Source: *Yearbook, Australia* (ABS Cat. 1301.0)

Section 2

Marriages, Births and Divorces



Marriages

In all societies, marriage is the principal social regulator of reproduction. It exists both as a rite and as an indicator of social status, but above all as a species of sanction. It stabilises both sexual congress and parenting. It represents a web of ritual, sexuality, and biological and social reproduction, as well as an economic enterprise which forms a basic cell of the economics of the whole society. Marriage provides the social and economic security for the raising of infants to maturity and the fulfilling of their material needs.

Figure 2.1 shows the annual number of marriages in Australia at approximately decade intervals from 1901 to 2000, and the marriage rate (per 1,000 population) over the same period. The steady rise in the number of marriages up to 1970 masks large fluctuations in the marriage rate, largely in response to economic conditions. The figure for 1903 is included to indicate a self-regulating effect in the adjustment of population to economic adversity. That year marked the end of the most severe drought on record and this is reflected in a fall in both the marriage rate and in the actual number of marriages, which was followed by a fall in the number of births, and the birth rate, in the following year, 1904. Similar declines occurred in the Great Depression and in the recession of 1963. Since the 1970s, a combination of legal, social and economic factors have contributed to a major decline in the marriage rate which has continued now across three decades.

The large rise between 1960 and 1970 reflects a marked fall in the age at marriage and its lowest for the century, and the return to later ages of marriage accounts for part of the fall thereafter.

2.1 Marriages 1901-2000

annual number and crude rate (per 1,000 mean population)

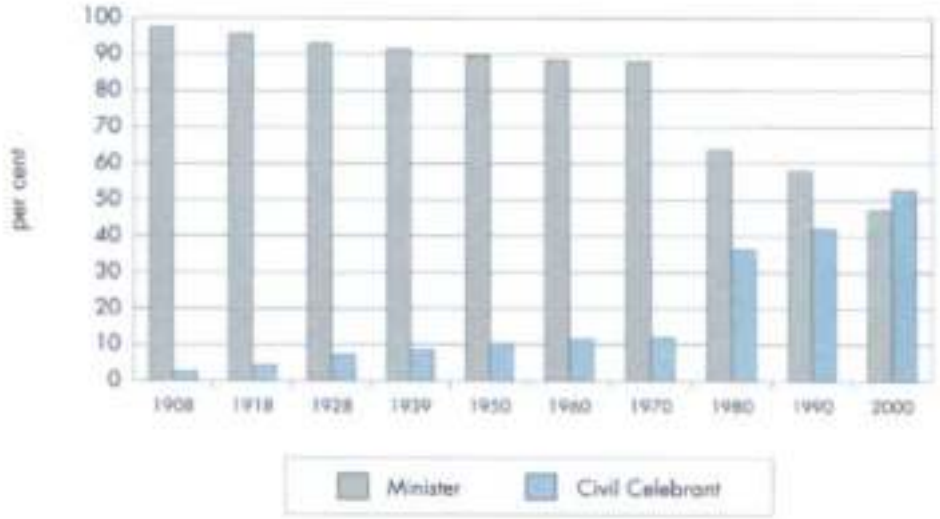
Source: *Marriages and Divorces, Australia* (ABS Cat. 3310.0)

Marriages by Ministers of Religion and Civil Celebrants

In the past 30 years, increasing numbers of couples have chosen to be married by a civil celebrant. From 1908 to 1970, close to 90% or more of couples were married in a religious ceremony by a member of the clergy, but in 2000 this had declined to under 50%. This dramatic shift in the preferred type of marriage ceremony far surpasses the increase in the number of Australians identifying themselves as having no religious affiliation. Part of the increased preference for civil ceremonies may result from the civil ceremony having been allowed out of the registry office into scenic settings.

2.2 Marriages by Ministers of Religion and Civil Celebrants 1908-2000

per cent of all marriages



Source: *Marriages and Divorces, Australia* (ABS Cat. 3310.0)

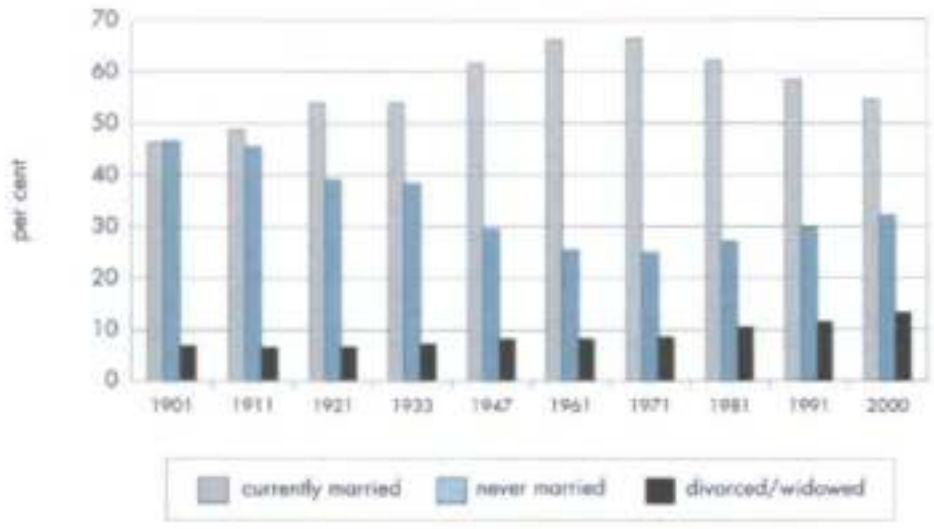
Marital Status of the Population

Figure 2.3 shows the percentage of the adult population who were currently married, who had never married, or who were divorced or widowed each decade from 1901 to 2000. At the beginning of the century, approximately equal numbers of adult Australians were never married or married, but by 1947 the married population was approximately double the never married population. This reflected the fall in the percentage of the population of marriageable age (see Figure 1.4). Following the general trend of marriage rates, the currently married population increased to the 1970s, then declined to the 1990s.

The rise within the last two decades in the proportion of the total population who are currently divorced or widowed is primarily the result of divorce.

2.3 Marital Status of Population 1901-2000

per cent of population aged 15 years or more



Source: Marriages and Divorces, Australia (ABS Cat. 3310.0)

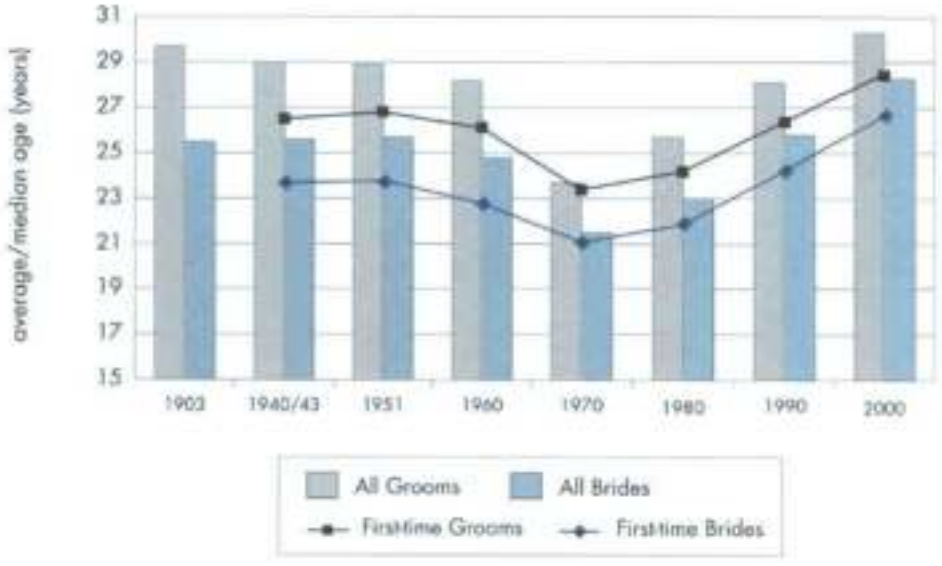
Average/Median Age at Marriage

The fall and then the rise in the age of marriage across the century is also reflected in the marriage figures. Figure 2.4 shows the average or median (according to availability from official statistics) age at marriage of men and women in 1903 and from 1943 to 2000. This is shown for all marriages from 1903, and for first marriages from 1940. The average/median age at marriage for men was 29 in 1903 and remained so until the 1950s, thereafter falling to reach a century's low of 23 in the 1960s, and rising again to reach 30 in 2000. Women's age at marriage followed the same pattern, starting at 25 years in 1903, reaching its lowest (21 years) in the 1960s and rising to 28 years in 2000.

The all-marriages figure suggests that average age at marriage was not much higher at the end of the century than at the beginning, but the all marriages figure has been pushed upwards by high rates of divorce, followed by remarriage, in this later period. The first marriage figures, however, show that people are now older when they marry for the first time than in the early 1960s. This is particularly true for first-time brides.

The average age difference between all brides and all grooms has halved, from four years at the beginning to two years at the end of the century. The average age difference between brides and grooms at first marriage has also decreased since the 1940s.

2.4 Average/Median Age at Marriage 1903-2000
all marriages 1903-2000 and first marriages 1940-2000



Sources: *Marriages, Australia* (ABS Cat. 3306.0)
Marriages and Divorces, Australia (ABS Cat. 3310.0)

Cohabitation Prior to Marriage

Between 1975 and 2000, the percentage of couples cohabiting before marriage rose from 16% to 71%. This suggests a major shift in social attitudes towards sexual relations outside of marriage. The increasing number of ex-nuptial births to de facto couples reflects this revolution (see Figure 2.9). De facto couples now comprise about 10% of all couples. Prior to 1992, data on cohabitation is from the ABS Family Survey. From 1997, cohabitation before marriage data is derived from marriage registrations (couples giving the same residential address).

Contrary to popular opinion that cohabitation increases the likelihood of finding a satisfactory marriage partner, divorce rates have been found to be higher among those couples who cohabited before being married.

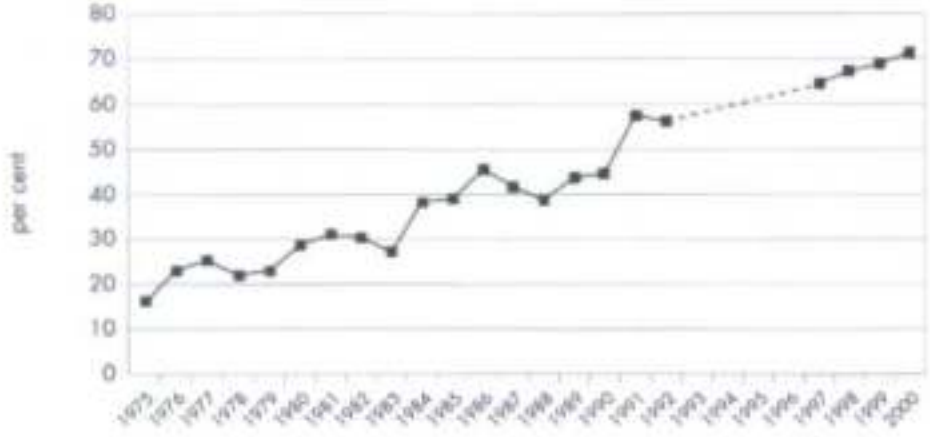
Per Cent of Couples Divorcing Within 5, 10, 20 Years of Marriage

	Within 5 years	Within 10 years	Within 20 years
Cohabiting	13%	26%	56%
Non-cohabiting	6%	14%	27%

Source: *To Have and To Hold*, House of Representatives Standing Committee on Legal and Constitutional Affairs, June 1998

2.5 Cohabitation Prior to Marriage 1975-2000

per cent of couples



Source: *Marriages and Divorces, Australia* (ABS Cat. 3310.0)

Births

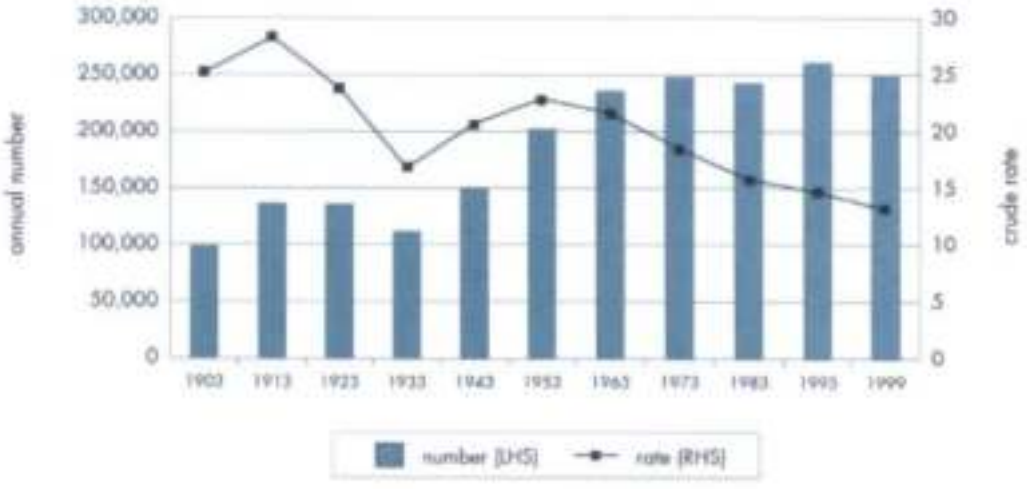
Figure 2.6 shows the crude birth rate (live births per 1,000 population) at decade intervals from 1903 to 1999. With a rising population throughout the period, the number of births will rise even if the birth rate remains steady. Hence the birth rate is a more useful indicator of reproductive change.

Between 1903 and 1999, the birth rate almost halved from 25.2 to 13.1 births per 1,000 population. Over the century, there has been a general fall in the birth rate, and there are four periods when there were falls in the absolute number of births. These falls in birth numbers mark the economic depressions in the first decade of the century and in the 1930s, and the high unemployment rates in the early 1980s and 1990s. The arrival of safe and easy birth control in the 1960s and of abortion in the 1970s appear to have had little impact on the overall pattern.

Although a decrease appears over the decades of the 1980s and 1990s, the birth rate stabilised in the early 1990s in conjunction with a large decrease in immigration. Renewed levels of immigration were followed by a renewed decrease, which economic improvement has failed to arrest. The withdrawal of tax exemptions for average income families since the mid-1980s may also be contributing to the decline.

2.6 Births 1903-1999

annual number and crude rate (per 1,000 mean population)



Source: Births, Australia (ABS Cat. 3301.0)

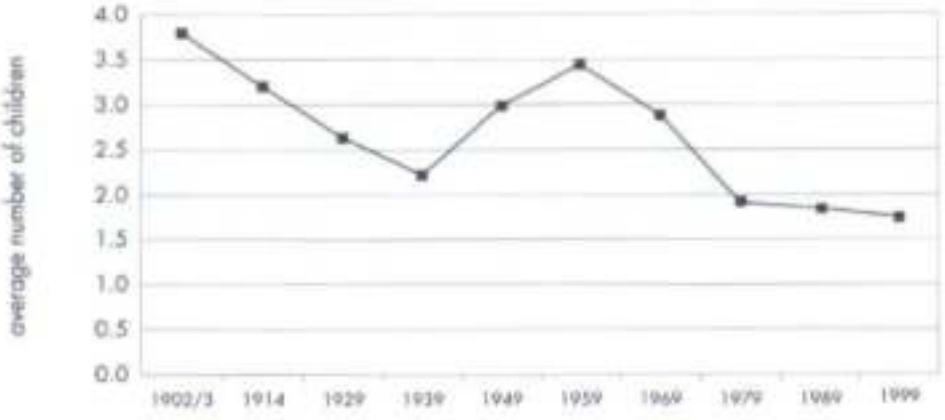
Fertility of Women

Figure 2.7 shows fertility in terms of the number of children per marriage (in the years 1902-03, 1914 and 1933) and average number of children per woman in her lifetime (for the years 1929 to 1999). The figures indicate a decline in fertility from the beginning of the century, a revival with the post-war baby boom lasting into the 1960s, then another decline.

For population growth by natural increase to occur, fertility rates must be more than 2.1. This is called replacement level, the average number of children a couple must have to replace themselves (2) and to allow for the members of the population who do not reproduce (.1). In the last three decades, fertility has been well below replacement level and reached a century's low of 1.7 in 1999.

Declining fertility in Australia reflects the same trend in almost all developed countries. Not only are more women childless, but those women who do have children are having fewer. As with birth rates, there are many possible reasons for this development, including changes to taxation, rising costs of children, increasing workforce participation of women, and diminished security and stability of marriage.

2.7 Fertility of Women 1902-1999
average number of children in lifetime



Source: *Births, Australia* (ABS Cat 3301.0)

Young Mothers

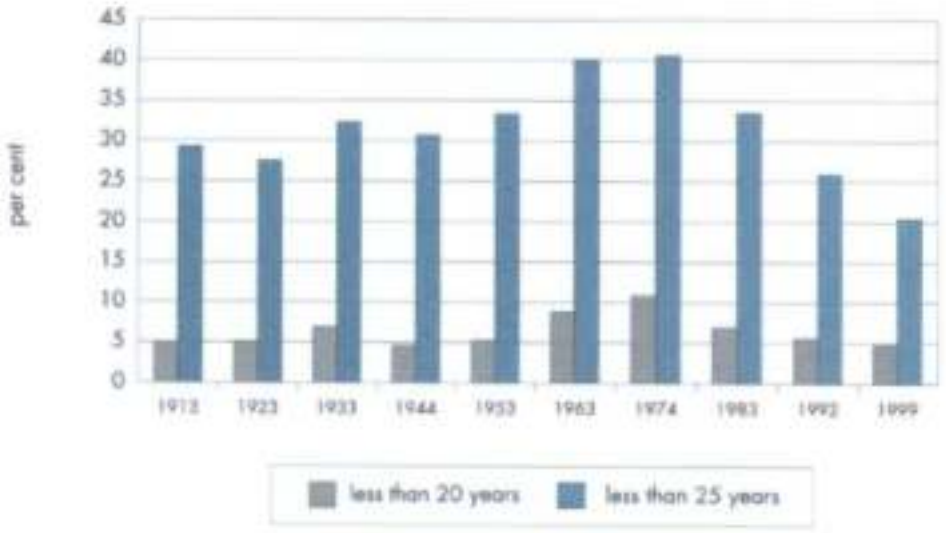
Figure 2.8 shows the percentage of births to teenage mothers and to women aged less than 25 years from 1913 to 1999. Figure 2.4 has shown that the average marriage age for women fell from 25 in the first half of the century to a low of 21 in the mid-1970s, thereafter rising again to above early-century levels. The ages of mothers giving birth show a similar but not identical pattern.

Teenage births were about 5% of all births from 1913 to 1953 (with the exception of a high rate of 6.9% in 1933). The rate rose considerably in the 1960s and 1970s, passing 10% in 1974, but fell again to about 5% in the 1990s. Births to mothers aged less than 25 show a similar pattern, rising from about 30% in the first half of the century to 40% in the early 1960s and falling markedly by the end of the 1990s to 20%, well below levels early in the century.

Thus teenage pregnancy has returned to turn-of-the century rates, but there is evidence that adult women are postponing parenthood until after their early 20s. Again, this is probably related to later marriage, to extended education, and to increasing workforce participation by women.

2.8 Young Mothers 1913-1999

per cent of mothers aged less than 20 years and less than 25 years at confinement



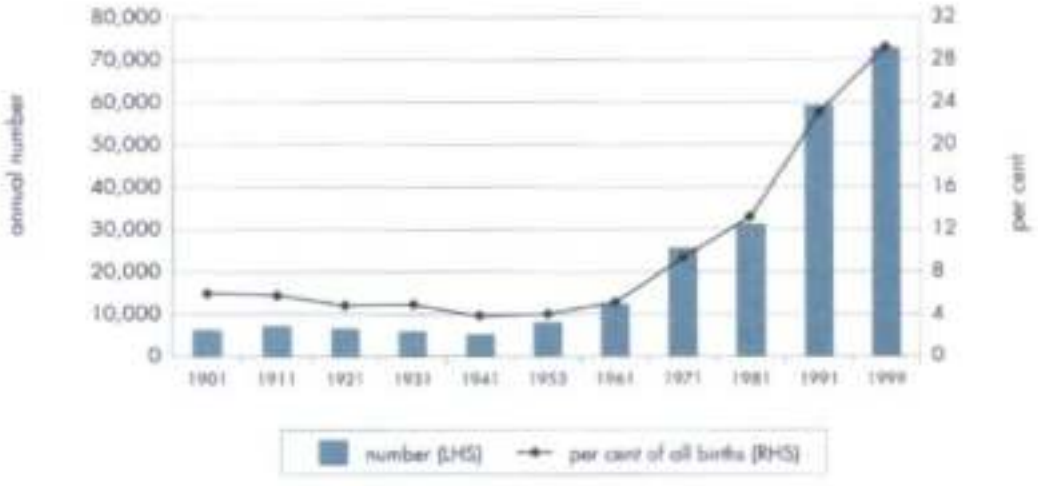
Sources: *Yearbook, Australia* (ABS Cat. 1301.0)
Births, Australia (ABS Cat. 3301.0)

Ex-Nuptial Births

Figure 2.9 shows ex-nuptial births in Australia as a percentage of all births, from 1901 to 1999. From 1901 to 1953, the ex-nuptial birth rate fell from 6% of all births to 4%. In 1961, the percentage of ex-nuptial births had risen to approach the level at the beginning of the century. Thereafter the percentage rose rapidly, reaching 9% in 1971, 13% in 1981 and 23% in 1991. The number and percentage of ex-nuptial births has continued to rise throughout the 1990s, with 72,691 babies born out of wedlock in 1999, comprising 29% of all births.

The rise in ex-nuptial birth rates has been unaffected by the availability of safe and effective contraception, suggesting that, in many cases, the decision to have a child out of wedlock has been a conscious one. As premarital sex and cohabitation has become not only acceptable but normalised, any social stigma associated with unmarried parenting has all but disappeared.

2.9 Ex-Nuptial Births 1901-1999
number and per cent of all births



Source: *Births, Australia* (ABS Cat. 3301.0)

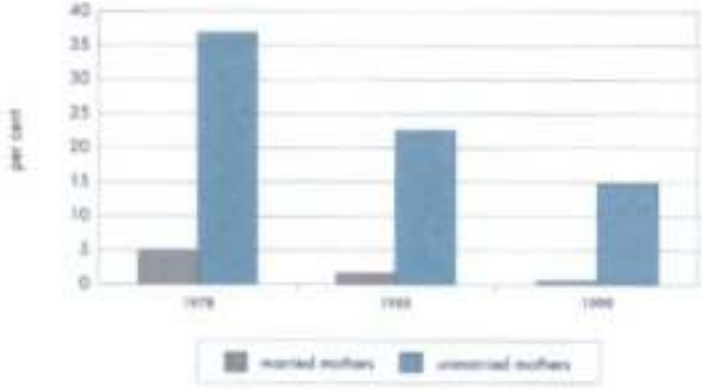
Mothers' Age and Marital Status

Ex-nuptial births are much more likely to be to young mothers than to older mothers. In 1978, 5% of married mothers were aged less than 20 years at confinement, compared with 37% of unmarried mothers. In 1999, the equivalent proportions were less than 1% and 15%.

Over the same period the proportion of mothers aged more than 35 years tripled for unmarried mothers and increased four-fold for married mothers. This reflects the trend toward postponement of marriage and of parenting, with an increasing number of older women choosing to have a child either within a de facto relationship and/or without a committed partner.

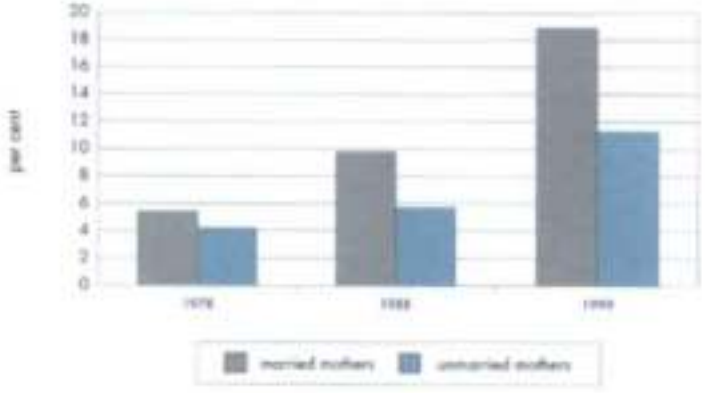
2.10a Mothers Aged Less Than 20 Years 1978-1999

per cent of married and unmarried mothers aged less than 20 years



2.10b Mothers Aged More Than 35 Years 1978-1999

per cent of married and unmarried mothers aged more than 35 years



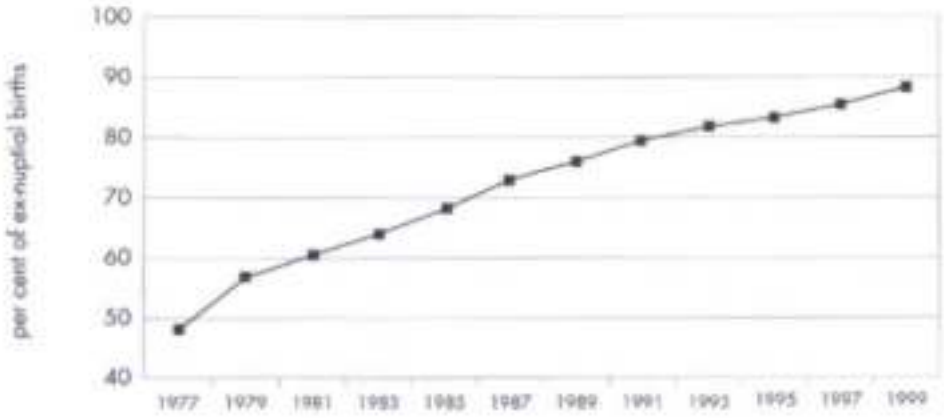
Source: Births, Australia (ABS Cat. 3301.0)

Acknowledgement of Paternity

Figure 2.11 shows the proportion of ex-nuptial births which have been acknowledged by the father. In 1977, for less than half of all ex-nuptial births the father's name was on the birth certificate. In 1999, paternity was acknowledged for close to 90% of ex-nuptial births. This provides confirmation of two developments: the removal of stigma associated with ex-nuptial parenting, and the increasing percentage of ex-nuptial births to couples in de facto relationships relative to single mothers without partners.

2.11 Paternity-Acknowledged Ex-nuptial Births 1977-1999

per cent of ex-nuptial births with paternity acknowledged



Sources: *Births, Australia* (ABS Cat. 3301.0)
Social Indicators 1992 (ABS Cat. 4101.0)
Social Trends 1994 (ABS Cat. 4102.0)

Adoptions

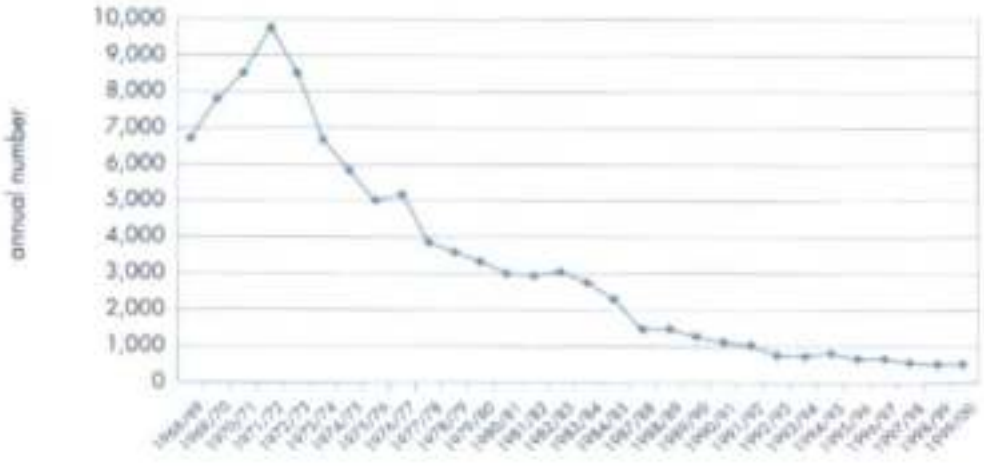
The total number of adoptions has decreased dramatically over the past three decades, declining from a peak of 9,798 in 1971/72 to 566 in 1999-2000. Of the latter, 20% were adoptions by relatives. The peak in 1971/72 corresponds with the rise in the ex-nuptial birth rate, and the fall thereafter with the introduction of the sole parent pension and the campaign against adoption.

The Australian Institute of Health and Welfare report, *Adoptions, Australia* (2001), suggests that the decline is due to a combination of the availability of effective birth control, more government and community support for single parents, access to alternative reproductive technology such as IVF, changes to the legislation relating to adoption by relatives, and the introduction of permanent guardianship legal orders. High rates of abortion cast doubt on the first factor, and use of IVF does not reflect a decrease in the demand by would-be adoptive parents.

Adoption as a solution to illegitimacy had a fairly short career. It began on a large scale only in the 1920s, with facilitating legislation. This reflected the medical approach to parenting of those years, which did not value parental ties, as seen also in the provisions of the time for 'stolen children' and refugee children. The present situation can be seen as a return to normal respect for the natural ties of parenthood.

2.12 Adoptions 1969-2000

annual number of adoptions



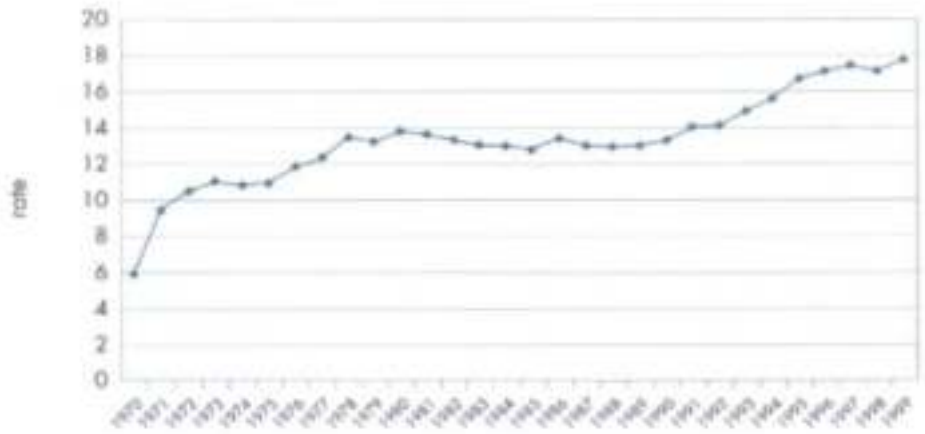
Source: *Adoptions, Australia 1999-2000* (Australian Institute of Health and Welfare)

Abortions

South Australia and the Northern Territory are the only jurisdictions that keep accurate records of abortions. Figure 2.13 shows that in South Australia, abortion rates have increased from 6 to 18 per 1,000 women of child-bearing age in the three decades from 1970 to 1999. If we can assume that this rate approximates that for Australia as a whole, around 75,500 abortions were performed in 1999. That is, there were about a third as many abortions as there were live births.

2.13 Abortions 1970-1999

rate per 1,000 women aged 15-44, South Australia



Source: *Thirtieth Annual Report : For the Year 1999*, Committee appointed to examine and report on abortions notified in South Australia, Department of Human Services, Adelaide

Divorces

Figure 2.14 shows the divorce rate per 1,000 population using decade averages from the 1880s to the 1920s, and thereafter annual rates at decade intervals. The divorce rate quadrupled in the last decade of the 19th century, then entered a period of stability followed by a steepening increase from the 1920s to the 1950s, a decline to the 1960s, a sharp rise from 1963 to 1973, and a massive rise to 1983. There was a decline in the mid-1980s, which continued throughout the 1990s. The rate was about .02 per 1,000 population in the 1880s and 2.8 per 1,000 population in the 1990s.

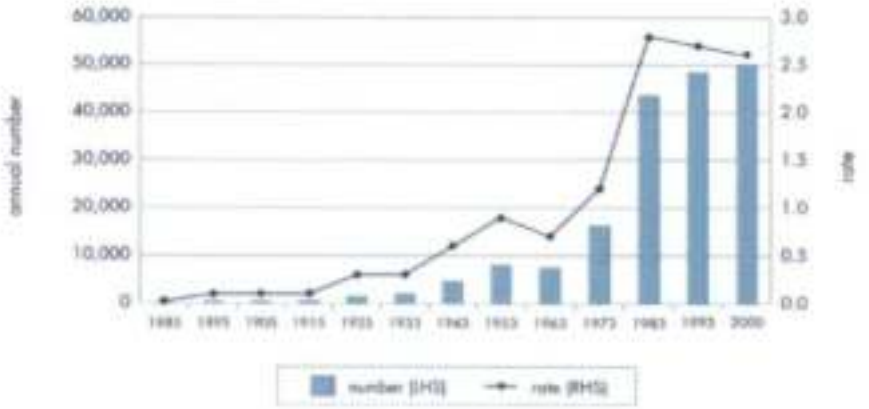
The pattern of these figures, with their three major fits and starts, cannot be understood without reference to changes to the divorce law which mark the initiation of changes in the divorce rate. The author of an early *Yearbook* noted that legislation passed in New South Wales (1899) and Victoria (1889) made divorce comparatively easy, leading to an increase in divorce during the period 1891-1900.

The Federal *Matrimonial Causes Act 1959-66*, which came into operation in 1961, replacing separate State and Territory legislation, again made divorce easier by the introduction of new grounds without fault—separation for five years. Following this major change, the divorce figures for 1973 show a doubling from 1963. The *Family Law Act 1975*, which came into operation on 5 January 1976, eased restrictions yet again, replacing the 14 grounds of the *Matrimonial Causes Act* with a single ground—'irretrievable breakdown of marriage', defined as one year's separation. This presaged the near doubling again by 1983.

The number of divorces rose massively from 16,000 in 1973 to 63,000 in 1976. Obviously, this rise could not be the result of the new encouragement afforded to divorce by the *Family Law Act*, as the one-year wait it required had not yet elapsed. Rather, it represents pending divorces from the previous four years, no longer required to wait out a five-year term of separation.

2.14 Divorces 1885-2000

annual number and crude rate (per 1,000 mean population)



Source Marriages and Divorces, Australia (ABS Cat. 3310.0)

Section 3

Children and Families

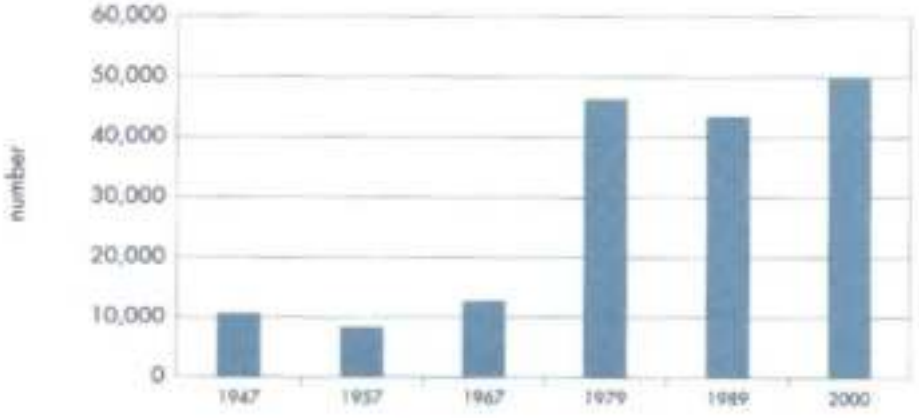
Children and Divorce

Figure 3.1 shows the annual number of children affected by divorce from 1947 to 2000. Average number of children per divorce has decreased over the period from around 1.2 to 1, but an increasing number of divorces has meant that more children are affected in absolute terms.

In 2000, the parents of 49,600 children divorced, representing around 1% of children aged less than 18 years. This is not a cumulative total, and therefore does not include children whose parents divorced in previous years. Figure 3.2 (overleaf) shows that in 1997, 28% of dependent children lived apart from one or both of their natural parents, and 11% (well over a third) did so because of divorce.

3.1 Children and Divorce 1947-2000

annual number of children (younger than 18 years) whose parents divorced



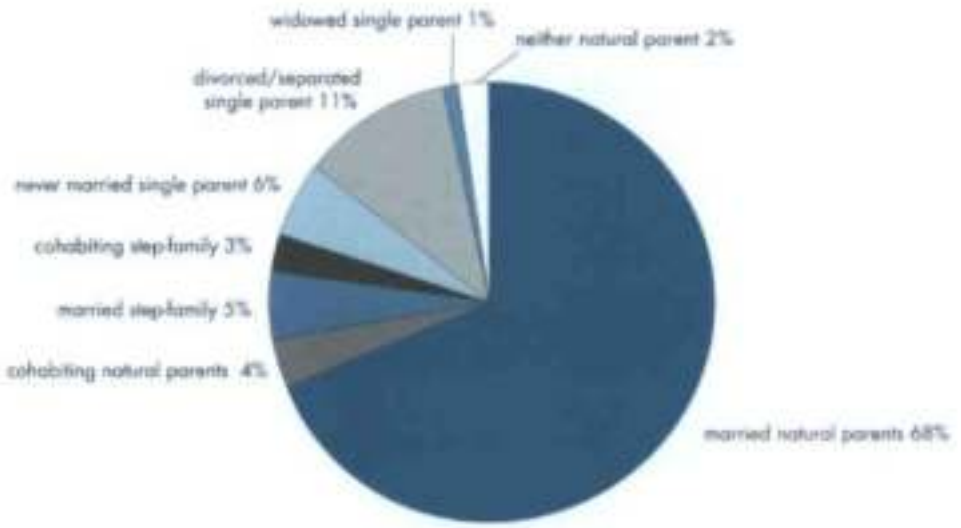
Sources: Yearbooks (ABS Cat. 1301.0)
Marriages & Divorces, Australia (ABS Cat. 3310.0)

Family Structure

In 1997, around 72% of dependent children lived with both their natural parents—68.7% with married parents and 3.6% with cohabiting parents. Of the 978,000 children who lived apart from at least one of their natural parents, most lived in single parent families. A small number of children lived with neither natural parent.

3.2 Families with Dependent Children 1997

per cent of dependent children



Source: *Children, Australia: A Social Report* (ABS Cat. 4119.0)

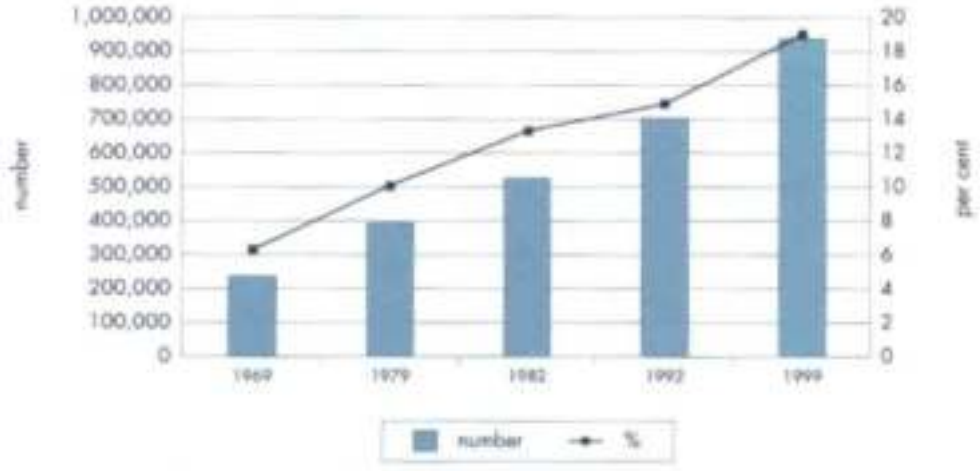
Children in Single Parent Families

Figure 3.3 shows that the number and the proportion of dependent children living in single parent families increased markedly in the period from 1969 to 1999. In 1999, 19% (more than 936,000) of children were living in homes with only one parent, compared with 6.3% in 1969.

Around two-thirds of single parent families in 1997 were the result of divorce or separation of marriages. This represents a small increase since 1975. The proportion of never-married and widowed single parents changed markedly over the same period, with the proportion of never-married single parents increasing from 11% to 30% of all single parents and the proportion of widowed single parents falling from 27% to 7%.

3.3 Children in Single Parent Families 1969-1999

number and per cent of dependent children



Sources: *Social Indicators 1984* (ABS Cat. 4101.0)
Marriages and Divorces 1994 (ABS Cat. 3310.0)
Labour Force Status and Other Characteristics of Families (ABS Cat. 6224.0)

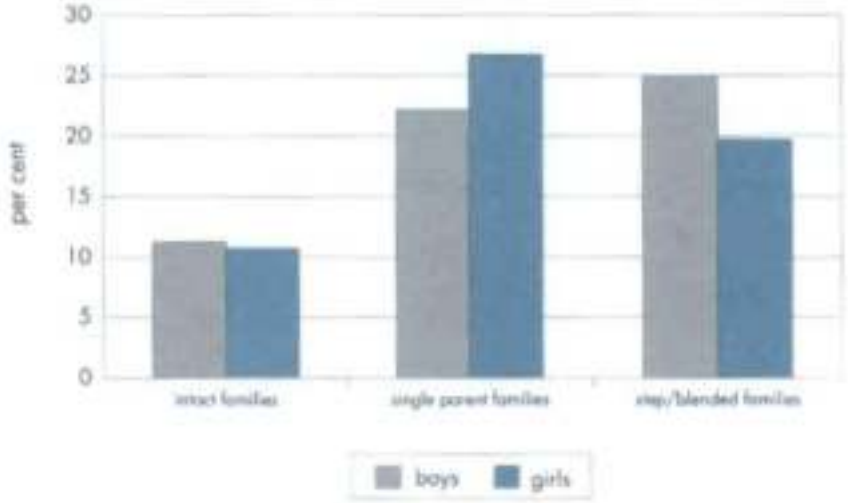
Children with Mental Health Problems—Family Structure

A large amount of research evidence indicates that children in single parent families are at greater risk of educational disadvantage, behavioural and psychological problems, and neglect and abuse compared with children in intact families. Some of this risk can be attributed to the lower incomes of single parent families, but many studies have shown that an effect of family structure remains after controlling for income. The following two graphs do not control for the effects of other factors, but show the simple relationship between family structure, household income and child mental health.

