STATE OF THE NATION 1999

INDICATORS OF A CHANGING AUSTRALIA

Lucy Sullivan • Jennifer Buckingham • Barry Maley • Helen Hughes

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THE CENTRE FOR
INDEPENDENT
STUDIES

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TAKING CHILDREN SERIOUSLY

In 1994 the Centre for Independent Studies embarked on a programme of research entitled Taking Children Seriously, directed by CIS Senior Fellow Barry Maley. At the heart of this program is the present and future well-being of children. This revised and updated version of the first *State of the Nation*, published in 1997, arises from work carried out under the programme.

Major supporters of Phase 2 of the *Taking Children Seriously* programme include:

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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. In 1999, on the eve of a new millenium, this second edition reveals continuing, even accelerating, change – sometimes for the better, sometimes for the worse.

In this revised and substantially expanded edition, we have been able to use new and extensive data from the most recent census of 1996 which were not available in 1997. To this we have added a variety of recent data from several other sources. As before, all of the figures and tables are accompanied by commentaries which draw attention to significant features and, where appropriate, attempt to explain underlying causes of trends and their implications.

Many of the figures from the previous publication have been updated with the most recent statistics available at the time of publishing. Where no new information was available, the figure from the first edition is not repeated in this volume. In some cases, new material and the series of figures illustrating it cover relatively short time periods because the developments concerned (for example, in information technology) are so recent that only a short series is obtainable.

The first edition of *State of the Nation* was very well received as fulfilling the need for a publication that brought together, in one volume, statistical evidence and informed commentary on the major aspects of society and the economy. This new *State of the Nation* is a more comprehensive, contemporary edition that is useful either alone or in accompaniment with the original. (Many of the numbers will appear different, as the figures are now per 100,000 population rather than per half million). One of the major differences in the current edition is the expansion of the economy section, reflecting an increasing community awareness of the role of the economy in society. The economy section is intended to provide a clear, concise overview of the main economic indicators and their wider implications.

The usefulness of a publication such as *State of the Nation* consists in the contribution it can make to reliably informed public debate of social issues and government policy and, more generally, as 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.

The decision to prepare and publish *State of the Nation* arose out of the work which the Centre for Independent Studies has done in gathering essential and background data over several years as part of its continuing 'Taking Children Seriously' programme of research and publication. It will be seen that much of the material in the present edition, 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.

About the Authors

Lucy Sullivan is a Research fellow at the CIS. She has published widely in academic journals, including the *British Journal of Sociology* and the *Journal of Medicine and Law*. For the CIS, she was co-author of *Home Repairs: Building Stronger Families to Resist Social Decay* (1996). Her *Rising Crime in Australia* (CIS, 1997) explores the links between increased crime and other social changes. Following much positive response to her recent paper *Tax Injustice: Keeping the Family Cap in Hand*, her next publication will address the issue of family taxation.

Jennifer Buckingham joined the CIS in December 1998 as a research assistant in the *Taking Children Seriously* programme, after completing an Honours degree majoring in psychology. This is her first publication for the CIS.

Barry Maley is a Senior Research fellow at the CIS and Director of the *Taking Children Seriously* research programme. Prior to joining the CIS in 1989 he was Senior Lecturer in Behavioural Science at the University of New South Wales. His most recent CIS publication is *Children's Rights* (1999).

Helen Hughes is Professor Emeritus, the Australian National University, and Senior Fellow at the CIS. Most recently, she co-authored the paper *Why Small Business is not Hiring: regulatory impediments to small business employment.*

Acknowledgements

The assistance of Professor Warren Hogan and Dr Kevin Donnelly is gratefully acknowledged.

PART 1
THE SOCIAL FABRIC

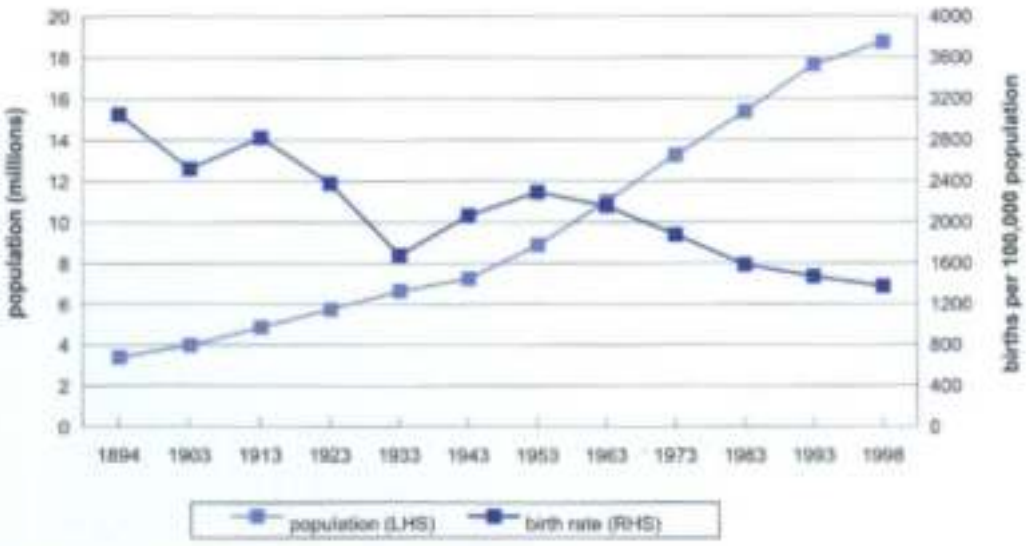
SECTION 1:
POPULATION

Throughout the century, Australia has sought to increase its population. Australia was a 'small country' at mid-century, but in the last fifty 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 six between 1894 and 1998. 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 increase assumed a steeper gradient, which was sustained for the succeeding five decades.

The birthrate figures (see also Figure 2.5) for the same period exhibit an overall downward trend. Marked dips occur in the recession of the first decade of the century and the Great Depression of the 1930s (indicating an adjustment of population to economic adversity), with recoveries thereafter despite the general decline. The constant gradient of population increase masks a decrease in the contribution of natural increase, with an increase in that of immigration, from the period of the 1970s through the 1990s.

1.1 AUSTRALIAN POPULATION 1894-1998



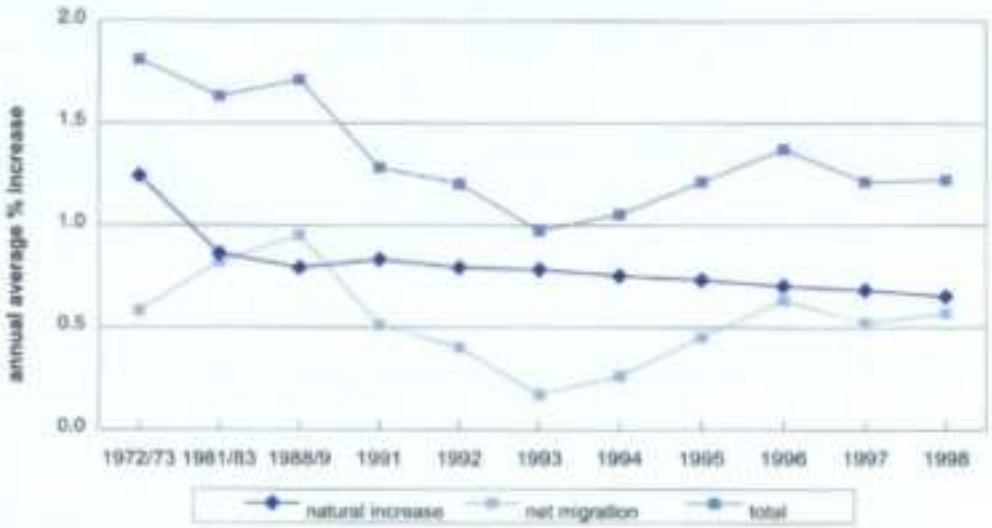
Source: *Yearbooks* (ABS Cat. 1301.0)

Figure 1.2 shows the percentage increases in population from 1972/73 to 1998 by natural increase and by immigration. The twelve months of 1988/89 had the highest rate of immigration this century, outstripping natural increase.

In the decade 1989 to 1998, the Australian population increased by 11.5%. The contribution of natural increase rose to a peak of 80% of net increase in 1993 but fell back to 53% of net increase in 1998. Thus the contribution of immigration to net population growth was roughly equal to that of natural increase in 1998.

1.2 POPULATION INCREASE 1973-1998

natural increase, net migration and total



Source: *Yearbooks* (ABS Cat.1301.0)
Australian Demographic Statistics (ABS Cat. 3101.0)

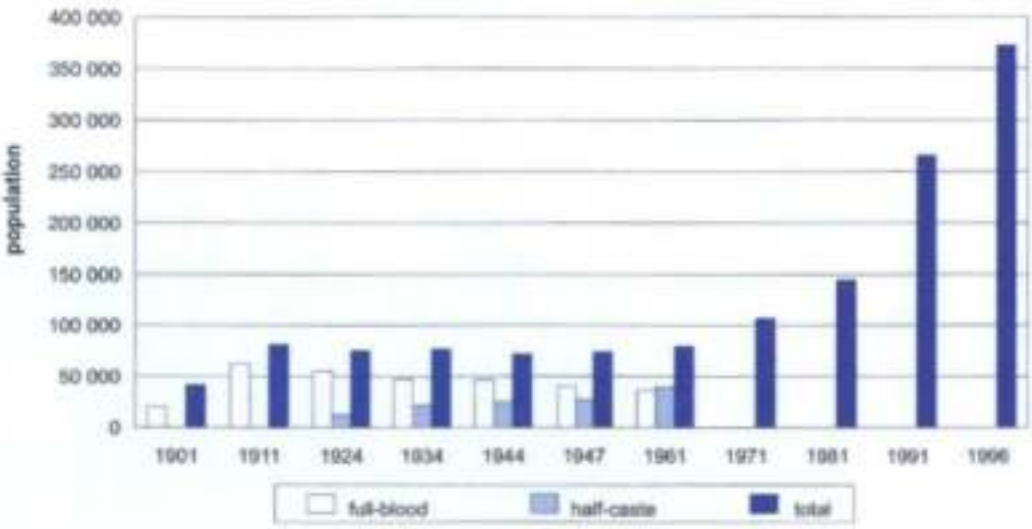
Indigenous Population

Figure 1.3 presents the *Year Book* record of the Aboriginal and Torres Strait Islander population since Federation. There is considerable uncertainty about the figures throughout. 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'

Thus the fall in Aboriginal population in the first half of the century, and its rise in the second, should be construed as representing first, increasing racial intermarriage, and then the elimination of this influence on record-keeping, rather than as a decline in reproduction and/or survival, followed by regeneration.