Figure 3.4 shows that the proportion of children with mental health problems—including behavioural, affective (mood), and attention deficit disorders—is lowest in intact families. The highest proportion of children with problems occurs in single parent families, but boys are most likely to suffer from mental health problems in step/blended families.

3.4 Children with Mental Health Problems 1998

prevalence by family type,
per cent of children aged 4-17



Sources: Sawyer, M.G. et al. 2000, *The Mental Health of Young People in Australia*, Mental Health and Special Programs Branch, Commonwealth Department of Health and Aged Care, Canberra

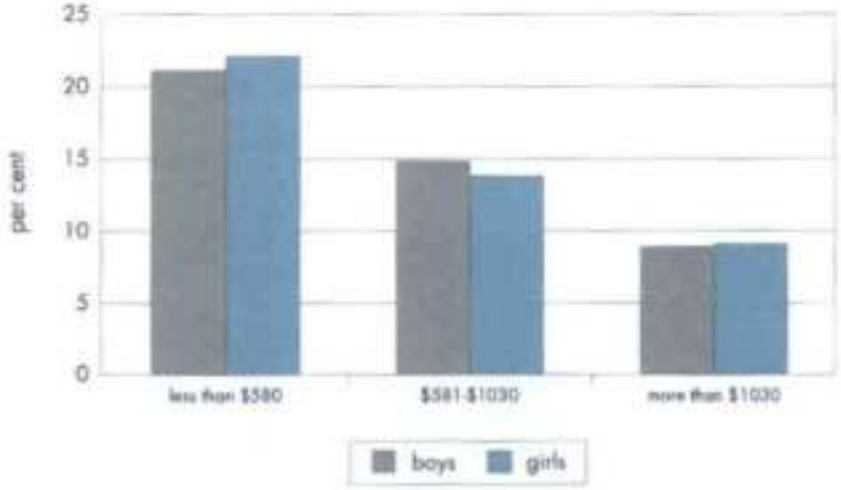
Children with Mental Health Problems—Household Income

Household income has a strong relationship with child mental health. As household income decreases, the prevalence of child mental health problems increases. This survey data does not show any significant difference between the effect of income on boys and girls.

The *type* of mental health problem experienced by boys and girls does differ substantially, however. Girls are more likely to suffer from internalising disorders related to anxiety and depression, while boys are more likely to exhibit externalising disorders related to delinquent or aggressive behaviour at all levels of income.

3.5 Children with Mental Health Problems 1998

prevalence by weekly household income,
per cent of children aged 4-17



Sources: Sawyer, M.G. et al. 2000, *The Mental Health of Young People in Australia*, Mental Health and Special Programs Branch, Commonwealth Department of Health and Aged Care, Canberra

Child Abuse and Neglect

The rate of child abuse and neglect rose and then fell over the 1990s, the period in which comprehensive records have been kept, and statistics published, for each state and territory. Figure 3.6 shows the number and rate of substantiations—investigated and confirmed instances—of child abuse and neglect. One child may have several child abuse or neglect substantiations. The substantiation figures do not represent the number of children involved, but the rates figures do.

Child abuse and neglect is most likely to occur in non-intact families. Figures for 1996/97 (the latest period for which demographic details are available) show that the incidence of child abuse and neglect is 8 to 10 times higher in step/blended families and in single parent families than in intact families.

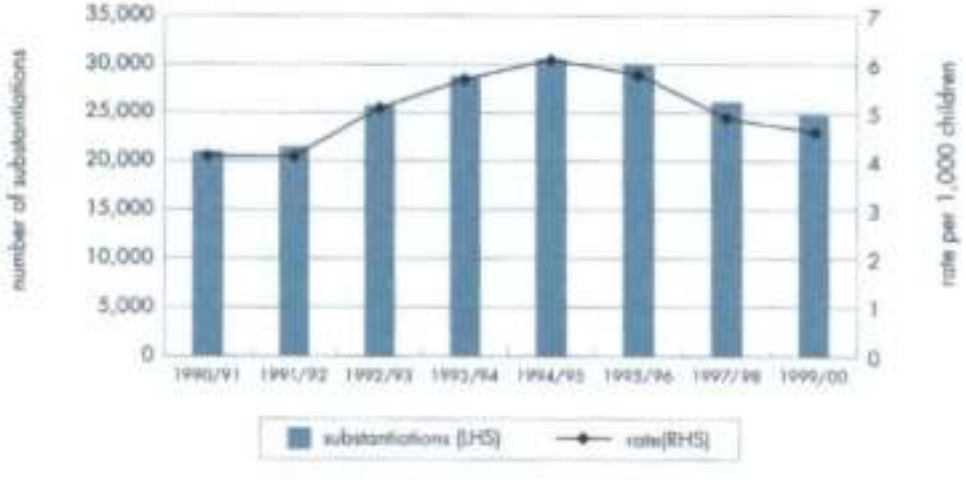
Child Abuse and Neglect by Family Type 1996/97

Family Type	*Substantiations*	*Children in Families*	*Incidence (%)*
2 parent – natural	1,593	3,396,860	.05
2 parent – step/blend	1,715	364,608	.5
1 parent – female	2,732	743,063	.4
1 parent – male	360	101,536	.4

3.6 Child Abuse and Neglect 1991-2000

annual number of substantiations & rate

(children subject to substantiations per 1,000 children aged 0-16 years)



Source: Child Protection, Australia (AIHW)

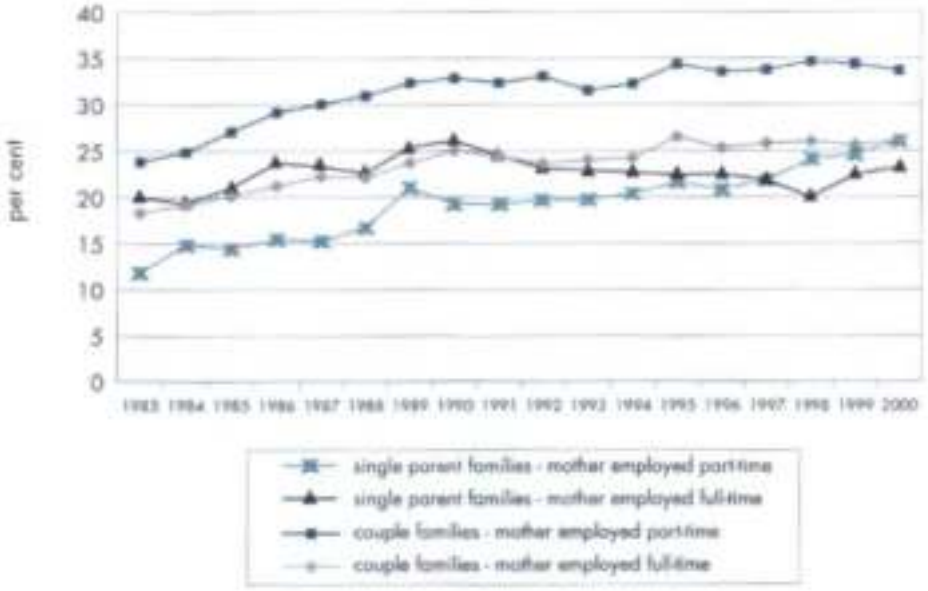
Working Mothers

Mothers with dependent children were more likely to be employed in 2000 than in 1983. The largest increase was in part-time employment for both mothers in couple families and single mothers. Mothers in couple families have higher rates of employment than single mothers, which is possibly related to the higher average educational attainment of mothers in couple families.

Until 1997, more single mothers were employed full-time than part-time, but in 2000 the opposite was the case, with 26% of single mothers employed part-time and 23% employed full-time. The reversal is not primarily a result of fewer single mothers working full-time. Mothers in couple families have remained more likely to be employed part-time than full-time, with participation in both categories rising fairly steadily until 1994 and then flattening.

3.7 Working Mothers 1983-2000

per cent of mothers with dependent children in couple and single parent families who were employed



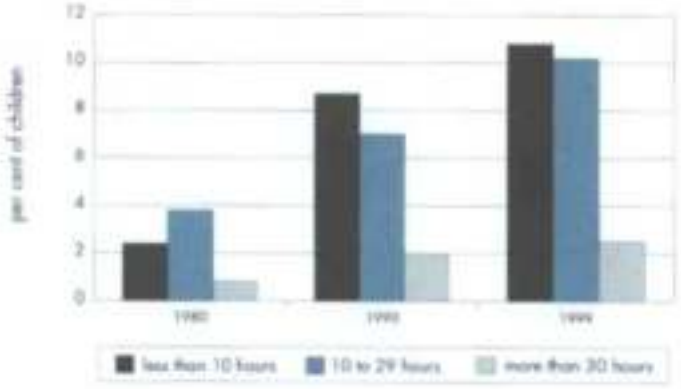
Sources: *Children, Australia: A Social Report 1999* (ABS Cat. 4119.0)
Labour Force Status and Other Characteristics of Families (ABS Cat. 6224.0)

Children in Child Care

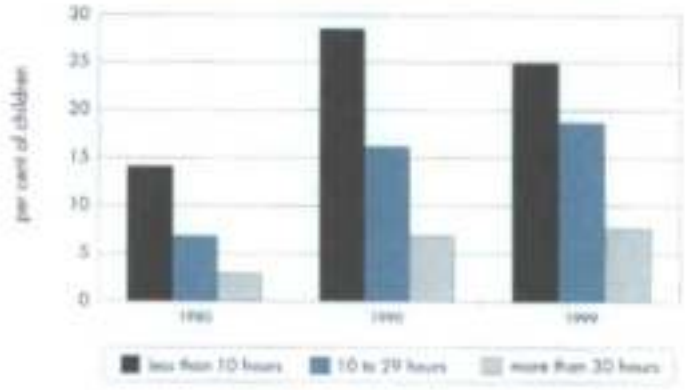
Accompanying the increase in mothers in the workforce has been a rise in the number and proportion of children in formal and informal childcare each week. Figures 3.8a and Figure 3.8b show the proportion of children aged less than 12 years who spent time in formal and/or informal childcare each week, by the number of hours spent in care. For children of school age, this means out-of-school care.

The total proportion of children in care increased from 24% in 1980 to 51% in 1999. There was little change in the total proportion of children in care from 1990 to 1999, but there was a notable shift in the amount of time children spent in care. While the proportion spending less than 10 hours in care decreased, more children spent 10 to 29 hours, and more than 30 hours, in care each week in 1999 than in 1990.

3.8a Formal Child Care 1980-1999
per cent of children aged 0-11,
weekly hours in formal childcare



3.8b Formal & Informal Child Care 1980-1999
per cent of children aged 0-11,
weekly hours in formal and/or informal childcare



Source: Childcare, Australia (ABS Cat. 4402.0)

Families with No Parent Employed

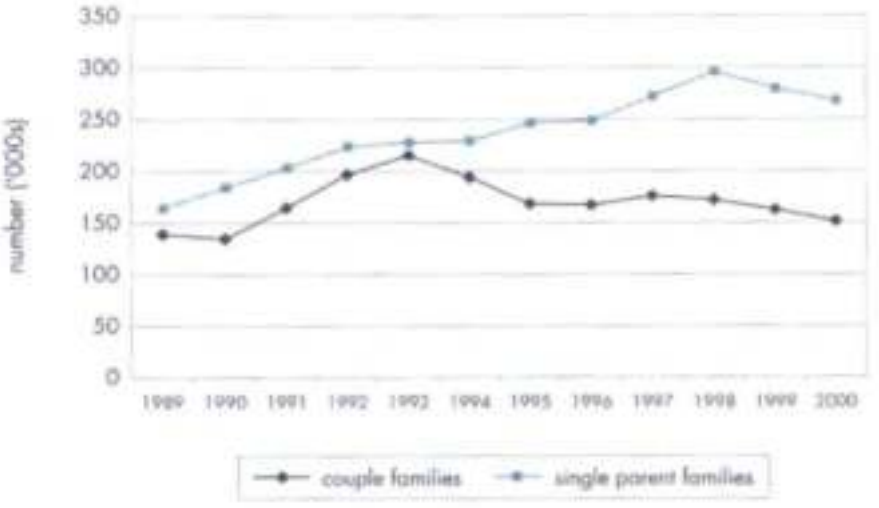
Figure 3.9 shows the number of couple families and single parent families with no parent employed, and therefore no earned income. This includes those with parents unemployed (not employed and looking for work) and not in the labour force (not employed and not looking for work).

Couple families and single parent families with no parent employed have followed a different pattern over the 11 year period. The number of single parent families with no parent employed increased to 1997, thereafter declining slightly. The number of couple families without employment peaked in 1993 and declined steadily to 2000.

While the number of unemployed single parent and couple families was fairly similar at the beginning of the 1990s, the number of unemployed single parent families is now 80% higher.

3.9 Families with No Parent Employed 1989-2000

couple families and single parent families with dependent children



Source: *Labour Force Status and Other Characteristics of Families* (ABS Cat. 6224.0)

Taxation and Families 1950-2000

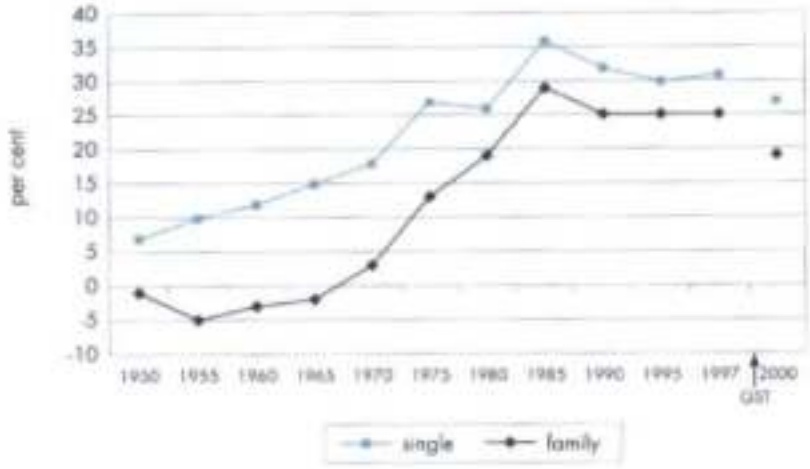
Families require higher incomes than single people in order to enjoy comparable life circumstances.

In the first half of the 20th century, the Basic Wage determination ensured a higher income (almost double) for adult males (as family breadwinners) than for youths and women. The unequal pay approach to family income provision was slowly eroded in the middle decades of the century, and was replaced by tax deductions per family member and for child-related expenditure. The deductions were equally available to all families, offering horizontal equity for families as compared with single persons in the tax system, and providing adequate protection for families against rising taxation which was making average earnings inadequate for the support of families. Until the 1970s, families with incomes as high as 150% Average Weekly Earnings (AWE) paid no tax.

At the beginning of the 1970s, the Basic Wage was replaced with equal pay, and by the end of the decade family tax deductions had been withdrawn and replaced with a Family Allowance which, with inflation, soon became quite inadequate for the extra expenses incurred by families. Families with moderate earnings, between AWE and 150% AWE, began to pay large proportions of their earnings in tax, and the majority of families paid tax at rates not very different from those paid by single persons. Whereas in 1960, a family income was likely to be about 170% of an equivalent single worker's, by 1980 and through to the present it is likely to be only about 10% higher. Families have suffered extreme financial stress compared with single people and couples without children since the early 1980s.

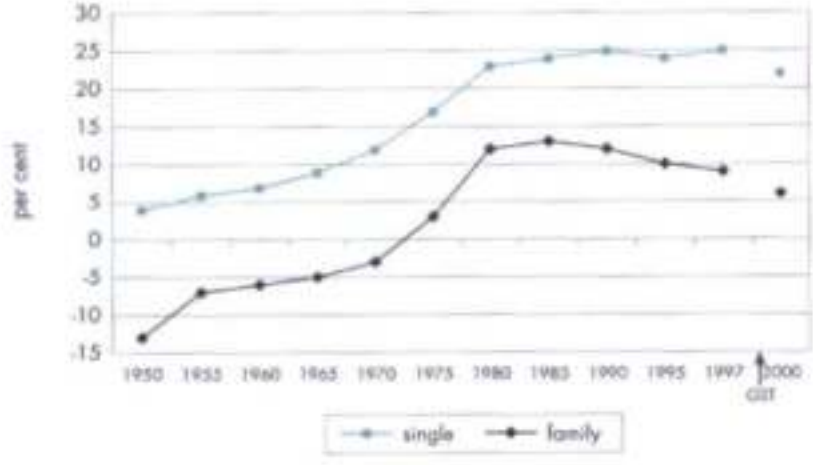
3.10a Tax on 150% Average Weekly Earnings 1950-2000

net per cent of earnings paid in income tax by family (3 children) and single earner



3.10b Tax on Average Weekly Earnings 1950-2000

net per cent of earnings paid in income tax by family (3 children) and single earner



Source: Sullivan, L. 2001, *Taxing the Family*, The Centre for Independent Studies.

Deaths

Life Expectancy

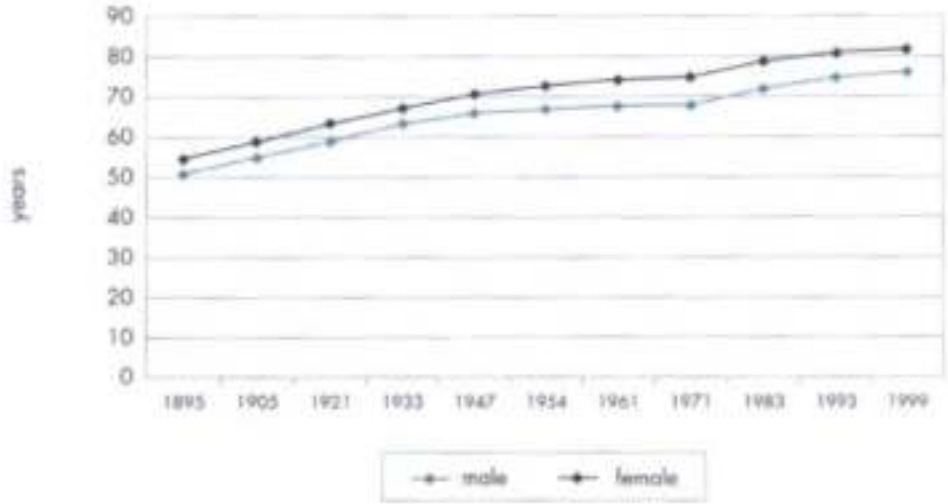
Longevity of the population is one of the most telling markers of its well being. It is usually measured in terms of life expectancy and death rates. Both are estimates pitched between what is happening now and what this is likely to mean for the future. Although they cannot predict the future, as trends they are able to show how longevity has improved (or declined).

Figure 4.1 shows the dramatic rise in life expectancy in the century from the 1890s to the 1990s. In 1895, the average life expectancy for males at birth was 51.1 years, and for females, 54.7. In 1999, the equivalent figures were 76.2 and 81.8 years. This is among the highest in the world.

The gap between men's and women's life expectancy has actually become wider since mid-century when it was only about 3.6 years, as in 1895. There has, however, been a slight narrowing in the last decade—from 6.5 years in 1987 to 5.6 years in 1999. The death rates of males are higher than for females at all ages from new-borns to octogenarians. Some of these death rates will be examined in more detail in later pages.

4.1 Life Expectancy at Birth 1895-1999

males and females



Sources: *Yearbook, Australia* (ABS Cat. 1301.0)
Australian Social Trends (ABS Cat. 4102.0)

Death Rate

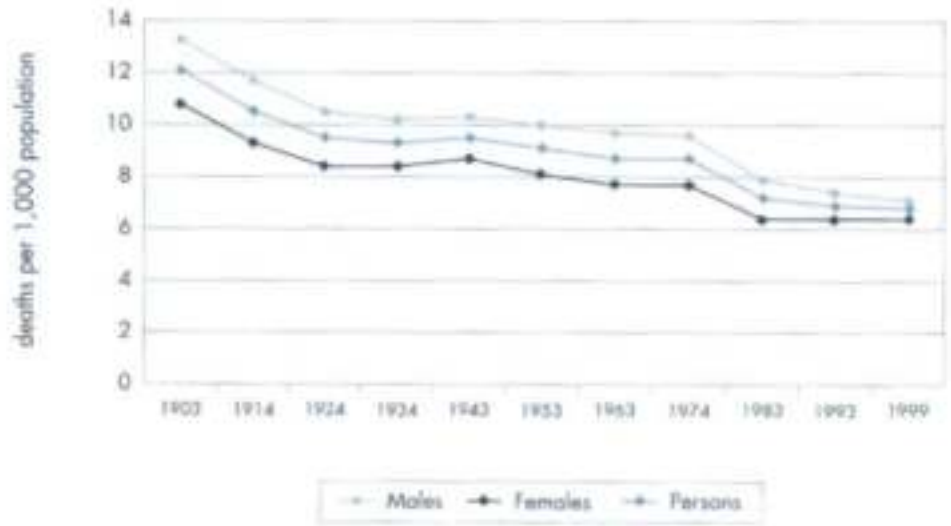
Figure 4.2 shows the death rate in Australia (per 1,000 population), from 1903 to 1999, for men and women. A higher death rate means more people dying at younger ages and a fall in the death rates generally means greater longevity. (It could, however, mask an increase in people dying young, while those that survive increase their lifespan.) The figure shows a fall in the death rate of both men and women from approximately 13 and 11 per 1,000 population respectively in 1903 to 7 and 6 per 1,000 population in 1999.

The death rate can be expected to be affected by the age distribution. The higher proportion of children in the early years of the century should lower the death rate, and the larger population of old people today should raise it, so the improvement is even more impressive than the figures indicate.

The rate of decrease in the male death rate has slowed considerably in the course of the 1990s compared to the rate of decrease over the previous new decades, and the female death rate, interrupting a 90 year trend, has not fallen.

4.2 Deaths 1903-1999

males, females and persons, deaths per 1,000 population



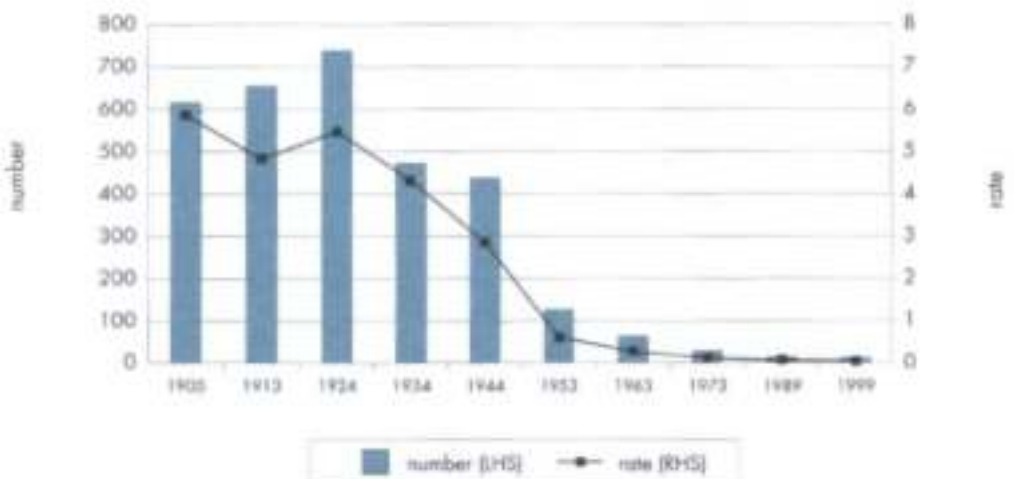
Source: *Deaths, Australia* (ABS Cat. 3302.0)

Maternal Death in Childbirth

Maternal death in childbirth is an indication both of the quality of medical care and of general levels of health of the mature population of women. Figure 4.3 shows the total number of maternal deaths and the rate per 1,000 births from 1905 to 1999. The maternal death rate in 1905 was 6 per 1,000 births or 0.6%. By 1999, it had fallen to 0.04 per 1,000 births or 0.004%. Sometimes no maternal death occurs in one of the states in a whole year. Infection (puerperal septicaemia), contracted in hospital, was a major cause of death in childbirth until the 1940s. Since then antibiotics have made this a virtually non-existent cause of maternal death.

4.3 Maternal Death in Childbirth 1905-1999

number and rate per 1,000 births



Source: *Causes of Death, Australia* (ABS Cat. 3303.0)

Perinatal Deaths

Perinatal mortality, deaths per 1,000 live births occurring around the time of birth and in the first 28 days of the baby's life, is considered to be one of the more telling indicators of population health. It is a gauge both of the health and well being of women in their reproductive years and of their access to good medical services.

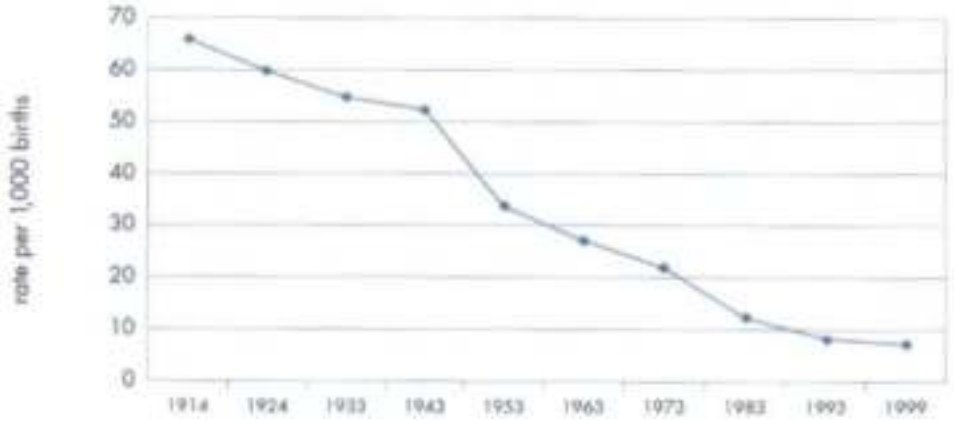
Figure 4.4 shows perinatal mortality in Australia from 1914 to 1999. From 1914 to 1963, no gestational age or birth weight was specified, but from 1973 perinatal death statistics include only babies of at least 22 weeks gestation or 500g birth weight.

From 1973, the *Yearbook* perinatal mortality statistics include both live births and stillbirths. For earlier years, perinatal mortality must be calculated by adding stillbirths to deaths of children within 28 days of birth. From 1943 to 1963, estimations of the number of stillbirths were published in the *Yearbooks*, and each year were similar in number to the number of deaths from birth to less than 28 days old. In the first three decades of the century, stillbirths did not have to be notified and no estimates are recorded. In Figure 4.4, perinatal mortality rates for this period have been estimated using the ratio for the 1940s to the 1960s.

In the course of the last century, perinatal mortality rates have decreased from 66 per 1,000 births to 7 per 1,000 births.

4.4 Perinatal Deaths 1914-1999

fetal deaths and deaths before one month of age

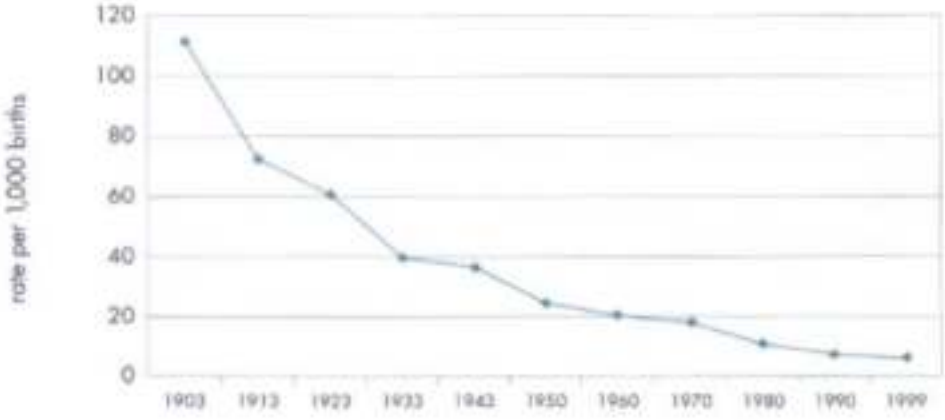


Sources: Yearbook, Australia (ABS Cat. 1301.0)
Causes of Death, Australia (ABS Cat. 3303.0)

Infant Deaths

While perinatal mortality says much about the health of parturient women, infant mortality (deaths of liveborn infants under one year of age) is indicative of the adequacy of the care babies receive, and of general levels of health in the community, particularly as regards infectious diseases, to which infants are especially, and more fatally, prone. Infant mortality is higher than for any of the other years of childhood and young maturity. The infant mortality rate (Figure 4.5) was very high by modern standards at the turn of the century—over 10% of infants died before they reached their first birthdays. This had fallen to 4% by 1933, to 2% by 1960, and to 0.6% by 1999. In the 1990s, a large number of these deaths were the result of external causes—accident and misadventure—rather than disease.

4.5 Infant Deaths 1903-1999
deaths before one year of age



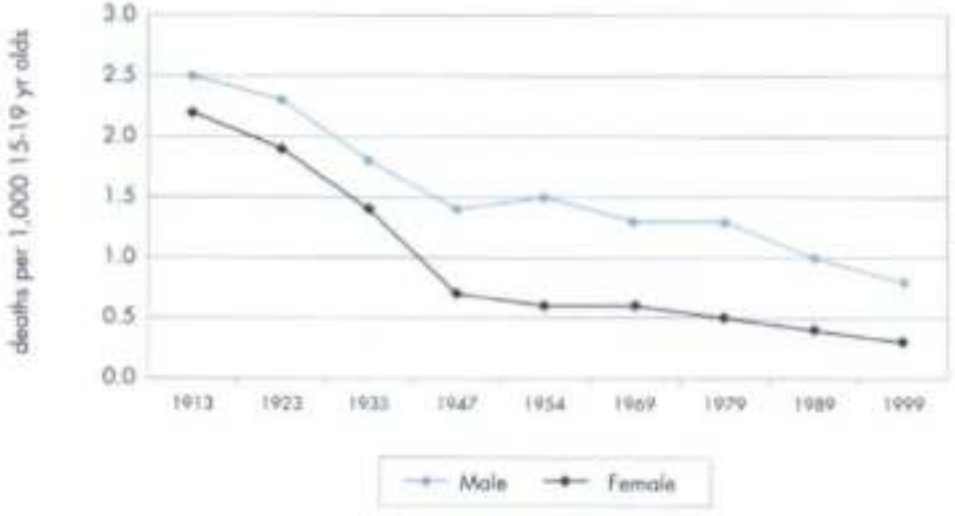
Sources: Yearbook, Australia (ABS Cat. 1301.0)
Deaths, Australia (ABS Cat. 3302.0)

15-19 Year Old Death Rates

The death rate for all age groups combined may conceal trends in particular age groups. Figure 4.6 shows the death rates for males and females in the age group 15-19 years, a pattern which is replicated in the age groups 20-24 and 25-29 years. It seems that the fall in death rates of young men and women during the first half of the 20th century has scarcely been maintained in the second. The male and female death rates drew sharply apart in the late 1940s, and have shown only modest signs of rapprochement. This pattern contrasts with death rates in boys and girls younger than 15, which have drawn closer over the past decade. This contrast suggests that in some way we have been failing our young males since the beginning of the century, as their mortality figures cease to make the same improvement as those for females. This failure appears to occur as males emerge from the care of the family with the onset of adolescence.

4.6 15-19 Year Old Deaths 1913-1999

males and females, deaths per 1,000 population



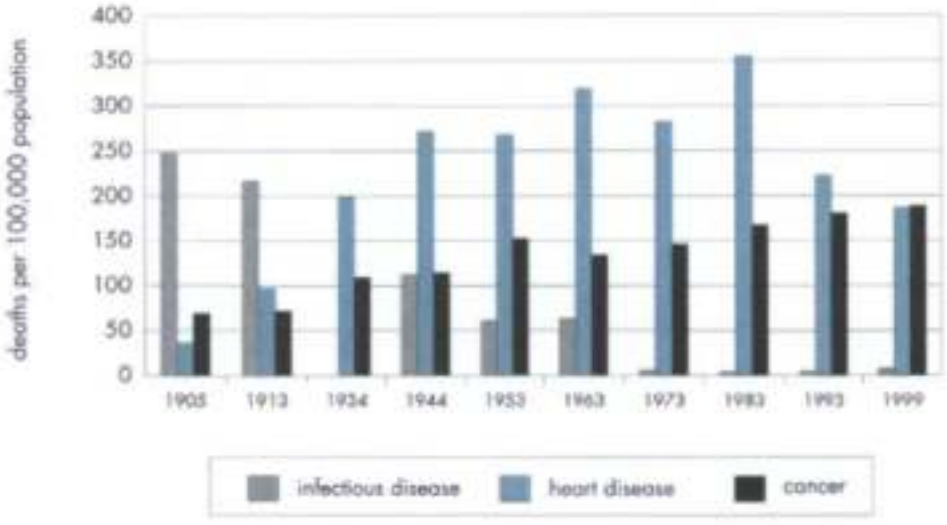
Source: *Australian Social Trends* (ABS Cat 4102.0)

Causes of Death

Figure 4.7 shows death rates (deaths per 100,000 population) from various causes: infectious (other than puerperal fever) and parasitic (such as malaria and Ross River Fever) diseases, from cancer and from heart disease, from 1905 to 1999, across the period of increasing life expectancy which we have already witnessed (Figure 4.1). As deaths due to infectious diseases declined in the course of the 20th century, deaths due to cancer and heart disease rose to be the major causes of death in Australia.

In 1905, there were about 250 deaths per 100,000 people from infectious diseases, and about 100 from cancer and heart disease combined. In 1999, the relative frequencies are reversed, with over 370 deaths from cancer and heart disease combined, and about 8 from infectious diseases. In 1905 a larger proportion of deaths were occurring in the older mature (40-64 years) and younger (less than 5 years) age groups, whereas in the 1990s, the majority occurred at age 65 or over. It therefore appears that in the course of the century we have moved from a large number of lives being cut short by infectious diseases to the majority of the population dying of what must be considered diseases of old age—heart disease and cancer. The National Heart Foundation suggests that that the marked decline in heart disease deaths between 1983 and 1993 is the result of an increase in awareness of the risk factors for heart disease, such as fatty diet and cholesterol level, created by campaigns initiated by the World Health Organisation, the National Heart Foundation and state health bodies. The influence of bypass surgery should not be underrated.

4.7 Causes of Death 1905-1999
infectious disease, heart disease and cancer



Source: Causes of Death, Australia (ABS Cat. 3303.0)

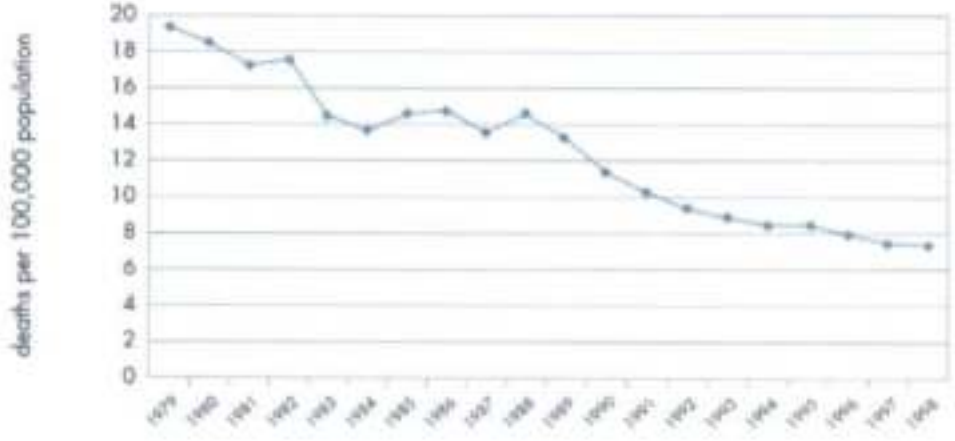
Motor Vehicle Accident Deaths

Figure 4.8 shows death rates due to motor vehicle accidents from 1979 to 1998. Motor vehicle deaths include the drivers and passengers of cars and motorcycles, but do not include cyclists and pedestrians.

The decline in motor vehicle deaths, despite a rise in ownership and usage, appears to be a triumph of interventionary regulation, especially the introduction of seatbelts and random breath testing for alcohol in the 1970s and 1980s. However, it is also possible that this decline would have occurred without such legislation because of developments in motor vehicle technology and safety. There was a levelling off in motor vehicle deaths in the 1990s, which supports the first explanation. The sex differential decreased between 1979 and the early 1990s, but has remained steady since then.

4.8 Motor Vehicle Accident Deaths 1979-1998

rate of deaths of drivers and passengers in motor vehicles (including motorcycles)



Source: National Injury Surveillance Unit, Flinders University (http://www.nisu.flinders.edu.au/data/)

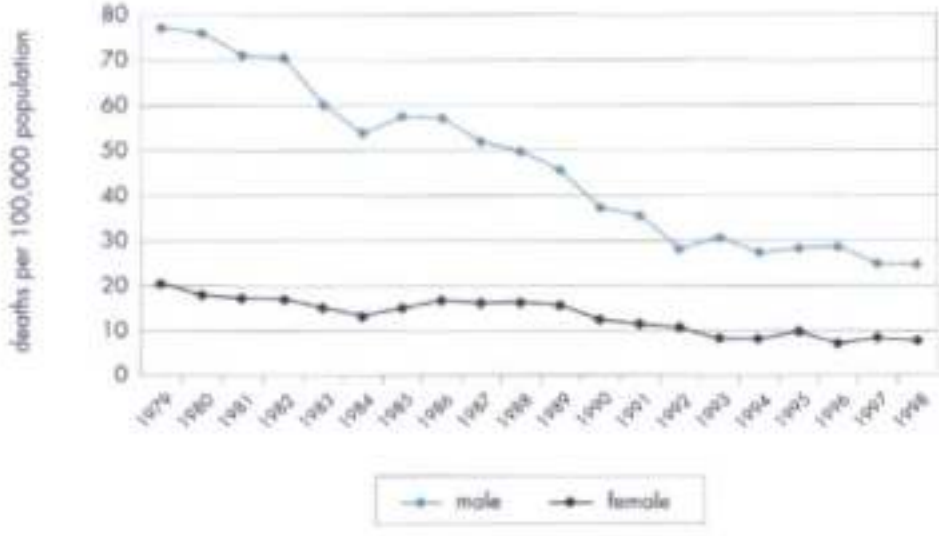
15-24 Year Old Motor Vehicle Deaths

Rates for motor vehicle deaths for 15-24 year old males and females show the same patterns of decline as those for the total population, with male rates having decreased by a factor of three over the period 1979 to 1998. Male rates fell from 77 per 100,000 15-24 year olds in 1979 to 25 in 1998, and female rates fell from 21 to 8.

The narrowing of the gap between male and female deaths is remarkable, but nevertheless, the male motor vehicle death rate in this age group is still three times higher than the female and double that of the total male population. It has been conjectured that some of these deaths might have been suicides but, if so, the proportion cannot be established.

4.9 15-24 Year Old Motor Vehicle Deaths 1979-1998

males and females, deaths per 100,000 population



Source: National Injury Surveillance Unit, Flinders University (http://www.nisu.flinders.edu.au/data/)

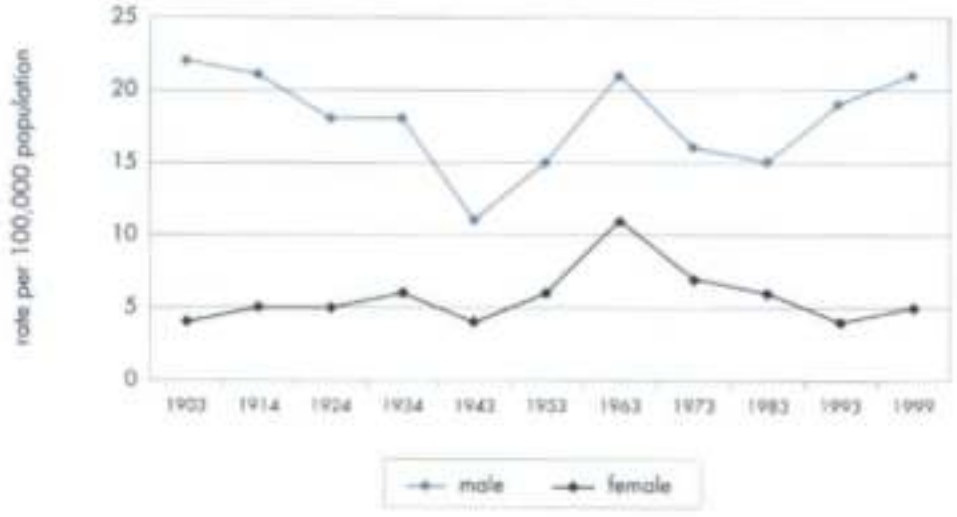
Suicide

Figure 4.10 shows suicide rates for males and females from 1903 to 1999. These have not shown the decrease evident in deaths that are responsive to medical and regulatory intervention and are no better at the end of the century than at the beginning. The rates for males have been higher than the rates for females throughout the century despite the decrease in the male rates to mid-century, with a marked decline in 1943, which may be attributed to the involvement of males in World War II. The large rise in the 1960s can be linked to the ready availability of barbiturates, which was corrected within the decade. From mid-century the rates for males and females showed similar trajectories to the period 1983 to 1993, when the rate for males turned sharply upwards while female rates continued to fall. A rise in the female rate occurred between 1993 and 1999, and the male rate continued its rapid rise. Male rates in 1999 were as high as at the beginning of the century, and female rates higher, despite the increased medical ability to reclaim lives.