1.3 ABORIGINAL & TORRES STRAIT ISLANDER POPULATION 1901-1996



Source: *Yearbooks* (ABS Cat. 1301.0)

Immigration & Multiculturalism

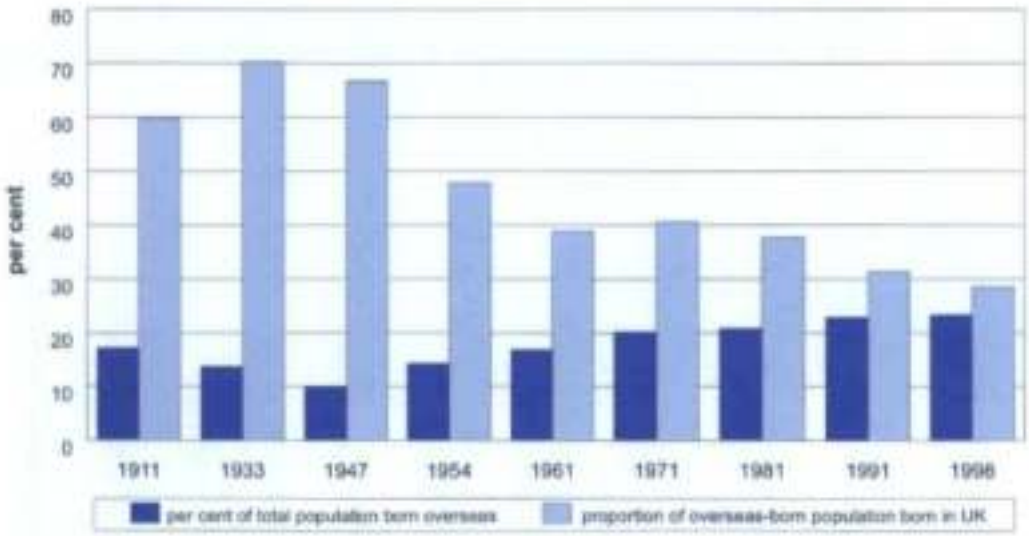
The overseas-born population in Australia was at its lowest at 10% in the 1940s. In the 1990's, the Australian population is still largely native-born with close to 80% of the population born in Australia throughout this decade. While 21% of the population in 1996 were born overseas, another 19% of the population were second-generation Australians (ie. their parents were born overseas) making 40% of the national population either first- or second-generation Australians.

Figure 1.4 shows that while the proportion of the population born overseas has not changed markedly, the United Kingdom-born component of this population has decreased from just over 70% in 1933 to less than 30% in 1998. From 1911 to 1947, over 95% of the population were born in Australia, New Zealand or Britain. The figure in 1998 was 72%.

In 1997, 13% of the population were born in Europe or the former USSR, while 5% were born in North Asia, South Asia and South East Asia combined. People born in the Middle East and North Africa accounted for 1% of the population.

1.4 OVERSEAS BORN POPULATION 1911-1998

per cent of total Australian population born overseas and the proportion of these born in the UK (1981-1998 – UK & Ireland)



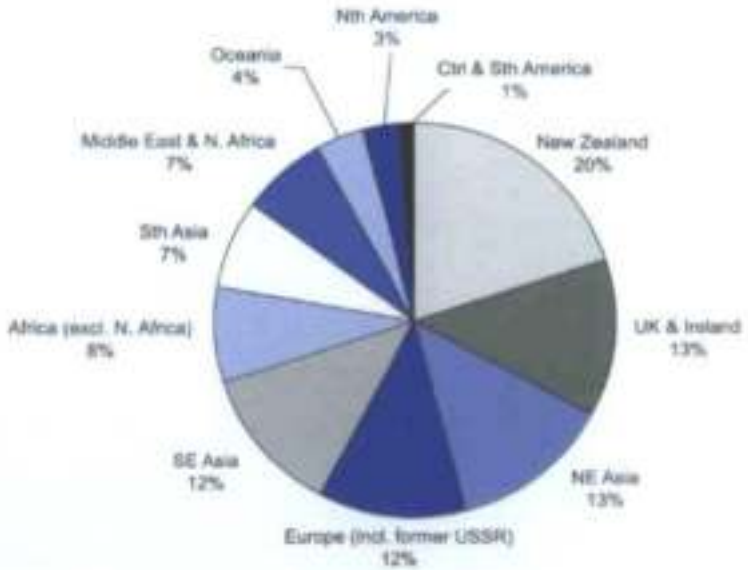
Source: *Australian Demographic Statistics* (ABS Cat. 1301.0)

In the year 1997/98, settler arrivals totalled 77,327. New Zealand, Europe and the United Kingdom together comprised almost half of the settler arrivals in 1997-98. A study by the Centre for Population and Urban Research at Monash University has shown that although 20% of settlers in 1997/98 were New Zealand citizens, the proportion of these people who were New Zealand-born has decreased significantly from almost 90% in 1991 to 76% in 1998 (the figure at which it has been stable for several years). Under migration arrangements with Australia, New Zealand citizens are free to live and work in Australia.

Australians have among the most tolerant attitudes to migrants in the world, according to the International Social Survey Program. One of the most common arguments against multi-culturalism is a perceived loss of national and cultural identity, but Australians ranked the importance to national identity of birthplace lower than 19 of the 24 countries surveyed, instead emphasising the importance of sharing the national dominant religion, and ranking religion lower in importance than only 9 other countries.

1.5 SETTLER ARRIVALS 1997/98

by country of origin



Source: Department of Immigration and Multicultural Affairs

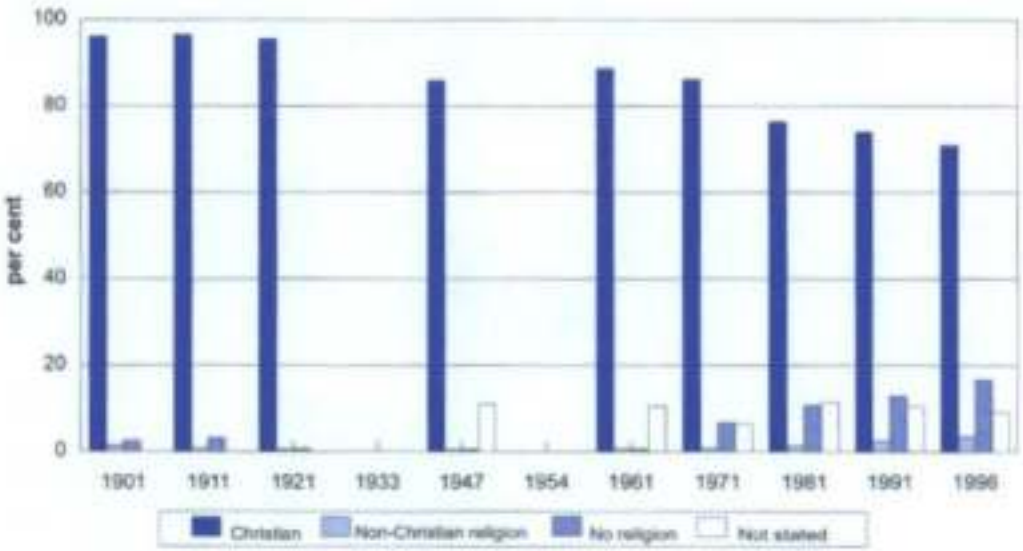
Religion

Figure 1.6 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 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 influencing the decline of Christianity 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.

1.6 RELIGION 1901-1996

per cent affiliation

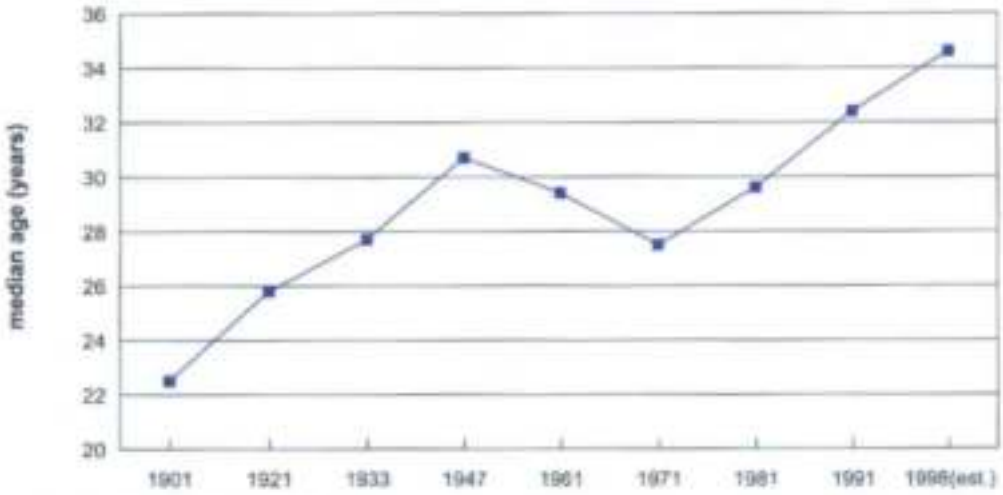


Source: *Yearbooks* (ABS Cat. 1301.0)

Age

Figure 1.7 shows the median age of the Australian population from 1901 to 1998. 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 34.6 years in 1998, the highest point in the century, reflecting both a fall in the birth rate and a marked rise in life expectancy over the period.

1.7 MEDIAN AGE OF POPULATION 1901-1998



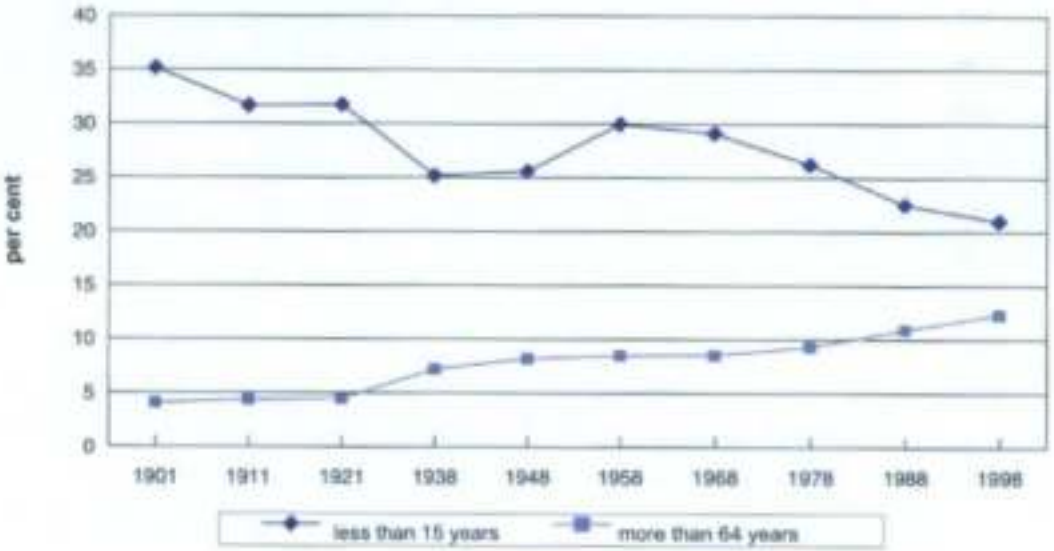
Source: *Yearbooks* (ABS Cat. 1301.0)
Population Projections (ABS Cat. 3222.0)

The "ageing of the population", shown in Figure 1.8, 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 1998.

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.