Apart from during World War II, male suicide rates have fluctuated around 20 per 100,000 population across the century, while female rates, apart from during the barbiturate epidemic, have fluctuated around 5. Neither show convincing trends of increase or decrease, although the overall pattern for males is U-shaped, while for females, it is the reverse.

4.10 Suicide 1903-1999

males and females, age standardised rates



Sources: *Australian Social Trends* (ABS Cat. 4102.0)
Causes of Death, Australia (ABS Cat. 3303.0)

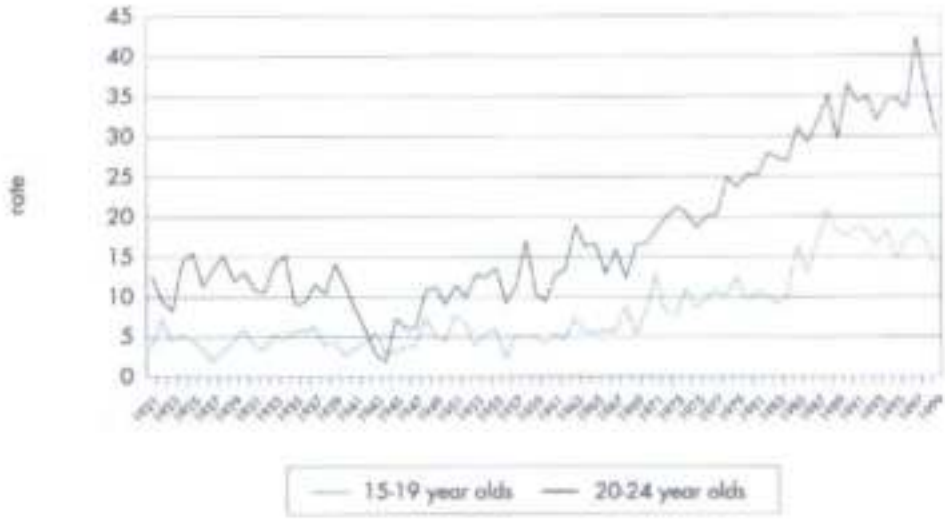
Youth Suicide

Figure 4.11 shows that suicides of young males rose steadily from the 1960s to the 1990s in both the 15-19 and 20-24 year age group, albeit with sizeable fluctuations, with higher rates in the latter group. In 1997, there was a sudden increase in suicides in the 20-24 age group, with 42 in 100,000 20-24 year old males taking their own lives. This sudden increase occurred after a seven year plateau from 1990 to 1996 of suicide rates around 32 to 36 per 100,000, to which the 1999 figure again fell.

Like males, females aged 20-24 have had a higher suicide rate than those aged 15-19 (Figure 4.12 overleaf). But unlike males, female youth suicide rates have fluctuated around 5 per 100,000 and have not exceeded 10 per 100,000 since 1921.

In 1999, 15-19 year old male suicide rates were three times higher than 15-19 year old females, and 20-24 year old male suicide rates were five times higher than the suicide rates of females in the same age group. The downturn in suicide rates in 1999, particularly for young males but also for young females, may reflect changes in classification.

4.11 Male Youth Suicide 1921-1999
rates per 100,000 15-19 and 20-24 year olds



Source: Unpublished data provided by Malinda Steenkamp, National Injury Surveillance Unit, Flinders University, 19 July 2001

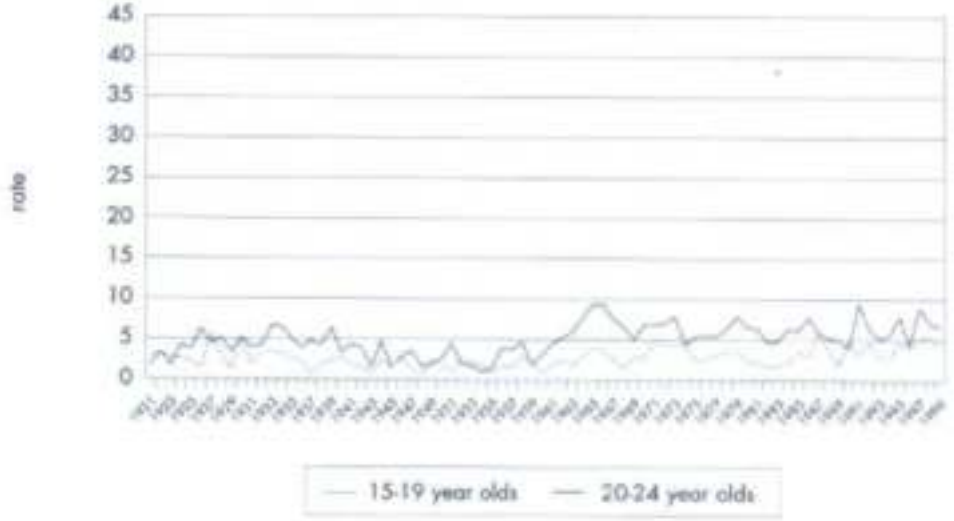
Although the 15-24 year old suicide rate is not, even now, higher than other male rates, its impact is in the life years lost, and the tragedy of young lives taken. Suicide is responsible for 22% of male deaths and 14% of female deaths in the 15-24 age group.

The high rates of suicide deaths among young males are currently attributed to two major factors. One is youth unemployment, which, like suicide, is higher in rural and remote areas. Young people who do not have the ambition and/or the means to move to urban centres to look for employment face the prospect of long-term unemployment, or in some cases a future struggling to make a living from their family's land. The second factor, the method of suicide, contributes to the large difference between both male and female suicides and rural and urban suicides. Males, especially those in rural areas, tend to choose more violent and irreversible methods of suicide such as firearms and explosives. Females are more likely to use slower methods such as carbon monoxide poisoning or drug overdose, the effects of which can be reversed if discovered in time. Affective disorders, especially depression, are major contributing factors in youth suicide.

Australian youth suicide rates are among the highest in developed countries, while suicides of elderly people are comparatively low. Comparisons should be treated with some caution, however, as methods and accuracy of reporting suicide deaths may differ between countries.

4.12 Female Youth Suicide 1921-1999

rates per 100,000 15-19 and 20-24 year olds



Source: Unpublished data provided by Malinda Steenkamp, National Injury Surveillance Unit, Flinders University, 19 July 2001

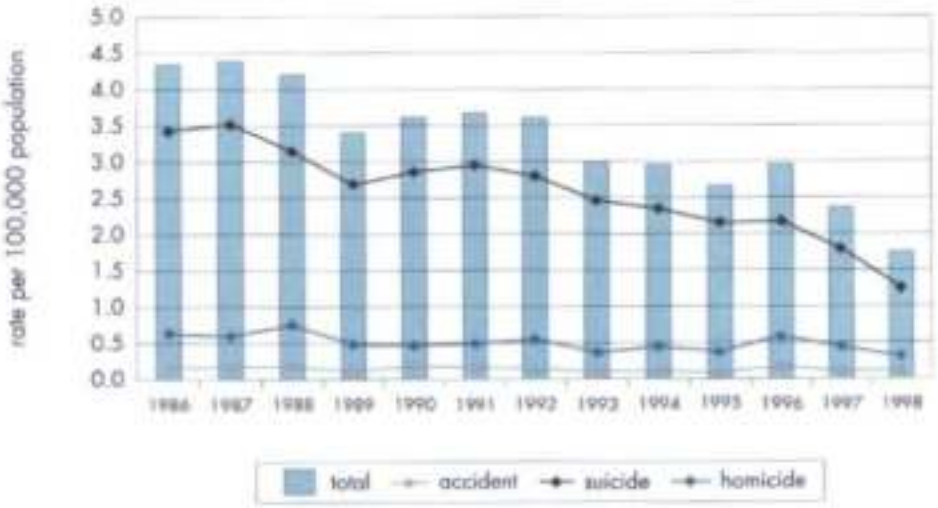
Firearm-Related Deaths

Figure 4.13 shows the rate of death caused by firearms in five categories in the period 1986 to 1998. The rates in all categories have decreased over this period. Death rates in the 'homicide' category show the most fluctuation. By far the largest category of deaths by firearms is suicide. It accounts for at least two to three times as many deaths as all other categories combined.

The gun 'buy-back' campaign and legislation outlawing semi-automatic firearms introduced after the Port Arthur massacre of 1996 seems to have had some effect on the number of firearm related deaths. However, since such deaths were already on a downward trajectory, this is difficult to confirm. The greatest decrease has been in suicides using firearms, but since it is not clear that overall suicide rates have decreased, it is possible that people have sought other means to take their lives in the absence of firearms.

4.13 Firearm-Related Deaths 1986-1998

accident, suicide, homicide and total*

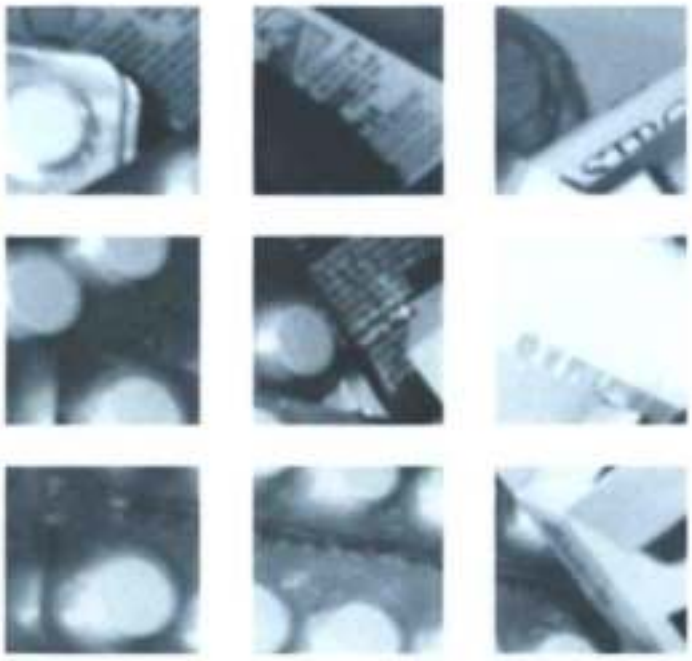


*total includes 'legal intervention' and 'unknown'

Sources: Australian Institute of Criminology publications:
Mukherjee, S. and C. Carcach, 1996, *Violent Deaths and Firearms in Australia: Data and Trends*
Mouzos, J. 1999, *Firearm-Related Violence: The Impact of the Nationwide Agreement on Firearms*
Mouzos, J. 2000, *Firearm-Related Deaths in Australia 1998*

Section 5

Health and Drugs



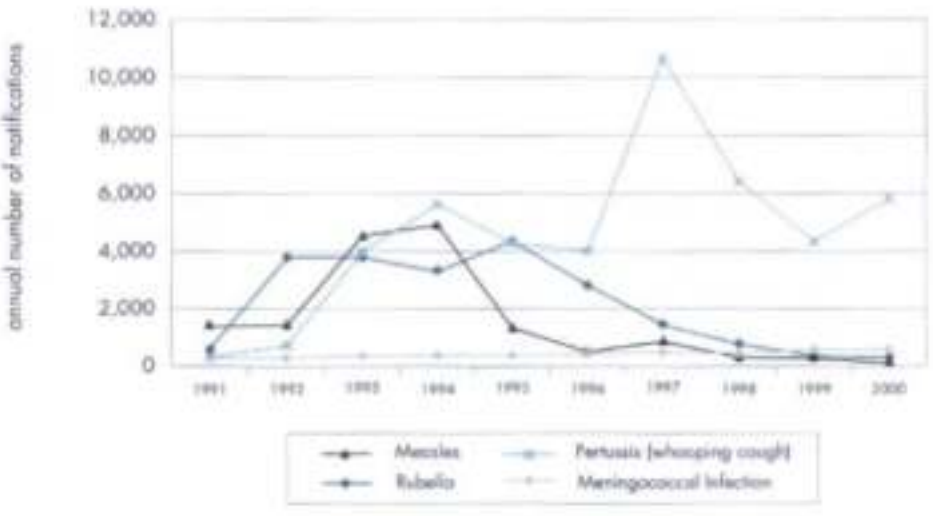
Notifications of Selected Diseases

In 1980, it seemed that the war on infectious diseases had, in developed countries, been won. But within the decade, new diseases and a resurgence of old ones showed that the relaxation of standards was premature. Although people in Australia are not yet dying in large numbers as a result of the resurgence of infectious or communicable diseases, an increase in infection rates is apparent. Figures 5.1a (below) and 5.1b (overleaf) show that incidence of some well-known infectious diseases rose considerably in the first half of the past decade, but in the latter half in most cases was brought under control again.

The rise in the number of notifications (number of infections, not deaths) of whooping cough (pertussis) confirms the importance of immunisation as a method of control. When the rate of immunisation lapsed due to concerns about side-effects, the disease re-established itself swiftly with an increase from 337 to 10,669 annual notifications between 1991 and 1997. Measles and rubella (german measles) notifications rose to mid-decade and then fell again in response to national immunisation campaigns. Meningococcal infections, although still at lower rates than other diseases, tripled in the decade from 1991 to 2000.

5.1a Notifications of Selected Infectious Diseases 1991-2000

measles, rubella, pertussis, meningococcal infection

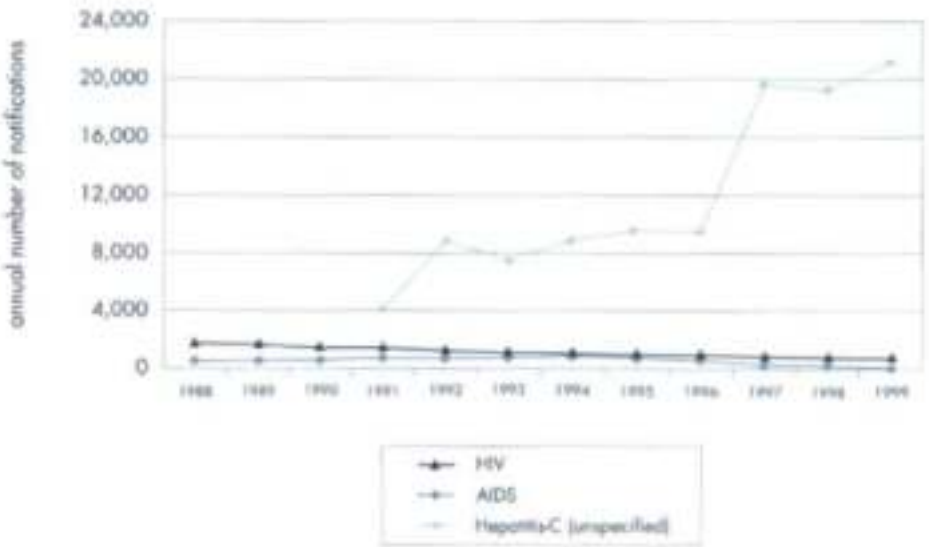


Source: Communicable Diseases Network Australia New Zealand, National Notifiable Diseases Surveillance System

Hepatitis-C, primarily a blood-borne disease which is most commonly transmitted through intravenous drug (IUD) use, increased five-fold in the period from 1991 to 2000. The increase in Hepatitis-C notifications appears to be associated with needle-exchange programmes. New reports of HIV (human immunodeficiency virus) have decreased annually from a peak of 2500 diagnoses in 1988 (Figure 5.1b). It is thought that HIV infection usually progresses to AIDS (acquired immunodeficiency syndrome) whereby the body succumbs to an array of infections which the weakened immune system cannot withstand. AIDS diagnoses rose in the mid-1990s as the earlier cases of HIV developed into AIDS, followed later by a decrease in AIDS diagnoses in response to the falling rate of HIV infection. The most common form of HIV transmission is by male homosexual activity, accounting for 85% of known infections.

5.1b Notifications of Selected Infectious Diseases 1988-1999

HIV, AIDS and hepatitis-C



Source: Communicable Diseases Network-Australia New Zealand, National Notifiable Diseases Surveillance System

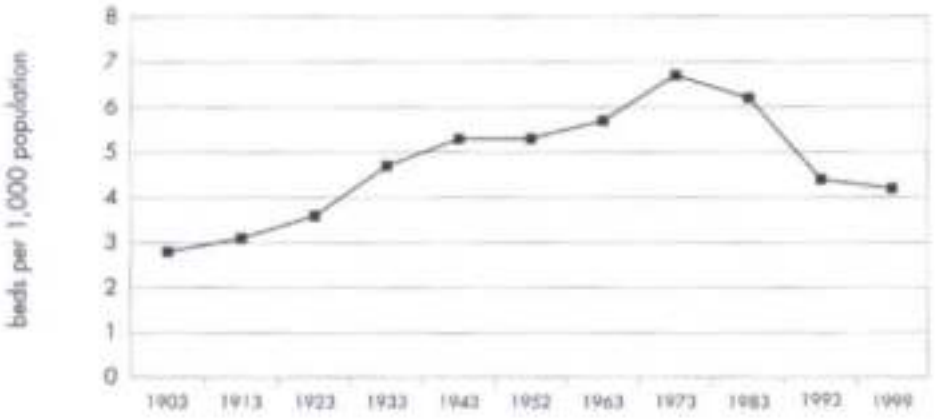
Hospital Beds

Public criticism of the efforts of the government in health care is largely associated with the functioning of its major health care institutions, the hospitals. Figure 5.2 shows the supply of hospital beds from the turn of the century to 1999.

There are five phases in the series: first a period of steady expansion up to the 1940s, a period of stability and another phase of expansion, followed by a sharp decline and then a levelling. During the 1970s, the capital and running costs of hospitals increased dramatically (far beyond the CPI) and this pressure forced the levelling off and ultimately the reduction in the supply of beds while population growth continued. To cope with a reduced ratio of beds to population, hospitals have increased the throughput of patients, and admissions have been rising despite fewer beds being available.

Between 1989 and 1999 the average length of stay fell from 5.9 to 3.9 days, and the number of hospital beds per 1,000 population decreased by 20%. During the same period, the rate of admissions increased by 30%.

5.2 Hospital Beds 1903-1999
available beds per 1,000 population



Source: *Australian Social Trends* (ABS Cat. 4102.0)

Medical Practitioners

General practitioner care is the front line, and a major part, of our health care system. Figure 5.3 shows that the number of general and specialist medical practitioners per 100,000 population increased substantially from the early decades to the end of the century. In 1911, there were 88 doctors per 100,000 population. By 2000, this had more than tripled to 291 doctors per 100,000 population. The greatest increase has been in specialist practitioners, particularly in the 1980s and 1990s.

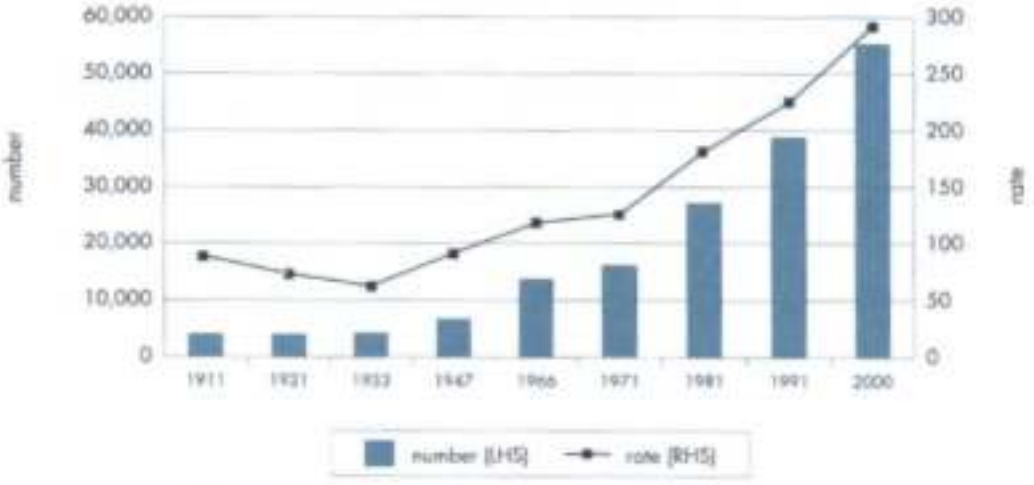
This general trend conceals the differences in the number of doctors proportional to population by geographical area.

Medical Practitioners per 100,000 Population, by Region, 1998

Capital city	Other large metro	Large rural centre	Small rural centre	Other rural area	Remote area
314.0	241.2	266.9	154.3	91.1	105.2

Source: Australian Institute of Health and Welfare, *Medical Labour Force 1998*, Appendix 7, Table 27

5.3 Medical Practitioners 1911-2000
general and specialist, number and rate per 100,000 population



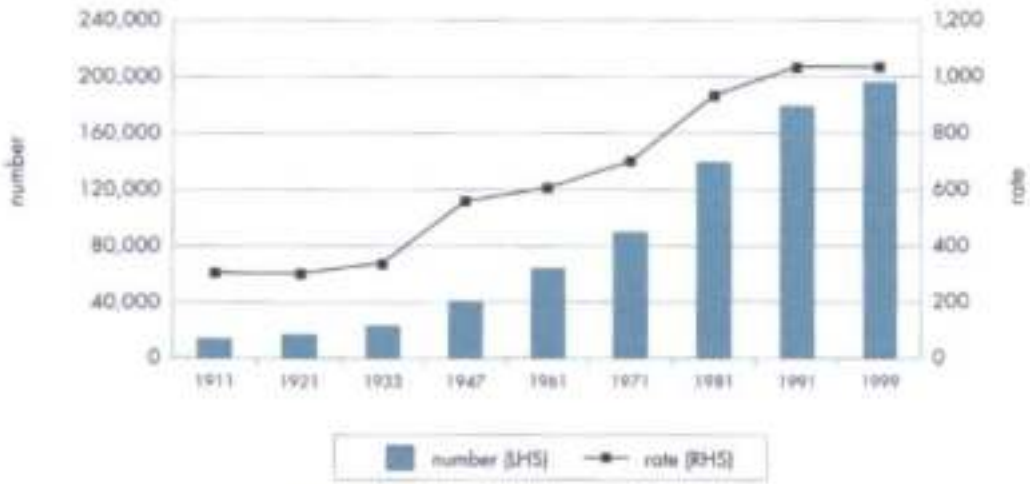
Sources: *Census Detailed Statistical Tables 1911-1961* (ABS)
Characteristics of Persons in Health Related Occupations, Australia (ABS Cat. 4346.0)
Yearbook, Australia (ABS Cat. 1301.0)

Nurses

The number of registered and enrolled nurses per 100,000 population kept pace with the rate of increase of doctors up until the 1990s, when it levelled off. Many hospitals are now experiencing shortages, and are having difficulty finding nurses to fill available places in the following areas in particular: operating theatre, critical/intensive care, neonatal intensive care, accident/emergency, cardiothoracic, midwifery and mental health.

Nursing employment in rural areas is well above that of other health professions. In 1996, nurse employment per 100,000 population in large rural centres (1,705), small rural centres (1,363) and remote centres (1,220) exceeded that of capital cities (1,183). However, a much larger proportion of nurses outside capital cities and large rural centres were enrolled nurses—around 30% in small rural centres and other rural and remote areas, as compared to 17% in capital cities. An enrolled nurse has lower minimum educational qualifications (one year diploma) than a registered nurse (three year degree). (*Nursing Labour Force 1998*, AIHW).

5.4 Nurses 1911-1999
registered and enrolled, number and rate per 100,000 population



Sources: *Census Detailed Statistical Tables 1911-1961* (ABS)
Characteristics of Persons in Health Related Occupations, Australia (ABS Cat. 4346.0)
Nursing Labour Force 1999: Preliminary Report (Australian Institute of Health and Welfare)

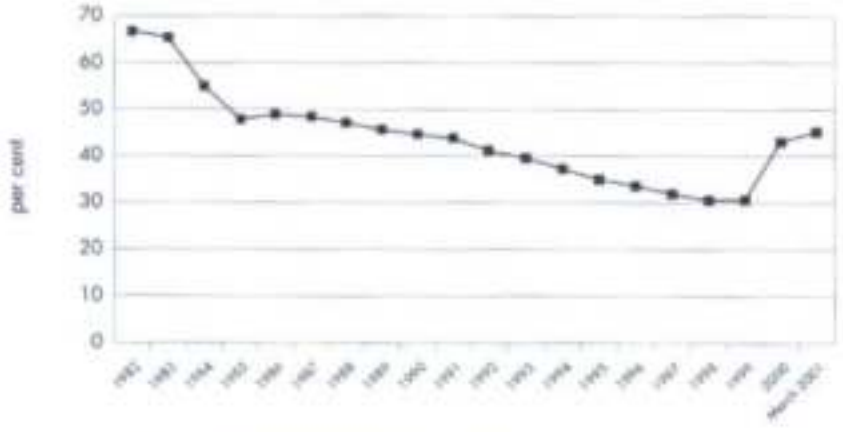
Private Health Insurance

The National Health Act of 1953 required that private health funds (insurers) accept all applicants, and offer policies at the same rate to all applicants regardless of age, race, sex, benefits claimed, or family size. This means that low-risk groups (the young) face higher premiums than their health risks justify, while high-risk groups (the aged), paying the same premium, are effectively subsidised by the young. There are therefore strong incentives for low-risk individuals to abandon private health insurance, if there is an alternative, leading to higher premiums for those who remain in the funds, and an incentive for them, too, to use an available alternative. This became possible when public health schemes were introduced, first as Medibank in 1974, and then Medicare in 1984.

The percentage of the population with private health insurance fell from 67% in 1982, before the introduction of Medicare, to 48% in 1985, a few years after. This had dropped to 32% in 1998 (see Figure 5.5). Other common reasons for opting out of health insurance include the hidden 'gaps' in coverage and an absence of advantage for private patients, who in many cases receive the same treatment as in the public system. To combat the decline in private coverage, new membership categories were introduced in 1996 to replace the two existing categories—single and family. The new categories provide coverage specific to the needs of young single people, couples without children, couples with dependent children and sole parents. Additional (and apparently more successful) measures are the recent 30% rebate on membership premiums, as well as the 30 June 2000 deadline for avoiding age-incremented premiums for over-30s. Whether this increase is sustainable remains to be seen.

5.5 Persons with Private Health Insurance 1983-1999

per cent of population



Sources: Australian Social Trends (ABS Cat. 4102.0)
Private Health Insurance Administrative Council, Quarterly Coverage Statistics (www.phiac.gov.au)

Mental Health of Adults

There are no recent time series of statistics showing the prevalence of diagnosed mental disorders in the population for comparison with the increase in the prescription of psychoactive medication. The most recent information comes from the ABS's National Survey of Mental Health and Wellbeing of Adults in 1997, involving 10,600 people aged 18 years or more.

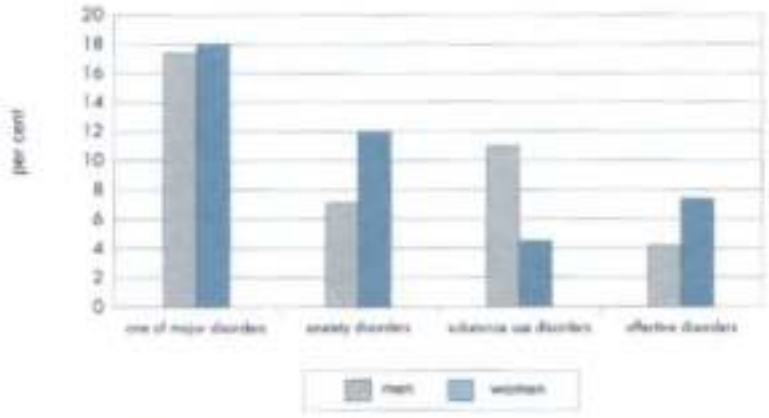
Figure 5.6 shows the percentage of the adult population who had experienced symptoms of one of the major mental disorders in the 12 months previous to the 1997 survey. Some 17% of adult men and 18% of adult women had experienced one of the major psychological disorders (anxiety, affective or substance-use disorders) in the previous 12 months.

The highest prevalence of anxiety disorder symptoms was found among women aged 45-54 (16%). The highest prevalence of substance use disorder symptoms was found among men aged 18-24, with one in five men in this age group (20%) suffering from this condition. Alcohol abuse was three times more prevalent than any other substance use disorder. Affective disorder symptoms were most common among women aged 18-24 (11%). Among affective disorders, the most common was depression, accounting for 92% of women's and 83% of men's affective disorders.

Some sociologists and psychologists stress the importance of social interaction and family support in maintaining psychological health and a sense of well being, so increases in recent years in the numbers of single households, of divorces and separations, and delayed marriages may play a part in the rise of prescriptions to combat these disorders. The rate of daily usage of prescribed psychoactive medication is still much lower than the prevalence or symptoms—roughly one in 23 adults (aged 18 years or more) versus one in five adults (4% vs 20%).

5.6 Mental Health of Adults 1997

per cent of men and women



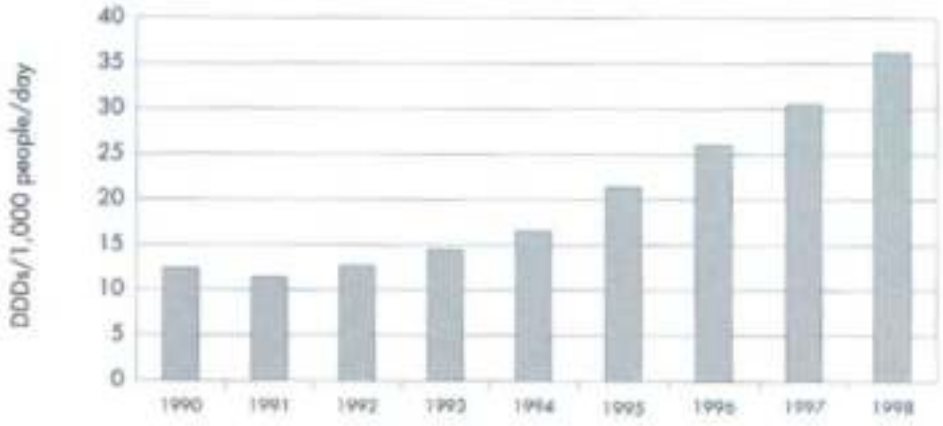
Source: Mental Health and Wellbeing Profile of Adults, Australia (ABS Cat. 4326.0)

Antidepressants

Depression and anxiety are affective (mood) disorders which are commonly treated by medication. Depression is experienced as a lack of energy, concentration and disturbances of sleep and appetite. Anxiety disorders are experienced as nervousness, tension and distress. For these symptoms to be diagnosed as a clinical condition requiring medication, they must be experienced as persistent and severe enough to impair daily functioning.

The number of anti-depressants prescribed in 1997 was two and a half times greater than in 1990, rising from 1,240 to 3,050 defined daily doses per 100,000 population; that is, from average usage by one in 80 people to one in 30. Prescriptions of anti-psychotics increased only marginally in the same period. Increasing concern about depressive disorders resulted in the formation of 'Beyond Blue' in 2000, a government funded organisation designed to promote awareness of and research into the causes and effects of depression.

5.7 Antidepressants 1990-1998
defined daily doses per 1,000 population



Sources: Australian Statistics on Medicines (Australian Institute of Health and Welfare) Drug Utilisation Sub-Committee, Commonwealth Department of Health and Aged Care

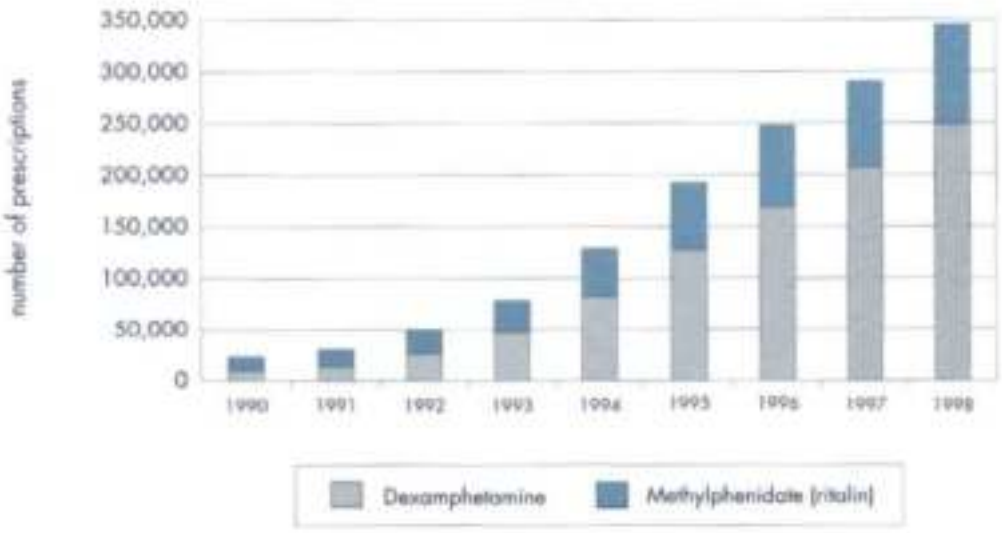
ADD/ADHD Medication

In recent years, Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD) have been diagnosed increasingly in children who are perceived to be severely inattentive, impulsive or hyperactive compared with other children of the same age. Diagnosis depends upon medical practitioners' interpretations of individual cases brought to their attention by concerned parents or others. There is no objective test to classify the existence or severity of the condition.

Figure 5.8 shows that there has been a remarkable 14-fold increase in the prescription of medication for these disorders since 1990. Prescriptions of dexamphetamine have increased 25-fold. The Australian Medical Association has voiced concerns that many children are being wrongly diagnosed as suffering from these disorders and are taking the relevant drugs (mostly amphetamines) unnecessarily, with some attendant risks from sustained use.

The recent Survey of Child and Adolescent Mental Health estimated prevalence of ADHD at 15% of boys and 7% of girls aged 4-17 years. ADHD was most prevalent (20%) among younger boys (aged 6-12) and boys in single parent and low income families.

5.8 ADD/ADHD Medication 1990-1998
annual number of prescriptions



Sources: Australian Statistics on Medicines (Australian Institute of Health and Welfare) Drug Utilisation Sub-Committee, Commonwealth Department of Health and Aged Care

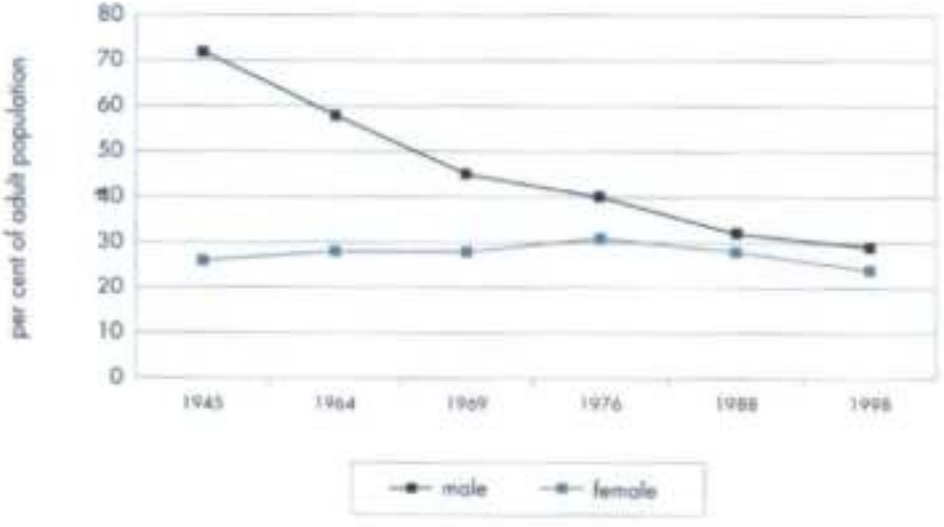
Tobacco Use

Figure 5.9 shows population estimates, based on surveys, of the proportion of the population aged 20 years or more who are current smokers. Lifetime prevalence trends (whether a person ever smoked tobacco regularly) would certainly be higher.

A major decrease, from 70% to 45%, which involved males only, occurred in the 1960s, following the establishment by Professor Richard Doll of Oxford University of an epidemiological link between smoking and death from heart disease and lung cancer in British doctors. The succeeding two and a half decades have seen a further 15% decrease to bring the male rate to 29% in 1998. The rate for adult females was less than 30% at the beginning of the period shown, and actually rose slightly in the 1970s, during a period when the male decrease steadied, but had fallen again by the early 1990s to below its original level.

5.9 Tobacco Use 1945-1998

per cent of adult population who currently smoke tobacco



Sources: *Patterns of Drug Use 1985-1995*, National Drug Strategy, Commonwealth Department of Health and Family Services
National Drug Strategy Household Survey 1998 (Australian Institute of Health and Welfare)

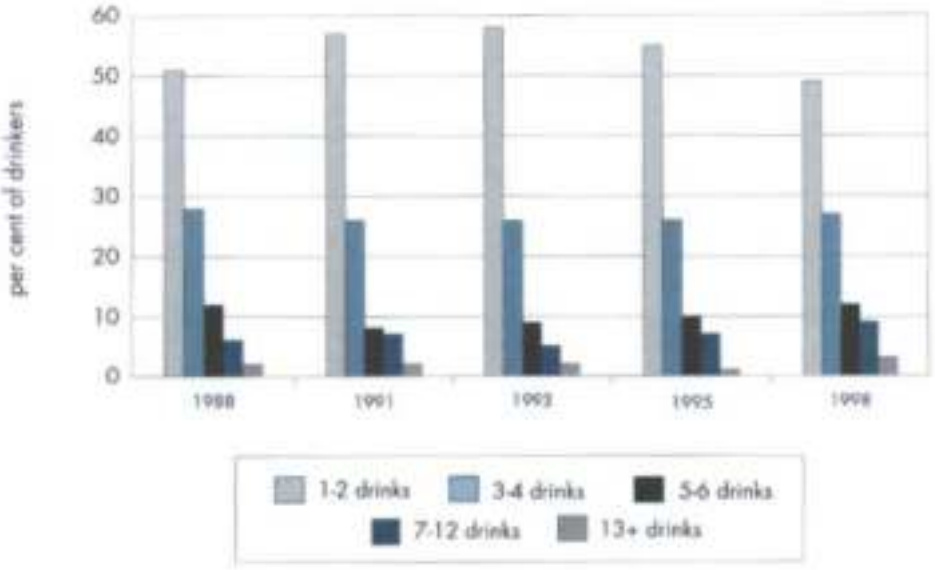
Alcohol Use

Figure 5.10 is based on survey (not population) statistics, and shows self-reported drinking habits of a sample of people 20 years of age or older.

Research has shown that 1-4 drinks a day in adults can be beneficial to health, decreasing the risk for heart disease compared with non-drinkers' risk, but that more than 6-7 drinks per day is harmful to health. The figure indicates that the majority of drinkers—about 78%—had consumed only 1-4 drinks in a day across the period 1988 to 1998. There was a small increase in the heavy drinking range (7 or more drinks) in 1998, and the incidence of extreme binge drinking was higher than in previous years.

Note that these figures do not indicate the percentage of non-drinkers, nor the percentage of days for each category of drinkers in which alcohol was not consumed at all. They do, however, suggest that a larger proportion of drinkers are consuming alcohol in the range considered 'heavy drinking' than in previous years

5.10 Alcohol Use 1988-1998
drinks consumed on usual drinking day



Source: *National Drug Strategy Household Survey 1998* (Australian Institute of Health and Welfare)

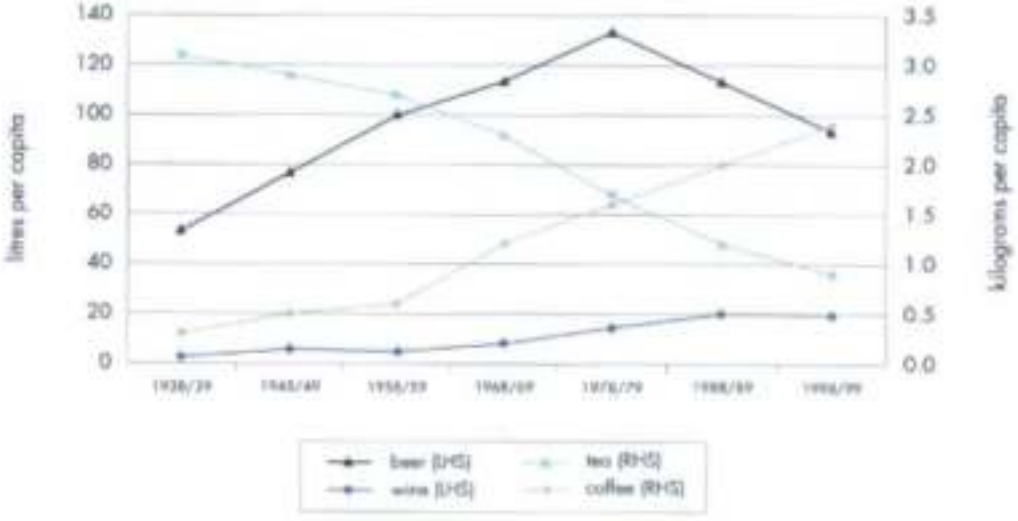
Consumption of Beer, Wine, Tea and Coffee

Figure 5.11 depicts the annual average per capita consumption of beer, wine, tea and coffee in Australia from 1938/39 to 1998/99. Consumption of beer increased dramatically between 1938/39 and 1978/79, firstly as it replaced spirits in common usage and then as part of a general increase in alcohol consumption. It has decreased equally dramatically since 1978/79, without a commensurate increase in wine consumption, which suggests a return to drinking spirits. Pre-mixed spirits have become increasingly prevalent in recent years. Wine drinking increased slowly across most of the period, particularly in the decades of the 1970s and 1980s but has fallen slightly in the 1990s. Wine has two to three times the alcoholic content of beer.