1.8 POPULATION AGE DISTRIBUTION 1901-1998

per cent of population aged less than 15 years & more than 64 years



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

Sex

Figure 1.9 shows the percentage of the Australian population which was female from 1901 to 1998. For most of the period, males have outnumbered females. 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.

1.9 SEX DISTRIBUTION of THE POPULATION 1901-1998

Source: *Yearbooks* (ABS Cat.1301.0)
Australian Demographic Statistics (ABS Cat. 3101.0)

SECTION 2:
MARRIAGES, BIRTHS & DIVORCE

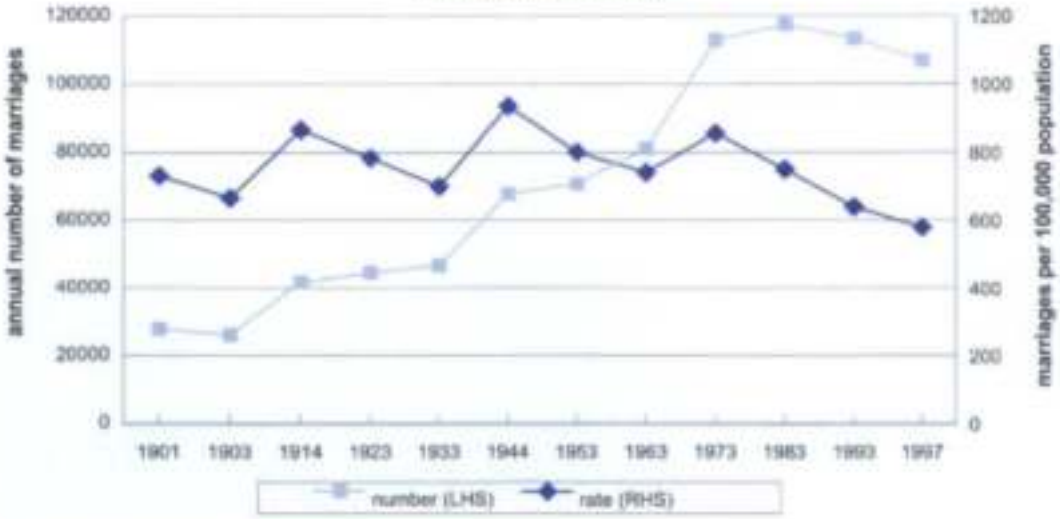
Marriage Rate

In all societies, marriage is the principle social regulator of reproduction. It exists both as a rite and as a 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 1997, and the marriage rate (per 100,000 population) over the same period. The steady rise in the number of marriages up to 1983 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 birthrate, 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 fall in the marriage rate which has continued now across three decades.

2.1 MARRIAGES 1901-1997

annual number and rate



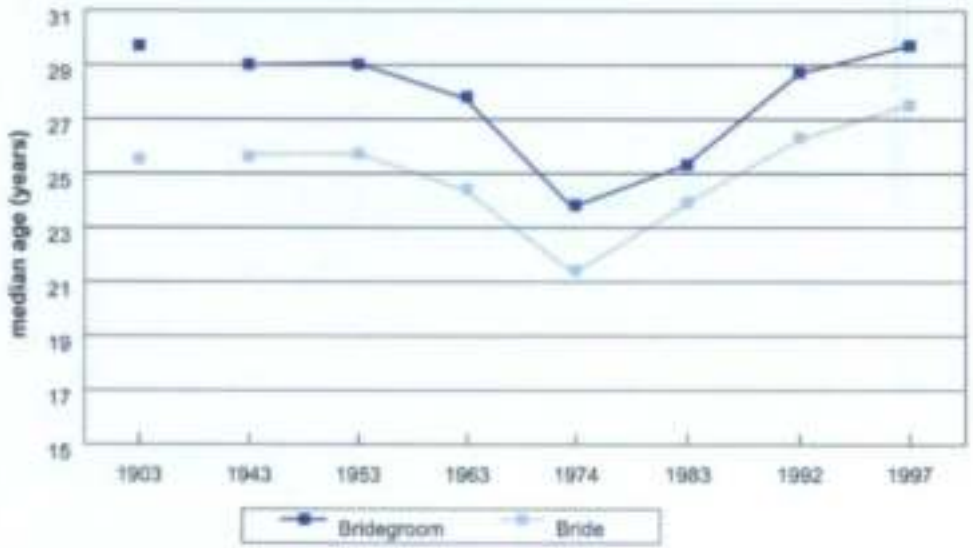
Source: *Marriages and Divorces*, (ABS Cat. 3310.0)

The flattening of the number of marriages in the 1980s has become, in the 1990s, a definite decline. In 1997, the number of marriages was less than the number in 1973, when the Australian population was some 4.5 million persons fewer.

Age at Marriage

The fall and then the rise in the age of marriage across the century is reflected in the marriage figures. Figure 2.2 shows the average or median (according to availability from official statistics) age at marriage of men and women in 1901 and from 1943 to 1997. This is for all marriages, not just first marriages. The figure would be pushed upwards by high rates of divorce or widowhood, followed by remarriage, in any period. The average median age of marriage for men was 29 in 1903 and remained so in 1943 and 1953. Thereafter it fell to reach a century's low of 25 in 1974, then rose again to reach 29.7 in 1997. The picture is similar for women. The average age at marriage in 1903 was 25, and it remained at this level in 1943 and 1953, fell to its lowest point of 21 in 1974, then rose to exceed its turn of the century level, reaching 27.5 in 1997.

2.2 AVERAGE/MEDIAN AGE at MARRIAGE 1901-1997



Source: *Yearbooks* (ABS Cat. 1301.0)
Marriages and Divorces, (ABS Cat. 3310.0)

Marriage Ceremonies

In the past 30 years, increasing numbers of couples have chosen to be married by a civil celebrant. From 1908 to 1967, close to 90% or more of couples were married in a religious ceremony by a member of the clergy, but in 1997, this had declined to just over 50%. This dramatic shift in the preferred type of marriage ceremony 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.

2.3 MARRIAGES by MINISTERS of RELIGION and CIVIL CELEBRANTS

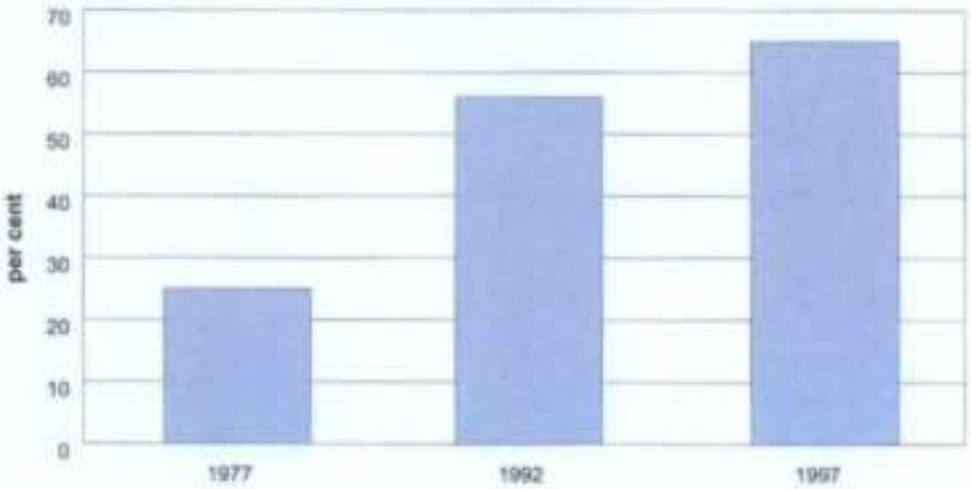
Source: *Marriages and Divorces*, (ABS Cat. 3310.0)

Cohabitation

Between 1977 and 1997, the percentage of couples cohabiting before marriage rose from 25% to 65%. This suggests a major shift in social attitudes to the regulation of sexual relations. The increasing number of ex-nuptial births to de facto couples reflects this revolution (see Figure 2.9). The Australian Bureau of Statistics has given its sanction to this development by ceasing to distinguish married and de facto couples, although the two categories are still distinguished elsewhere (the latter comprises about 10% of the total).

2.4 COUPLES COHABITING BEFORE MARRIAGE

per cent of all married couples



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

Birth Rate

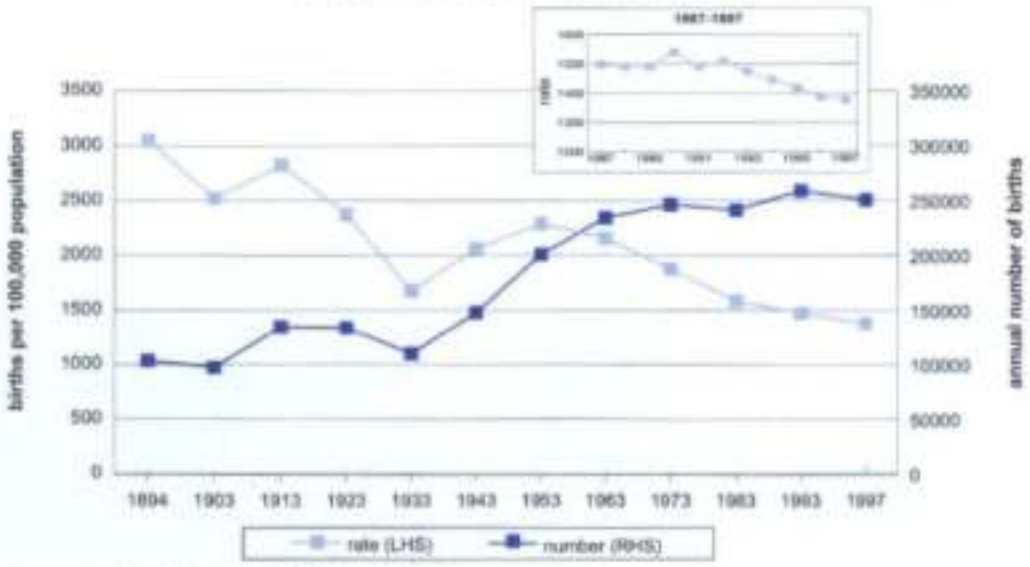
Figure 2.5 shows the crude birth rate (live births per 100,000 population) at decade intervals from 1894 to 1997. With a rising population throughout the period, the number of births will rise even if the birth rate remains steady. Hence rate is a more useful indicator of reproductive change.

Between 1894 and 1997, the birth rate almost halved from 2523 to 1379 births per 100,000 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. A straight line drawn from 1894 to 1997 shows the data points for birth rates varying quite close to it on either side (if we ignore the major responses to economic recessions in 1903 and 1933) suggesting a generally consistent decline over the century. The arrival of safe and easy birth control in the 1960s and of abortion in the 1970s appears to have had little impact on the overall pattern.

The annual birth rates for 1987 to 1997 show that although there was an decrease over the decade, the birth rate stabilised in early 1990s in conjunction with a large decrease in immigration. Renewed levels of immigration were followed by a renewed decrease, despite economic improvement. The withdrawal of tax exemptions for average income families since the mid 1980s may also be contributing to the decline.