Tea and coffee consumption have reversed in popularity over the period, with tea consumption in 1999 only a third of that in 1938/39, and coffee consumption showing an eight-fold increase in the same period. The changes in preference may be due to European and American influence in the post-war years. Asian migrant tea drinking has not reversed the decline in consumption of tea.

5.11 Consumption of Beer, Wine, Tea and Coffee 1939-1999

litres per capita of beer and wine,
kilograms per capita of tea and coffee



Source: Yearbook, Australia (ABS Cat. 1301.0)

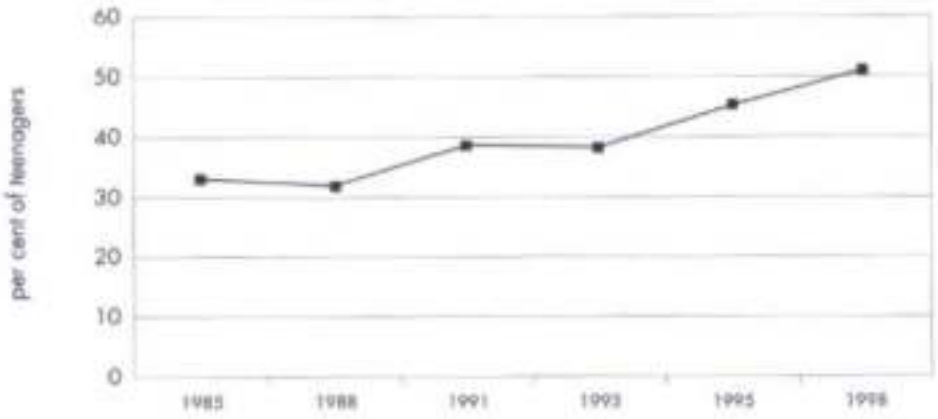
Illicit Drug Use by Teenagers

The problems inherent in collecting data on illicit drug use (for example, honest answers to questions concerning illegal behaviour, concerns about confidentiality) mean that estimates of usage are less than completely reliable. In Australia, population drug-use prevalence is inferred from responses to surveys completed by samples of the population, and estimates have the usual problems of sample studies.

Figure 5.12 shows data on illicit drug usage drawn from a series of Household Surveys conducted as part of the National Drug Strategy. These took the form of self-report surveys completed by a random sample of the population. The 1985 survey was administered by interview. After running a parallel interview and sealed booklet survey in 1988, the latter was judged to be supetior and hence was used in each of the later surveys. Therefore 1988 is probably a better baseline figure. A major disadvantage is that it reports 'ever used' figures, which may represent as little as one puff of marijuana, which is scarcely a significant index.

Figure 5.12 shows that the percentage of teenagers who had ever used an illicit drug rose from 33% in 1985 to 51% in 1998, an increase of 55%. Marijuana was the most commonly used illicit drug, with 45% of young people aged 14-19 having ever used, and 35% having recently used (in last 12 months), marijuana in 1998.

5.12 Illicit Drug Use by Teenagers 1985-1998
per cent of 14-19 year olds who have ever used an illicit drug



Sources: *Progress of the National Drug Strategy: Key National Indicators*, Commonwealth Department of Health and Family Services, Canberra.
National Drug Strategy Household Survey 1998: First Results (Australian Institute of Heath and Welfare)

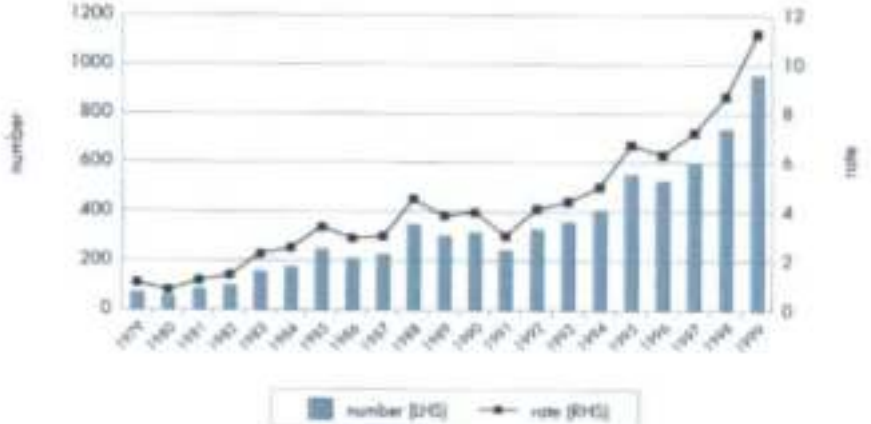
Opioid Overdose Deaths

Figure 5.13 shows the number and rate of deaths attributed to opioid overdose from 1979 to 1999, published by the National Drug and Alcohol Research Centre (NDARC). Opioids are the decomposed elements of both heroin and methadone. Therefore, when they are detected in the blood post mortem, blood toxicology cannot distinguish which of the two drugs was used (or if both).

The increase in opioid overdose deaths over the period 1979 to 1999 is statistically significant, with a major increase in the last five years. The death rate per 100,000 population was 1.1 in 1979, rising to 4.5 in 1988, and to 11.3 in 1999. It is difficult to establish whether the number of overdoses has simply increased with the number of users because the illegality of heroin use generates inaccurate reporting. Longitudinal studies report annual mortality between 1% and 3% among dependent opioid users. If this rate is stable then the number of users has increased at the same rate as the number of deaths.

NDARC suggest that risky injecting behaviour and poly-drug use are major factors in overdose deaths. If the current practice of older users is replicated among younger users, we will face another epidemic of overdose deaths in 10 to 15 years. The current 'epidemic' shows no sign of deceleration. The overdose mortality rates provide no evidence of any positive effect of the current drug strategy of harm minimisation, and rather provide evidence to the contrary. Given the spread of Hepatitis-C among injectors, harm minimisation programmes such as free needle exchanges and 'shooting galleries' also appear to be ineffectual in preventing the spread of blood-borne diseases.

5.13 Opioid Overdose Deaths 1979-1999
number and rate of opioid overdose deaths
per 100,000 population aged 15-44



Sources: Trends in Opioid Overdose Deaths in Australia 1979-1995 (National Drug and Alcohol Research Centre)
National Drug and Alcohol Research Centre web data
(www.med.unsw.edu.au/ndarc/questions/overdosestats.htm)

Section 6

Education

State and Non-Government School Students

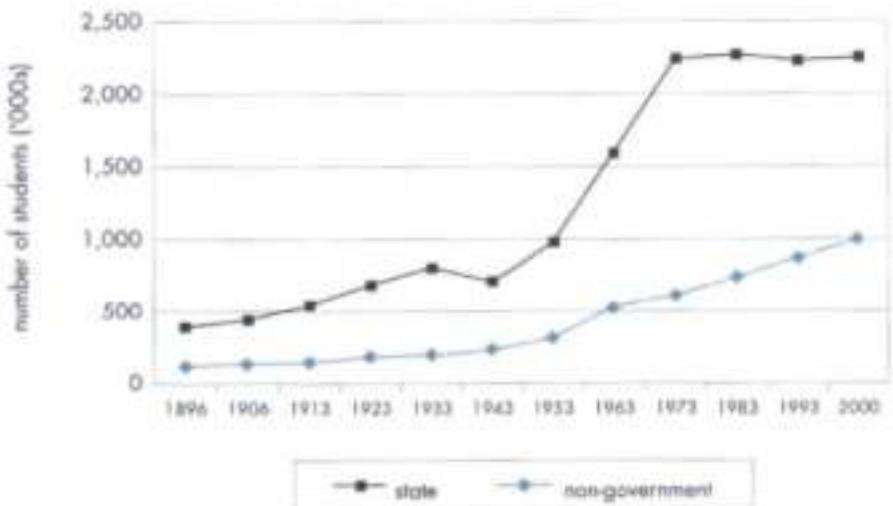
School education was initially a states' affair, but since the 1970s the Commonwealth has increasingly exerted pressure on education policy, via its control of funding, in the ongoing expansion of the Commonwealth role in social matters.

Universal free primary education (originally reaching into the early teenage years) was established in the Australian states in the latter decades of the 19th century. The very steep increase in pupil numbers from 1943 to 1973 is the result of a sharp rise in the proportion of children in the population coinciding with an extension of compulsory education. Under the new system, primary schooling ended before the teenage years, while secondary education was extended to the mid-teens and became compulsory. The levelling in pupil numbers in the last two decades reflects the decline in the school-age population, with the upturn in the last decade (seen only in private school numbers) due primarily to increased retention in the final years of secondary school.

The percentage of pupils in private schools remained between 20% and 25% until the 1990s, but exceeded 30% in 2000.

6.1 State and Non-Government School Students 1896-2000

thousands of students



Sources: Yearbook, Australia (ABS Cat. 1301.0)
Schools, Australia (ABS Cat. 4221.0)

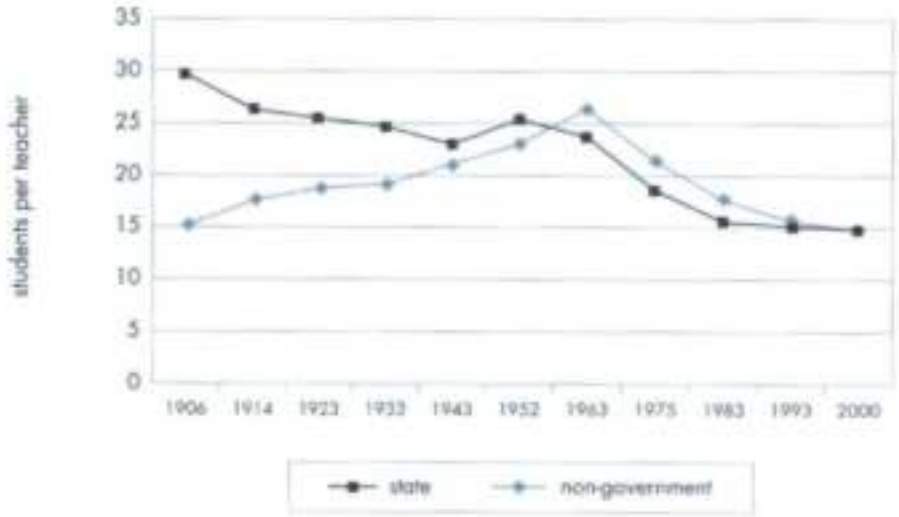
Students per Teacher

Figure 6.2 shows the number of pupils per teacher in state and private schools from 1906 to 2000.

The progress of teacher:pupil ratios has been very different for private as compared with state schools. In 1906, state schools typically had twice as many pupils per teacher as private schools (30 compared with 15). While state schools' teacher:pupil ratios fell markedly in the first half of the century, private schools' teacher:pupil ratios rose equally markedly. By 1943, the two ratios were almost equal (23 pupils per teacher for state schools, 21 for private schools). By 1963, state schools had fewer pupils per staff member than did private schools, and they maintained their advantage as ratios fell in both sectors, until the two converged at 15 pupils per teacher in 1994 (where they remain in 2000), the level at which private schools began. Thus the preference for private schools in the 1990s, and their better educational outcomes, cannot be attributed to advantages in teacher:pupil ratios.

Within wide limits, it now appears that class size has little effect on the quality of education and that teacher quality is more important. State government legislation excludes much information on school performance under the Freedom of Information Act. As a result, there is no feedback of teacher and school performance, and parents are denied informed choice.

6.2 Students per Teacher 1906-2000
state and non-government schools



Sources: Yearbook, Australia (ABS Cat. 1301.0)
Schools, Australia (ABS Cat. 4221.0)

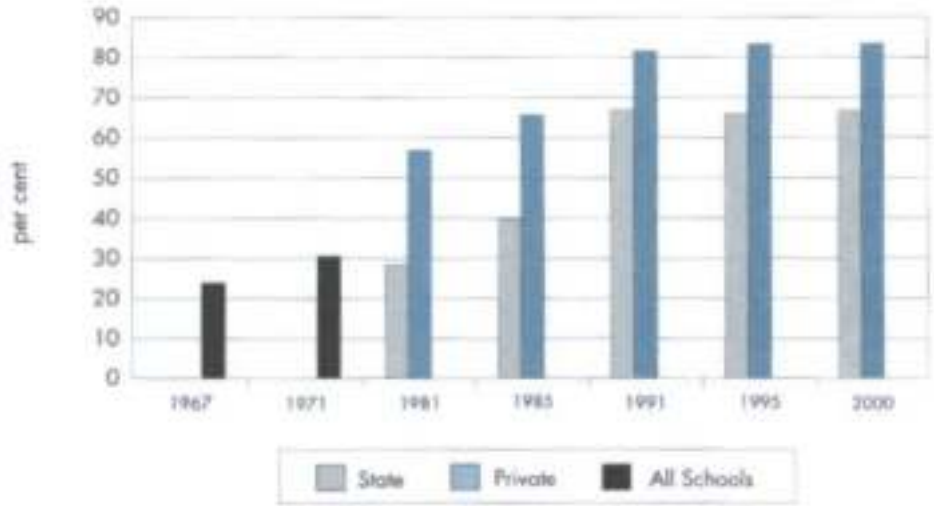
Year 12 Retention Rates

Figure 6.3 shows apparent retention rates to Year 12 in Australian schools between the years 1967 and 2000. From 1981 to 2000, retention rates for state and non-government school are shown separately. The rates are the proportion of first-year high school students (Year 7 in some states and Year 8 in others) who went on to Year 12.

Retention to Year 12 was low in 1967 (only 24%) and was still only 29% in state schools and 57% in non-government schools in 1981. Retention to Year 12 more than doubled in state schools and increased by 50% in non-government schools between 1981 and 1991 as part of a government policy to combat youth unemployment. Thereafter, retention rates declined slightly in state schools and increased slightly in non-government schools. Some part of this effect may be due to state school students transferring to private schools for Years 11 and 12.

Retention rates are higher for girls than for boys. In 2000, the apparent retention rate from Year 7 to 12 was 79% for girls and 66% for boys.

6.3 Year 12 Retention Rates 1967-2000



Source: Schools, Australia (ABS Cat. 4221.0)

Maths and Science Performance of Year 8 Students

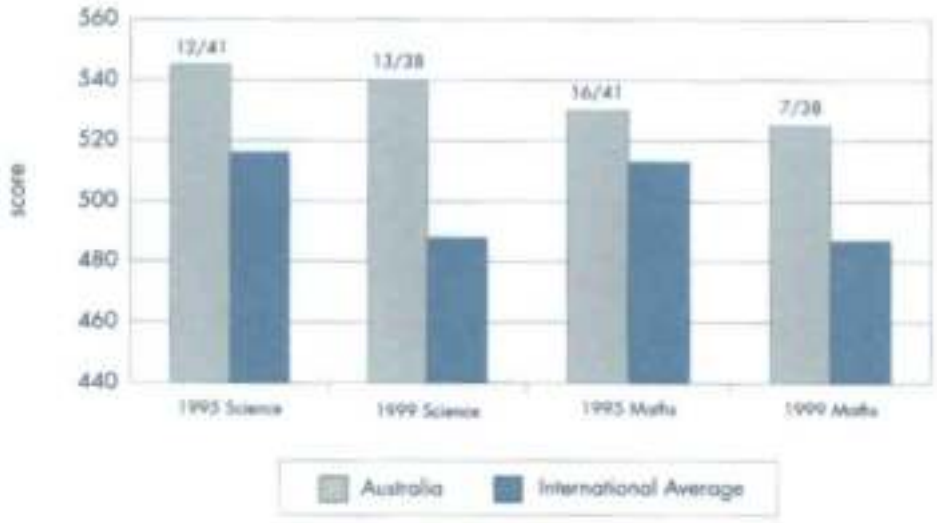
Pupil attainment, or the outcomes of education, is not treated in the *Yearbooks*, and is virtually undocumented in official reports of the last decade.

The International Association for the Evaluation of Educational Achievement (IEA) has conducted a series of comparative international surveys of primary and secondary student maths and science skills since 1959. The most recent of these, the Third International Maths and Science Study (TIMSS) was conducted in 1994-95 using more than half a million students in 45 countries.

Figure 6.4 depicts Australia's performance in the study, showing Australia's score in comparison with the international average score, as well as Australia's ranking out of the participating countries. The consistent top maths and science performers were Korea, Singapore, Japan and Taipei, with the Netherlands and Hungary also occupying high positions. Nevertheless, Australia is consistently higher than the international average, and higher than the United States and United Kingdom.

6.4 Maths and Science Performance of Year 8 Students 1995 & 1999

Australia's score and rank, international average score



Source: *Third International Maths and Science Study*, International Association for the Evaluation of Educational Achievement

Students with Special Needs

The Productivity Commission's *Report on Government Services* (SCRCSSP 2000) provides statistics on the number of children who are classified as having 'special needs'. They include students from families with a low socioeconomic status (SES); students who are geographically isolated; students from a language background other than English (LBOTE); Indigenous students; and students with a disability.

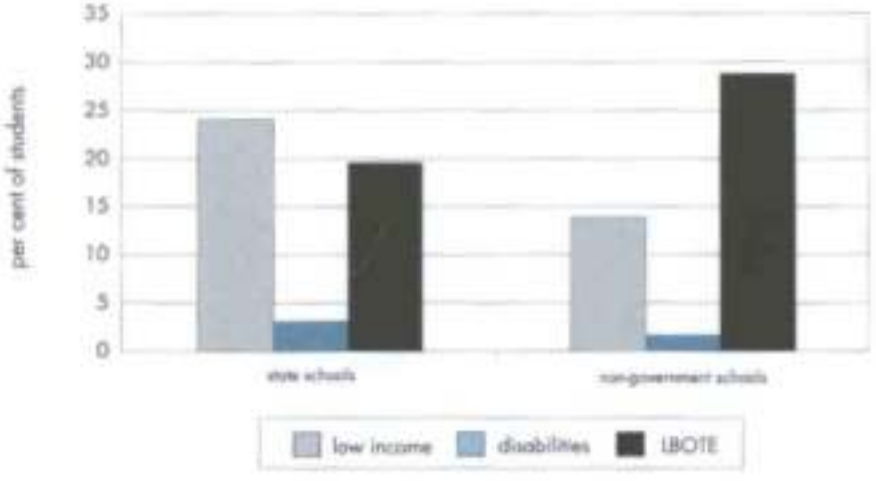
Socioeconomic status is an index of household income, parental occupation and parental education. No data comparing school sectors on this index is available, but this may change with the introduction of the new, SES-based, non-government schools funding mechanism. Household income figures from the most recent Census of Population and Housing (1996), however, provide some information about families in state and non-government schools.

Public schools presumably serve the majority of children in rural and isolated areas, although there are no statistics published in the usual sources to confirm this. In many cases, however, isolated students are home-schooled, either with or without state government distance education programmes, or they are sent to non-government schools with boarding facilities.

The Productivity Commission report provides figures for the last three categories of special needs. By combining the state and territory figures to get national figures, we see that the total proportion of students identified as having special needs is higher in the non-government sector. Indigenous students are not a separate category in Figure 6.5 as they are included in the LBOTE category under the Commonwealth's definition.

6.5 Students with Special Needs 1996

per cent of students in state and non-government schools



Source: *Report on Government Services 2000*, Steering Committee for the Review of Commonwealth/State Service Provision, Productivity Commission

Expenditure per Student in State and Non-Government Schools

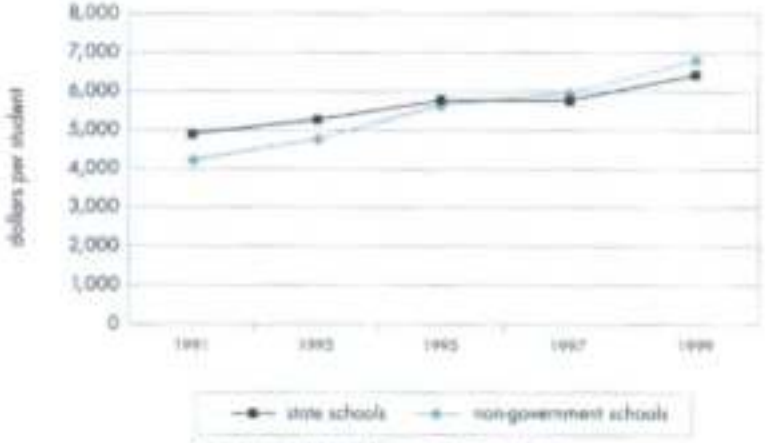
Figure 6.6 shows the average expenditure per student in government and non-government schools. For state schools, this represents government funding only and does not include income raised from other sources, such as fundraising and fees. For non-government schools, these figures include funding from all sources—government and private.

In the financial year 1998-99, expenditure per student was $6,425 for state (or 'government') schools and $6,777 per student for private (or 'non-government') schools. The official figures for government schools for 1991 to 1995 do not take into account the expenses incurred by superannuation and long-service leave, whereas the non-government school figures do. Ken Gannicott, in the policy monograph *Taking Education Seriously* (The Centre for Independent Studies, 1997) estimates this would amount to almost 15% on top of the official figure for government schools. The figures for these years have been adjusted accordingly. For 1997 and 1999, superannuation is included, but there are other expenses not taken into account in the state schools figures, such as payroll tax and long service leave.

'User cost of capital'—the cost to the government of not using the land and other assets associated with state schools for other purposes—is not included in the government school figure. The Productivity Commission estimates the 'user cost of capital' at $1,240 per student in 1999 (SCRCSSP 2001: Table 3A.9). Non-government schools figures include the equivalent costs. If the user cost of capital is added to state school expenditure figure, their per capita expenditure is much higher than that of non-government schools.

6.6 Expenditure per Student 1991-1999

state* and non-government schools, funding from all sources



*does not include payroll tax or long-service leave

Sources: Gannicott, K. 1997, *Taking Education Seriously*, The Centre for Independent Studies, Sydney.
Unpublished data, Ministerial Council for Employment, Education and Youth Affairs
Report on Government Services 1999, 2000, 2001, Steering Committee for the Review of Commonwealth/State Service Provision, Productivity Commission

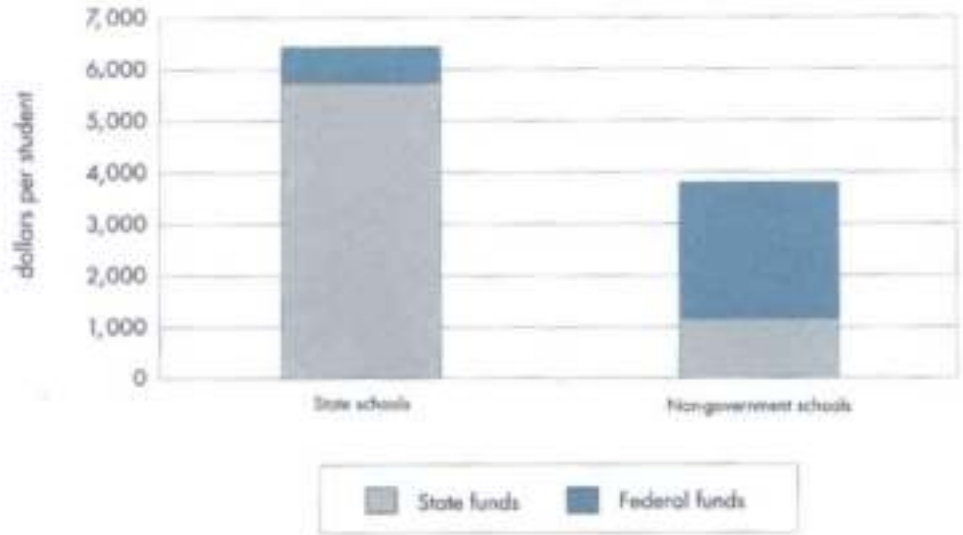
Government Funding per School Student

Public education lobby groups have been claiming, over the last 12 months in particular that state schools receive less government funding than non-government schools. Federal funding figures are often quoted to support this assertion. The majority of funding to state schools, however, comes from state governments, so both sources of funding must be combined for a clear picture of government funding levels.

Figure 6.7 shows that when federal and state funding are combined, state school students receive, on average, 70% more government funding than non-government school students. The majority of the state schools' public funding comes from state governments, whereas most of the non-government schools' public funding comes from federal sources. A large proportion of the cost required to educate a child in a non-government school comes from private sources, primarily as tuition fees paid by parents.

6.7 Government Funding per Student 1998-99

per capita funding from state and federal governments for state and non-government schools



Source: *Report on Government Services 2001*, Steering Committee for the Review of Commonwealth/State Service Provision, Productivity Commission

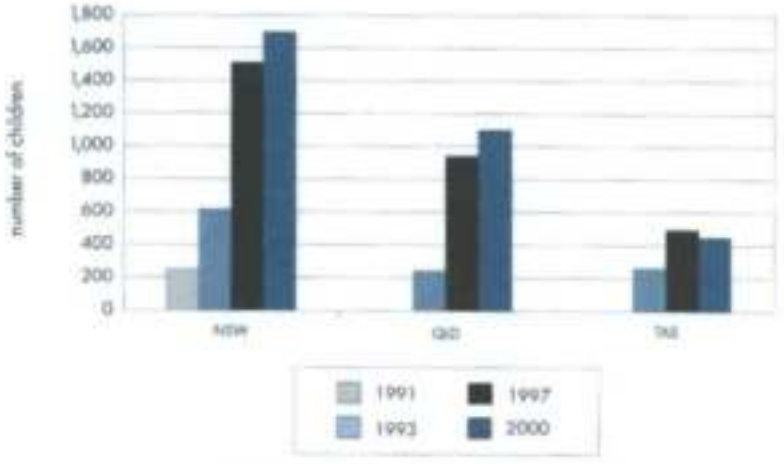
Home Schooling

The various education acts in the states and territories stipulate that children aged 6 to 15 years (16 in Tasmania) must be enrolled in and attend a registered state or non-government school. Parents who wish to educate their child at home must apply to the Minister for Education or another authority in their state or territory for dispensation or exemption from this general rule, and to register their child as home schooled. Home schooling is different to studying by correspondence or 'distance education' in remote areas, as parents do not have to follow prescribed curriculum content or teaching programmes.

Families choose home schooling for a variety of reasons. First and foremost is a belief that they can offer their children a better education at home than is offered in the institutional school setting. Parents who want their children to have a secular education, but do not wish to send their children to a public school, have few options available to them, as the majority of non-government schools are religious. Moreover, if such families are unable to pay fees, their choices are limited even further.

Very little information is available about home schooling in Australia. Only New South Wales, Queensland and Tasmania are able to provide figures on home-schooling registrations over a number of years, and these are presented in Figure 6.8. Personal communication with relevant education authorities in other states and territories indicates that around 5,000 children were registered to be home schooled in Australia in 2000. An unknown number of children in each state and territory are not attending school and are not registered as home schooled. Some home education authorities suggest that there are very few unregistered home schooled children, whereas home educators themselves assert that there are as many unregistered home schoolers as there are registered.

6.8 Home Schooling 1991-2000
number of children registered to be educated at home in New South Wales, Queensland and Tasmania



Sources: Annual Reports, NSW Board of Studies
Unpublished data, personal communication, Queensland Department of Education
Unpublished data, personal communication, Tasmanian Home Education Advisory Council

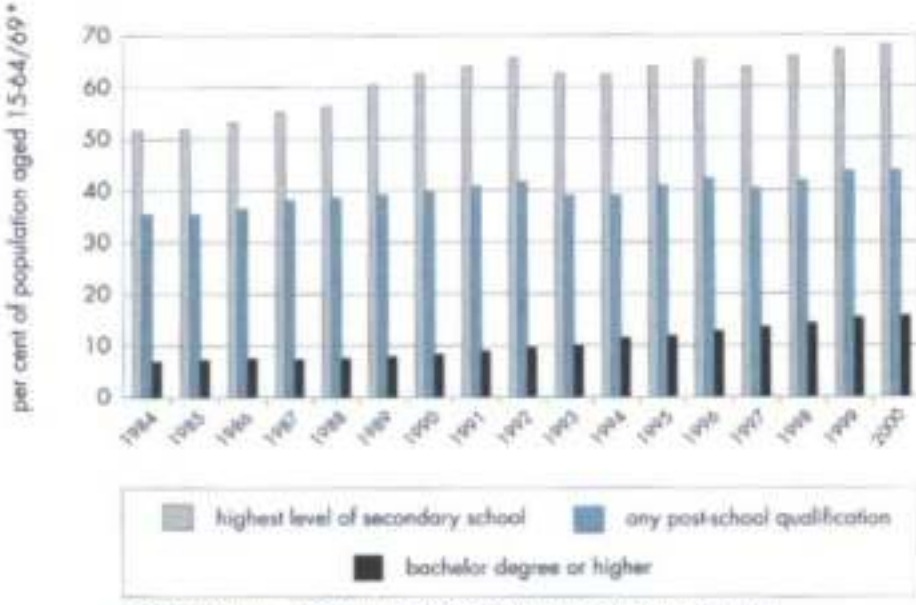
Educational Attainment

The Australian labour force is now more highly educated than ever before. In 1984, just over half of the adult population of working age had completed Year 12, and just over one third had a post-school qualification. Seven per cent had a bachelor degree or higher. In 2000, more than two thirds of the working age population had completed Year 12, 44% had a post-school qualification, and the proportion with a bachelor degree or higher had more than doubled to 16%.

This change has accompanied the trend in employment toward a higher proportion of skilled occupations, especially managerial and professional positions.

6.9 Educational Attainment 1984-2000

highest level of secondary school,
any post-school qualification, bachelor degree or higher



*1984-1988: population aged 15-69; 1990-2000: population aged 15-64

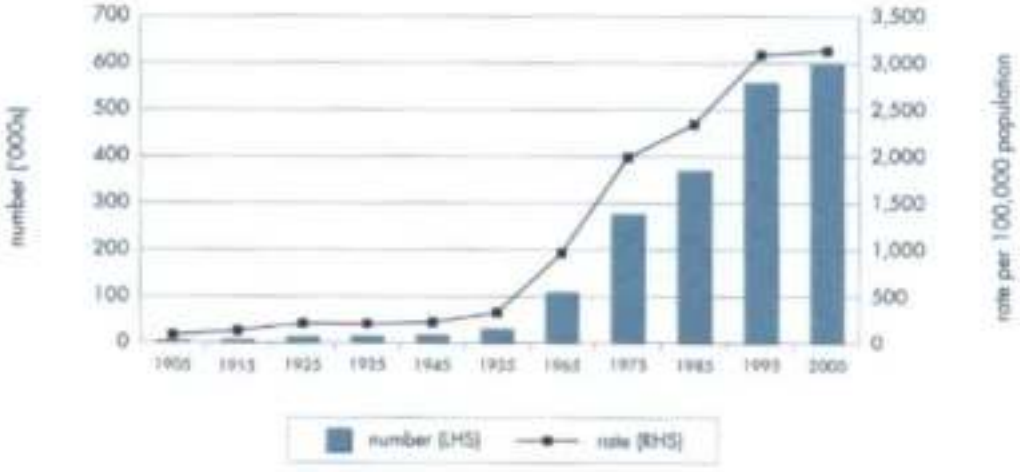
Source: *Australian Social Trends* (ABS Cat. 4102.0)

University Participation

In the last 50 years higher education has moved from being an unusual to a common event for young Australians. Figure 6.10 shows that in the mid-1950s fewer than 350 people out of every 100,000 were at university. By the turn of the century, that number was more than 3,100 per 100,000. The effect of this is to increase greatly the proportion of Australians with a degree. In just the 1990-2000 period, the proportion of people aged 15 to 64 with a bachelor degree or higher went from 8.4% to 15.7%. This figure will continue to increase, with around a third of Australians now having attended university by age 25, and with the immigration programme favouring educated migrants.

6.10 University Participation 1905-2000

number of students and rate per 100,000 population



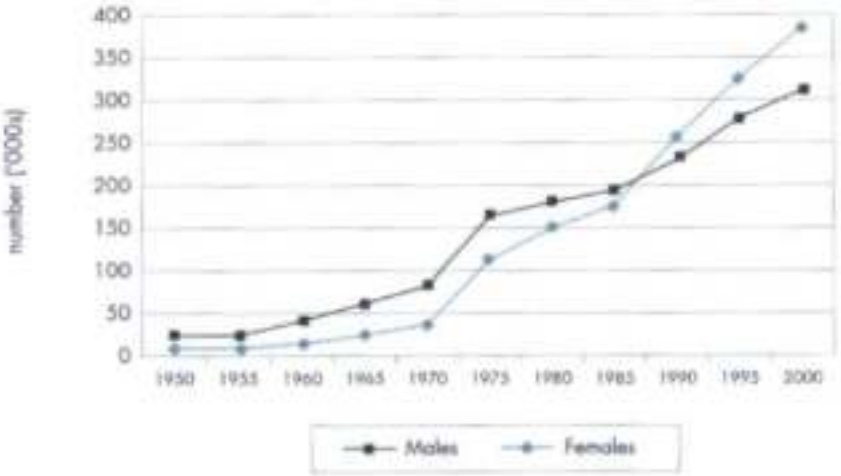
Source: *Higher Education Time Series Tables*, Commonwealth Department of Education, Training and Youth Affairs, copyright Commonwealth of Australia, reproduced by permission

University Students by Gender

Fifty years ago male students outnumbered female students by four to one in Australia's universities. Thirty years ago it was still two to one. In the late 1980s something that a generation earlier would have seemed impossible happened—women began to outnumber men. The ratio has expanded slowly since, and now stands at 1.2 females to one male. This is due partly to nursing, a traditionally female profession, being increasingly taught in universities rather than hospitals from the mid-1980s onward. But it also reflects long-term trends in male academic attainment, including more girls than boys going on to complete Year 12. In four of the ten broad fields of study men make up less than 30% of the students.

6.11 University Students by Gender 1950-2000

number of male and female university students



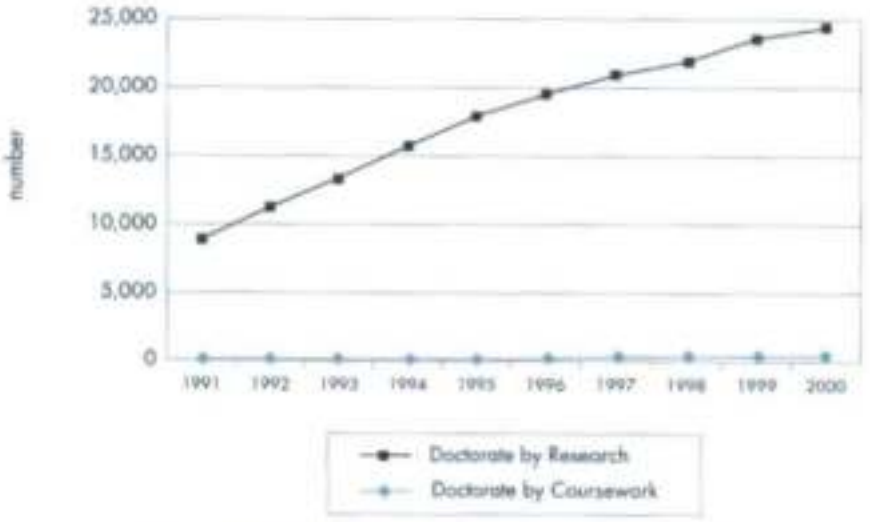
Source: *Higher Education Time Series Tables*, Commonwealth Department of Education, Training and Youth Affairs, copyright Commonwealth of Australia, reproduced by permission

Students Enrolled in PhD Courses

In the late 1980s and early 1990s many Colleges of Advanced Education were turned into or merged with universities. The various technology institutes also added 'university' to their titles. With the name change went an obligation to do research, and the need for students doing the major research degree, the PhD. As the graph shows, the result was a proliferation of doctoral students over the 1990s. The PhD is the usual qualification for an academic job, but the number of junior lecturer jobs shrank throughout most of the 1990s. The modest growth in doctorates by coursework, seen on the bottom line of the graph, is a sign that the dissertation-only PhD may, over time, see some competition from more broadly based PhDs, like those offered in most American universities.

6.12 Students Enrolled in PhD Courses 1991-2000

number of non-overseas students

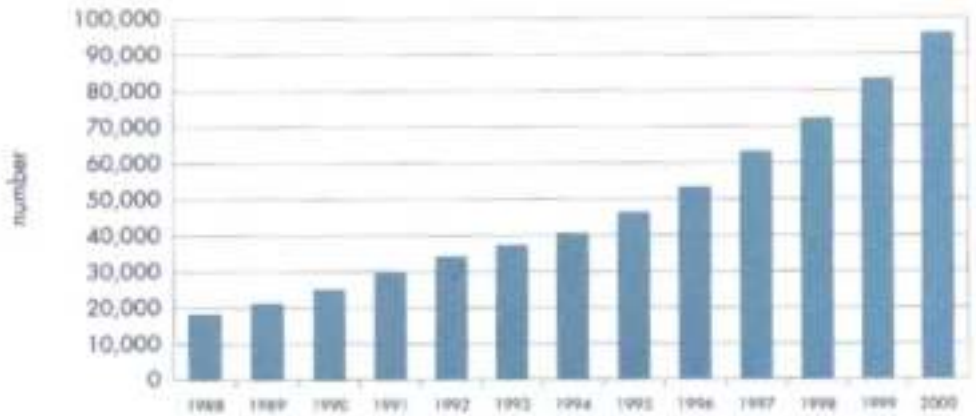


Source: *Higher Education Time Series Tables*, Commonwealth Department of Education, Training and Youth Affairs, copyright Commonwealth of Australia, reproduced by permission

Overseas University Students in Australia

In the mid-1980s the then Labor government decided to make university education an export industry, leading to the rapid growth in overseas students shown in Figure 6.13. This has turned out to be the most significant market reform ever in higher education, and is a marked contrast with the quotas and price controls surrounding Australian undergraduates. Indeed, the inability of universities to run local undergraduate programmes on an economic basis prompted their push to increase overseas enrolments. Some 'overseas' students now attend Australian universities in their home countries, where international campuses have been established. The universities are attempting to recruit more students from emerging recruitment populations such as India and China, but the current largest sources are Malaysia, Singapore and Hong Kong.

6.13 Overseas University Students in Australia 1988-2000



Source: *Higher Education Time Series Tables*, Commonwealth Department of Education, Training and Youth Affairs, copyright Commonwealth of Australia, reproduced by permission

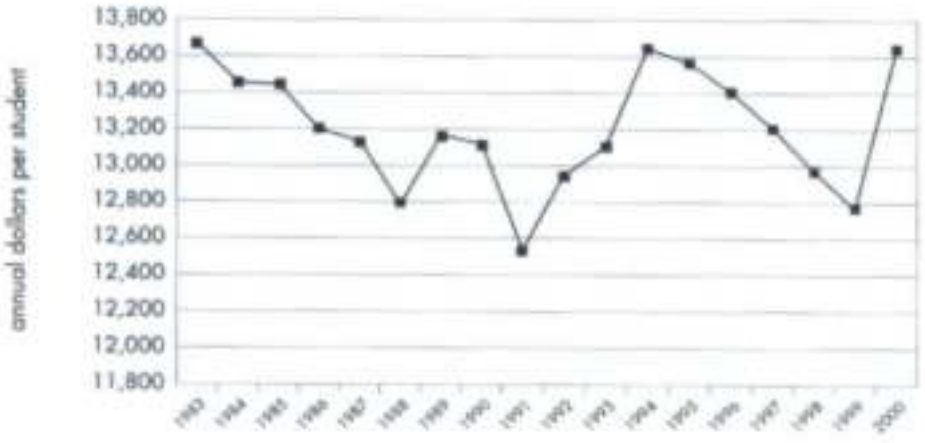
Commonwealth Funding per University Student

No issue in higher education is more controversial than funding—and even the statistics are controversial. The federal government points out that funding per *planned* student is higher than it was in 1996, and that total revenues, which include income from private fee-paying students, are at record levels. The government's critics point out that as most universities enrol more students than the government plan requires, the *average* funding per student is lower than before, and that as HECS revenues grow the general taxpayer's contribution is declining.

Figure 6.14 shows the Australian Vice-Chancellors' Committee's average figure. Figures from other sources such as the National Tertiary Education Union (NTEU) also show a rise from 1999 to 2000, but by a much lower amount. The current funding 'crisis' is not principally due to government cuts; even the NTEU's figures show the government is spending only $20 million less than in 1996 out of a budget exceeding $5 billion. The problems arise because universities face rising costs that they cannot pass on to either the government or the approximately 75% of all students who are Australians holding HECS or scholarship places.

6.14 Commonwealth Funding per University Student 1983-2000

for full-time students, not including fee-paying students (2000 constant dollars)



Source: Australian Vice-Chancellors Committee, Funding Table 4.

Section 7

Crime and Justice

Preface

The ABS *Yearbooks*, until the 1960s, presented crime data as charges and convictions. In 1964, crimes recorded by police were added to the statistics, and within a decade the record of charges and convictions ceased. It is, however, possible to convert conviction rates into estimates of crimes recorded by police, based on ratios derived from the period in which both statistics were reported, so as to create an unbroken series across the 20th century. (Details of this procedure are provided in Lucy Sullivan's *Rising Crime in Australia*, The Centre for Independent Studies, 1997). Crimes recorded by police provide a series for the last four decades. In the following graphs, a combination of these indicators is shown. The sources are the ABS *Yearbooks* for the early years of the century until 1993 (except for 1993 assault, which comes from the Australian Institute of Criminology), and *Recorded Crimes, Australia* (ABS Cat. 4510.0) unless otherwise noted.