2.5 BIRTHS 1894-1997

annual number and rate per 100,000 population



Source: *Yearbooks* (ABS Cat. 1301.0)
Births, Australia (ABS Cat. 3301.0)

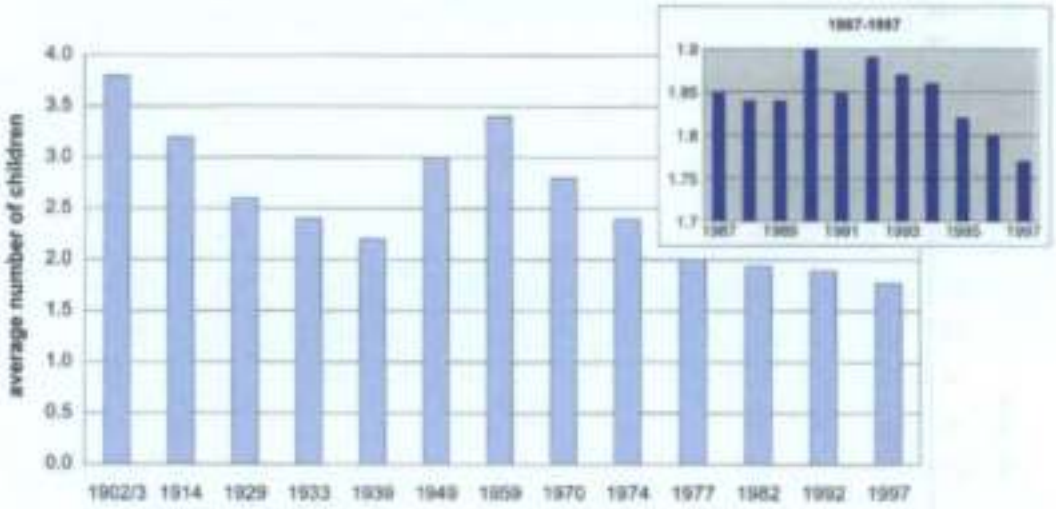
Fertility

Figure 2.6 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 1997). 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. Zero population growth by natural increase arrived between 1974 and 1977.

The annual fertility rates for the period 1987 to 1997 show a decrease overall, although, as with birth rates, peaks occurred in 1990 and 1992. The fertility rate for 1997 marks a low for the century with an average of below 1.8 children per woman.

2.6 FERTILITY of WOMEN 1902-1997

average children in lifetime



Source: *Yearbooks* (ABS Cat. 1301.0)
Births, Australia (ABS Cat. 3301.0)

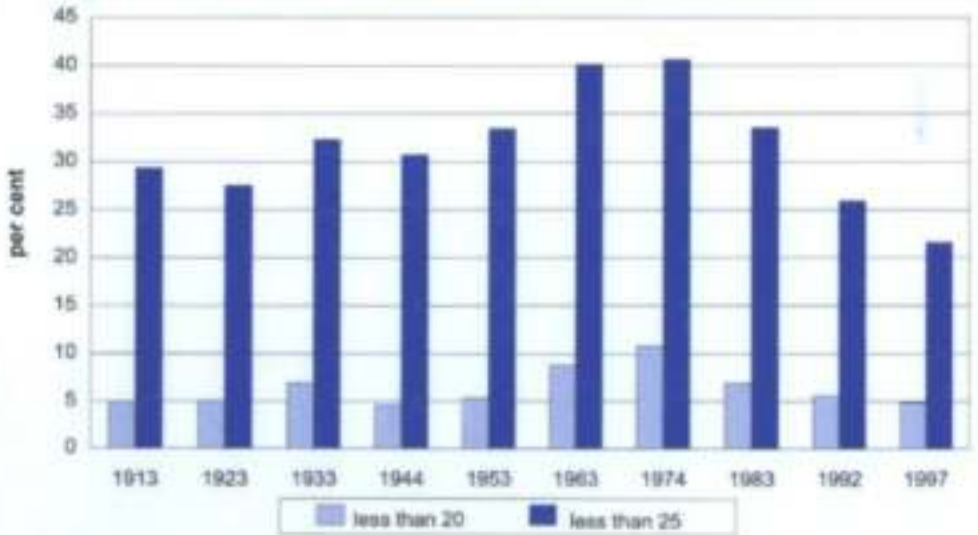
Maternal Age

Figure 2.7 shows the percentage of births to teenage mothers and to women aged less than 25 years from 1913 to 1997. Figure 2.2 shows 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 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 markedly in the early 1960s and falling markedly by the 1990s to below levels early in the century. Thus what appears to be a postponement of parenthood, if the 1960s and 1970s are taken as the norm, largely represents a return to normality from the extremes of that decade. Nevertheless, although the percentage of teenage births fell only slightly between 1992 and 1997, the percentage of mothers aged less than 25 fell to a level significantly below the previous low for the century – 22% as compared with 28% in 1923.

2.7 YOUNG MOTHERS 1913-1997

per cent of mothers aged less than 20 years, less than 25 years



Source: *Yearbooks* (ABS Cat. 1301.0)
Births, Australia (ABS Cat. 3301.0)

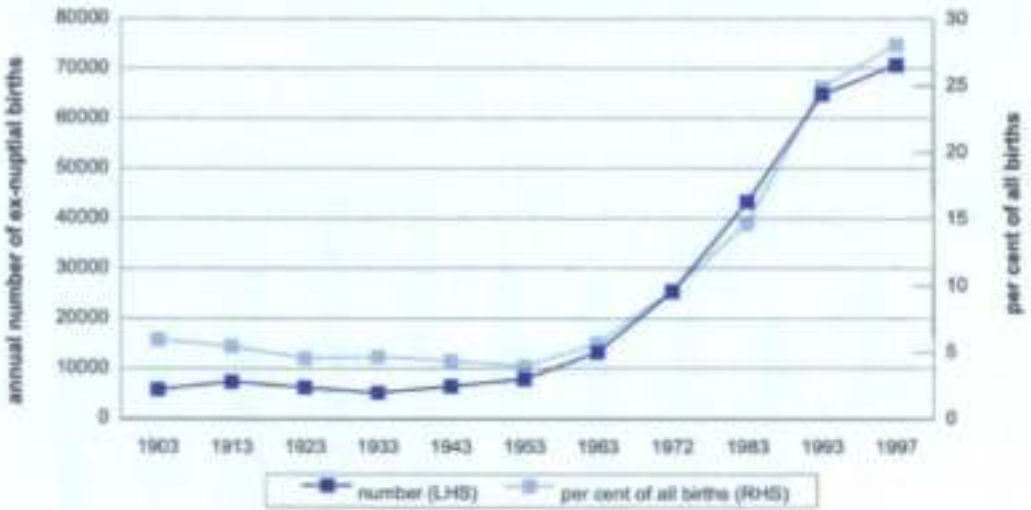
Ex-Nuptial Births

Figure 2.8 shows ex-nuptial births in Australia as a percentage of all births, from 1903 to 1997. From 1903 to 1953, the ex-nuptial birth rate fell from 6% of all births to 4%. In 1963, the percentage of ex-nuptial births had risen to approach the level at the beginning of the century. Thereafter the percentage rose exponentially, reaching 10% in 1972, 15% in 1982 and 24% in 1993. The number and percentage of ex-nuptial births has continued to rise throughout the 1990s, with 70,767 babies born out of wedlock in 1997, comprising 28% of all births.

The proportion of ex-nuptial births to young mothers was much higher than the proportion of all births in the 1990s. In 1997, 16% of ex-nuptial births were to mothers aged less than 20 and 47% were to mothers aged less than 25 years, which compares with 5% and 22%, respectively for all births.

2.8 EX-NUPTIAL BIRTHS 1903-1997

number and per cent of all births



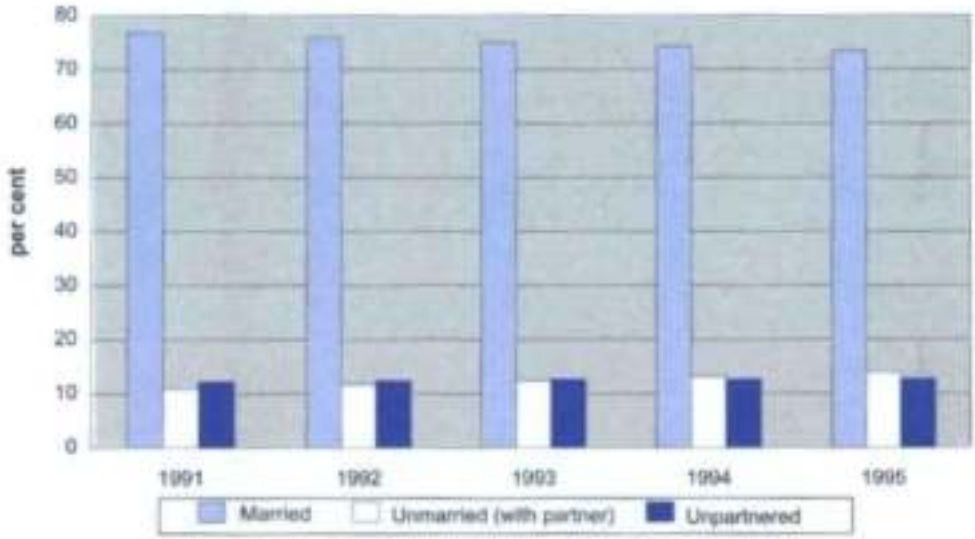
Source: *Yearbooks* (ABS Cat. 1301.0)
Births, Australia (ABS Cat. 3301.0)

Between 1991 and 1995, the proportion of unmarried mothers with partners at the time of the birth rose from slightly less than half to slightly more than half.

The increase in ex-nuptial births in the 1990s thus results from increase in de-facto couple parenting, rather than from an increase in single mothers without partners. Nevertheless, the percentage of births to mothers without partners is twice the level in 1963 and three times that for 1953. In 1995, 12% of births were to mothers without partners, and 14% were to de facto couples.

2.9 RELATIONSHIP STATUS of MOTHERS 1991-1995

married, unmarried and unpartnered



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

Adoptions

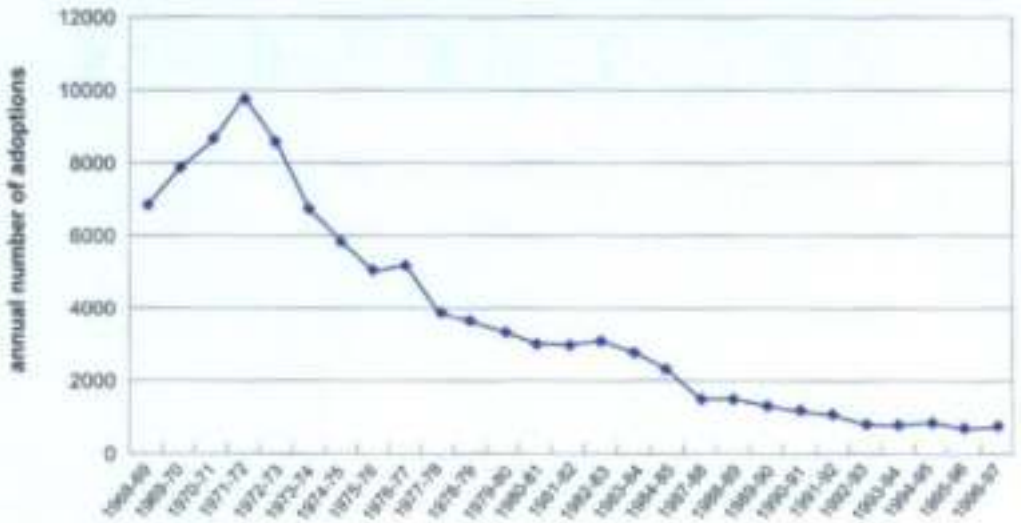
The total number of adoptions has decreased dramatically over the past three decades, declining from a peak of 9798 in 1971-72 to 709 in 1996-97. Of the latter, 25% were adoptions by relatives. The peak in 1971-72 corresponds with the steep rise in the ex-nuptial birth rate that occurred before the introduction of the sole-parent pension and the campaign against adoption.