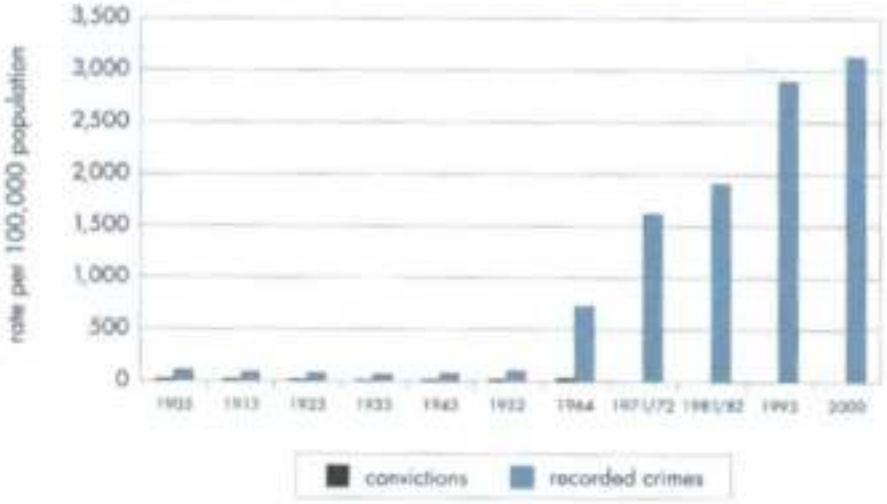
Figures 7.1 to 7.7 show that crime rates relative to the population (per 100,000 population), after falling in the first half the 20th century, have increased alarmingly since the 1960s.

Property Crime

Figure 7.1 shows conviction rates in the higher courts for the years 1903 to 1971/72, estimated equivalent recorded crime rates for the same years, and recorded crime rates for 1964 to 2000, for crimes against property. Crimes against property, primarily the various forms of theft, in the 1990s are possibly 40 times higher compared with their lowest level this century in the 1930s (the height of the Great Depression) and the 1940s (the middle of World War II). Between 1981/82 and 1993, the property crime rate rose by more than nine times the *total* property crime rate in the years 1903 to 1952. Motor vehicle theft in 1973 represented 27% of property crime, and in 2000, 29%. Thus it cannot be held individually accountable for the rise in property crime over these decades. The rise in motor vehicle theft was rather less than that for all property crime.

7.1 Property Crime 1903-2000

1903-1964 convictions and equivalent recorded crimes estimated from convictions, 1964-2000 crimes recorded by police



Sources: *Yearbook, Australia* (ABS)
Recorded Crimes, Australia (ABS Cat. 4510.0)

Violent Crime

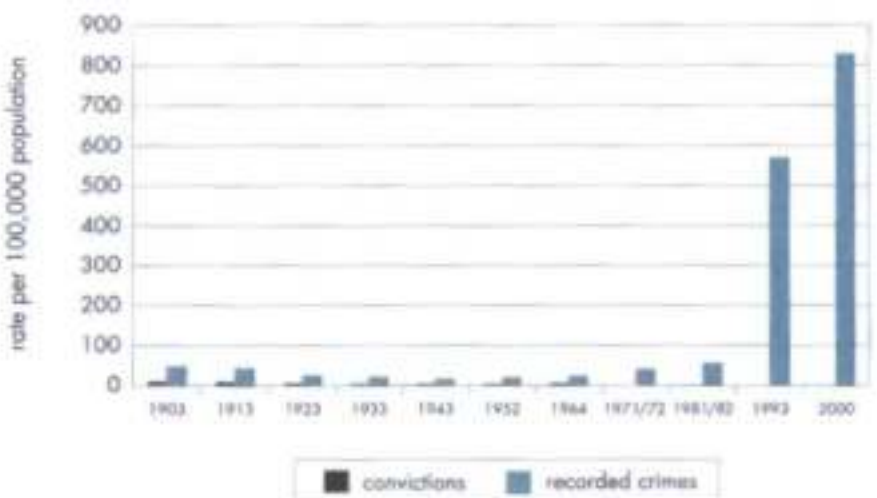
Figure 7.2 shows recorded (and estimated recorded) crime rates for violent crime (crimes against the person) over the century from 1903 to 2000. Conviction rates in the higher courts are also shown from 1903 to 1964. The figures represent the combined rates for homicide (murder, attempted murder, manslaughter, and driving causing death), rape (changing to sexual assault in 1997), and serious assault.

In contrast with crimes against property, it can be seen that the massive escalation of crimes of violence occurred only in the last two decades, from 1981/82 to 2000, attesting to the accuracy of public perceptions of the growth in, and people's growing fear of, personal violence. Crimes of violence decreased steadily during the first half of the century, reaching their lowest point in 1943, the middle of World War II, attributable in part to the absence of large numbers of young men from civilian life. But they remained lower in the 1950s and 1960s than in any decade of the century prior to the 1930s, and only finally rose above the 1903 level in 1981/82. Looking only at the police record period, violent crime increased by a factor of 37 between 1964 and 2000.

The incidence of crimes of violence is lower than that of crimes against property. It was about half at the beginning of the century, and only about one fifth in 1993, but in 2000 it was more than one quarter and at a much higher level—830 per 100,000 population compared with 50 at the turn of the century.

7.2 Violent Crime 1903-2000

1903-1964 convictions and equivalent recorded crimes estimated from convictions, 1964-2000 crimes recorded by police



Sources: *Yearbook, Australia* (ABS)
Recorded Crimes, Australia (ABS Cat. 4510.0)

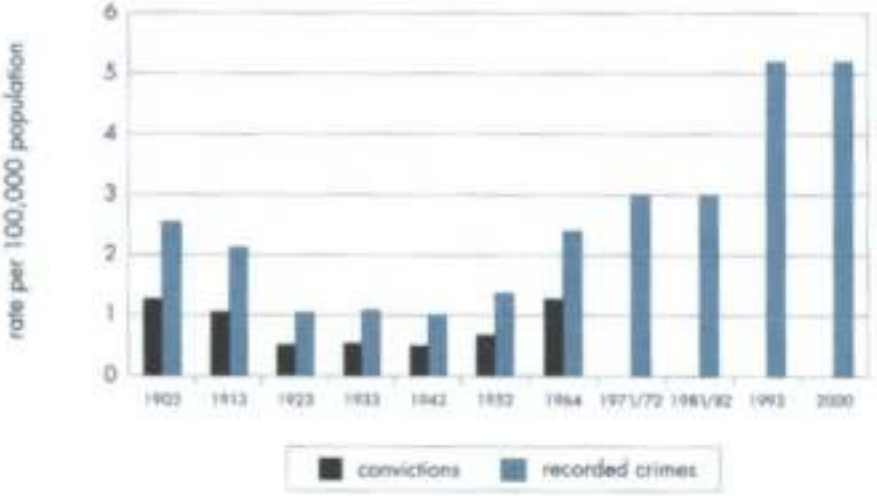
Homicide

Figure 7.3 shows recorded (and estimated recorded) crime rates for homicide from 1903 to 2000, and convictions from 1903 to 1964. Homicide includes murder, attempted murder, manslaughter and causing death by driving. It can be seen that the homicide rate fell by half to the middle years of the century, reaching an all-time low during World War II, again probably due to the absence of large numbers of young men from civilian life. By 1964 it had returned to turn of the century levels, then rose again by a quarter in the following decade, stabilised in the early 1980s, but showed another large rise to the 1990s.

It might be assumed that death caused by driving made a significant contribution to this increase, in contrast with the situation before the 1960s when there were low levels of car ownership. Against this explanation, in 1993, crimes recorded by police show this category at about a sixth of murder and attempted murder, and in 2000, about one third, so the major part of the rise in the early 1990s cannot be attributed to this somewhat less culpable origin.

7.3 Homicide 1903-2000

1903-1964 convictions and equivalent recorded crimes estimated from convictions; 1964-2000 crimes recorded by police



Sources: *Yearbook, Australia* (ABS)
Recorded Crimes, Australia (ABS Cat. 4510.0)

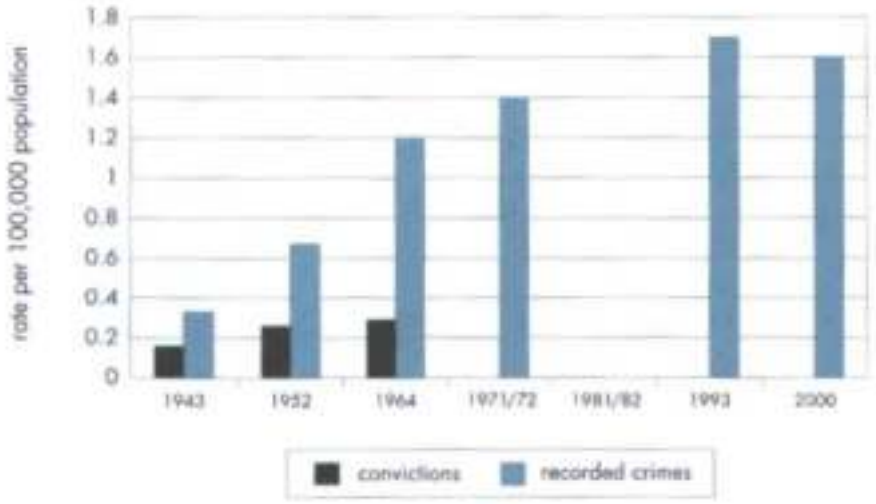
Murder

Only a limited set of statistics for murder separated from attempted murder is available and is presented in Figure 7.4. Murder was not distinguished from homicide in the figures for 1981/82, but the 1993 and 2000 figures, which are at least a third higher than the rate at the turn of the century, suggest a continuing rise from the middle of the century at least until 1993. Although the murder rate in 2000 was 6% lower than in 1993, it is nevertheless double that in 1952. Recorded murders are a third higher in 2000 than in 1964.

In 2000, the perpetrator was known to the victim in 63% of cases, and 26% of murders were committed by a family member. More than half of all murders were committed in residential dwellings.

7.4 Murder 1943-2000

1943-1952 convictions and equivalent recorded crimes estimated from convictions, 1964-2000 recorded by police [1981/82 not available]



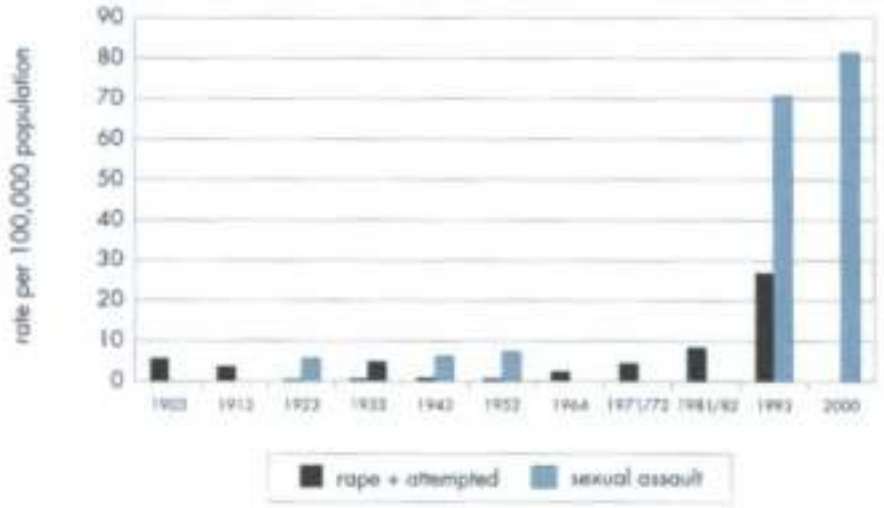
Sources: *Yearbook, Australia* (ABS)
Recorded Crimes, Australia (ABS Cat. 4510.0)

Rape/Sexual Assault

Rape (including attempted rape) and sexual assault rates are depicted in Figure 7.5. From 1903 to 1981/82, rape (including attempted rape) was reported as a discrete category. 'Sexual assault' replaced it in 1993, taking in other classes of sexual crimes. (An earlier category, 'other offences against females' made its appearance only intermittently and is not included here). Rape rates fell to very low levels in the early to middle decades of the century, but between 1964 and 1993 rape rose by a factor of more than 10 or 1000%. Reference to recorded sexual assault figures suggests that the increase has slowed somewhat in the 1990s.

7.5 Rape/Sexual Assault 1903-2000

1903-1952 recorded crimes estimated from convictions,
1964-2000 crimes recorded by police



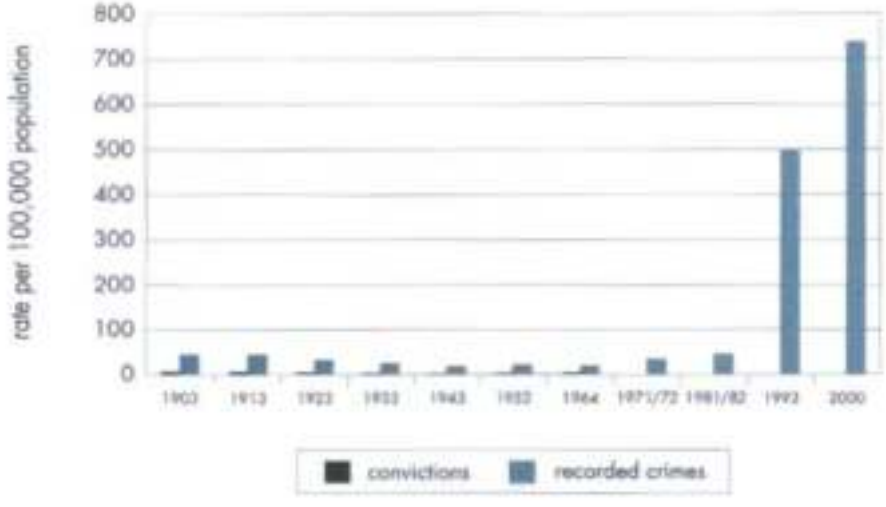
Sources: *Yearbook, Australia* (ABS)
Recorded Crimes, Australia (ABS Cat. 4510.0)

Assault

The serious assault rate was slightly higher than the rape rate (Figure 7.5) throughout the century until the 1990s: in 1997, the serious assault rate was close to nine times the sexual assault rate. Serious assault shows the general pattern of a fairly continuous fall to the 1940s, and thereafter a slow and then a rapid rise (Figure 7.6). If the unusually low wartime level is excluded, the result could be interpreted as showing a continuous fall though to the 1960s. Assault shows a less dramatic fall than any other crime, and the rate in 1963 was only approximately half that in the first two decades of the century. By 1981/82, this level was reached again and this was followed by a ten-fold rise between 1981/82 and 1993. This preceded another massive increase in the seven years to 2000. This increase had a major impact on the total violent crime and serious crime rates.

7.6 Assault 1903-2000

1903-1964 convictions and equivalent recorded crimes estimated from convictions, 1964-2000 crimes recorded by police



Sources: Australian Institute of Criminology
Recorded Crimes, Australia (ABS Cat. 4510.0)

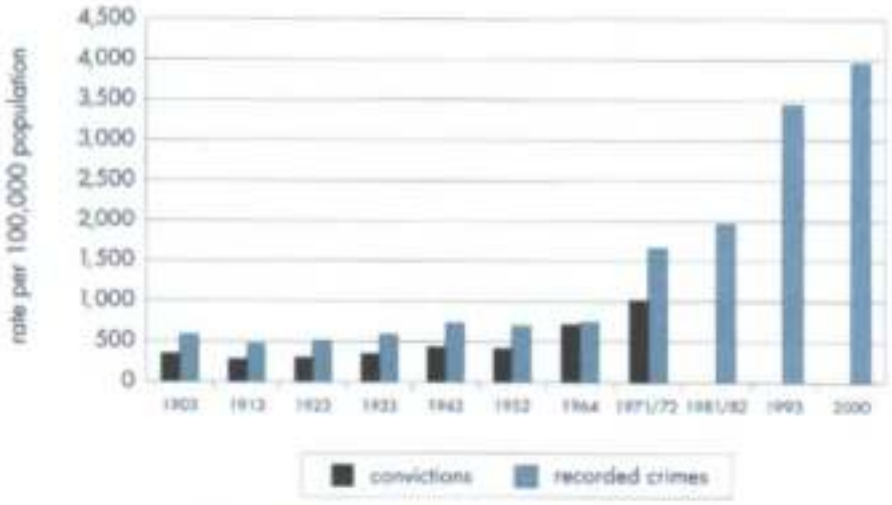
Serious Crime

Because of some uncertainty as to the degree of capture of crime statistics currently recorded by police, compared with convictions in the higher courts prior to 1970, it is salutatory to look at the 'total serious crime' figures for the century as represented by the combined higher courts and Magistrates Courts convictions and equivalent figures from police records. Serious crime is identified as *offences against the person, property, currency, forgery and blackmail*. Drug offences (trafficking) only rose to levels worthy of a separate category in the last three decades, and so are omitted in order not to create uncertainty about rises in more traditional crimes; it is nevertheless a serious crime to which our society is now subject (see Figure 7.8 for drug offences in the last three decades). Examples of non-serious crimes from earlier decades which are omitted are drunkenness and vagrancy, and from the present period, traffic infringements.

Figure 7.7 shows the rate of serious crime per 100,000 population from 1903 to 2000, based on convictions and estimated recorded crime rates, and from 1964, of crimes recorded by police. A fall from 1903 to 1913, was followed by a slow rise to pass the 1903 level in 1943. This was followed by a continuing increase through 1964 to the late 1990s, reaching a rate in 2000 which was more than six times that at the beginning of the century.

7.7 Serious Crime 1903-2000

1903-1971/72 convictions and equivalent recorded crimes estimated from convictions, 1964-2000 crimes recorded by police



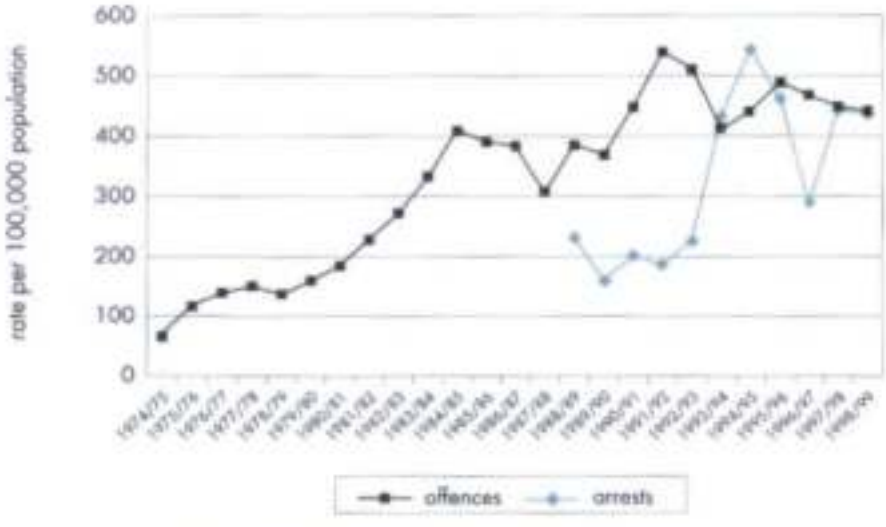
Sources: *Yearbook, Australia* (ABS)
Recorded Crimes, Australia (ABS Cat. 4510.0)

Drug Crime

Figure 7.8 shows the rate per 100,000 population of drug offences reported/becoming known to police from 1974/75 to 1998/99. These figures represent an aggregation of crime data from all States and Territories (excluding ACT from 1987/88 to 1996/97). These offences include drug use, possession, obtaining, unlawfully receiving, cultivating, manufacturing, supplying and importing.

The actual number of drug offences recorded by police was almost nine times greater in 1998/99 (83,533 offences) than in 1974/75 (9,700), and the rate six times higher. The rate of drug offences appears to have levelled somewhat since the early 1990s, which may either be a result of fewer offences being committed or less diligence in police reporting of possession and use of some drugs, most likely marijuana. Offences involving cannabis (marijuana) comprised the largest category of drug offences in 1998/99 (69.6% of the national total).

7.8 Drug Offences Recorded by Police 1975-1999 and Arrests 1989-1999



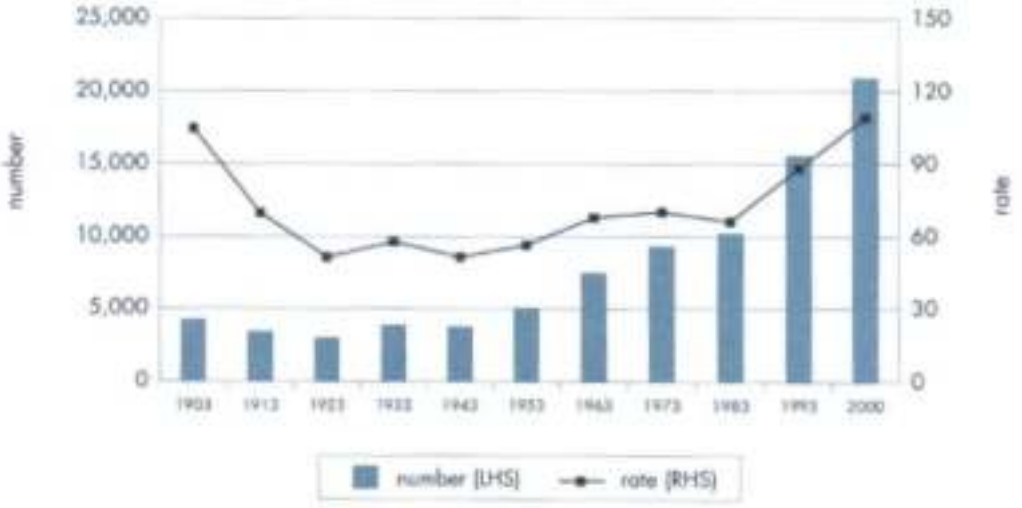
Sources: Australian Institute of Criminology, unpublished data
Yearbook, Australia (ABS Cat. 1301.0)

Prison Population

Because of changes in sentencing policy, the numbers of prisoners in gaol are generally considered to reflect theories of crime prevention as much as crime rates. Figure 7.9 shows the imprisonment rate in Australia (the number of prisoners at mid-year per 100,000 population) from 1903 to 2000. Imprisonment rates fell rapidly in the first decade of the century, then levelled out between 1913 and 1952 at about half of the starting figure. Thereafter, a slow rise with a slight decline between 1973 and 1983, is followed by a rapid rise, and by 2000 the level was slightly higher than that at the beginning of the century.

7.9 Prison Population 1903-2000

average daily prison population,
number and rate per 100,000 population



Sources: *Yearbook, Australia*
Recorded Crimes, Australia (ABS Cat. 4501.0)

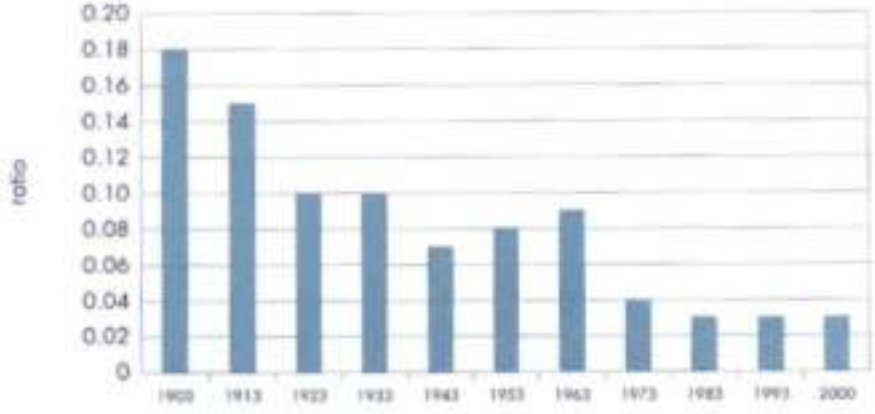
Imprisonment and Serious Crime

Rates of imprisonment have not kept pace with increases in the crime rate. This is best exemplified by looking at ratios of prisoners to crime numbers. Figure 7.10 shows the ratios of prisoners to serious crime rates from 1903 to 2000. The ratio fell considerably from 1903 to 1943. This means that fewer crimes were being punished by imprisonment and/or prison sentences were shorter over the period. This may have resulted from a higher percentage of convictions being for less serious crimes in this period. From 1963, the ratio fell away again, despite the fact that this is the period of marked rise of violent and property crime rates—that is, of more serious crime. Imposition of imprisonment was six times lower in 2000 than in 1903.

Because crime rates for the last four decades represent recorded crimes, not convictions, it is impossible to tell whether the fall in imprisonment rates represents greater leniency in judges or increased inability of police to catch culprits and obtain convictions. In the second half of this century, falling rates of imprisonment have been accompanied by rising rates of crime.

7.10 Imprisonment and Serious Crime 1903-2000

ratio of prisoners per 100,000 population to
serious crimes per 100,000 population



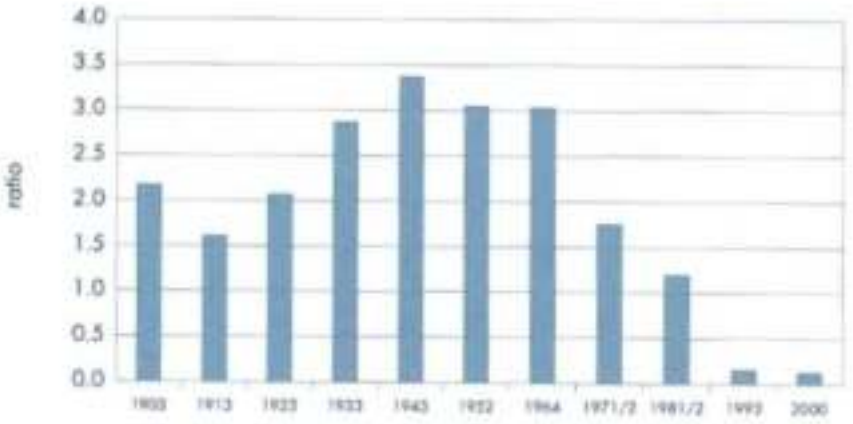
Sources: *Yearbook, Australia*
Recorded Crimes, Australia (ABS Cat. 4501.0)

Imprisonment and Violent Crime

Imprisonment for violent crime is probably of greater concern to the public than imprisonment for crimes against property. The ratio of prisoners to violent crimes could only be calculated using all prisoners regardless of offence (because a breakdown by offence is not given in the *Yearbooks*). Figure 7.11 shows the long-term trend of this indicator. The number of prisoners proportional to the number of crimes fell most rapidly from the 1960s, preceding the biggest increases in violent crime by approximately two decades. As with total serious crimes, we cannot be sure how much of this change is due to leniency in sentencing and how much to lower arrest and conviction rates, but it is unlikely to be entirely the latter. The effect, as regards failure of deterrence and of protection of the public, is likely to be much the same in either case.

7.11 Imprisonment and Violent Crime 1903-2000

ratio of prisoners per 100,000 population to violent crimes per 100,000 population



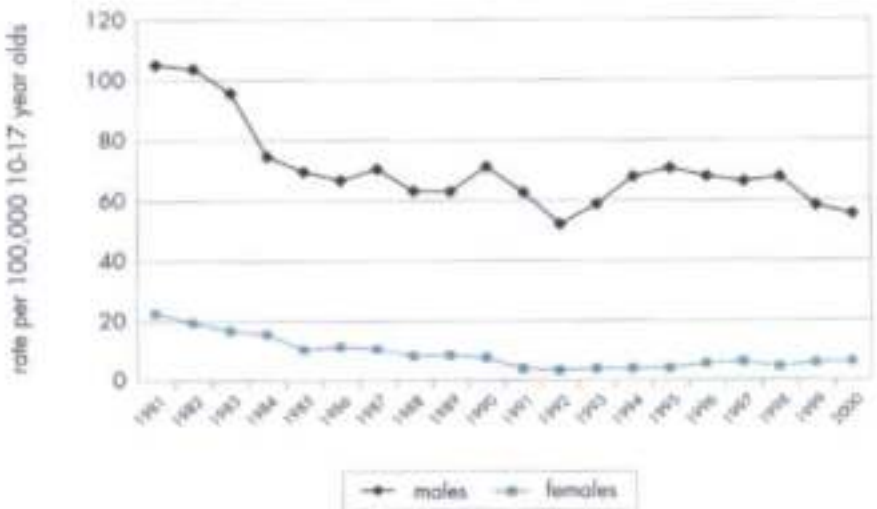
Sources: *Yearbook, Australia*
Recorded Crimes, Australia (ABS Cat. 4501.0)

Juveniles in Corrective Institutions

In the nineteen year period from 1981 through to 2000, the rate of juvenile detention (10-17 year olds in most states) in juvenile corrective institutions decreased from 105 males (per 100,000 males aged 10-17) and 23 females (per 100,000 females aged 10-17) to 55 males and 6 females per 100,000 in that age group.

Figures 7.13 and 7.14 show that arrests have increased over this period of declining rates of imprisonment. Therefore the decline in the number of juveniles in corrective institutions is not due to a decrease in juvenile crime, but to a change in the approach to juvenile justice. New juvenile justice legislation passed in most states and territories in the 1990s has allowed many juvenile offenders to avoid custodial sentences through a process of 'pre-court diversions', such as formal and informal police cautioning and family conferencing. However, some jurisdictions (Western Australia and the Northern Territory) impose mandatory detention after three offences.

7.12 Juveniles in Corrective Institutions 1981-2000



Source: *Persons in Juvenile Corrective Institutions 1981-2000*, Australian Institute of Criminology

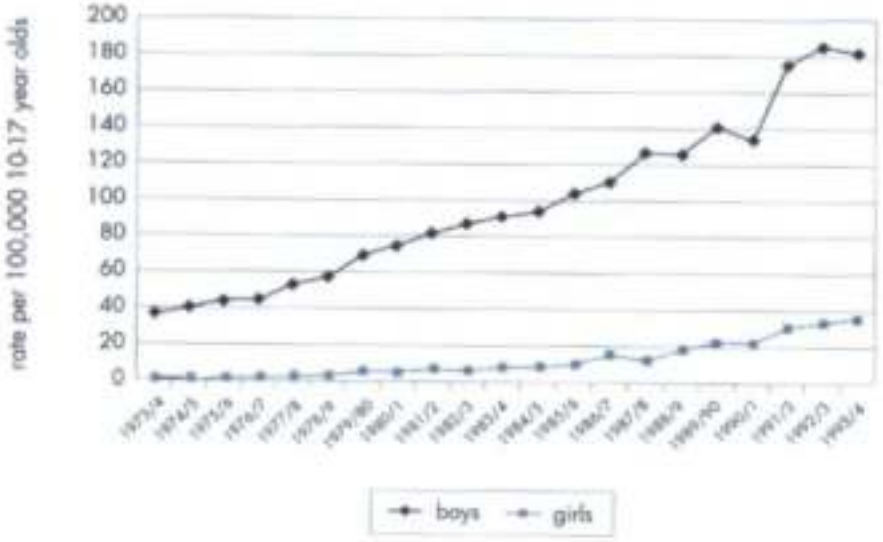
Juvenile Violent Crime

National statistics on juvenile offending are difficult to find, due to differences and deficiencies in crime recording procedures across the states. The measurement of juvenile crime on a national level is therefore inexact. Despite these problems, a national 20 year time series of juvenile arrest rates has been compiled and published (S. Mukherjee 1997, see graph for source below). Although the most recent data are for 1994/95, examination of the state-by-state data for more recent years indicates that the upward trend shown in these figures has continued. It should also be noted that arrest statistics are not the most accurate record of crime participation, as they only measure crimes cleared, and cannot necessarily be extrapolated to uncleared crimes. They do, however, provide the most consistent data available to date.

Figure 7.13 shows that violent crime rates among juveniles increased markedly over the two decades from the mid-1970s to the mid-1990s. Rates of arrest of 10-17 year old boys for robbery and for serious assault increased by a factor of five over this period. These arrest rates also demonstrate the great discrepancy between crime rates of boys and girls. It is possible that arrest rates do not accurately reflect participation rates, and that girls are arrested less often than boys for crimes committed, but there is no evidence of this and it is unlikely that this explains any significant proportion of the gender differences in arrest rates.

7.13 Serious Assault by Juveniles 1974-1994

boys and girls involved in cleared crimes



Source: Mukherjee, S. 1997. 'The Dimensions and Causes of Juvenile Crime', in A. Borowski & I. O'Connor (eds.) *Juvenile Crime, Justice and Correction*, Longmans, Melbourne.

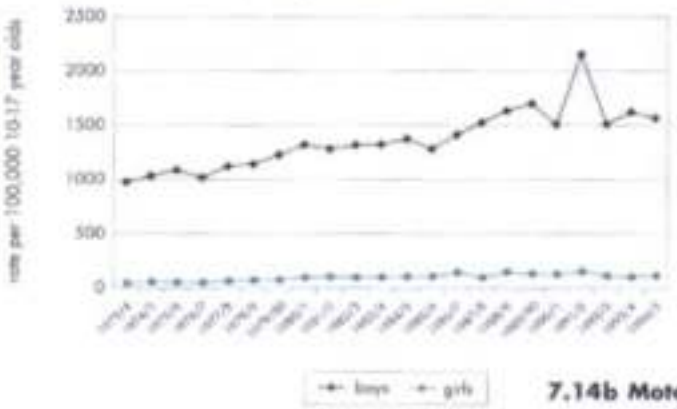
Juvenile Property Crime

Rates of arrests for property crime by juveniles, although up to ten times higher than rates of arrest for violent crime, have not increased to the same degree. Nevertheless, rates of arrest for break, enter and steal almost doubled for boys and tripled for girls, and rates of motor vehicle theft increased by one third for boys and again tripled for girls over the two decade period. Although arrests of girls for these property crimes increased at a greater rate than arrests of boys, they are still at least ten times lower.

Various theories have been put forward to explain gender differences in juvenile crime rates. Among them are biological differences, temperamental differences, and the differential effect of family dysfunction and breakdown on boys and girls. In a 1997 report *Social and Economic Stress, Child Neglect and Juvenile Deliquency*, researchers D. Weatherburn and B. Lind from the NSW Bureau of Crime Statistics and Research identified child neglect as one of the strongest predictors of juvenile crime participation, although how this might contribute to gender differences is not clear.

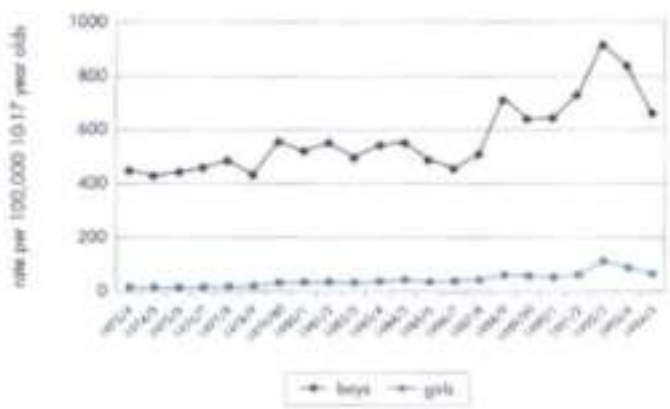
7.14a Break, Enter & Steal by Juveniles 1974-1995

boys and girls involved in cleared crimes



7.14b Motor Vehicle Theft by Juveniles 1974-1995

boys and girls involved in cleared crimes



Source: Mukherjee, S. (1997), 'The dimensions and causes of juvenile crime', in A. Borowski & I. O'Connor (eds.) Juvenile crime & correction

Police to Population Ratio

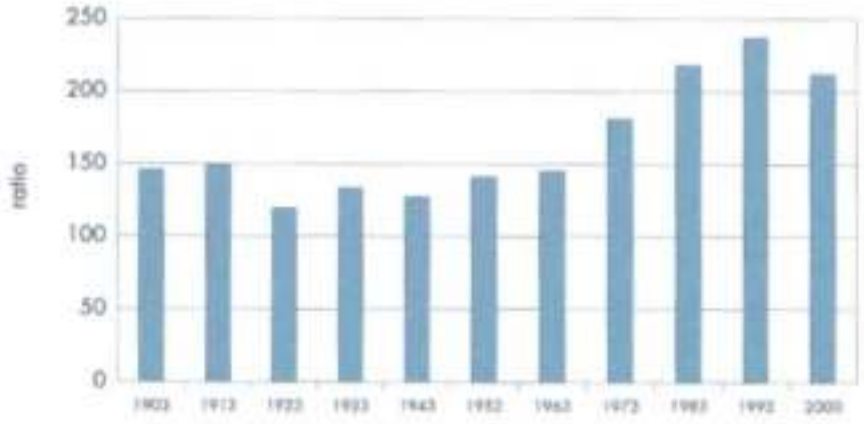
The *Yearbooks* provide figures of the number of police officers in Australia, and of the ratio of police to population in terms of persons in the population per police officer. If crime rates are stable, this is an appropriate means of monitoring how well the police force is being maintained, but if crime rates increase markedly, so will police duties in terms of detection and the processes of conviction, leaving less time for preventative surveillance. What is an adequate police force in conditions of low crime rates will become quite inadequate in conditions of escalating crime.

Figure 7.15 shows the *Yearbooks* figures of police officers per 100,000 population, from 1903 to 2000. Bearing in mind our knowledge of the fall in crime rates in the first half of the century, followed by a rise in the second, one can see that, as logic would demand, there is generally a fall in the ratio of police to population in the first part of the century, followed by a rise in the second half, which escalates from 1963 in apparent keeping with the escalation in serious crime rates in the same period. The number of police officers per 100,000 population has doubled between its lowest point in 1923 and its highest in 1993 (119 to 237). In 2000 it was somewhat lower, at 212 officers per 100,000 population.

These figures, however, do not show whether the rise in officer numbers is appropriate to the degree of rise in the crime rate.

7.15 Police to Population Ratio 1903-2000

sworn officers per 100,000 population



Sources: *Yearbook, Australia* (ABS Cat. 1301.0)
Report on Government Services 2001, Steering Committee for the Review of Commonwealth/State Service Provision, Productivity Commission

Police to Serious Crime Ratios

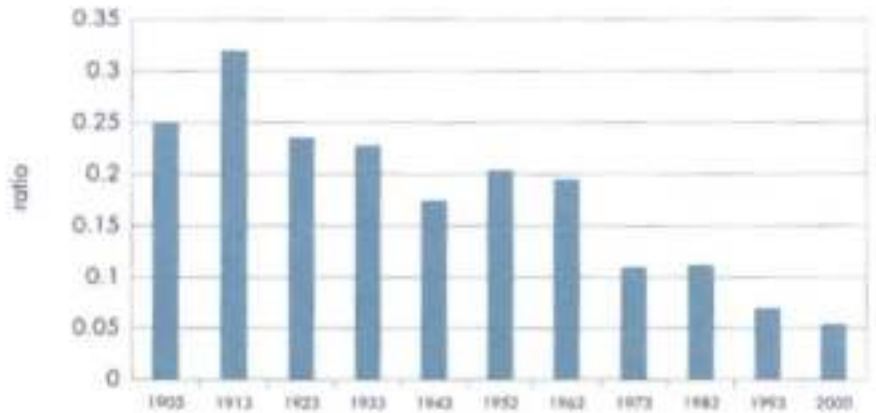
In Figure 7.16, officer numbers are presented as ratios, not to population, but to total serious crime rates. This figure demonstrates that the rise in police officer numbers has failed to compensate for the large rises in crime rates of recent decades.

There is a rise in police to serious crime ratios from 1903 to 1913, coinciding with (and perhaps partially achieving) the fall in all serious crime over that period, followed by a fall to below turn of the century levels by 1943, in parallel with the concurrent rise in serious crime rate. Thereafter the ratio rises again in 1952, co-incident with a slight fall in the serious crime rate, but then drops steeply, and again drops in the decade to 1993. In 2000 it fell again by one third. Similarly, the ratio of officers to violent crimes (not shown) rose as violent crime rates fell to mid-century, then fell in the period of increasing violent crime, with the ratio finally falling below that at the turn of the century in the last decade, in the face of the sudden rise in violent crime.

The maintenance of a police force in proportion to rising crime rates in the last several decades has clearly not been achieved.

7.16 Police to Serious Crime Ratio 1903-2000

ratio of police per 100,000 population to serious crimes per 100,000 population



Sources: *Yearbook, Australia* (ABS Cat. 1301.0)
Report on Government Services 2001, Steering Committee for the Review of Commonwealth/State Service Provision, Productivity Commission

Section 8

Culture and Recreation

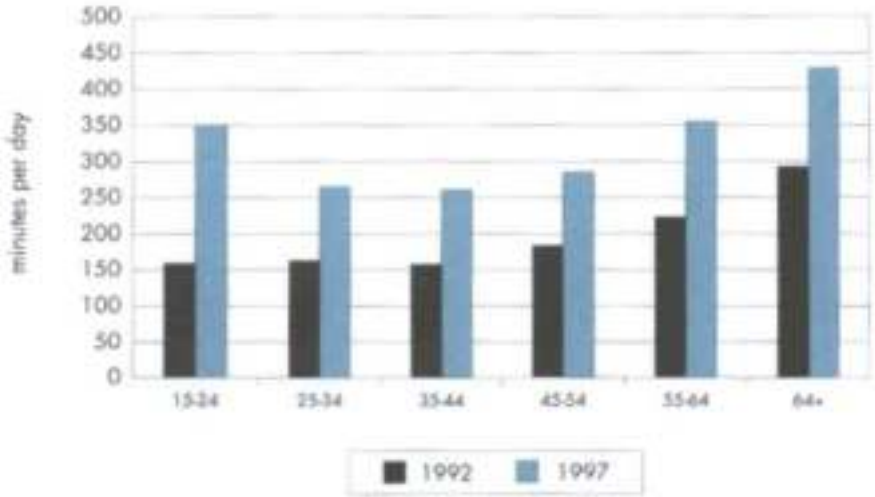
Passive Leisure

One indicator of relative prosperity and quality of life is the amount of leisure, or time free of work and attendance to the necessities of life, available to people. In general, the amount of leisure time available has increased significantly in the last generation or two.