The Australian Institute of Health and Welfare report, *Adoptions Australia* (1998), 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 – reflecting the medical approach of those years, which did not value parental ties, 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.

2.10 ADOPTIONS 1969-1997

total by both relatives and non-relatives



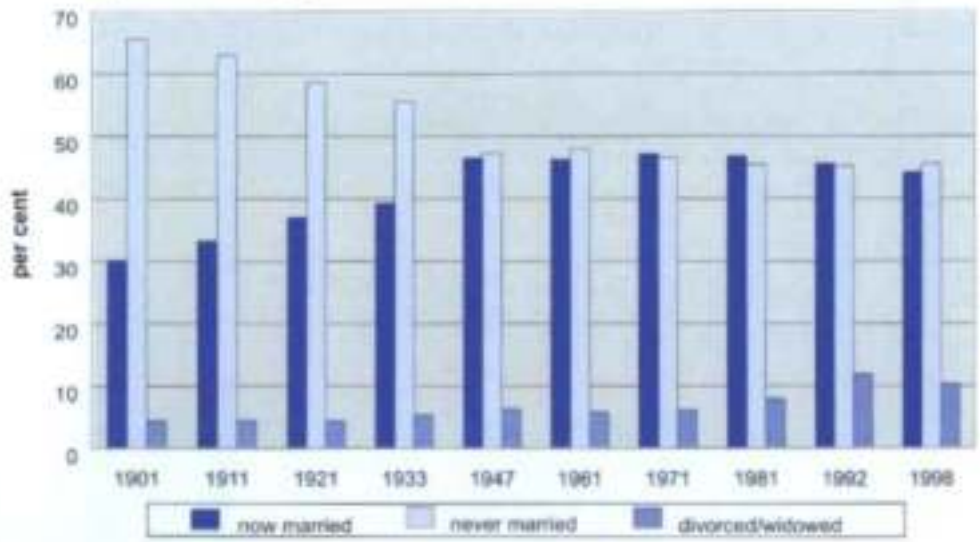
Source: *Adoptions, Australia* (1998, Australian Institute of Health and Welfare)

Marital Status

Figure 2.11 shows the percentage of the total population who were currently married, who had never married, or who were divorced or widowed each decade from 1901 to 1998. At the beginning of the century, many more Australians were never married than married, but by 1947 the percentages were approximately equal, and this condition continued through to the 1990s. The disparity in the percentages in the early years of the century compared with the present was in large part due to the age profile of the population and age of marriage, with a much higher percentage of the population falling below the median age of marriage, or indeed marriageable age, than at present. The rise within the last two decades in the proportion of the total population who are currently divorced and widowed is primarily the result of divorce. If we combine the 'now married' and the divorced/widowed population, this new category – an 'ever married' population – is greater than the 'never married' population, in keeping with the trend since 1950.

2.11 MARITAL STATUS 1901-1998

per cent of 15+ population now married, never married and divorced/widowed



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

Divorce

Figure 2.12 shows the divorce rate per 100,000 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 nineteenth 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-eighties, followed by a steady rise again throughout the 1990s. The rate was about 2 per 100,000 population in the 1880s and 280 per 100,000 population in the 1990s.

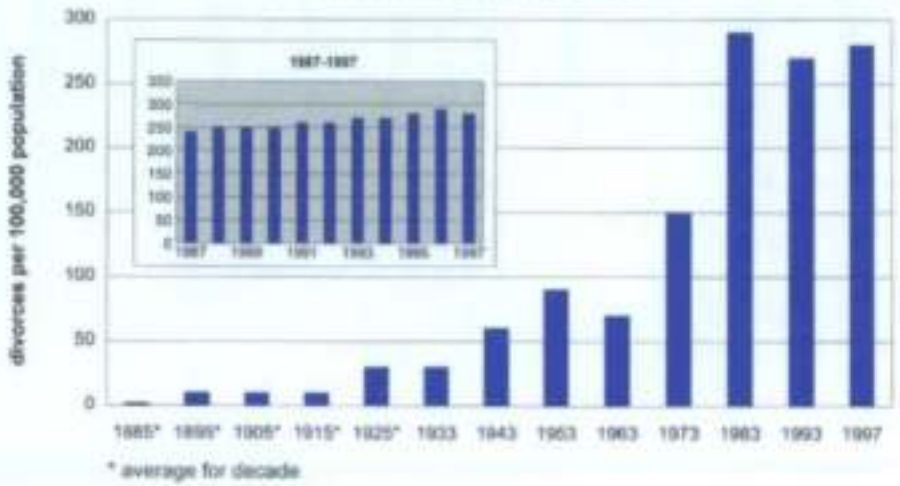
The pattern of these figures with their three major fits and starts, cannot be understood without reference to changes to the divorce law which mark the initiation of changes of divorce rate. The author of an early *Year Book* commented that:

> The rapid increase in divorce during the period 1891-1900 occurred largely in New South Wales and Victoria where legislation passed respectively in 1899 and 1889 made the separation of the marriage ties comparatively easy.

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, and this presaged the almost doubling again by 1983.

2.12 DIVORCE RATE 1885-1997

divorces per 100,000 population



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

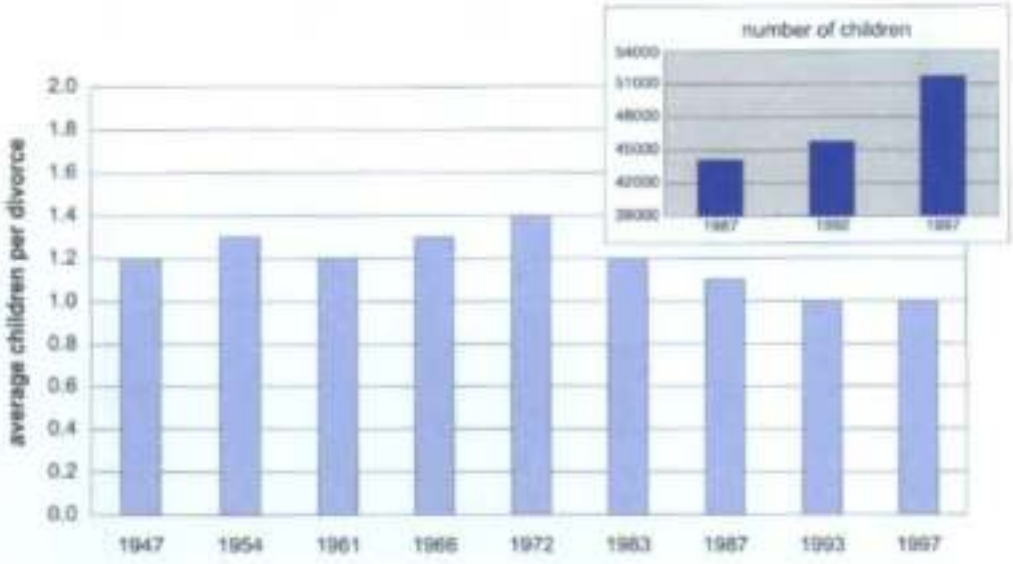
The number of divorces rose massively from 16,000 in 1973 to 63,000 in 1976. Obviously, this rise could not be the result of the new encouragement afforded to divorce by the *Family Law Act*, as the one-year wait it required had not yet elapsed. Rather, it represents pending divorces from the previous four years, no longer required to wait out a five-year term of separation. If we divide the excess by five, we obtain a figure of 25,400 or 180 per 100,000 population, which slots into a fairly steady upward trend in the two decades following the initial introduction of 'no fault' divorce in 1961, which has settled at a new, raised level in the 1990s.

Divorce and Children

Figure 2.13 shows the average number of children per divorce from 1947 to 1997. Until the 1970s the average number of children rose and fell with the divorce rate, suggesting that the rise took in families with more rather than fewer children; but in the 1980s and 1990s this relationship disappears. While the divorce rate was considerably higher in 1983, the average number of children was lower, and with the divorce rate fairly similar in the early 1990s, it fell again. This latter pattern is consistent with a diminished duration of marriage in these decades, and a marked rise in mothers' age at birth of first child across the same period from 23.7 years in 1971 to 29 in 1997. In 1997, the average number of children had risen slightly, and the actual number, considerably, to above 50,000.

2.13 CHILDREN and DIVORCE 1947-1997

average children per divorce and total children affected



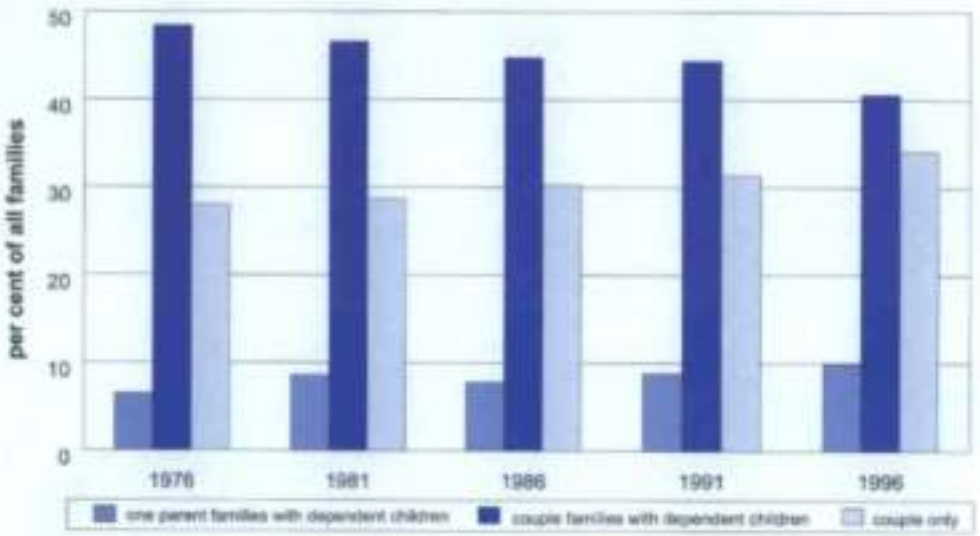
Source: *Yearbooks* (ABS Cat.1301.0)
Marriages & Divorces (ABS Cat. 3310.0)

Family Structure

Figure 2.14 shows that the proportion of all families (which includes couples without children) that are couple families with dependent children has decreased from 48% in 1976 to 40% in 1997. One parent families increased from 6.5% to 9.9% of all families and couple only families increased from 28% to 34% of all families in the same period.