In 1992 and 1997, the Australian Bureau of Statistics conducted a time use survey with time allocated to ten categories including paid work, domestic, education, community, social, active leisure and passive leisure. More recent data is not available.

Passive leisure mainly consists of leisure time spent in the home and includes activities such as reading, listening to the radio or music, watching television, and resting. The amount of time spent engaged in passive leisure activities increased across all ages between 1992 and 1997. The largest increase has been in the 15-24 age group, whose average daily passive leisure time more than doubled.

8.1 Passive Leisure 1992 & 1997
average minutes per day, by age group



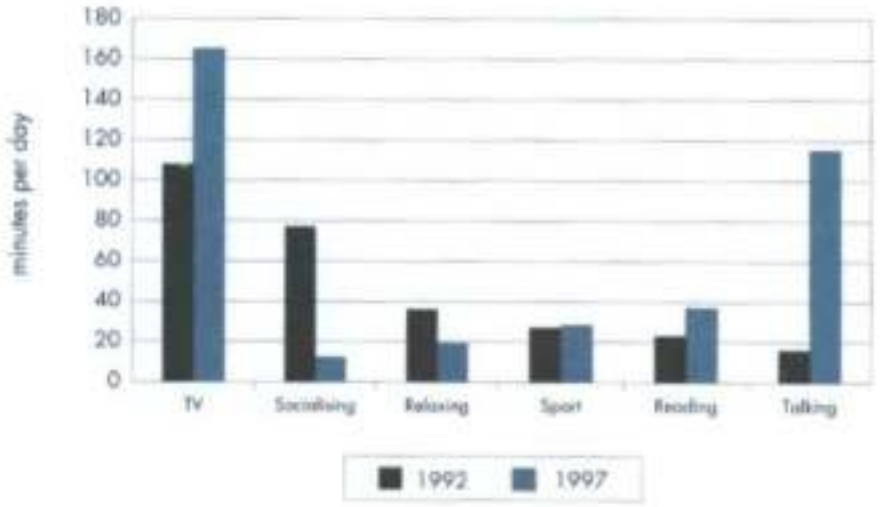
Source: *How Australians Use Their Time* (ABS Cat. 4153.0)

Main Leisure Activities

The figures on main leisure activities in Figure 8.2 show the most common leisure activities, both active and passive. Not surprisingly, TV is still the most popular leisure activity in 1997, taking over two and a half hours of daily leisure time on average. In 1992, TV viewing was followed by 'socialising', but in 1997, socialising was replaced by 'talking' as the second most time-consuming leisure activity. The distinction between socialising and talking is that socialising is an active, out-of-home group activity whereas talking is generally a passive, in-the-home activity such as talking on the telephone. Time spent reading also increased between 1992 and 1997.

8.2 Main Leisure Activities 1992 & 1997

average minutes per day, by type of activity



Source: *How Australians Use Their Time* (ABS Cat. 4153.0)

Television Viewing Throughout the Day

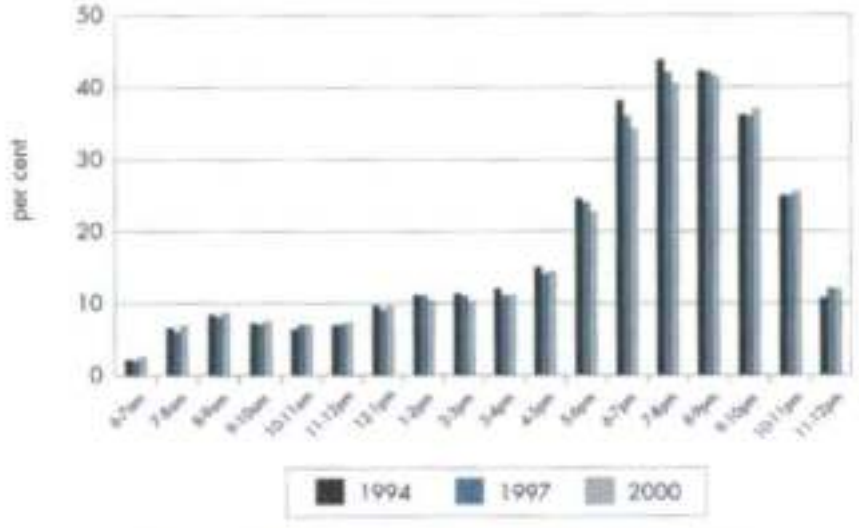
As already noted, watching television absorbs a major part of the leisure time of Australians and the penetration of television sets into Australian homes is virtually total. The market research company AC Nielsen reported in 2000 that in both regional and metropolitan areas, 100% of homes had at least one television and 88% had at least one VCR (video cassette recorder). Around 60% of homes have more than one television and around 23% have more than one VCR.

The Nielsen organisation maintains a continuing coverage of TV viewing behaviour throughout Australia with 'people meters' installed in a sample of 3600 households. This is claimed to be representative of the 6 million households and almost 19 million people in Australia. It is also claimed to be more accurate than the diary-based method of estimating viewing time used by the ABS (as for Figure 8.2) to collect the figures reported above. This is reflected in a larger average viewing time per day (over 3 hours compared with the 2.5 hours reported by the ABS). The statistics that follow are derived from the Nielsen sampling.

- On average, about a third of people are viewing television between the hours of 6pm and midnight throughout the year.
- The most popular viewing hours are between 7pm and 9pm, when the average audience is close to 42% of the population (Figure 8.3). Viewing times have shown a trend towards the later hours of the evening.
- Sunday is the most popular day for TV viewing, followed by Monday.

8.3 TV Viewing Throughout the Day 1994-2000

per cent of population watching television



Sources: *TV Trends 1994, 1998, 2001*, ACNielsen Media International

Pay TV Penetration

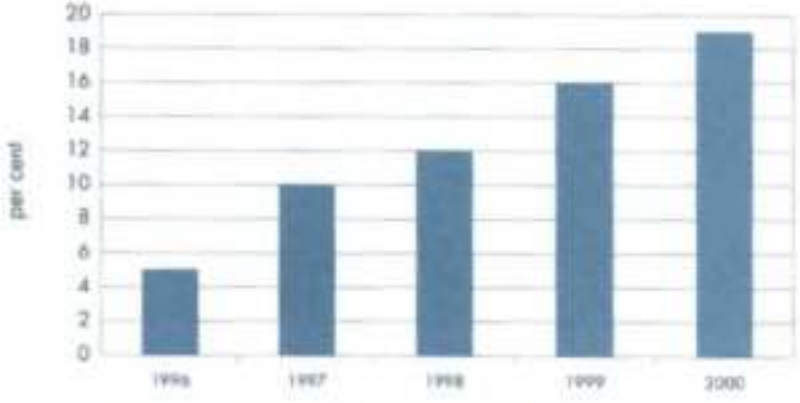
The proportion of households that subscribe to Pay TV channels increased almost four-fold between 1996 and 2000. Brisbane has the highest proportion of households with Pay TV (23.8%), closely followed by Sydney (23.1%). By comparison, Perth has only 10.5% of households subscribing to Pay TV.

It might be expected that the increasing presence of Pay TV in households would be accompanied by an increase in the amount of time spent watching TV each day. However, daily average viewing times have not increased significantly in the last decade. This suggests that people are watching Pay TV instead of, rather than in addition to, the free-to-air channels. Among children and young adults, however, there has been a slight decrease in daily viewing times from 1991 to 2000, in metropolitan areas at least. When extrapolated to weekly times, children in 2000 watched 1.5 hours less television each week than children in 1991, while young adults watched 3.5 hours less.

Daily Average Viewing Times (minutes)

	Metropolitan		*Regional*
	1991	2000	2000
Total People	*192*	*193*	*209*
Children 5-12	159	146	152
Teens 13-17	164	159	160
People 16-24	166	135	146
People 25-39	191	195	219
People 40-54	182	198	210
People 55+	261	258	275

8.4 Pay TV Penetration 1996-2000
per cent of households with Pay TV



Sources: *TV Trends 1994, 1998, 2001*, ACNielsen Media International

Attendance at Selected Cultural Venues/Activities

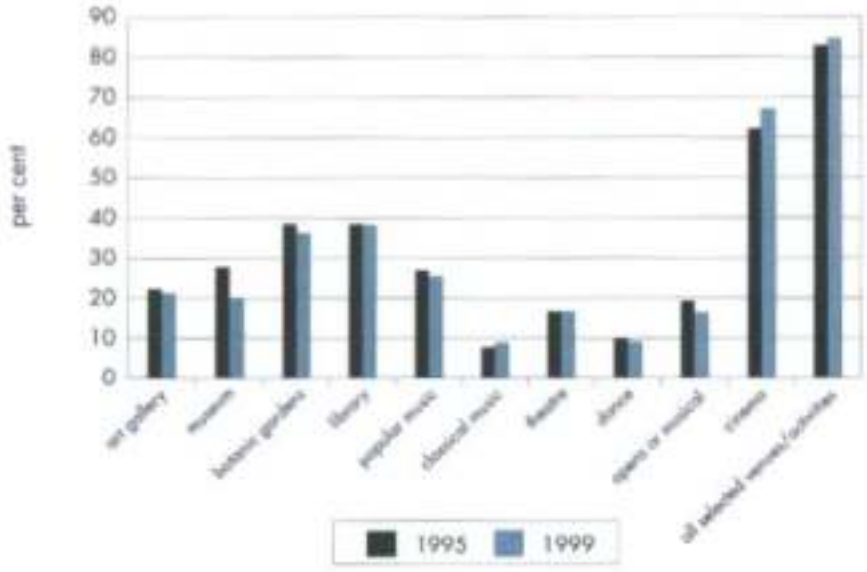
Australians were slightly more likely to attend a cultural venue or activity in 1999 than in 1995, but the popularity of particular types of venues and activities changed.

Attendances at cinemas increased, as is confirmed in more detail in the following pages, but museum attendances decreased, as did visits to botanic gardens and to operas or musicals.

There was a positive relationship between attendance at cultural venues and activities and educational attainment in 1999. People with a university education were around twice as likely to attend these venues and activities.

8.5 Attendance at Selected Cultural Venues/Activities 1995 & 1999

per cent of population aged 15+ attending at least once in previous year



Source: *Attendance at Selected Cultural Venues* (ABS Cat. 4114.0)

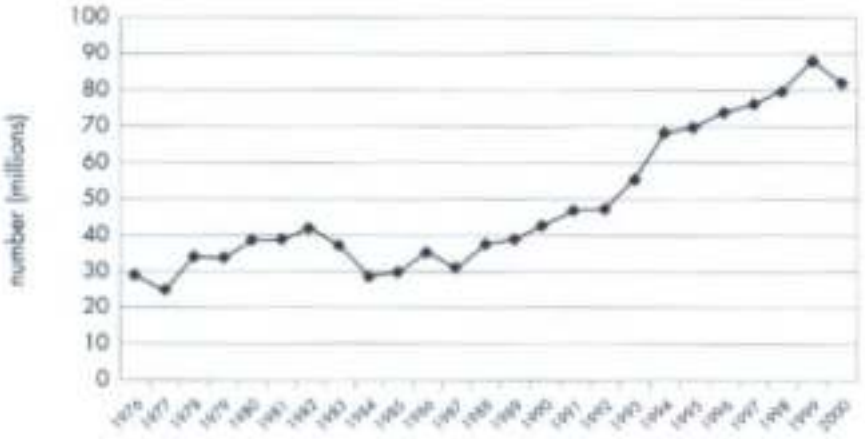
Cinema Admissions

Figure 8.6 shows that cinema attendances have increased every year from 1976 to 2000, almost tripling over that period. Box office figures reached 704 million dollars in 1999—a 12% increase on the previous year.

There were 82 million visits to cinemas in 2000. When averaged across the population, this is equivalent to four visits per person in that year. In 1976, it was close to half this number.

8.6 Cinema Admissions 1976-2000

millions of admissions each year



Source: Australian Film Commission / Motion Picture Distributors Association of Australia (www.afc.gov.au/resources/online/pdfs/faq6.pdf)

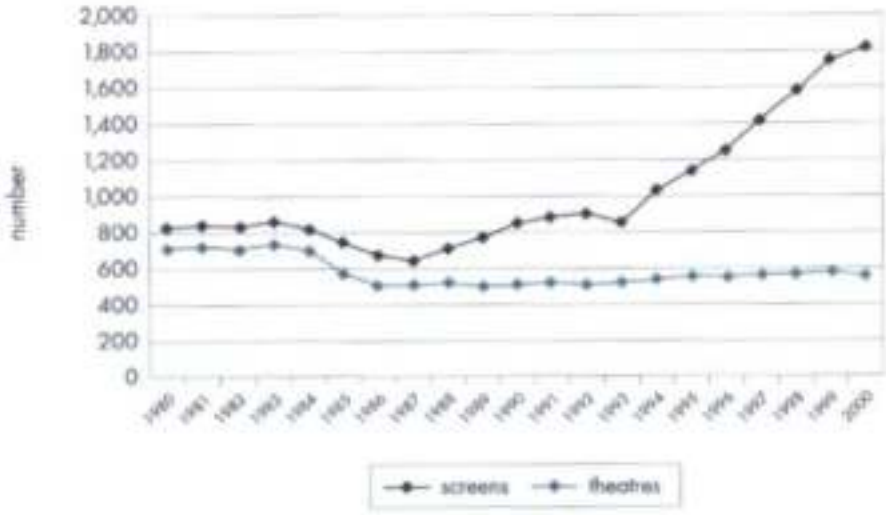
Cinema Screens and Theatres

Despite predictions that the cinema would not recover from the challenge of TV and video, the film industry has more than held its own in competition with both in recent years. This is reflected in the number of screens available and, more significantly, in attendances.

There has been a trend in recent years towards multi-screen cinema complexes. Consequently, the increase in the number of screens has not been matched by an increase in the number of separate buildings (theatres) housing the screens.

In 1980, there was approximately one cinema screen per 18,000 population. In 2000, the number of screens had increased more than the population, with approximately one cinema screen per 10,000 population.

8.7 Cinemas 1980-2000
number of screens and number of theatres



Source: Australian Film Commission / Motion Picture Distributors Association of Australia (www.afc.gov.au/resources/online/pdfs/faq6.pdf)

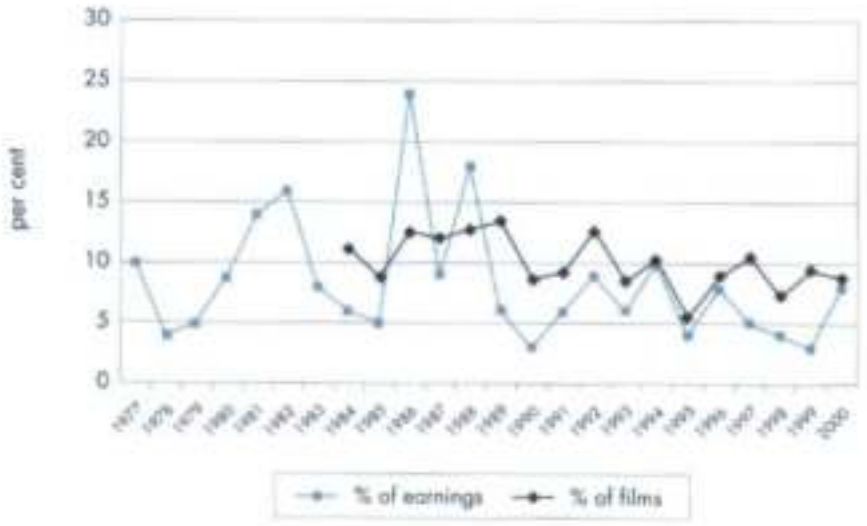
Australian Films

Figure 8.8 shows the proportion of films shown that were Australian, and the proportion of box office earnings made by these films.

The success of Australian films at the Australian box office fluctuated wildly over the period from 1977 to 2000, with box office earnings generally being higher when the number of Australian films was greater. The highest peaks in box office earnings occurred in the 1980s. This decade saw the release of several Australian films that were highly successful both in Australia and internationally, most notably the *Crocodile Dundee* movies and *The Man From Snowy River* movies.

8.8 Australian Films 1977-2000

Australian films' share of films screened and box-office earnings



Source: Australian Film Commission / Motion Picture Distributors Association of Australia (www.afc.gov.au/resources/online/pdfs/faq6.pdf)

Adults' Participation in Organised Sport

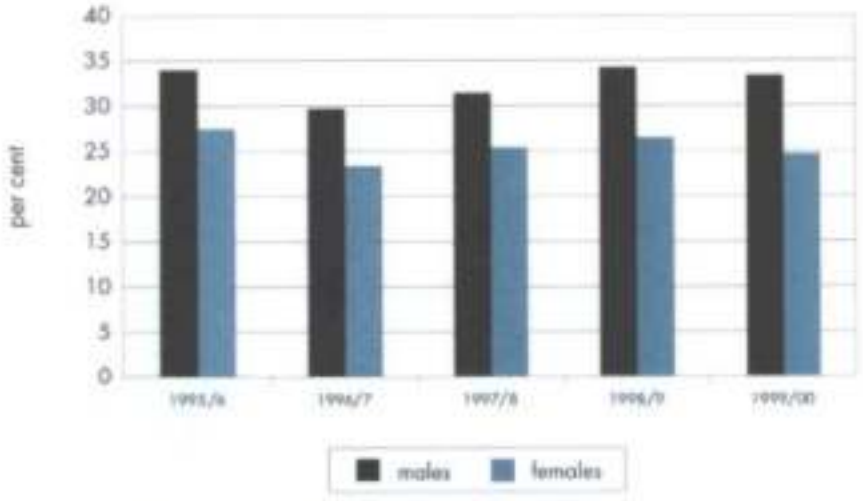
The importance of sport in the Australian way of life and as an element of national well being needs no emphasis. The Australian Bureau of Statistics conducted a series of surveys starting in 1993/94 to estimate how many people were involved in sports. The content of this survey changed in the 1997/98 survey to include both organised competitions and non-organised sports such as fishing and golf, whereas the earlier surveys reported only organised sports.

Figure 8.9 shows the proportion of adult males and females who participated in an organised sport from 1996 to 2000. Around one third of men and one quarter of women participated in an organised sport in 2000. The inclusion of non-organised sport brings total participation to 55%.

Because the series covers only a short time period, it is difficult to discern any trend. It appears that male participation in organised sport has shown little change, and that female participation has declined slightly.

8.9 Adults' Participation in Organised Sport 1996-2000

per cent of men and women aged 18 years or more



Source: *Participation in Sport and Physical Activities* (ABS Cat. 4177.0)

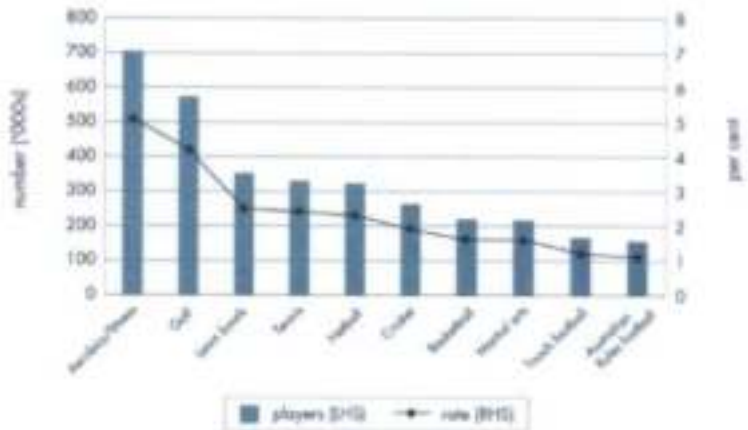
Top 10 Organised and Non-Organised Sports for Adults

Figures 8.10a and 8.10b show the ten organised and non-organised sports that have the highest participation rates. Non-organised sports have participation rates two to three times higher than organised sports.

Examination of the most popular organised and non-organised sports for adults reveals several common activities. Golf, aerobics/fitness and tennis appear in both the top 10 organised sports and the top ten non-organised sports. Both lists are dominated by activities that can be done individually, with team sports falling at the lower end of the list of organised sports.

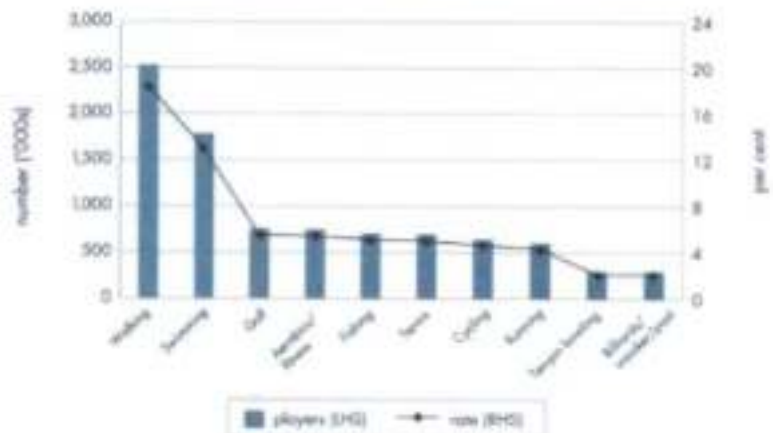
8.10a Top 10 Organised Sports for Adults 1999-2000

number of players and per cent of adults aged 18 years or more



8.10b Top 10 Unorganised Sports for Adults 1999-2000

number of players and per cent of adults aged 18 years or more



Source: Participation in Sport and Physical Activities (ABS Cat. 4177.0)

Children's Participation in Sport, Cultural and Leisure Activities

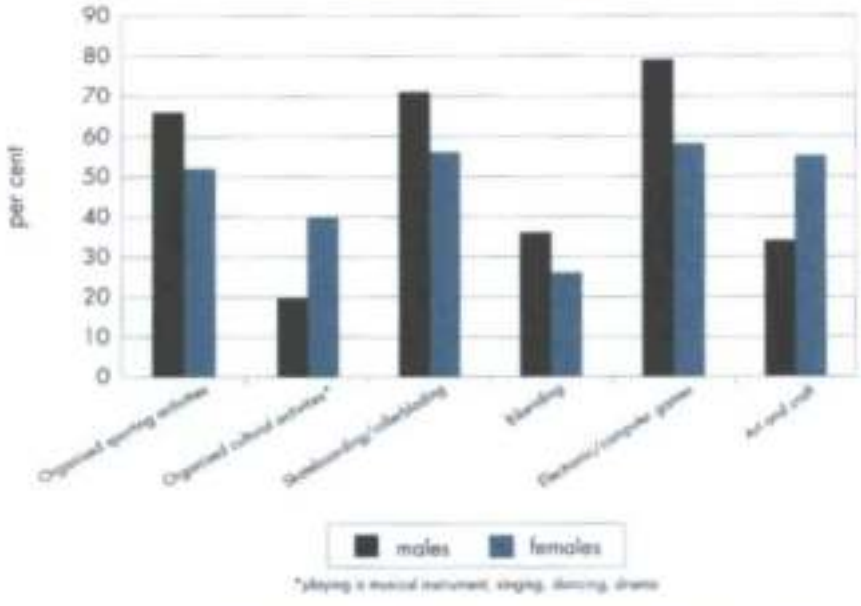
In 2000, for the first time, the Australian Bureau of Statistics conducted a survey of children's participation in sport, cultural and leisure activities. Figure 8.11 illustrates its general findings.

Boys were more likely to participate in physical activities, whether sport or other activities such as bike-riding, than were girls. Boys also were more likely to play electronic or computer games. Girls, however, had higher rates of participation than boys in cultural activities, such as performing arts, as well as art and craft.

The survey also found that participation in organised sporting and cultural activities was higher among older children—61% of children aged 5-8, 77% of children aged 9-11, and 73% of children aged 12-14 participated in an organised sport or cultural activity.

8.11 Children's Participation in Sport, Cultural and Leisure Activities 2000

per cent of children aged 5-14

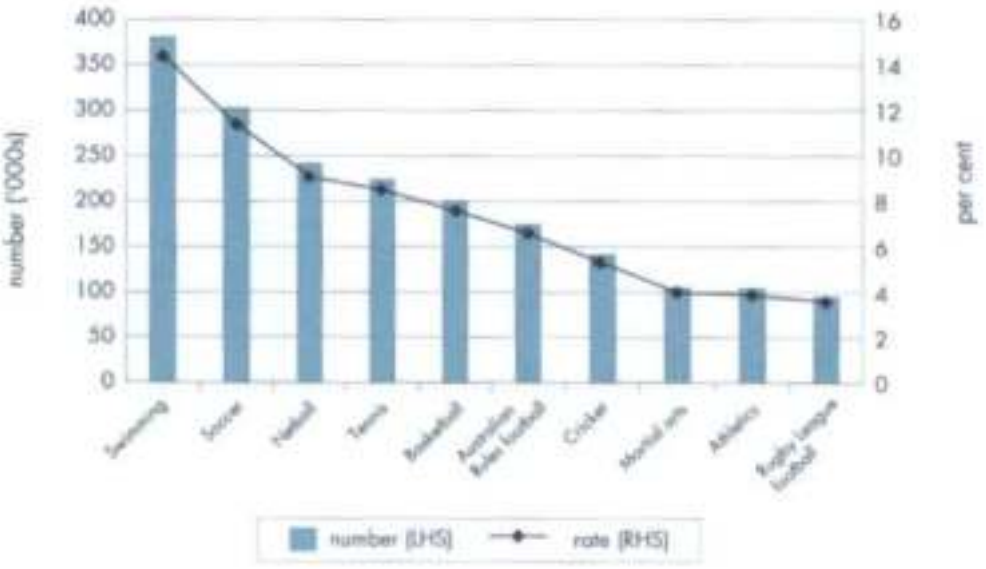


Source: *Children's Participation in Culture and Leisure Activities* (ABS Cat. 4901.0)

Top 10 Organised Sports for Children

The sports favoured by children (and their parents) resemble those favoured by adults, but team sports feature more prominently. Two notable inclusions in the top 10 organised sports for children, which do not appear in the top 10 organised sports for adults, are swimming and soccer. Swimming has by far the highest participation rates for children as an organised sport, and the popularity of this activity appears to carry over to adulthood as a non-organised activity. Soccer's high participation rates among children might be attributed to parents looking for a non-contact, safer football code than the rugby codes.

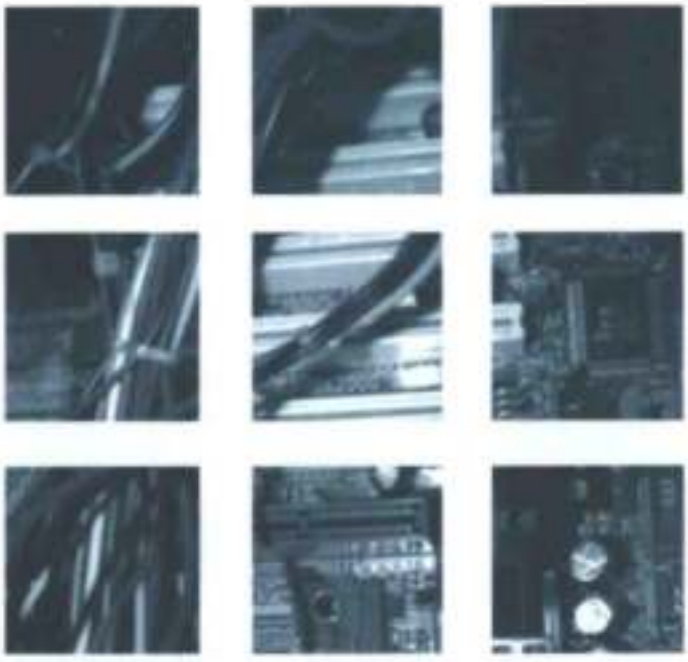
8.12 Top 10 Organised Sports for Children 2000
number of players ('000s) and per cent of children aged 5-14 years



Source Children's Participation in Culture and Leisure Activities (ABS Cat. 4901.0)

Section 9

Communication and Technology



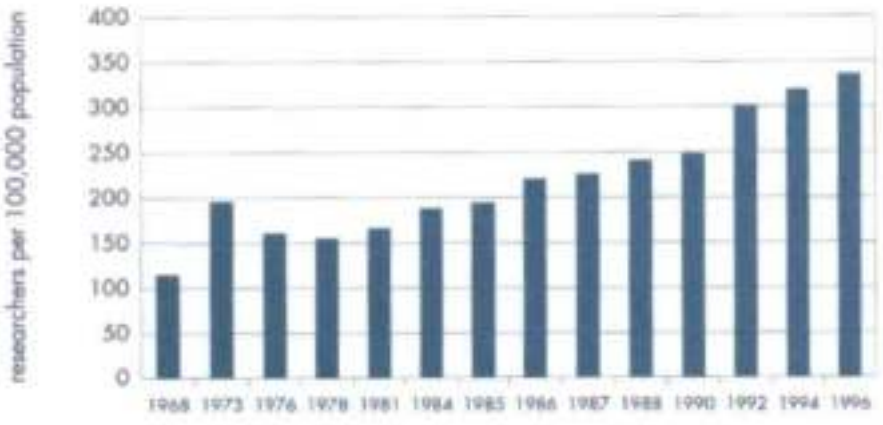
Researchers Engaged in Research and Development

The United Nations' Educational, Scientific and Cultural Organisation (UNESCO) publishes each year a *Statistical Yearbook*, with information about education, science and technology and communication in many nations. This information includes data on research and development personnel and expenditure in Australia. The most recent *Statistical Yearbook*, published in 2000, contains data up to 1996.

Figure 9.1 shows that there has been an increasing number of researchers engaged in research and development in the period 1968 to 1996. UNESCO defines researchers involved in research and development as 'professionals engaged in the conception or creation of new knowledge, products, processes, methods and systems, and in planning and management of research and development projects.'

In 1996, there were almost three times as many researchers involved in research and development per 100,000 population than in 1968.

9.1 Researchers Engaged in Research and Development 1968-1996
per 100,000 population



Source: UNESCO Statistical Yearbooks

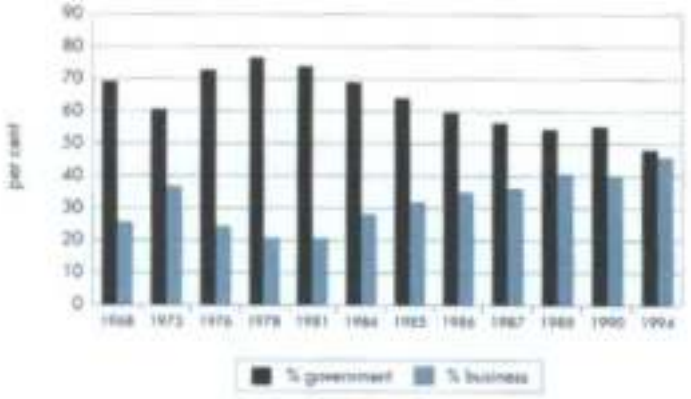
Expenditure on Research and Development

Figures 9.2a and 9.2b show that expenditure on research and development also increased significantly between 1968 and 1996, both as per capita expenditure (in constant dollars) and as a proportion of Gross National Product.

An important development has been the increasing contribution of private funding to research and development. Failure to take this into account gives the impression that expenditure on research and development did not increase significantly. From 1968 to the early 1980s, governments provided almost 70% of research and development funding. Thereafter, the relative contribution of private (business) funding increased, and in 1996 it was almost equivalent to government funding.

9.2a Source of Expenditure on Research and Development 1968-1994

per cent of total expenditure from government and from business



9.2b Expenditure on Research and Development 1968-1996

per cent of GNP and per capita (2000 constant dollars)

Source: UNESCO Statistical Yearbooks

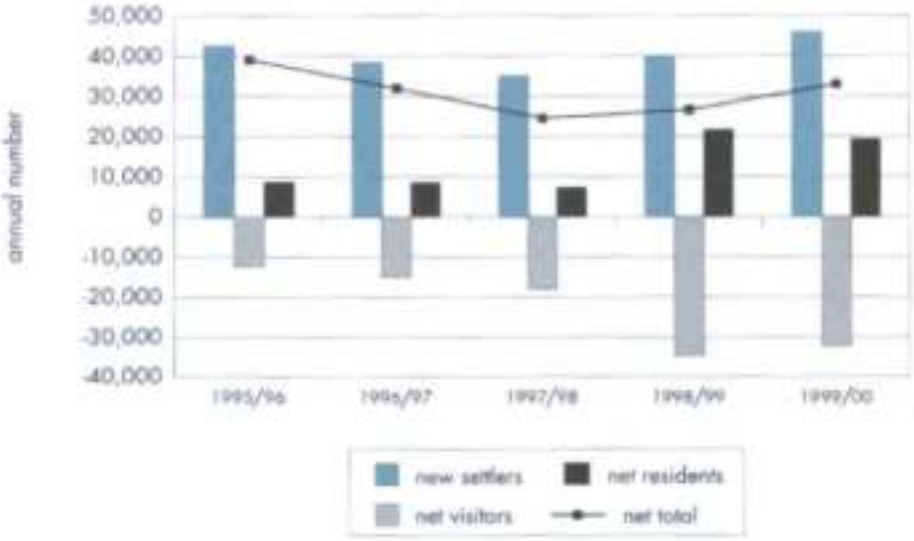
Arrivals and Departures of Skilled Workers

Concerns about a 'brain drain'—the movement of highly skilled and qualified Australian citizens to other countries—is widespread. Immigration figures, however, do not support this belief. Figure 9.3 shows the net effect of the movement of skilled workers in and out of Australia from 1995/96 to 1999/2000.

Although more Australian citizens classified as skilled workers left the country than arrived, a large number of new settlers classified as skilled workers arrived in Australia and more long-term visitors to Australia arrived in the country than left. The net effect was positive—Australia gained more skilled workers than it lost.

Immigration classifications provide limited information, however, and there is a question of quality. It is possible that first-class skilled persons leaving Australia are being replaced with persons of somewhat lesser ability.

9.3 Arrivals and Departures of Skilled Workers 1996-2000



Source: Birrell, B., I.R Dobson, V.Rapson and T.F. Smith 2001, *Skilled Labour: Gains and Losses*, Department of Immigration and Multicultural Affairs, Canberra.

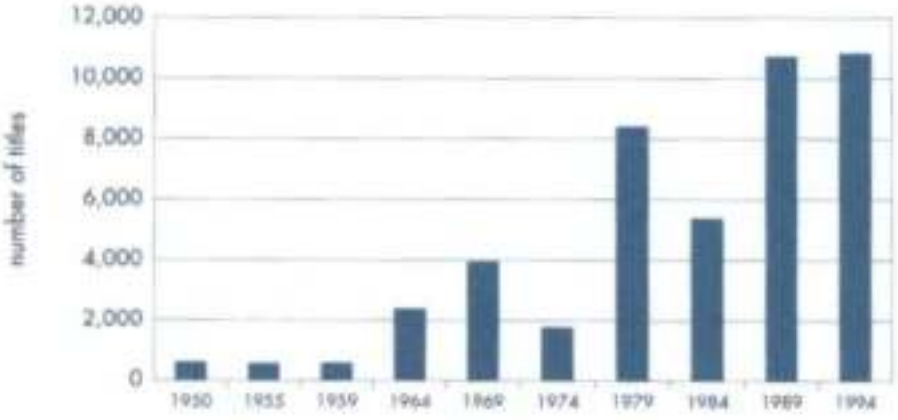
Books Published

The UNESCO *Statistical Yearbooks* contain information about publishing of books and the circulation of newspapers. Data on the number of titles published comes from the bibliographic records of the National Library, as it receives a copy of all books published in Australia.

Figure 9.4 shows that an increasing number of titles have been published in Australia over the period 1968 to 1996. This does not represent the number of copies published, but rather the number of different books published.

9.4 Books Published 1950-1994

number of titles published annually



Source: UNESCO *Statistical Yearbooks*

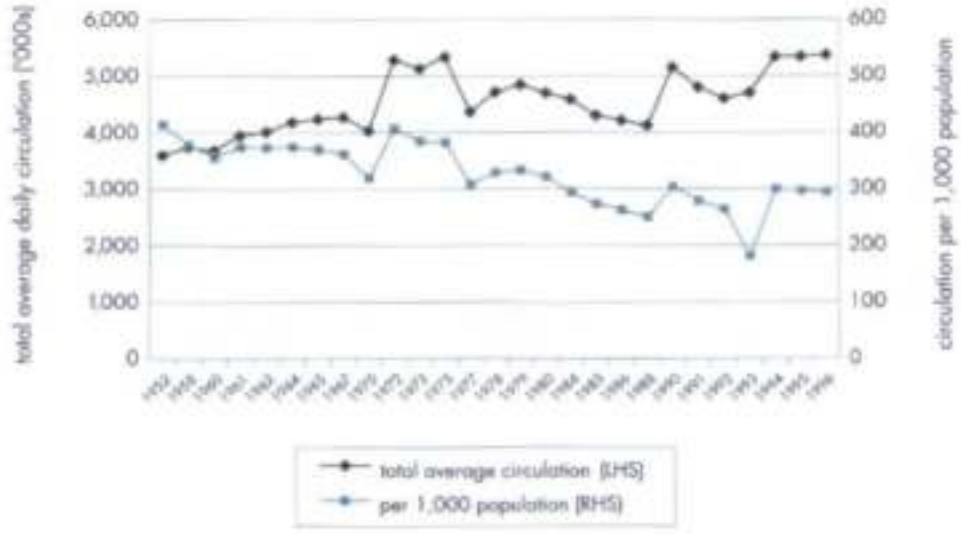
Daily Newspapers

Average circulation of daily newspapers relative to the population decreased from 1968 to 1996, although total circulation went up. In 1968, more than 40% of the population read a daily newspaper, compared with just under 30% in 2000.

The reasons for the decline are not obvious. It is possible that the internet is a contributing factor.

9.5 Daily Newspapers 1952-1996

total average daily circulation and circulation per 1,000 population



Source: UNESCO Statistical Yearbooks

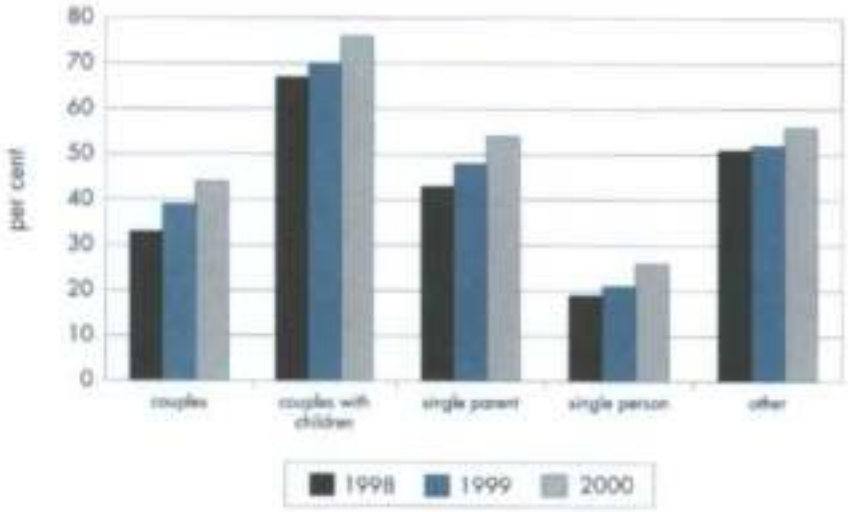
Homes with Computers

The largest and fastest growing group of owners of home computers is couples with children. Figure 9.6 shows that between 1998 and 2000, the number of couple families with children who had a computer at home increased from two thirds to three quarters of such families. The group least likely to have a computer at home is single persons.

The higher prevalence of computers in households with children reflects the growing importance of computer skills for employment and the subsequent emphasis on computer literacy in schools. It is also an indicator of the increasing affordability of computers and basic software.

9.6 Homes with Computers 1998-2000

per cent of households in each category



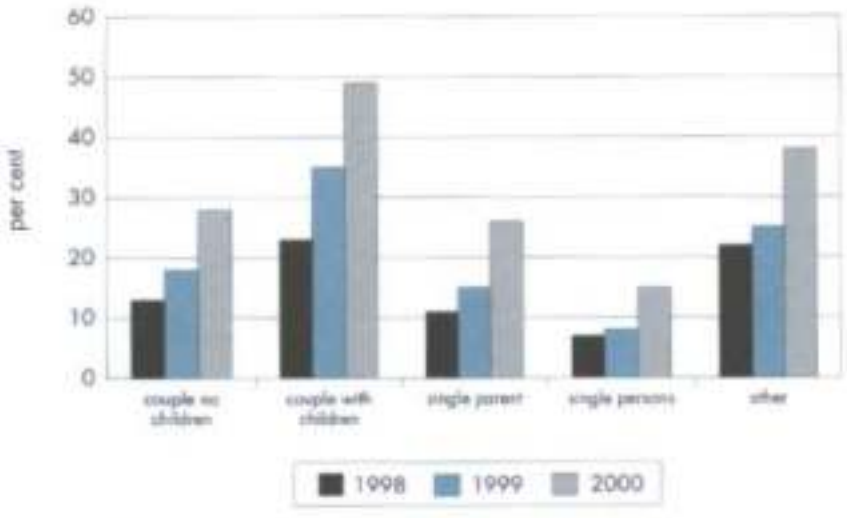
Source: *Household Use of Information Technology* (ABS Cat. 8146.0)

Homes with Internet Access

Figure 9.7 shows that the proportion of households with internet access at home doubled between 1998 and 2000, for each family type. As for computers, couples with children are most likely to have internet access at home, while single persons are least likely.