2.14 FAMILY TYPE 1976-1996

family type as a proportion of all families



Source: *Yearbook* (ABS Cat. 1301.0)

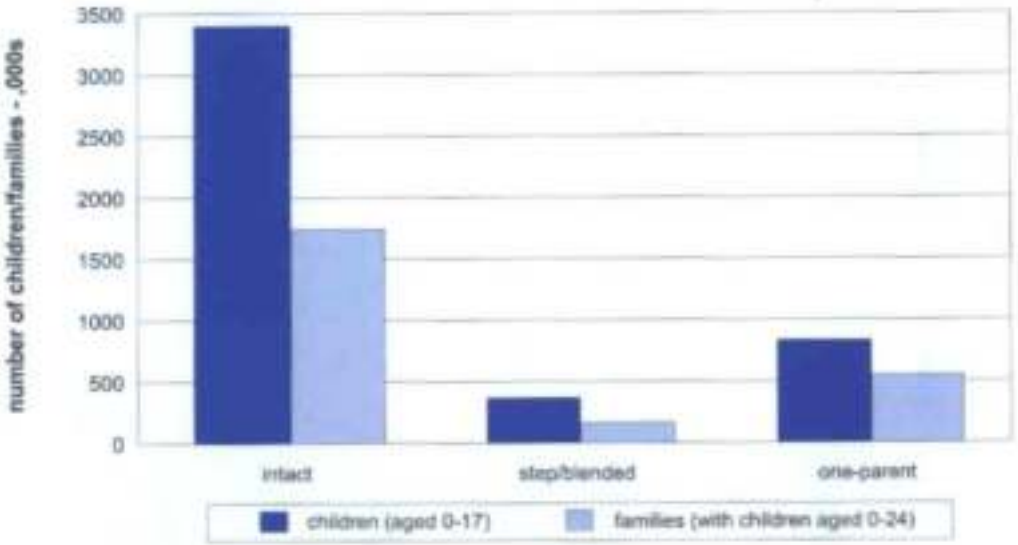
Children and Families

Figure 2.15 shows that in 1997, of children aged 0-17 years living with families:
- 74% were with both natural parents in an intact family
- 18% were in one-parent families
- 8% were in step or blended familes (of whom the majority were with one of their natural parents)

In sum, therefore, approximately 23% of children were living apart from one natural parent.

2.15 CHILDREN and FAMILIES by FAMILY TYPE 1997

numbers of children and families



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

Sole Parents

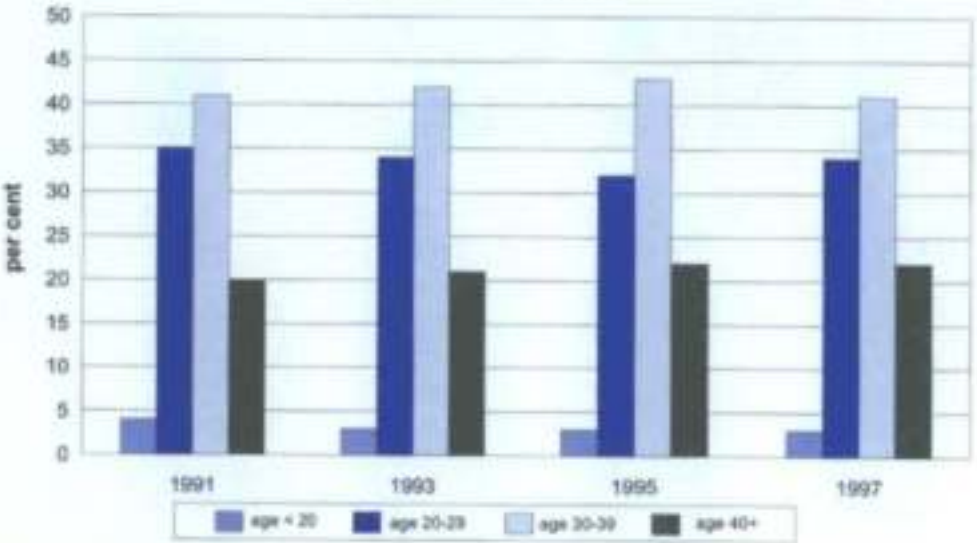
Welfare provision for single mothers began in 1975 with the introduction of the Supporting Parent Benefit. This also became available to the large number of divorced wives with children who received no maintenance, following the introduction of rapid no-fault divorce in 1975. Figure 2.16 shows the percentages of Sole Parent Pensions (the successor of the Supporting Parent Benefit) going to different age groups in 1991, 1993, 1995 and 1997.

Although the image of the Sole Parent pensioner that rouses most public resentment is that of the teenage unmarried mother, it can be seen that only a small proportion of this money can possibly go in this direction – less than 5% of sole parents are in this age group. Young, single mothers have been described as 'married to the state'; that is, the state, or the taxpayer, through the Sole Parents' Pension, provides financially for the raising of these children, in place of their fathers. A similar situation has developed with the raising of children by divorced mothers financed as much by the Sole Parent's Pension as by the children's fathers, which has persisted despite the introduction of the Child Support Scheme in 1989.

The high percentage of pensions going to women aged over 30 indicates that the claim that most women stay on Sole Parent Pensions for approximately 3 years is probably misleading, and that most women return to benefit dependency after such breaks.

2.16 SOLE PARENT PENSIONS 1991-1997

percentage of recipients by age



Source: *Yearbooks* (ABS Cat. 1301.0)

SECTION 3:
DEATHS

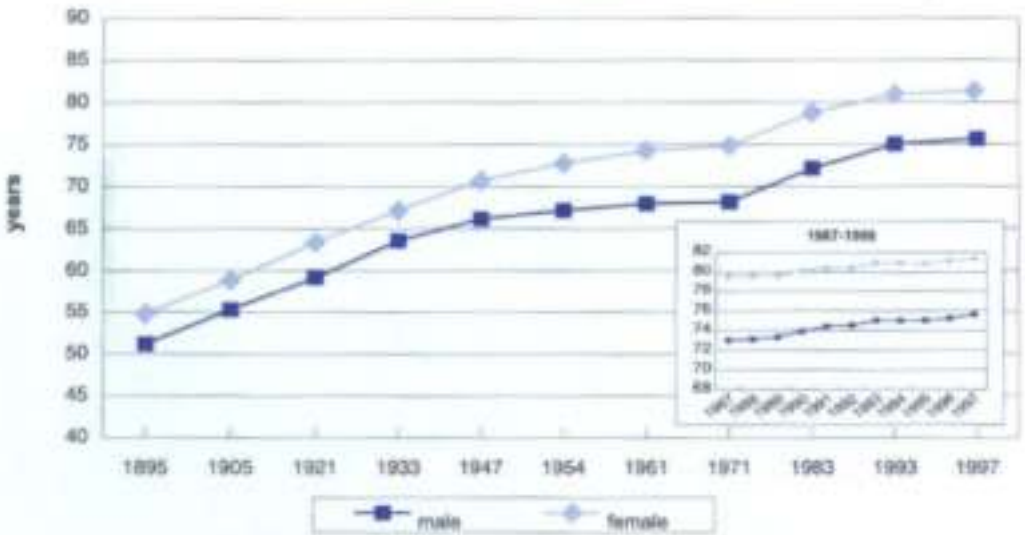
Life Expectancy

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, in fact, predict the future, as trends they are able to show how longevity has improved (or declined).

Figure 3.1 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 1997, the equivalent figures were 75.6 and 81.3. 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 is, however, a slight decrease in the last decade – from 6.5 years in 1987 to 5.7 years in 1997. 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.

3.1 LIFE EXPECTANCY at BIRTH 1895-1997

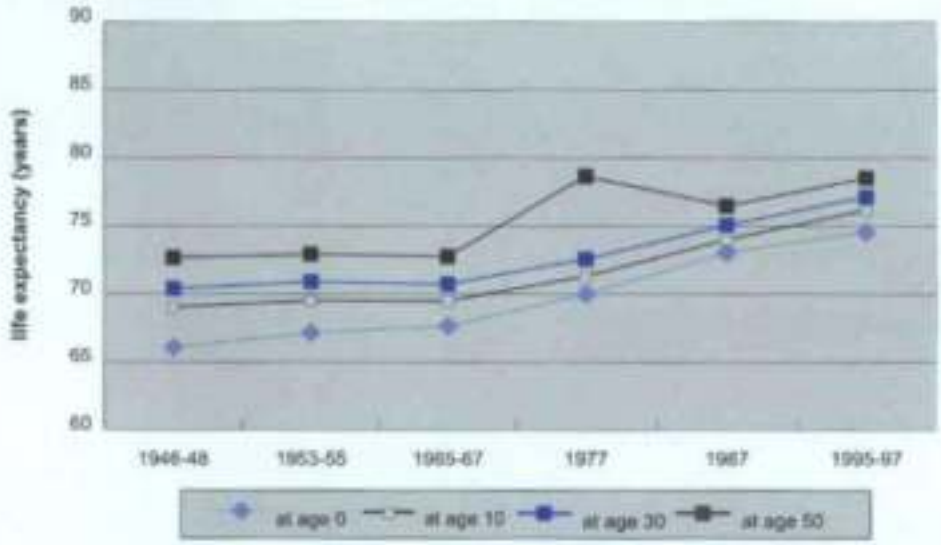


Source: *Yearbooks* (ABS Cat. 1301.0)

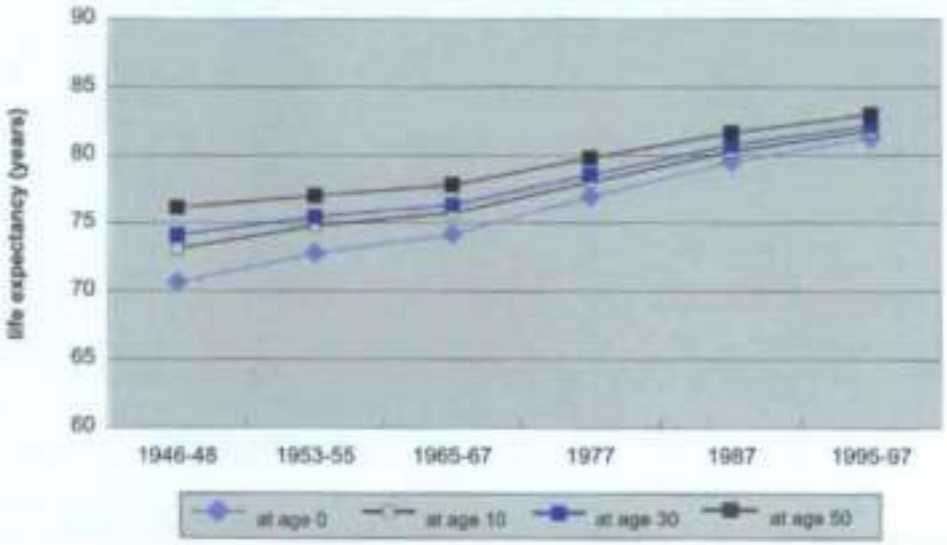
Figures 3.2 and 3.3 show that for other ages, the same pattern occurs. Life expectancy increases with age for both sexes (after the perils of childhood and adolescence), but males are still outlived by females, albeit by a smaller margin.