Unlike most forms of media, the content of the world-wide web—the network of telephone lines, computers and internet servers and subscribers—is not subject to censorship, although that question is currently under consideration by the Federal Government. However, parents concerned that their children may be exposed to inappropriate, often sexually explicit, material can purchase software that acts as a screening device to block the viewing of internet sites that have been so identified.

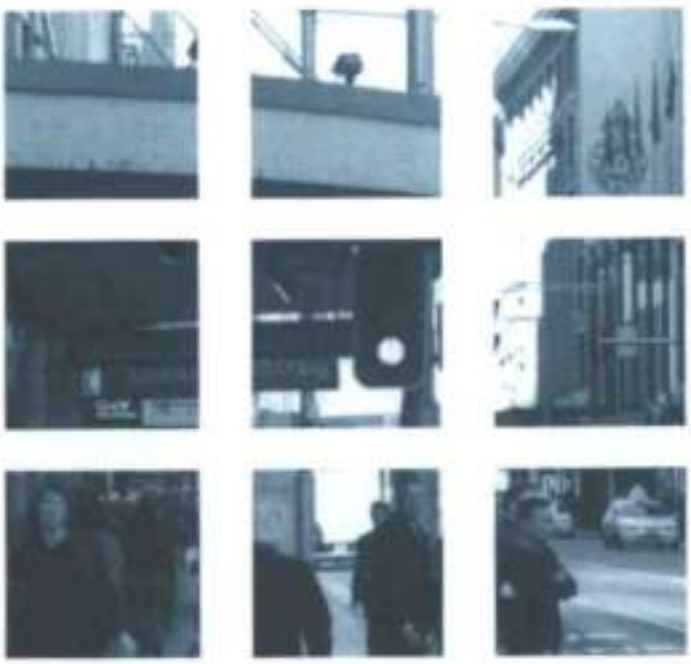
9.7 Homes with Internet Access 1998-2000
per cent of households in each category



Source: *Household Use of Information Technology* (ABS Cat. 8146.0)

Section 10

Labour Market



Labour Force Participation

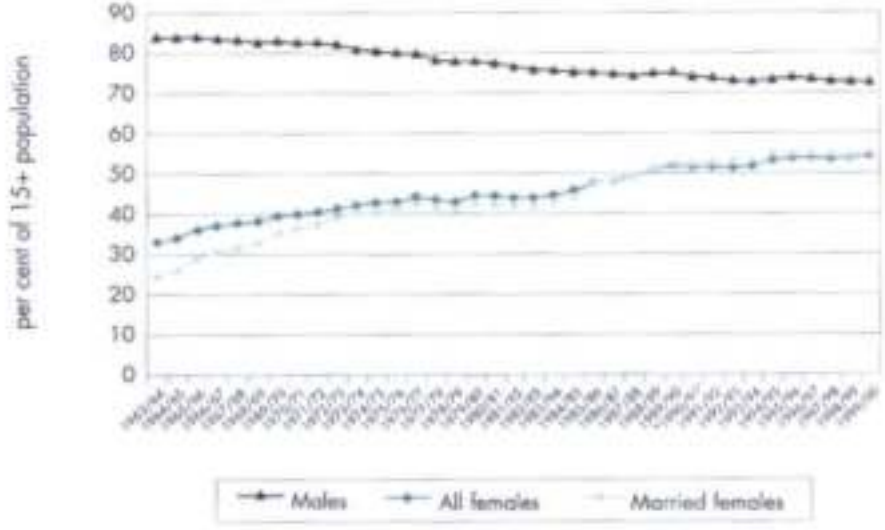
Australian labour participation rates (working full-time, part-time or looking for work) for men have been falling, mainly because men have been staying longer in education. This has been more than offset by the rising work participation of women (figure 10.1).

Australian women's participation in the labour force, although higher than 20 years ago, is still lower at just over 50% than in some other industrial countries such as Sweden, where it is over 75%.

Perhaps surprisingly, there is now little difference between the work participation rates of married and unmarried women.

10.1 Labour Force Participation 1964-2000

per cent of 15+ population



Sources: R.A. Foster 1996, *Australian Economic Statistics 1949-50 to 1994-95*, Reserve Bank of Australia;
Labour Force, Australia (ABS Cat. 6203.0)

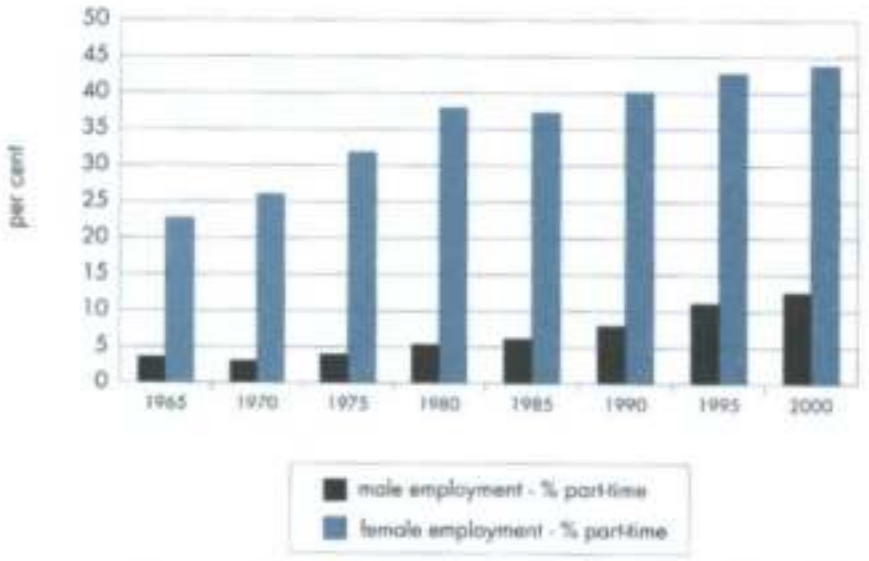
Part-time Employment

More men and women have been choosing part-time employment. The part-time proportion of the labour force has increased from an average for men and women of 7% in 1965 to 26% of the employed labour force in 1999/2000.

More than 70% of part-time workers are women and almost 45% of employed women work part-time. Most men and women who work part-time choose to do so, though about a third (including married women) would prefer to work longer (not necessarily full-time) hours. Studying and caring for children are the principal, though not the only, reasons for working part-time.

10.2 Part-time Employment 1965-2000

per cent of male and female employees who are employed part-time



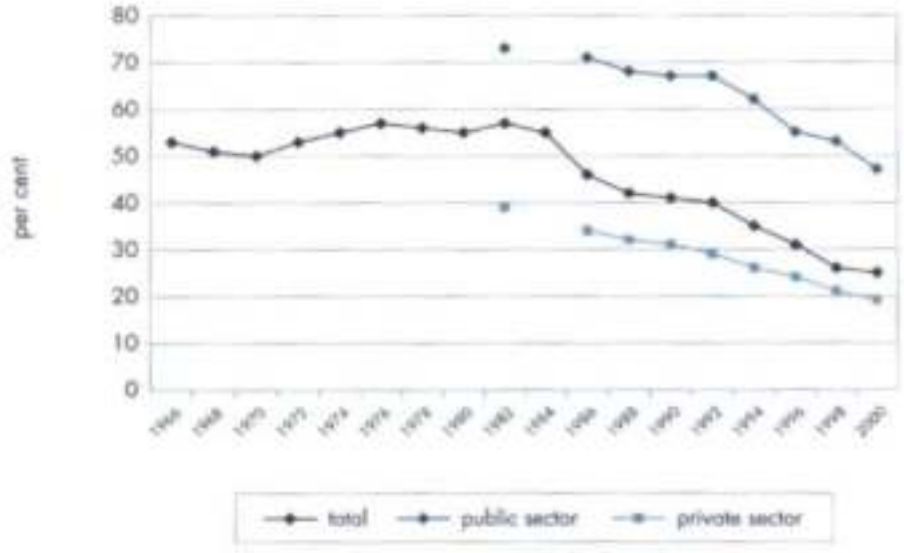
Sources: R.A. Foster 1996, *Australian Economic Statistics 1949-50 to 1994-95*, Reserve Bank of Australia
Australian Economic Indicators (ABS Cat. 1350.0)

Trade Union Membership

Declining trade union membership is a worldwide phenomenon, reflecting changing industrial and occupational structures and hence changing industrial relations. Human capital (education, training and work experience) has become the principal determinant of lifetime employment, earnings and asset accumulation for a rising proportion of workers who have therefore lost interest in trade union action with its group, rather than individual, approach to working conditions and earnings.

Most jobs are not as physically onerous as they used to be. Many of the working conditions that trade unions struggled hard to achieve have become accepted as a norm. The organisation of work has been transformed, with most firms realising that concern for the well being of their employees, particularly on the job, is essential for profitable operations. Trade unionism in the private sector is reflecting these trends. In the public sector, however, out of date management practices and regulations have preserved unionism.

10.3 Trade Union Membership 1966-2000*



* Breakdown by sector is not available for the early years.

Sources: *Trade Unions, Australia* (ABS Cat. 6325.0)
Employee Earnings, Benefits and Trade Union Membership (ABS Cat. 6310.0)

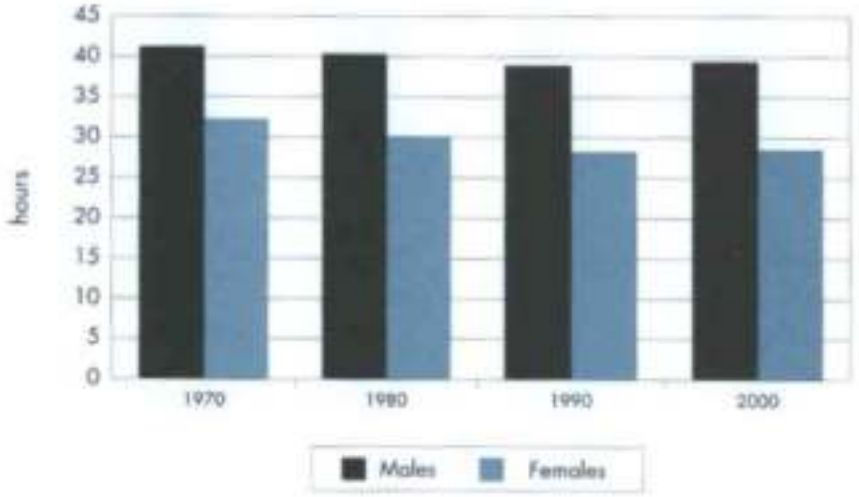
Working Hours

Some workers are making new choices about the length of their working hours, trading off work and leisure and work and income. Two trends are discernible. For some employees the 40 hour week has become a maximum, with 35 hours being regarded as a full working week—as the 5 day week is shortened, shift workers condense the working week into less than 40 hours and workers become entitled to monthly flexi-days. At the other end of the spectrum, some employees and self-employed men and women work long hours to boost their earnings or because they want to pursue professional and entrepreneurial interests. There has been little change in the average hours worked.

Increased leisure is an important component of rising living standards for some workers. Enjoying work and the workplace to the point of substituting work for leisure rewards others.

10.4 Average Weekly Hours Worked 1970-2000

average hours worked per week by male and female employees



Source: *Labour Force, Australia* (ABS Cat. 6203.0)

Average Weekly Earnings in Constant Prices

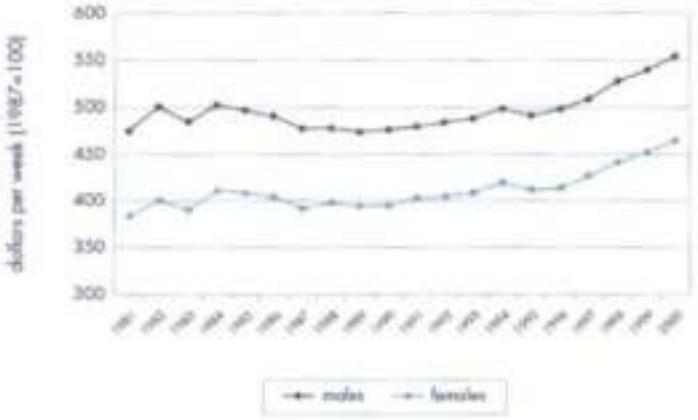
Average weekly earnings rose from the mid-1970s, peaking in the mid-1980s. They then fell to the end of the 1980s during the Accord between the Labor Government and the trade unions. During this period, however, industry superannuation schemes were introduced at the employers' expense. Despite increasing contributions to superannuation, wages began to rise slightly with the recovery from the 1991 recession, and the rise accelerated in the second half of the 1990s together with a fall in unemployment.

The difficulties of unskilled workers, compared with the high wages and salaries paid by capital and technology intensive firms, have led to fears that the income gap was widening. Peter Saunders, 'Household Income and Its Distribution', in the *2001 Yearbook of Australia* (ABS Cat.1301.0), however, found very minor changes in the distribution of the weekly income of wage and salary earners between 1986 and 1997-98, with only a slight increase in inequality. Given the wide differences among the pay of unskilled and highly skilled and professional and managerial employees, this is surprising.

Since the introduction of equal pay in Australia, the gap between men and women's average weekly earnings has declined. Australia has one of the lowest gender earning gaps in the world. Full-time female employees' earnings were, nevertheless, still only 81% of full-time male earnings. In part this is because more women than men interrupt their work experience and careers to nurture children, but it is also because women have only relatively recently obtained access to senior jobs. It is taking time for the increasing proportions of women in senior professional and managerial jobs to be reflected in average earnings. Part-time female employees earned more than part-time male employees.

10.5 Average Weekly Earnings in Constant Prices 1981-2000

male and female full-time adult employees, ordinary time earnings, 1987 dollars



Sources: R.A. Foster 1996, *Australian Economic Statistics 1949-50 to 1994-95*, Reserve Bank of Australia Yearbook (ABS Cat. 1301.0)

Unemployment

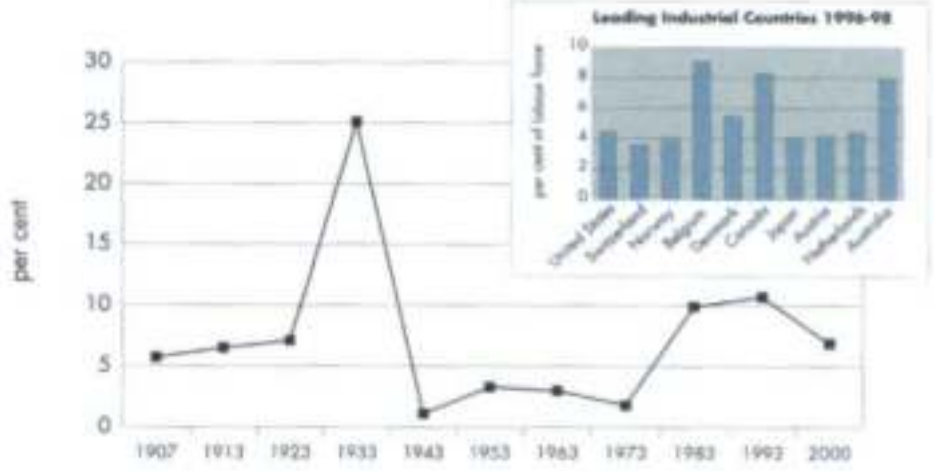
With the growth of the economy, unemployment rates in Australia have been reduced in recent years, but they remain high, reflecting the lack of competitiveness of the economy that is also indicated by relatively low export to GDP ratios and the low value of the Australian dollar (Figure 11.6).

Figure 10.6 shows unemployment rates from 1907 to 2000. These cover those in the labour force who are looking for work. This is the widely used International Labour Office's definition of unemployment, but it does not include those only marginally attached to the labour force who are looking for work and those who have dropped out of the labour force and become dependent on disabled, single parent, or other pensions. These two groups add another two to three percentage points to the unemployment level.

Unemployment fell to between 1% and 3% from 1943 to 1973, but returned to unacceptably high levels of unemployment between 7% and 10% in the 1980s and 1990s.

The proportion of unemployed who have been unemployed for 52 weeks or more has nearly doubled in the past 20 years from 16% in 1970 to 29% in 1999-2000, creating serious cause for concern with the emergence of permanently unemployed workers.

10.6 Unemployment 1907-2000
per cent of labour force



Sources: Yearbook Australia (ABS Cat. 1301.0)
World Bank, *World Development Indicators 2001*, Washington D.C.

Unemployment by Age

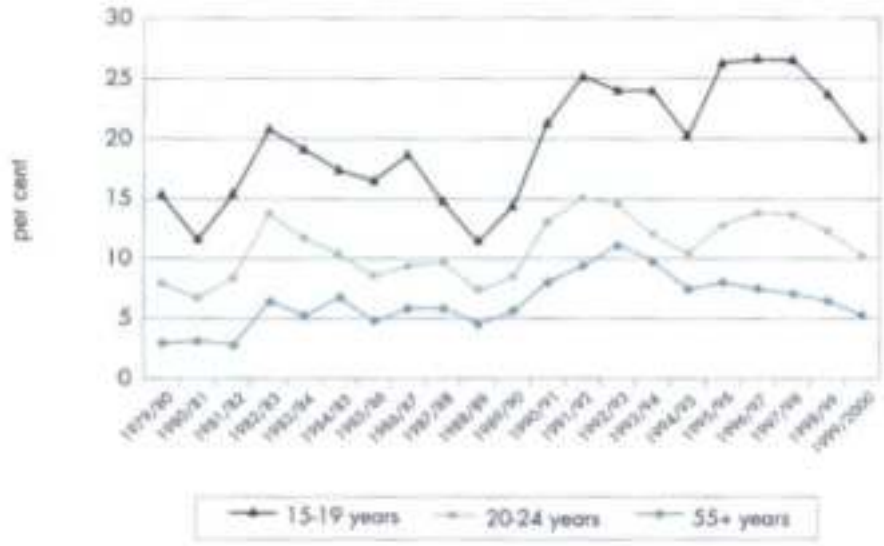
About 250,000 young people aged 15-24 were looking for work in 1999-2000. The numbers fall off sharply after 19 years of age, with 142,000 of those aged 15-19 and 109,000 of those aged 20-24 looking for work. Total youth unemployment is underestimated by the exclusion of those only marginally attached to the labour force and by those who have dropped out of the labour force to access disability and other pensions. Only 16,000 of those looking for work are attending school/tertiary education institutions full-time—that is, seeking to work their way through school or college—but 96,400 are only looking for part-time work, suggesting that they seek to combine work and study.

Finding a job after the age of 55 is difficult, particularly for unskilled workers and those who have become inflexible during their working years. The numbers in this age group seeking full- and part-time work, however, only numbered about 44,000 in 1999-2000. The numbers marginally attached to the labour force and those who have dropped out are, of course, likely to be higher for this age group than for younger people.

Most unemployed persons (367,000) were aged 25 to 54. Only 18%, mainly women, were looking for part-time work. Total unemployment for the 25 to 54 years group is also understated by the exclusion of those only marginally attached to the labour force and those who have dropped out of the labour force.

10.7 Unemployment by Age 1980-2000

per cent of labour force looking for full time work
(15-19 & 20-24 year olds not in full time education)



Source: *Labour Force, Australia* (ABS Cat. 6203.0)

Poverty and Welfare

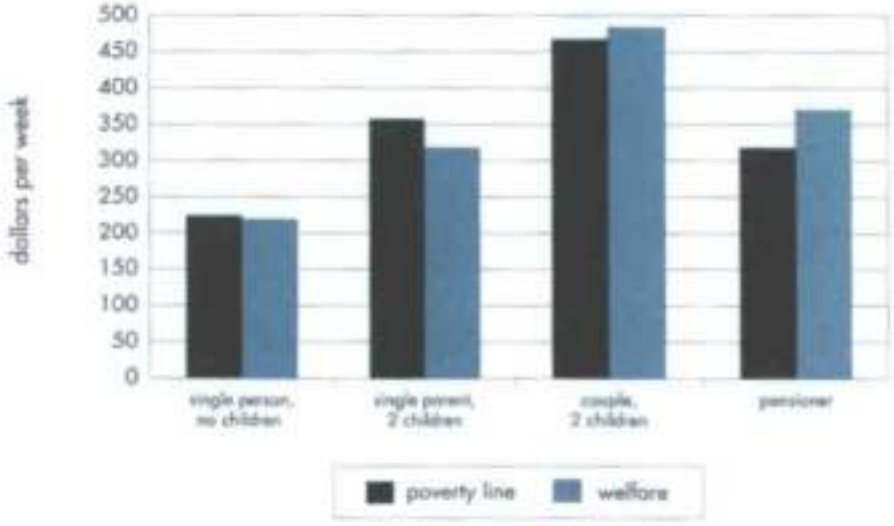
Most Australians consider that in a rich country such as theirs, poverty is intolerable. There has thus been bipartisan support for a safety net of welfare payments for those who are disabled, unemployed or otherwise disadvantaged. Children have been of particular concern. As a result, welfare payments (disabled, unemployed, single parent, old age and other pensions, and supplementary child, housing and other payments) have been raised to the level of the Henderson Poverty Line, widely regarded as a level of income below which households, particularly with children, should not fall.

Further support for people in poverty is provided by some 10,000 to 11,000 community social welfare organisations that employ about 100,000 charity workers and many more volunteers. More than half the income of the social welfare organisations is contributed by governments (Industry Commission, *Charitable Organisations in Australia*, 1995).

While a safety net is widely regarded as essential by the Australian community, the benefits are not unalloyed. Continued dependence on welfare is debilitating to the recipients. There is therefore increasing concern with enabling welfare recipients to find jobs. The introduction of 'mutual obligation' (by workers, governments and employers) seeks to address this problem.

10.8 Poverty and Welfare 2000

Henderson poverty line and
maximum welfare payments, dollars per week



Source: Melbourne Institute of Applied Economic and Social Research, *Poverty Lines: Australia*, December Quarter 2000

Income Distribution

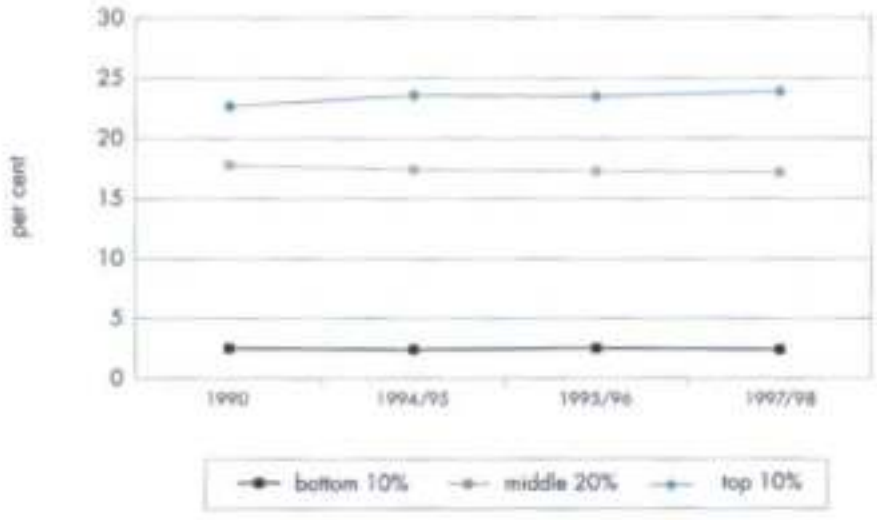
There is general agreement that income distribution became more equal in Australia between 1915 and 1969, with much of the rise in equality taking place after the Great Depression of the early 1930s, and that there was a further modest rise in equality between 1969 and 1981. Views about trends in the 1980s and 1990s differ, although it is also widely agreed that the incomes of the two lowest deciles rose in absolute terms (notably for children in those deciles) as did those of the highest two deciles. This has led some observers to conclude that 'the middle' has been squeezed.

Income distribution *per se* does not have any guidance for policy. Absolutely equal income distribution, the same proportion of income for each decile of the population, has proved to be a totally unrealistic concept. An equal distribution of income would take no account of individual preferences for work and leisure, of different earning and spending patterns at different ages, of the development of individual capacities and of the need for incentives to employees and entrepreneurs.

Figure 10.9 does not include income from the 'black' economy, which is estimated to be 15% of GDP. The inclusion of such income would raise the shares of the lower deciles by a greater margin than other deciles, making income distribution appreciably more equal.

10.9 Income Distribution 1990-1998

per cent of OECD equivalent disposable income received by individuals in bottom 10%, middle 20% and top 10%



Source: *Trends in Income Inequality in the 1990s*, National Centre for Social and Economic Modelling, paper presented at Business Council of Australia seminar, Sydney, 13 August 2001.

Section 11

Domestic Economy

Preface

Economic performance, measured by national productivity and output, underpins the possibilities of social and cultural life and profoundly influences the opportunities for individual well being. The 20th century showed that the economies that best meet the needs of their citizens are those in which productive capacity is overwhelmingly privately owned and operates within a competitive environment and a system of government based upon the integrity of institutions, the rule of law and equality before the law. Although the Australian economy remains quite regulated, notably in industrial relations, in comparison with many other industrial countries, economic reforms since the 1980s have opened up the economy to international competition and some enterprises and utilities that were formerly government operated have been privatised.

In the 1990s, the re-establishment of monetary stability and low inflation became priorities. From the middle of the decade government budgets were balanced. Some attempt has been made to make labour markets more flexible and the tax system more equitable and efficient. The results of these changes are becoming evident in a challenging but more stable and predictable environment for enterprise, and in increasing productivity and national wealth.

Welfare has not been neglected, albeit at very high cost to taxpayers and, paradoxically, to those who become dependent on it. Unemployment, which is closely correlated with poverty, is still unnecessarily and unacceptably high. It remains the principal cause of low living standards and thus Australia's key social and economic problem. Australia has very considerable natural advantages and an able population, but its pace of reform is still lagging behind industrial country leaders. To keep abreast of international developments, Australia has to reform its economy faster. Much remains to be done.

Gross Domestic Product per Capita

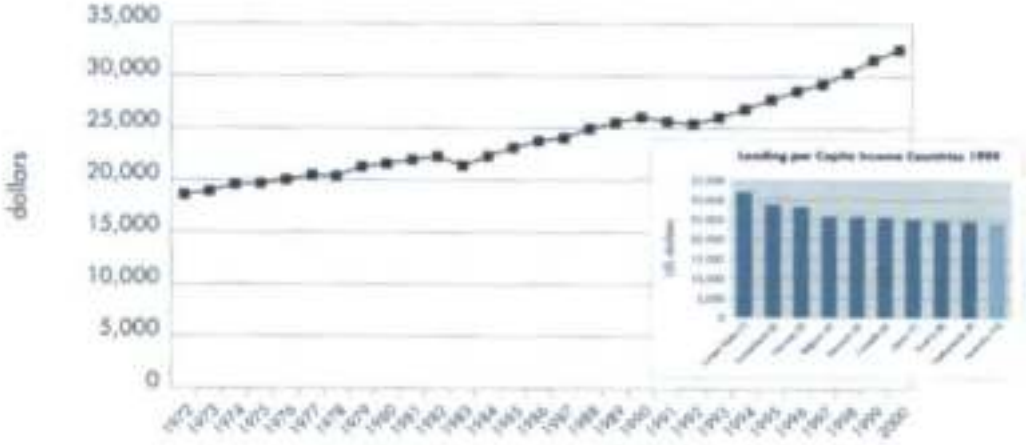
A hundred years ago, Australia's per capita income was the highest in the world (together with Argentina). Fifty years ago, Australia ranked third. From the 1960s, however, other industrial countries, notably Japan, overtook Australian productivity and per capita income. Despite the acceleration in productivity and growth in the 1990s, Figure 11.1 shows that Australia still only ranked 10th in the world in 1999 in purchasing power parity terms. (Australia was ranked 24th at official exchange rates compared to 19th in 1997).

Gross Domestic Product (GDP) is the measure (at market prices) of the total production of goods and services in a year.

The comparison in purchasing power parity (PPP) reflects how much a given product or service would cost in each country in a given unit of currency. The US dollar is used for convenience. PPP is a better indication of countries' relative economic performance than comparisons at official exchange rates, which can create distortions when overvalued or undervalued currencies are used.

11.1 Gross Domestic Product per Capita 1972-2000

1998-99 constant prices



Sources: *Australian National Accounts: National Income, Expenditure and Product* (ABS Cat.5206)
World Bank, *World Development Indicators 2001*, Washington, D.C.

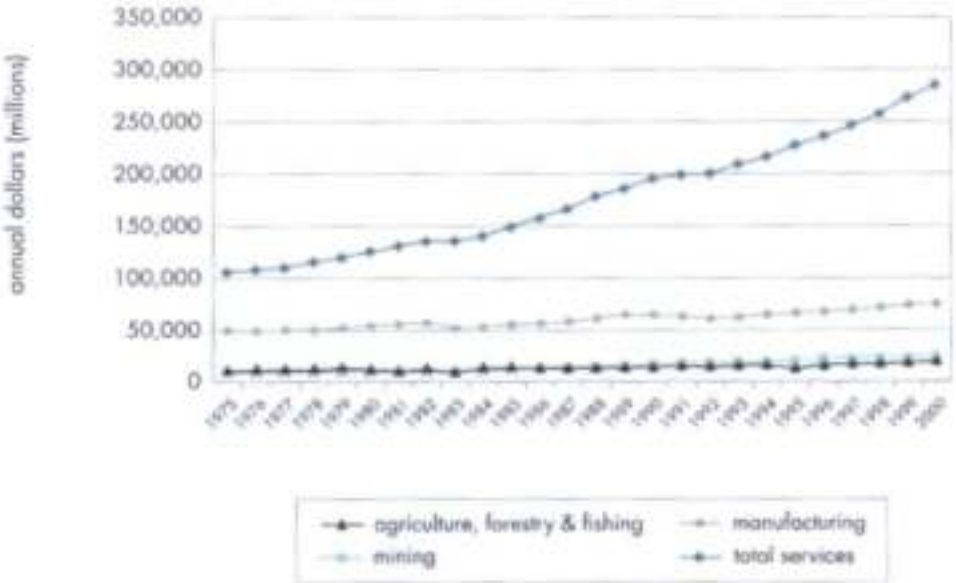
Gross Domestic Product by Industry

The share of output contributed by the principal sectors changed markedly between 1975 and 2000. Service industries have become more important, rising to 44 % of GDP in this period. The growth in GDP shown in Figure 11.2 has thus been largely fuelled by service industries. The share of manufacturing, in keeping with worldwide trends, dropped as consumption patterns changed with rising incomes. Education, health, leisure and entertainment have become large items of household consumption. The share of rural industries also declined. But although the shares of rural and manufacturing industries have fallen, their output continued to rise, with increasing supplies to domestic markets and exports.

In terms of wealth created, there is no difference in value added between, say, manufacturing and services. Increasing domestic processing of rural products or minerals, for example, only increases real national income if it takes place at internationally competitive costs. If 'value adding' has to be subsidised to compete in international markets, it will reduce rather than increase Australia's national income.

11.2 Gross Domestic Product by Industry 1975 to 2000

gross value added, 1998-99 constant prices



Source: *Australian National Accounts: National Income, Expenditure and Product* (ABS Cat.5206)

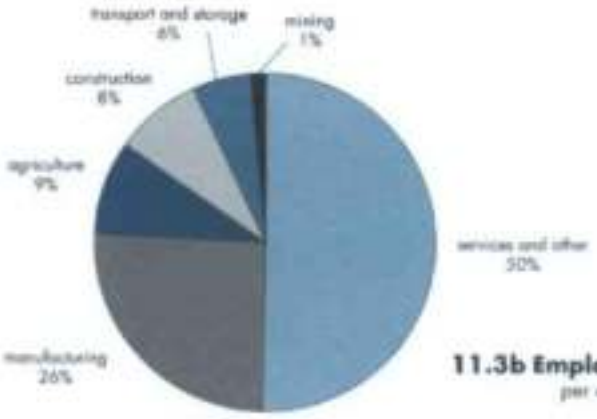
Employment by Industry

Services have become the dominant source of employment for the growing labour force, particularly for the rising number of women in the workforce (Figure 10.1), many of whom at some point in their lives desire to work part-time to combine nurturing children with jobs.

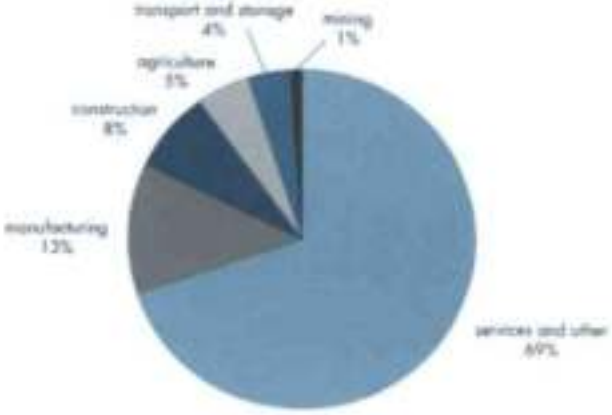
Most jobs requiring low skills are now concentrated in service industries, although even these have increasing skill contents. Most require computer literacy. The 'unskilled' category of employment is thus disappearing and semi-skilled occupations are making increasing learning demands on workers.

Many new technology intensive opportunities have been opened throughout the economy. The managerial, administrative and professional category of workers increased from 17% of the labour force in 1966 to 36% in 2000.

11.3a Employment by Industry 1966
per cent of total employees



11.3b Employment by Industry 2000
per cent of total employees



Source: *Australian Economic Indicators* (ABS Cat. 1350.0)

Australian Multinationals Abroad and Foreign Multinationals in Australia

Investment by multinationals in Australia (direct foreign investment) is a matter of policy concern, just as investment by Australian multinationals in other countries is of concern to them. Flows of investment among countries have been very beneficial in rapidly spreading new products and technologies, and hence high productivity, internationally. Countries have to shape their economic environment to ensure that multinationals behave like other responsible corporations. Many countries, including Australia, also have special regulations for foreign investment in such sensitive areas as the media and natural resources so that governments can ensure compliance with national policies.

Fifty years ago, over 70% of investment by multinationals in Australia was British. In 1999 the United States was the dominant investor. The share of foreign multinationals' in total Australian investment is, however, small.

Since Australia markedly reduced subsidies to its manufacturing industries by lowering tariffs, multinationals have had to face stiff competition in Australia from local firms, which have become more entrepreneurial. New Australian multinationals have grown and are still growing in mining, medical products, transport, shopping centres, travel, film distribution, and other services. More than 40% of Australian investment abroad goes to the United States.

If Australia were to be less open to foreign investment, it would be open to other countries to retaliate, so that Australian multinationals could be hampered in their own activities overseas.

11.4 Australian Multinationals Abroad and Foreign Multinationals in Australia 1950-2001

direct investment (millions)

	Australian direct investment abroad	Foreign direct investment in Australia	Income on Australian direct investment abroad	Remittances on foreign direct investment in Australia
	$million	$million	$million	$million
1950	61	709	-	-
1960	217	1,918	17	230
1970	534	5,275	65	505
1980	4,220	20,713	538	2,069
1990	39,484	96,072	2,598	5,386
Mar-01	150,216	205,073	9,624	13,144

Sources: *R. A. Foster 1996, Australian Economic Statistics 1949-90 to 1994-95*, Reserve Bank of Australia
Australia's Balance of Payments and International Investment Position (ABS Cat. 5302.0)

Inflation

Inflation results in a general rise in the price of goods and services. As prices increase, the value of wages, salaries and pensions diminishes. Pressures build to maintain real incomes, with wages and salaries chasing prices.

Inflation undermines savings and distorts investment decisions. It exacerbates uncertainty (which is always present in economic, as in other aspects of life), so that it hinders economic growth. It is a 'tax' on those with low incomes, particularly on groups such as pensioners and social security recipients whose incomes are relatively inflexible.

Australia did not control inflation well in the 1980s, but with improved monetary and fiscal policies now has one of the best inflation records in the world. Bringing inflation under control has been important for the acceleration of growth in recent years.

11.5 Inflation in Leading High Income Countries
average annual percentage change in the consumer price index

	1980-90	*1990-99*
United States	4.2	2.7
Switzerland	2.9	1.7
Norway	7.4	2.1
Denmark	5.5	2.0
Canada	5.3	1.7
Belgium	4.2	2.0
Italy	9.1	3.0
Austria	3.2	2.4
Netherlands	2.0	2.4
Australia	7.9	2.0

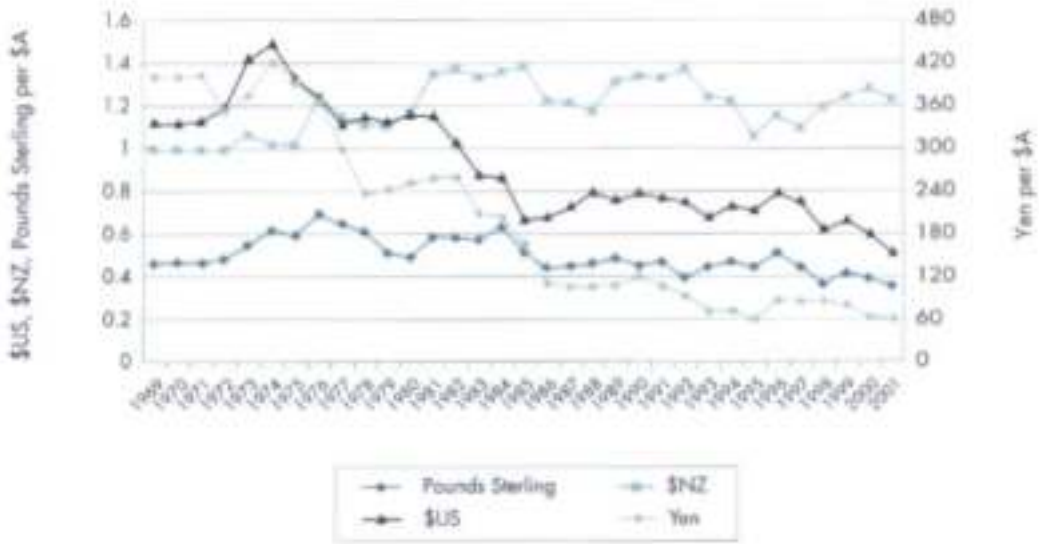
Source: World Bank, *World Development Indicators 2001*, Washington D.C.

Exchange Rates

The Australian dollar has fallen in value in comparison with other principal currencies despite the growth of productivity, output and low inflation. This has been very beneficial for exporters and it has been helpful to domestic producers competing with imports. Tourism has benefited, though the low value of the Australian dollar has been annoying for Australians wishing to travel abroad. Domestic tourism has been encouraged.

Views about the reasons for the low value of the Australian dollar vary. Some commentators regard it simply as a converse of the high valuation of the United States dollar. This does not explain why the Australian dollar has also depreciated to some extent in terms of the pound sterling and steeply in terms of the yen. Others relate the decline in the value of the Australian dollar to the vagaries of international capital markets that prefer the powerful United States economy. A further explanation is that Australian reforms have not gone far enough, so that while the growth of productivity has accelerated, it has not risen sufficiently to offset remaining high costs imposed by inefficient public sectors, by tariff-protected manufacturing and, particularly, by inflexible labour markets (see Figure 12.2).

11.6 Exchange Rates 1969-2001
units of foreign currency per Australian dollar



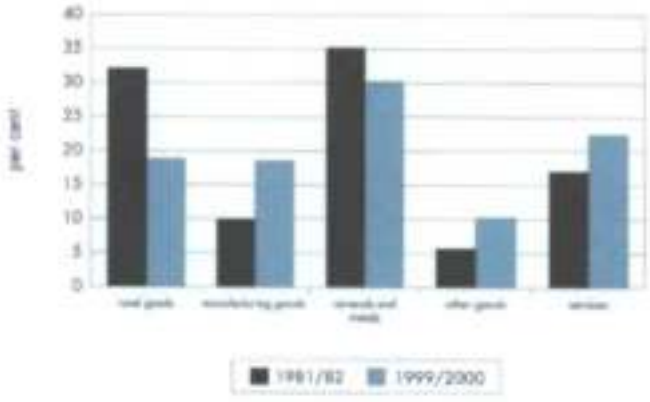
Source: Reserve Bank of Australia, *Statistical Bulletin*

Exports and Imports of Goods and Services

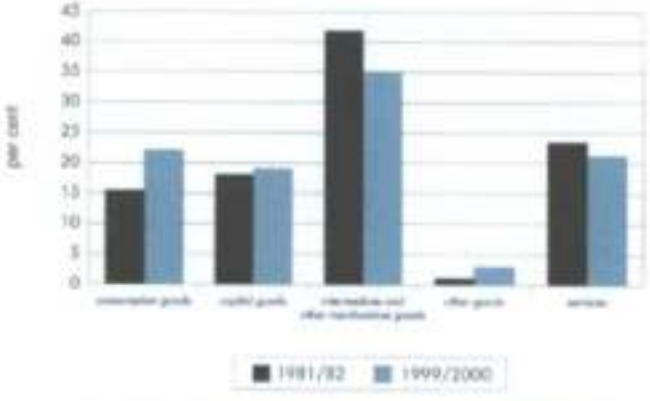
Australia exports to be able to import high quality goods and services from the rest of the world that it does not produce competitively.

Australia's exports are dominated by minerals and metals, and rural goods and services (tourism and education). Exports have risen since the mid-1980s (when they were only about 15% of GDP) with the increased productivity and competitiveness of the Australian economy and the low value of the Australian dollar, but they were still only 20% of GDP in 1999/2000. This is still low for a small country such as Australia. It suggests that Australia is still not sufficiently competitive in international markets. A ratio of 30% of exports to GDP would be more comparable to other countries with populations of 15 to 25 million and would be more comfortable for the Australian economy.