Male life expectancy at 10 years of age was 76.2 in 1995-97 and at 50 was 78.5. Female life expectancy at 10 years of age was 81.8 and at 50 was 83.

3.2 MALE LIFE EXPECTANCY by AGE 1946-1997



3.3 FEMALE LIFE EXPECTANCY by AGE 1946-1997



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

Death Rates

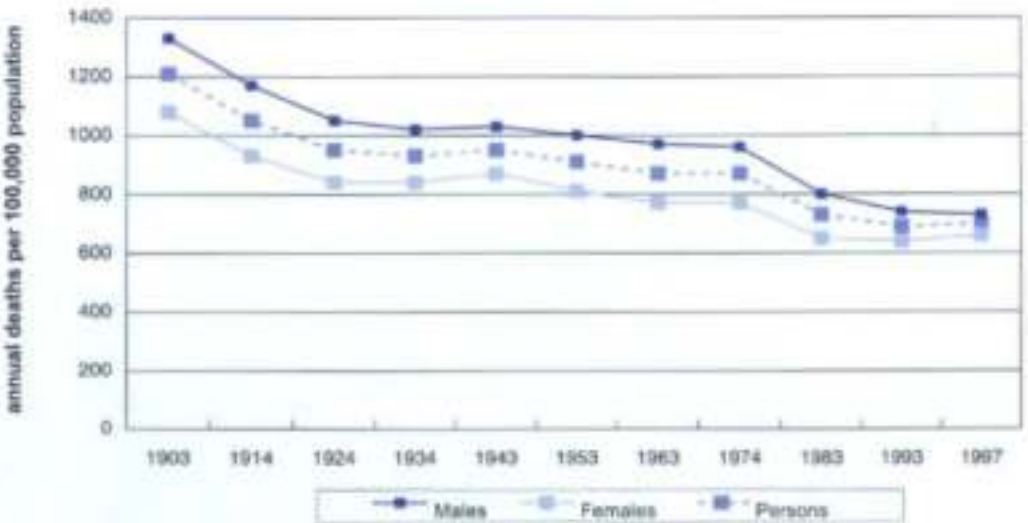
Figure 3.4 shows the death rate in Australia (per 100,000 population), from 1903 to 1997, for men and women. A higher death rate means more people dying at younger ages and a fall in the death rates generally indicates greater longevity. (It could, however, mask an increase in people dying young, while those that survive increase their life span.) The figure shows a fall in the death rate of both men and women from approximately 1350 and 1100 per 100,000 population, respectively, in 1903 to 730 and 660 in 1997.

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 higher 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 two decades, and the female death rate, reversing a 90 year trend, has risen slightly.

3.4 DEATH RATES 1903-1997

males, females and persons



Source: *Yearbooks* (ABS Cat. 1301.0)
Deaths, Australia (ABS Cat. 3302.0)

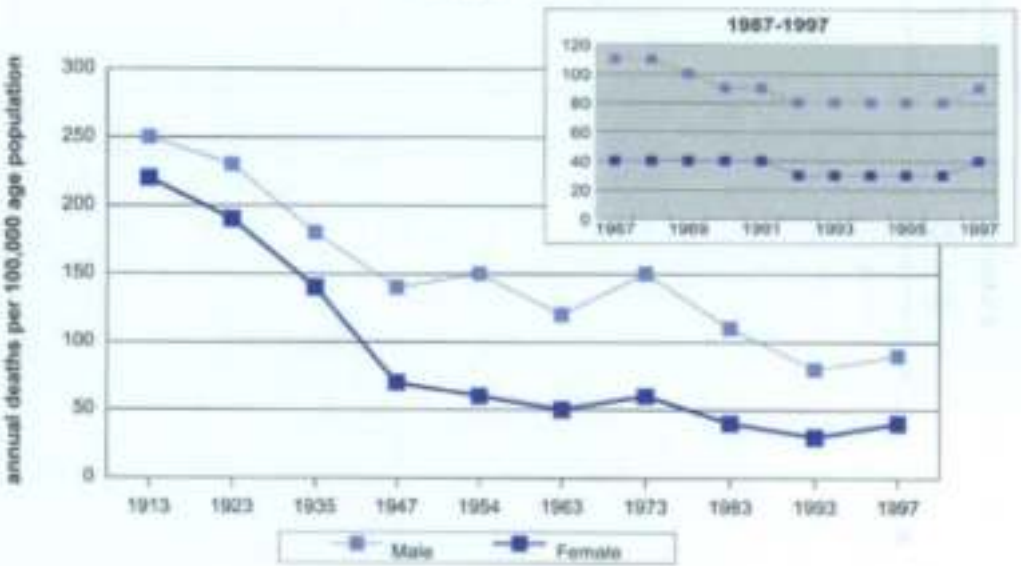
15-19 Year Old Death Rates

The figures for all age groups combined may conceal trends in particular age groups. Figure 3.5 shows the death rates for males and females in the age group 15-19, a pattern which is replicated in the age groups 20-24 and 25-29. It seems that the fall in death rates of young men and women during the first half of the 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 middle of the century, as their mortality figures cease to make the same rate of improvement which has occurred for females, and which was a feature of the earlier period. This failure appears to occur as males emerge from the care of the family with the onset of adolescence.

An alarming development appears in the latest mortality statistics: while the 15-19 year old death rates remained stable in the period 1992 to 1996, they actually increased in 1997, for both males and females.

3.5 AGE 15-19 DEATH RATES 1913-1997

males and females



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

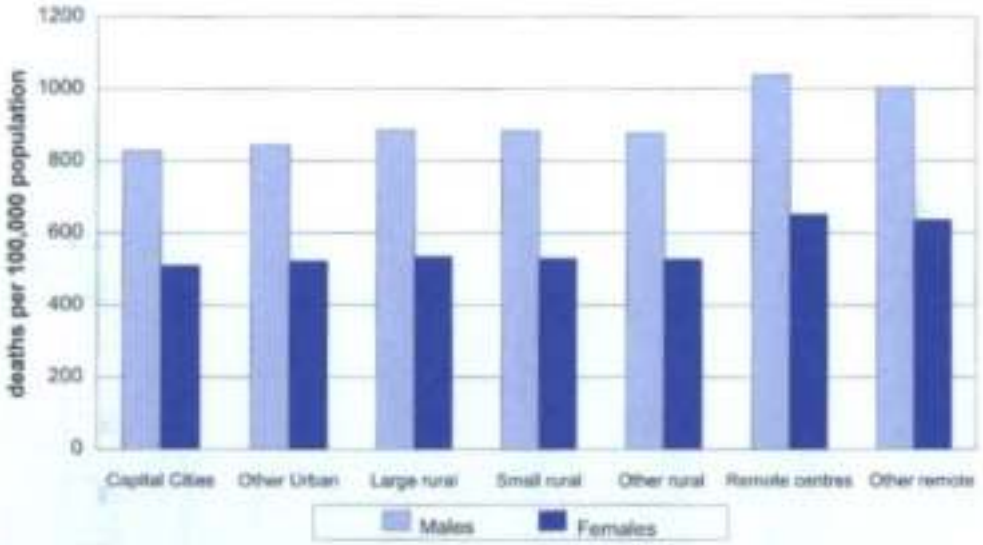
Urban, Rural & Remote Death Rates

As shown in Figure 3.6, the death rate of the population in remote areas (population up to 10,000)* is higher than in urban centres and rural areas (population between 10,000 and 100,000)* for both men and women. In the period 1992 to 1996, the annual average death rates for males and females in remote centres and other remote areas were around 25% higher than for urban and rural populations.

Figure 3.7 shows the contribution of the indigenous population to the differences. Death rates for non-indigenous Australians differ little between urban, rural and remote locations, while Indigenous rates rise across the areas of residence. The higher death rates in rural areas are almost entirely due to their higher indigenous populations. The majority (66%) of Indigenous people live in rural and remote areas, particularly in the Northern Territory where they account for 28% of the population. Indigenous persons account for around 22% of the remote population as opposed to 2.2% of the total population.

3.6 URBAN, RURAL and REMOTE DEATH RATES

annual average 1992-96, all causes



Source: *Health in Rural and Remote Australia* (1998, Australian Institute of Health and Welfare)

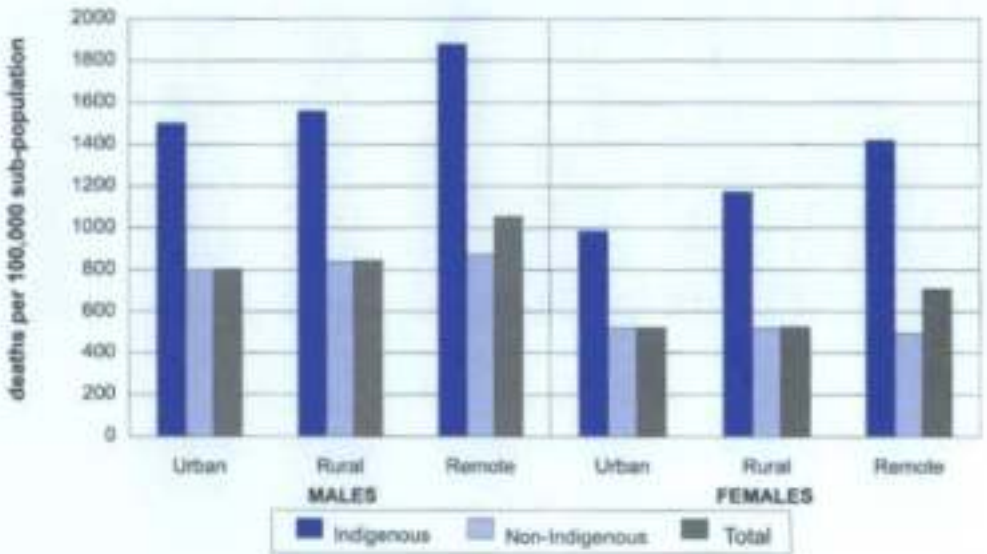
Much of the discrepancy between the death rates of Indigenous Australians and the total population is attributable to four major causes: circulatory diseases (includes ischaemic heart disease), respiratory diseases (includes pneumonia), injuries (includes road accidents) and endocrine diseases (includes diabetes). Indigenous people also have much higher rates of hospitalisation than the national average. For most conditions, their rate of hospitalisation is two to five times higher than would be expected based on the all-Australian rates (AIHW, 1998).

In the year 1995/96, government expenditure on Aboriginal and Torres Strait Islander health services was around 2.2% of the total recurrent health expenditure, a figure which is commensurate with Indigenous representation in the total population. However, their lower health status and hence greater need for services is more accurately reflected by the gross expenditure by government-subsidised programs, (which include private out-of-pocket payments and funding from non-government organisations) of which per capita spending on indigenous Australians was 44% higher than for other Australians.