11.7a Exports of Goods and Services 1981/82 & 1999/2000
per cent of total exports



11.7b Imports of Goods and Services 1981/82 & 1999/2000
per cent of total imports



Source: *Australian Economic Indicators* (ABS Cat. 1350.0)

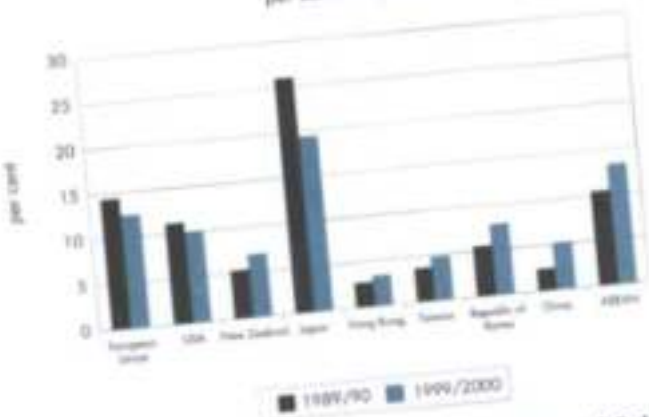
Merchandise Imports and Exports by Origin and Destination

Imbalances of trade have no economic meaning as such because trade and capital flows are both complementary and substitutable. While Australia wishes to attract investment from abroad this is reflected in negative trade balances. Bilateral trade balances are unimportant in a liberal trading world. Nevertheless, it is important to diversify export and import markets to minimise the impact on Australia of changing economic conditions, especially recessions, in other countries and regions.

During the last 50 years, the United Kingdom and other European countries and the United States have declined in importance as export customers while Japan and other Asian countries have become more important. Europe and the United States are still major customers. Many Australian firms find these markets favourable because they have similar consumption patterns to those in Australia.

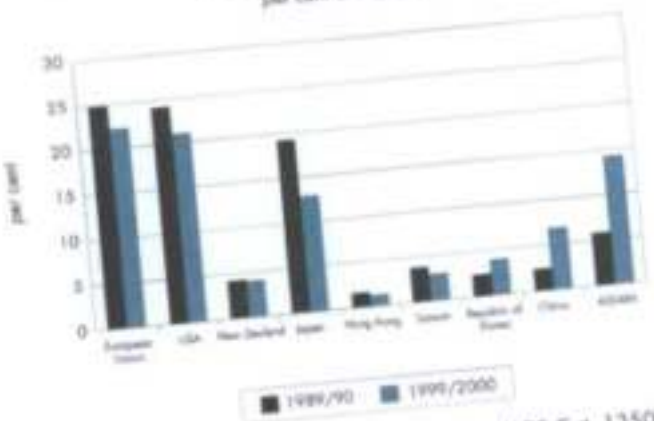
11.8a Merchandise Exports by Country of Destination
1989/90 & 1999/2000

per cent of exports



11.8b Merchandise Imports by Country of Origin
1989/90 & 1999/2000

per cent of imports



Source: *Australian Economic Indicators* (ABS Cat. 1350.0)

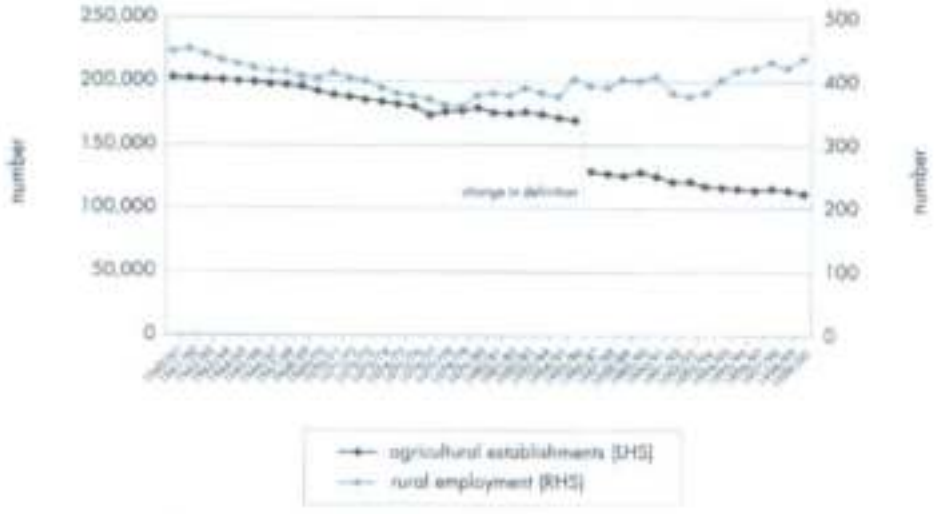
Trends in the Rural Economy

While the total area farmed in Australia has remained unchanged since the 1950s, the number of farms has dropped steeply. In recent years two trends have become evident. To continue to compete internationally, traditional Australian farms have become capital and technology intensive to exploit economies of scale and increase productivity. The size of these farms has increased and their number has declined. At the same time, there has been considerable farm diversification, mainly in areas close to cities and towns, with relatively small scale intensive farming for such crops as grapes, fruit and vegetables and for such animals as deer and goats. Much of this farm output is processed and exported. Employment in farming, after falling for decades, has consequently increased slightly.

Both types of farms have become innovative, with computerised record keeping and cost accounting becoming the norm. Farmers have to invest in commodity, interest and exchange futures to avoid being burnt in export markets.

Changes in farming and more efficient transport have affected rural areas. Towns that offer diversified professional, shopping and education services and entertainment are thriving. Those that do not, decline. Some farmers and rural dwellers, like entrepreneurs and workers in other rapidly changing sectors, have had difficulties in adjusting. Dairying is the most recent example of radical changes. Some have had to leave farming. With the wool stocks created by the attempt to exercise monopoly power in the highly competitive fibre industry finally sold and a return to higher prices for rural products, farmers who have succeeded in mastering new skills are increasing their returns.

11.9 Agricultural Establishments and Rural Employment 1961-2000



Source: Australian Bureau of Agricultural and Resource Economics 2000, *Commodity Statistics*

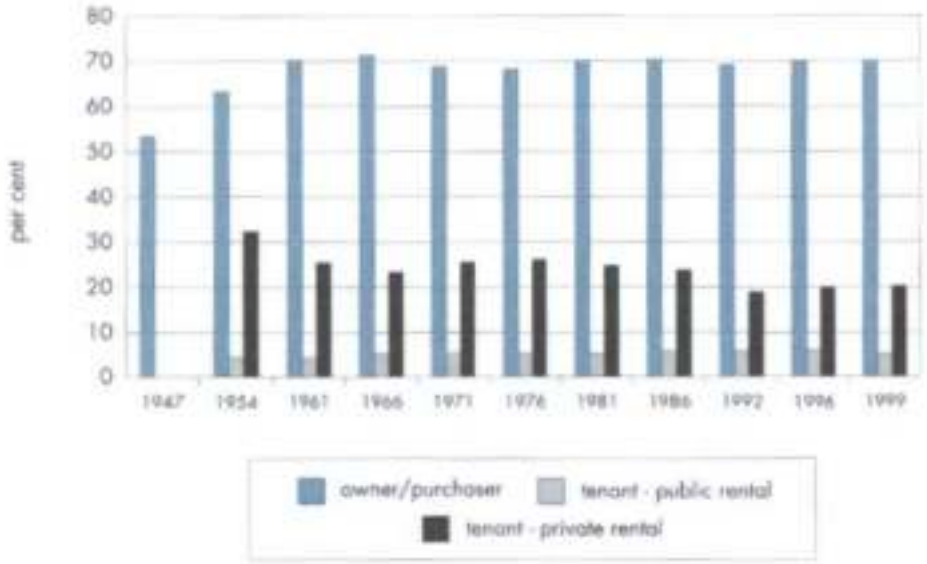
Home Ownership

Australia has one of the highest levels of home ownership in the world. Figure 11.10 shows that home ownership has been stable at nearly 70% of occupied dwellings since the 1960s.

Home ownership provides a large asset that can be enjoyed by families in everyday life and reduces the cost of accommodation, particularly for those retiring from the labour force who have generally paid off their mortgages. Home ownership encourages saving for these reasons and provides a measure of security when households are faced by illness or unemployment.

On the negative side, house values decline when structural change reduces employment opportunities, for example in declining townships or where a mine has come to the end of its life, making it very difficult to move to a new, thriving area where house values are higher.

11.10 Home Ownership 1947-1999
per cent of occupied dwellings by type of tenancy



Sources: *Australian Social Trends 1997, 2001* (ABS Cat. 4102.0)

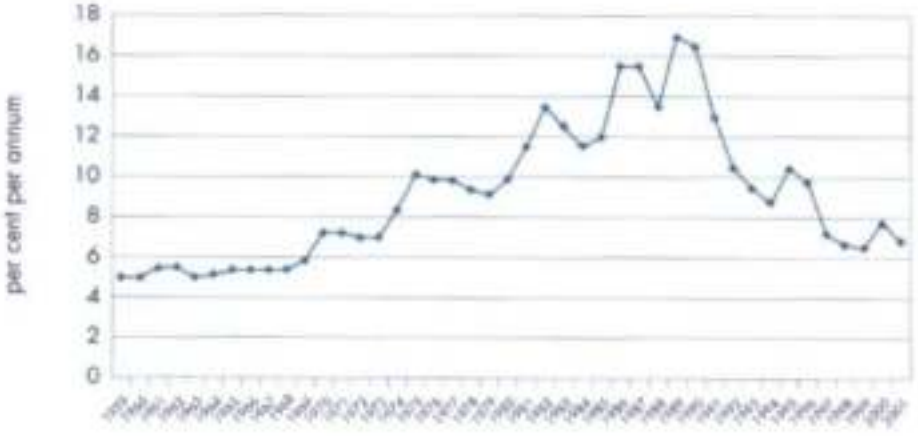
Home Loan Interest Rates

Because a high proportion of Australians own or are purchasing their own homes (Figure 11.10), home loan interest payments are a very important component of household consumption.

During the years of high inflation, home loan interest rates rose to very high levels, to peak at an unprecedented 17% in 1989 on the eve of the deepest recession Australia has experienced since World War II. With the exception of 1995 and 1996, when home loan interest rates again rose, there has been a downward trend in the 1990s, with a return to levels not experienced since the early 1970s. For those buying their own homes, this has meant a substantial increase in income for other goods and services. New home starts have been encouraged, stimulating the economy after the mild drop in activity that followed the boom created by the holding of the Olympic Games in Sydney and the rush to beat the introduction of the GST in 2000.

11.11 Home Loan Interest Rates 1959-2001

banks' standard variable rate



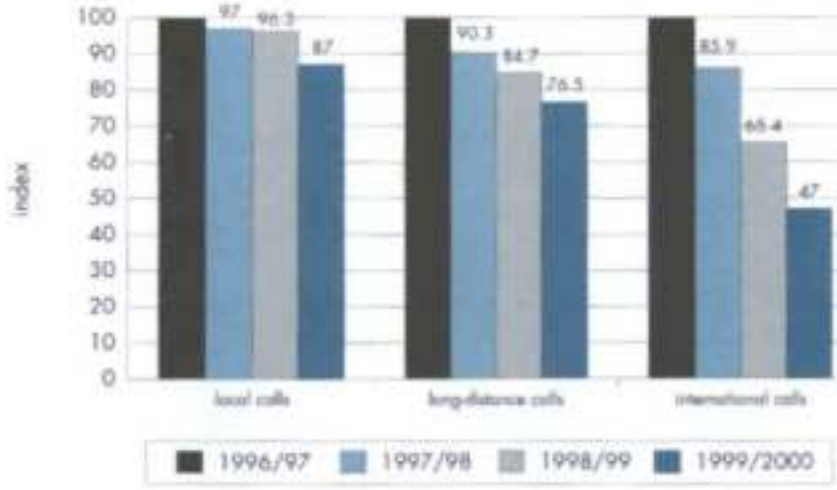
Source: Reserve Bank of Australia, *Statistical Bulletin*

Cost of Telephone Calls

The introduction of competition into telecommunications and the partial privatisation of Telstra has led to a steady fall in the cost of local, long distance and international telephone calls since 1996/97. Rural as well as urban subscribers have benefited. The cost of mobile calls has also been falling.

Telephone services, as responses to faults, have also improved. The improvement has been most marked in remote areas, but services have also improved in rural and urban areas.

11.12 Cost of Telephone Calls 1997-2000
index of change 1996/97=100



Source: Australian Competition and Consumer Commission 2001, *Changes in the Prices Paid for Telecommunications Services in Australia 1996-97 to 1999-2000*

Cost of Petroleum in Australia

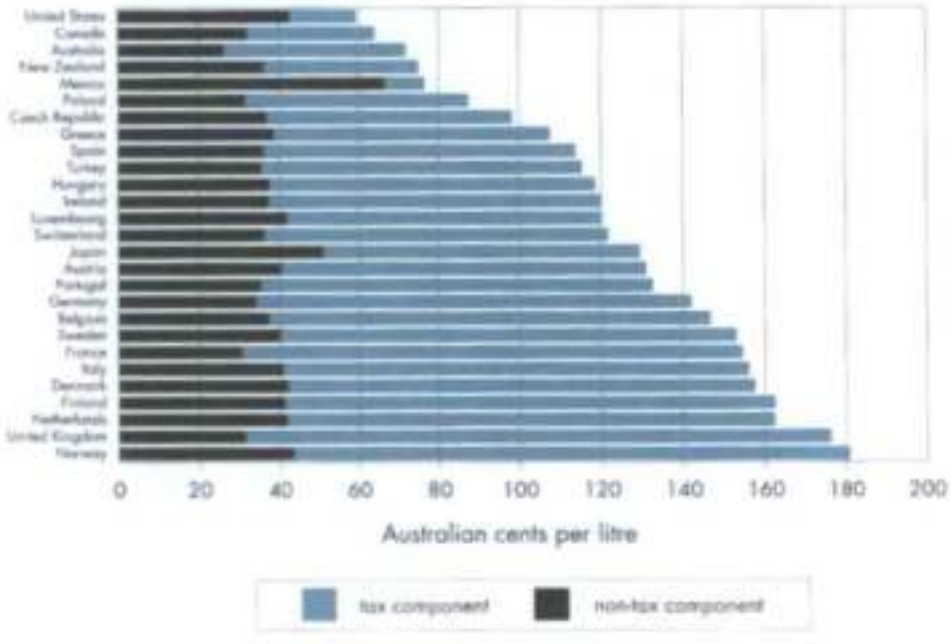
Australian drivers were unhappy when petroleum prices at the pump rose in the early months of 2001. There were demands to reduce excise taxes on petroleum to bring down prices. Figure 11.13, however, shows that Australia has the third cheapest retail prices of petroleum in the world, with only the United States and Canada having lower prices.

Petrol pricing is unstable because the petroleum producing countries' cartel, the Organisation of Petroleum Exporting Countries (OPEC) is unable to implement cohesive long term policies. Dissension frequently rends the cartel and from time to time independent petroleum producers outside the cartel are able to introduce competitiveness into petroleum markets and so lower prices in the short term.

The price of petrol to consumers is also influenced by government policies. Before tax, Australia has the lowest petroleum prices in the world. Like the United States and Canada, Australia follows a largely market oriented policy, with taxation roughly in line with other indirect taxes. Most European countries, in contrast, use their petroleum taxes to raise the price of petroleum to levels that encourage conservation and stimulate the supply of alternative renewable sources of energy. Norway, a petroleum exporter, has the highest price of petroleum among industrial countries for environmental reasons; that is, to encourage conservation.

11.13 International Petrol Prices 1999

Unleaded Gasoline Prices and Taxes, Third Quarter 1999



Source: Institute of Public Affairs, Facts, April 2001

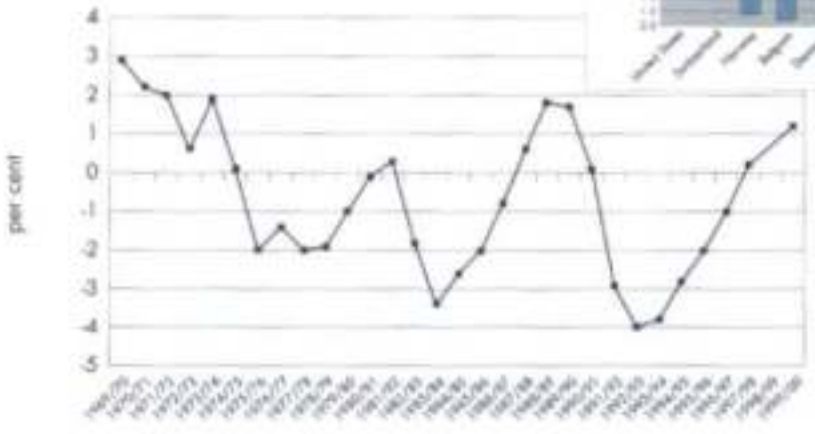
Government Finances—Budget Management

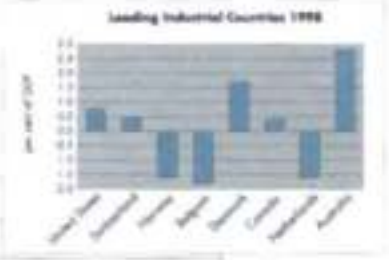
In Australia, as in many other industrial and developing countries, budgets were marked by deficits during the 1980s and early 1990s with consequent high inflation, resulting in severe costs to consumers and the economy overall. More recent policies have therefore been focused on balancing the budget, and even bringing it to surplus, before deciding on priorities for additional or new expenditures. Australia has become a leading fiscal performer.

Fiscal policy cannot merely be judged, however, by the extent to which the budget is balanced in the short or even the medium term. The efficiency and equity of revenue collections and of expenditures are key to ensuring that fiscal policies fulfil the democratic mandates of voters, but avoid budget blow-outs as a step in prudent fiscal management.

11.14 Commonwealth Budget Surplus 1970-2000

revenues minus outlays as per cent of GDP
(positive = surplus, negative = deficit)





Sources: World Bank, *World Development Indicators 2001*, Washington D.C.
Budget Paper No. 1—Budget Strategy and Outlook 2000-01

Australian Government Expenditure

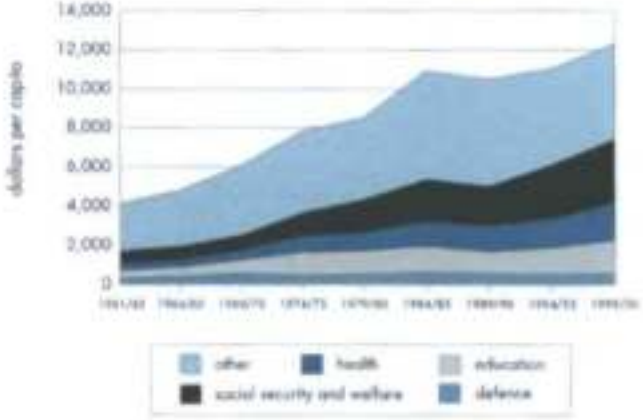
Government expenditure has continued to grow in the 1990s. Social security and welfare are the main components of expenditure and they have been growing most rapidly. Increasing welfare payment rates have offset expenditure reductions of falling unemployment and measures to eliminate social security cheating. Reducing welfare expenditures requires policies that increase employment opportunities. This will simultaneously reduce welfare costs and increase tax collections and hence revenues.

Expenditures on health and education, the next two substantive items, have also grown but they are still sometimes regarded as inadequate. The issue is not simply one of government spending, but whether more of these sectors can be accommodated more efficiently and equitably by privatising greater access to education and health. Current efforts to increase private enrolment in health insurance aim to make more resources available for hospitals, nursing and other health services as Australia's ageing population must be expected to place increasing pressure on health services.

Proposals for school vouchers and tax credits have been made to improve parental choice and school performance. Reform is particularly urgent in the tertiary education sector where the central allocation of student places allows inefficiency to flourish. Ensuring that universities compete for students and expanding the Higher Education Contribution Scheme have been flagged as ways of expanding tertiary education equitably without excessive budget expenditures.

The budget squeeze has mainly been felt in defence. To maintain its defence preparedness, Australia is likely to face a substantive overhang of accumulated replacement needs for equipment that is becoming rapidly out of date.

11.15 Government Expenditure 1962-2000
education, health, social security & welfare, and other
(constant 2000 dollars per capita)

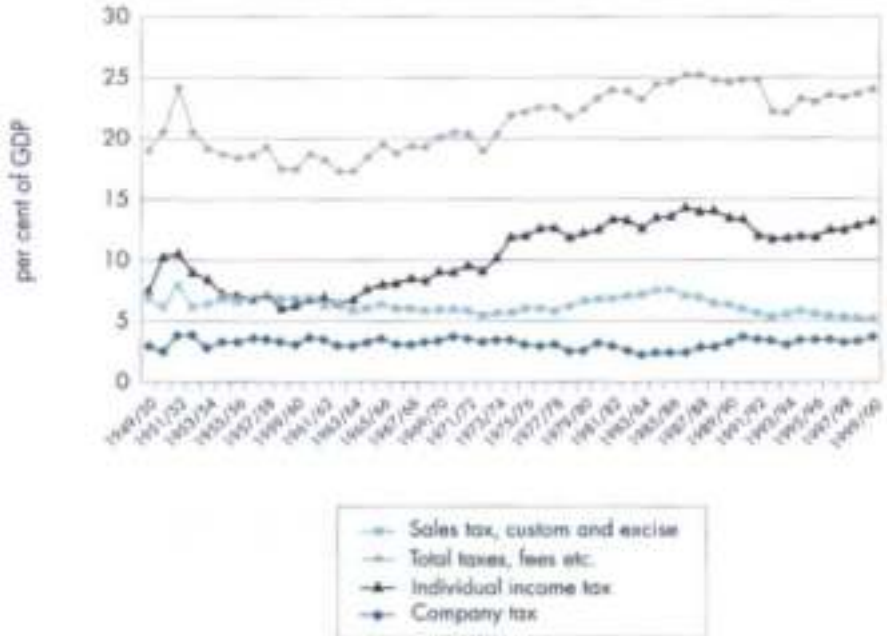


Sources: R.A. Foster 1996, *Australian Economic Statistics 1949-50 to 1994-95*, Reserve Bank of Australia
Government Finance Statistics (ABS Cat. 5512.0)

Commonwealth Taxation Revenue

Tax revenues as a percentage of GDP peaked after World War II, fell during the 1950s, but then increased steadily to cover increasing government spending until the late 1980s, despite budget deficits (Figure 11.14). Individual income taxes bore the brunt of the tax increases, with company taxes fairly stable and indirect taxes (sales taxes, customs and excise) also fairly steady to the mid-1980s when they began to decline. The introduction of the GST has halted this trend, to some degree substituting for income taxes.

11.16 Commonwealth Taxation Revenue 1950-2000



Sources: R.A. Foster 1996, *Australian Economic Statistics 1949-50 to 1994-95*, Reserve Bank of Australia;
Reserve Bank of Australia, *Statistical Bulletin*;
Budget Paper No. 1—Budget Strategy and Outlook 2000-01

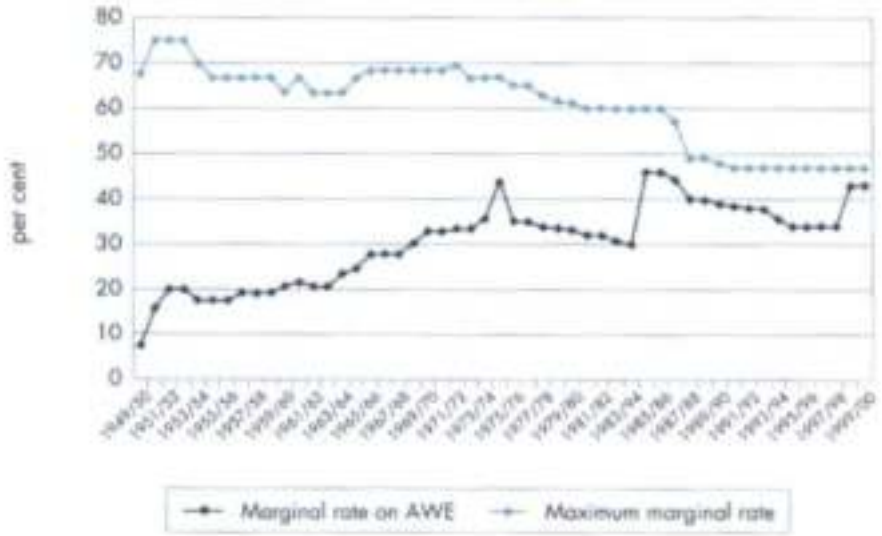
Personal Income Tax Rates

Australia's progressive tax system, combined with the inflationary conditions which prevailed until the early 1990s, meant that as nominal (money) incomes rose to match increasing prices, taxpayers moved to higher tax brackets ('bracket creep'), reducing the proportion of earnings in wage earners' hands. The incentive for additional work was thus reduced at relatively low levels of earnings. Some unskilled 'working poor' households pay relatively high taxes on low incomes. This situation has only been partly offset by recent tax changes.

The top marginal personal income tax rate fell from 60% in the 1980s to 47% (plus Medicare levy) in 1990-91 and has since remained stable.

11.17 Personal Income Tax Rates 1950-2000

marginal rate on average weekly earnings (male) and maximum marginal rate



Sources: R.A. Foster 1996, *Australian Economic Statistics 1949-50 to 1994-95*, Reserve Bank of Australia;
Reserve Bank of Australia, *Statistical Bulletin*;
Budget Paper No. 1—Budget Strategy and Outlook 2000-01

'Tax Freedom Day'

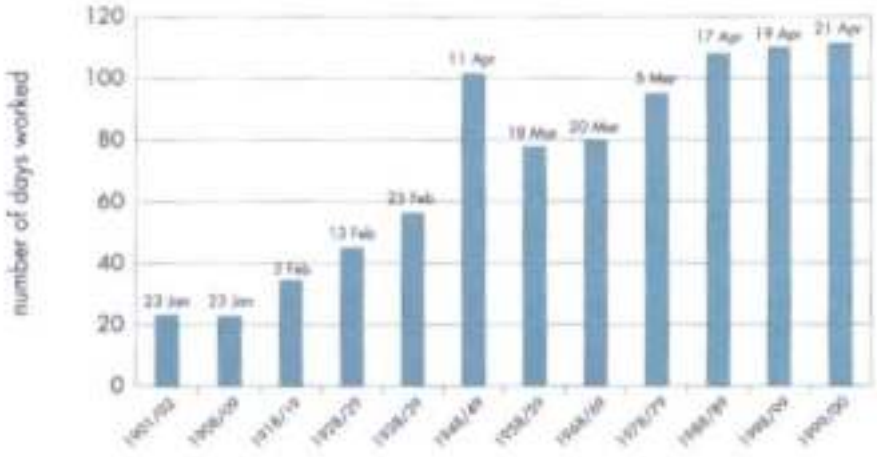
The incidence of rising taxation is best illustrated by considering for how many days and months 'average' income earners have to work until they start earning income for themselves.

Figure 11.18 shows the rise of the income tax burden until it reached 21 April in the year 2000.

The notion of the 'Tax Freedom Day' must, of course, be viewed with some caution. There is no 'average' taxpayer. Some households and individuals have such low incomes that they do not pay tax so that they have met their taxes on 1 January, while others work beyond 21 April to fulfil their tax obligation. The satisfaction of taxpayers with how Australian governments spend their money is a major concern. Nevertheless, the concept illustrates the rising incidence of tax.

11.18 'Tax Freedom Day' 1902-2000

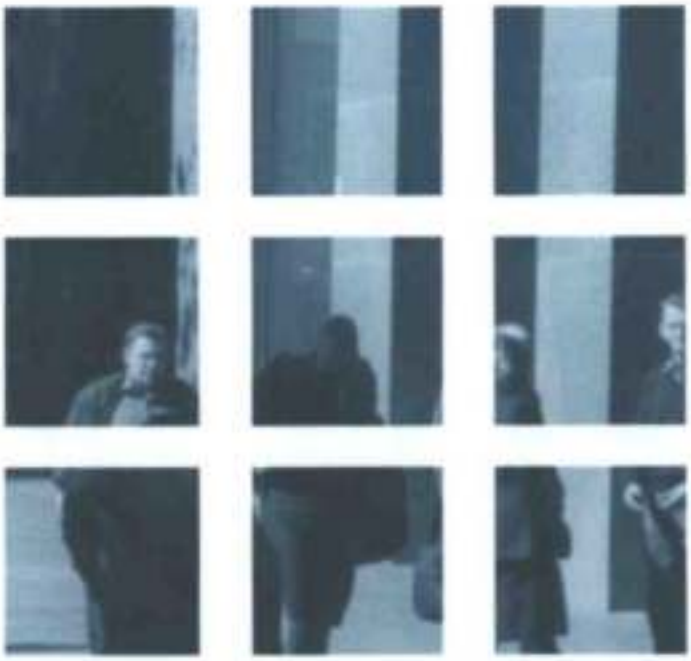
day of the year when total national tax bill has been paid



Source: Calculated from Yearbook 2001 (ABS Cat. 1301.0)

Section 12

International Economy



Economic Freedom in Australia

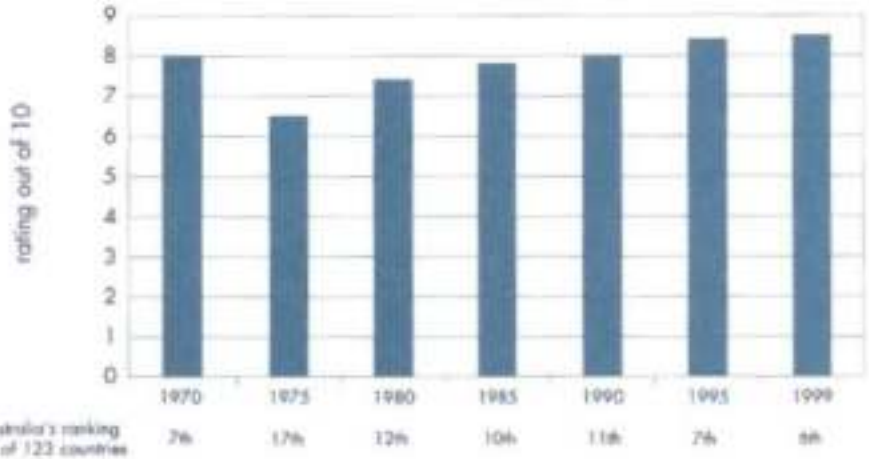
The Fraser Institute in Canada (and the Hoover Institution in the United States) have calculated indexes of economic freedom to measure worldwide liberalisation of laws and regulations. Although carefully assessed by leading scholars and using objective measures (such as the level of tariffs and the share of government in GDP), the freedom indexes are necessarily to some degree subjective. But they are compiled by experienced analysts and give a good idea of Australia's ranking in the freedom stakes.

Figure 12.1 shows that Australia became more regulated in the 1970s, so that its rank dropped from 7th in the world to 17th. With the reforms of the 1980s and 1990s, as the economy became less regulated, it improved its standing to 6th in the world in 1999 (and 7th in the Hoover ranking). Countries as divergent as the United States and Singapore and Hong Kong lead in the economic freedom rankings.

The higher the column, the better attainment of economic freedom—that is, the more pervasive the sphere of private decisions, the better the security of property, the more stable money, the better the access to international markets, the greater the freedom to work, buy, save and invest, and the simpler and more reliable the government regulation of economic activity and its enforcement of the necessary rules.

12.1 Economic Freedom in Australia 1970-1999

ratings out of a theoretical 10

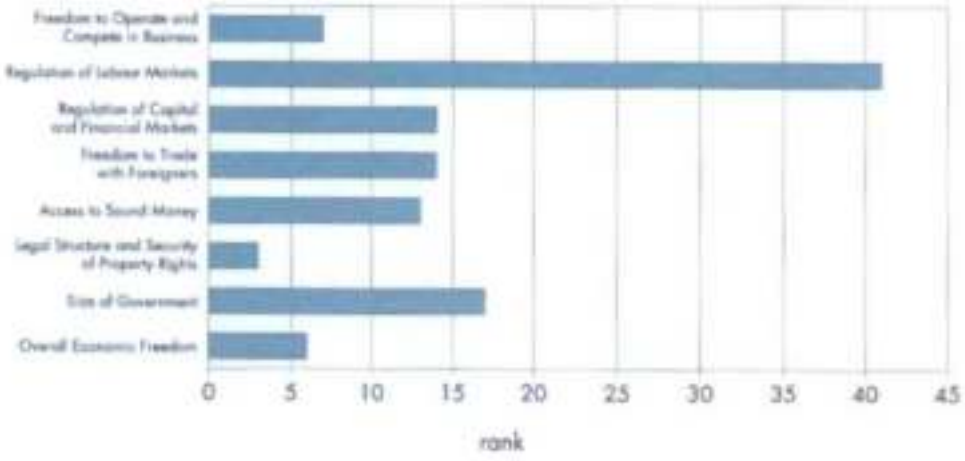


Source: Fraser Institute, *Economic Freedom of the World, Annual Report 2001*, Vancouver

Economic Freedom in Australia by Sector

Figure 12.2 shows the economic freedom index numbers for Australia by economic sector. Australia stands out in the legal structure and security of property rights. Not unexpectedly, it is by far the worst in the inflexibility of labour markets.

12.2 Economic Freedom in Australia by Sector 1999
the higher the ranking, the less free the sector



Source: Fraser Institute, *Economic Freedom of the World, Annual Report 2001*, Vancouver

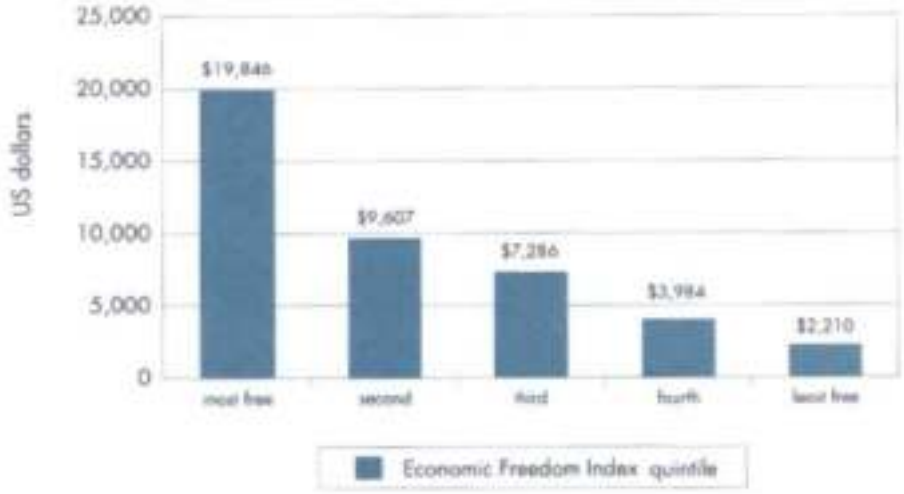
Economic Freedom and per Capita Income

The advocates of liberalisation argue that the reason for a more liberal environment is the achievement of rapid growth and high per capita incomes so as to put more money into people's pockets. Reforms do have costs in the short run, but these can be minimised by the careful formulation of reform policies. In the medium and long term reforms produce new jobs and higher incomes.

Figure 12.3 shows the unambiguous relationship between high economic freedom and high per capita income. The least free countries have the lowest per capita income.

12.3 Economic Freedom and per Capita Income

1998 per capita income in purchasing power parities



Source: Fraser Institute, *Economic Freedom of the World, Annual Report 2001*, Vancouver

Australian Aid to Other Countries

Figure 12.4 shows that the level of Australian aid has been fairly stable in the 1980s, with a new peak in 1999/2000.

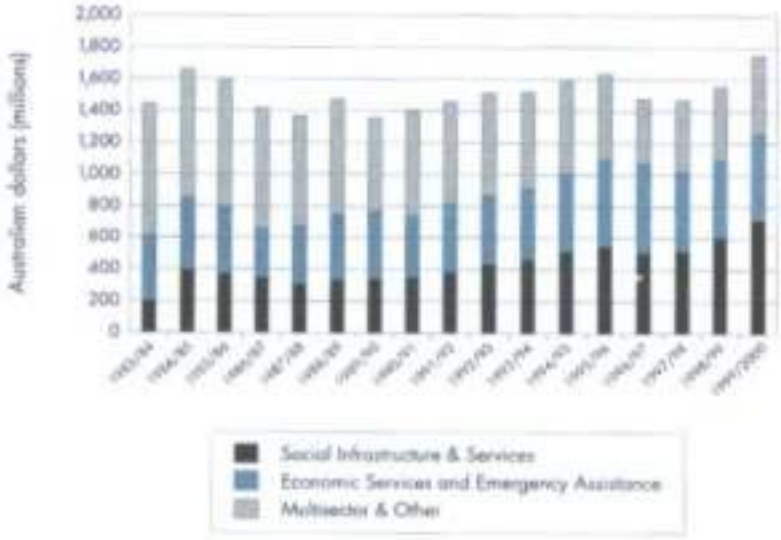
Because it is aware of its necessarily small influence in world affairs, Australia has focused its aid both by countries and in sectors to which it gives assistance. Most of the bilateral aid, (which accounts for about 60% of total aid), goes to the Pacific Islands, including Papua New Guinea, where Australia has the greatest responsibility in international terms. The East Asian neighbourhood is the other principal destination for bilateral aid.

Australia makes a substantial contribution to multilateral development institutions, notably the World Bank and the Asian Development Bank, to be able to join with other countries in giving aid effectively to large countries such as India and China where direct Australian aid can only be a drop in the bucket. By working through the development banks Australia also contributes to other areas where poor people are concentrated, notably Sub Saharan Africa.

Social infrastructure and services have received an increasing share of Australian aid through the bilateral programme and as the development banks have moved into these areas. Emergency assistance and support for productive capacity, notably in agriculture, has also grown.

12.4 Australian Aid to Other Countries 1984-2000

constant 1999-2000 dollars



Source: AusAID

Global Growth Trends

Global growth rates vary considerably by region, and by countries within regions, although there are some clear regional patterns. Within regions, and within large developing countries such as China and India, averages of per capita income are not very informative because of the extremes of poverty and wealth that continue to exist side by side.

East Asia and the Pacific have led global growth since the 1980s. The East Asian countries' per capita income has risen markedly compared to industrial countries. The relatively poor performance of Indonesia, the Philippines and Vietnam, however, is offsetting the rapid growth of Hong Kong, Singapore, the Republic of Korea, Thailand and Malaysia. After setting its door to the world ajar, China grew even more rapidly than the rest of the region, although it is widely believed that its real average annual per capita growth was closer to 6 or 7% than the official claims of 10% reported here. The economic performance of the Pacific Islands was disappointing, with minimal increases in per capita income.

Although decolonisation dates back to the 19th century in Latin America, the region had persistently poor growth records for countries with 'catching up' opportunities. Its percentage of industrial countries' income has remained static since 1980.

The Middle East and North African countries have also had mediocre growth performance despite 'catching up' opportunities, so that their percentage of industrial countries' per capita income also remained static. There were wide disparities in this region in per capita income and growth between countries such as Algeria, Egypt and Morocco, and the petroleum rich countries.

South Asia has improved its growth performance since the 1980s, so that despite its still rapid population growth (resulting from past demographic profiles), per capita incomes are rising slightly in comparison to those of industrial countries.

Civil unrest, wars and political disarray accompanied by poor economic management affected the Sub Saharan African countries so badly that they grew very slowly. The apparent AIDS epidemic has added substantially to these countries' problems. The percentage of their per capita incomes to the industrial countries' has declined slightly.

The stagnation of the Central European countries (the Czech Republic, Hungary, Poland, the Slovak Republic, Estonia, Latvia and Lithuania) in the 1980s was followed by an acceleration of growth in the 1990s. Per capita income reached about 33% of that of industrial countries.

The GDP of the East European and Central Asian countries (principally the former USSR and the war-torn Balkans) fell during the 1990s. In 1999 their per capita income was only 20% of that of industrial countries.

Steady growth in the mature industrial economies, only slightly interrupted by a mild recession in the early 1990s, stimulated global growth by providing market access

and investment for developing countries. Markets and investment were particularly important for the rapidly growing East Asian economies and China.

12.5a Global Population, per Capita Income and Growth Rates, by Regions, 1980 and 1999, and 1990-1999

	Population		*Per capita income (Purchasing power parity)*		*Average annual real per capita income growth*	
	1980 mill	1999 mill	1980 $US	1999 $US	1980-90 %	1990-99 %
Developing countries						
East Asia and Pacific	1,361	1,861	1,440	3,360	8.8	9.1
Latin America and Caribbean	349	506	3,180	4,700	1.8	3.3
Middle East and North Africa	176	290	3,000	4,600	2.1	3.5
South Asia	874	1,303	920	1,660	5.7	5.6
Sub-Saharan Africa	378	625	1,100	2,600	2.0	2.2
Transitional Economies						
Central Europe	60	73	..	6,990	1.8	3.0
Eastern Europe and Central Asia	325	400	..	4,240	3.9	-3.7
Industrial Countries	752	845	15,000	21,480	2.2	2.4

12.5b Per Capita Income of Developing and Transitional Countries as a Percentage of the per Capita Income of Industrial Countries, by Region, 1980 and 1999

	1980	1999
East Asia and Pacific	10	16
Latin America and Caribbean	21	22
Middle East and North Africa	20	21
South Asia	6	8
Sub-Saharan Africa	7	6
Central Europe	..	33
Eastern Europe and Central Asia	..	20

Sources: International Economic Data Bank, Australian National University, for population and real GDP growth (in local currencies); Maddison A. 2001, *A Millennial Perspective*, Development Centre of the OECD, Paris, for per capita income in purchasing parity constant international dollars

State of the Nation 2001

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This third edition of *State of the Nation* (previous editions in 1997 and 1999) expands and updates a comprehensive overview of the key indicators of Australian life in terms of various social, economic, cultural and recreational measures.

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