**Rural and remote definitions are according to RRMA (Rural, Remote and Metropolitan Areas) classifications, which are conventionally used in health care statistics.*

3.7 INDIGENOUS and NON-INDIGENOUS DEATH RATES by LOCALITY

annual average 1992-96, all causes



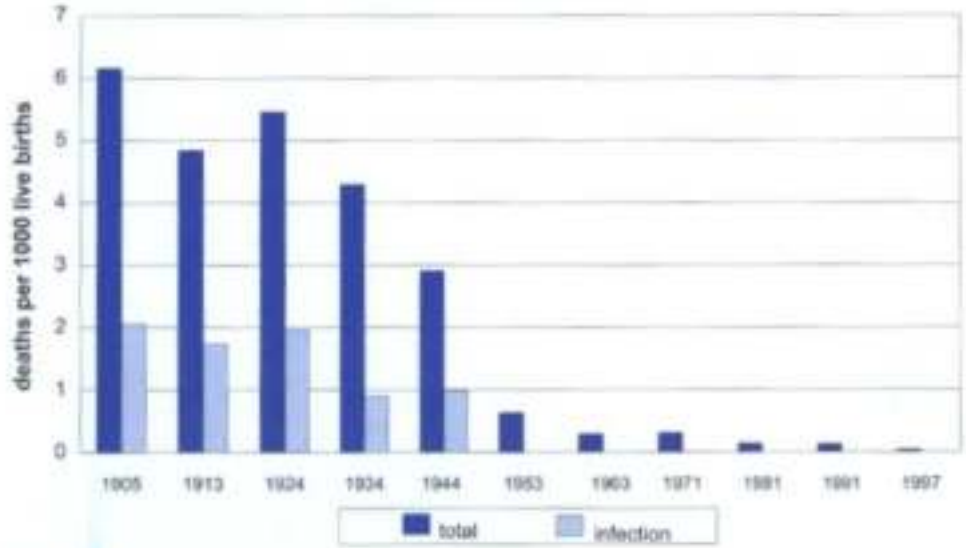
Source: *Health in Rural and Remote Australia* (1998, AIHW)
Yearbooks (ABS Cat. 1301.0)

Maternal Death in Childbirth

Maternal death in childbirth is an indication both of quality of medical care and of general levels of health of the mature population of women. Figure 3.8 shows total maternal deaths per 1000 births from 1905 to 1997, and also a major cause of death in the first half of the century, infection. The maternal death rate in 1905 was 6 per 1000 births or 0.6%. By 1997 it had fallen to 0.04 per 1000 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.

3.8 MATERNAL DEATH in CHILDBIRTH 1905-1997

due to infection and total rate



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

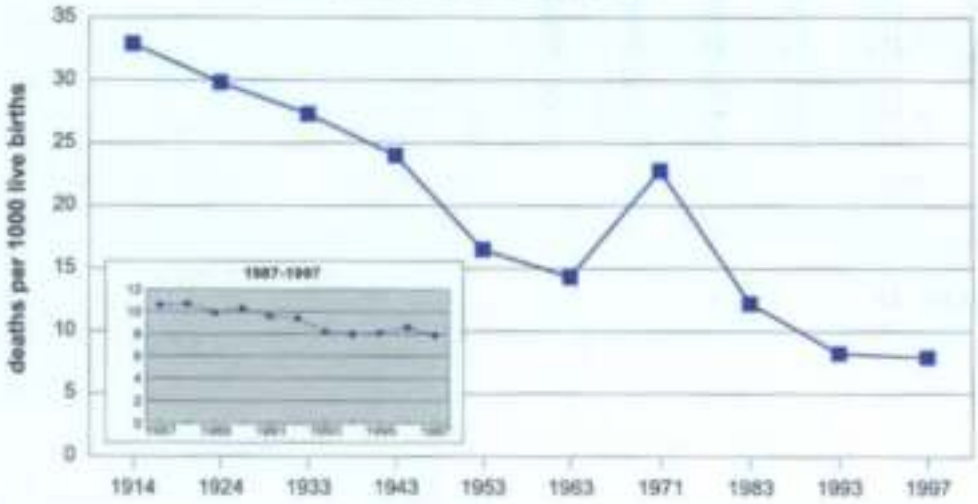
Infant Health

Perinatal mortality, deaths per 1000 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 3.9 shows perinatal mortality in Australia from 1914 to 1997. Perinatal mortality includes both live births and still births above a given gestational age or birth weight. In 1914, there were 33 deaths per 1000 live births; in 1997 this had fallen to eight. The decline was steady from 1914 to 1993, apart from a steeper than average fall between 1943 and 1953, and a large rise in 1971 returning almost to the 1940s level. In the course of the 1990s it has largely flattened.

The large rise between 1963 and 1971 to 23 deaths per 1000 live births has two possible explanations. One is the perinatal definitional change from 28 weeks to 20 weeks gestation and from 500g to 400g, effectively widening the perinatal category. However, the sustained increase in perinatal mortality rates to 23.6 in 1976 suggests that another factor was involved. The contemporary medical fashion of elective induction of births which meant that babies were born prematurely, and prone to lung and liver complications, may have been the major factor responsible.

3.9 PERINATAL MORTALITY 1914-1997

deaths before one month of age



Source: *Yearbooks* (ABS 1301.0)
Causes of Death, Australia, (ABS Cat. 3303.0)

While perinatal mortality says much about the health of parturient women, infant mortality (deaths of liveborn infants under one year of age, per 1000 live births) 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 particularly, 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 3.10) was very high by modern standards at the turn of the century – over 19% of infants died before they reached their first birthdays. This had fallen to 4% by 1933, to 2% by 1963 and to 0.6% by 1997. Again the decline has flattened in the 1990s. In 1996, infant deaths accounted for 65% of deaths of children under the age of 15.

3.10 INFANT MORTALITY 1903-1997

deaths before one year of age

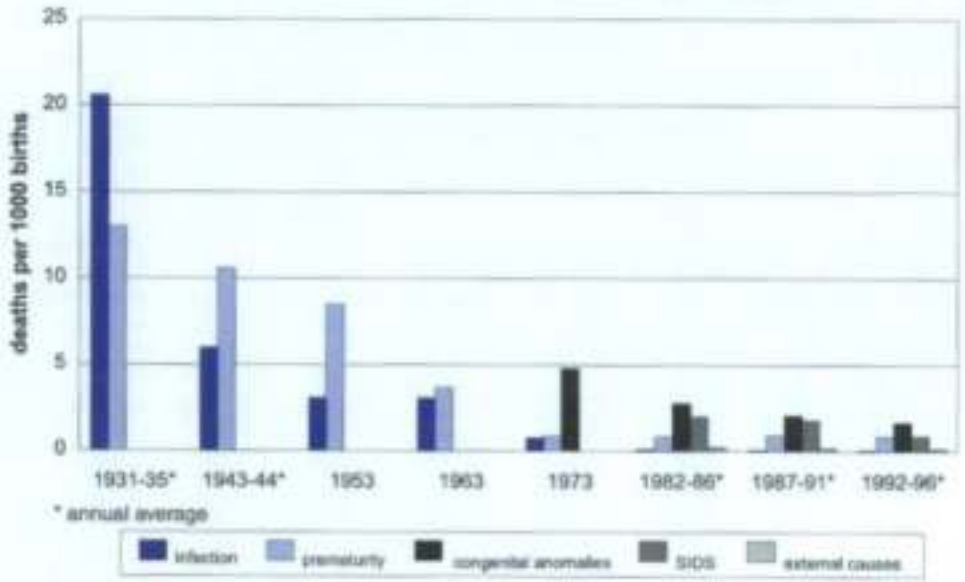
Source: *Yearbooks* (ABS Cat. 1301.0)
Deaths, Australia. (ABS Cat. 3302.0)

Figure 3.11 shows a selection (as available) of causes of infant death from the 1930s to the 1990s. In 1931-35 there were high rates of infant deaths from infection and prematurity, 21 and 13 per 1000 births respectively. By 1992-96, deaths due to infections had fallen to a mere 0.1 per 1000 – the result of the great triumph of Western medicine (especially antibiotics) and public health over infectious diseases which occurred throughout this period. Death due to prematurity fell to 0.9 per 1000 births in 1973, thereafter remaining relatively stable.

The fall in death rates due to congenital anomalies reflects the growth in prenatal diagnoses followed by termination of pregnancy.

Deaths due to SIDS (Sudden Infant Death Syndrome, formerly known as 'cot death') decreased from the 1980s to the 1990s, with increased public awareness of research developments regarding risk factors such as infant sleeping positions. External causes, including injury (eg motor vehicle accidents, drowning) and poisoning, are much less prevalent in infants than in older children. Injury is the leading cause of death in children aged 1-4, 5-9 and 10-14.

3.11 CAUSES of INFANT DEATH 1931-1996



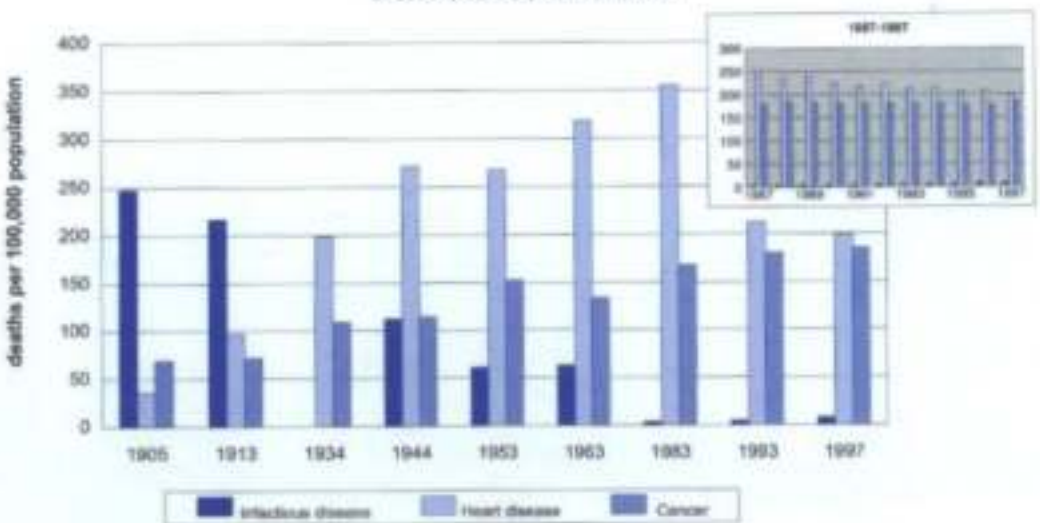
Source: *Yearbooks* (ABS Cat. 1301.0)
Causes of Infant Death 1982-1996 (ABS Cat. 4398.0)

Changing Patterns of Mortality

Figure 3.12 shows death rates (deaths per 100,000 population): from infectious (other than puerperal fever) and parasitic (such as malaria and Ross River fever) diseases, from cancer and from heart disease, from 1905 to 1997, across the period of increasing life expectancy which we have already witnessed (Figures 3.8 and 3.9). As deaths due to infectious diseases declined in the course of the 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 1997, the relative frequencies are reversed, with over 370 deaths from cancer and heart disease combined, and about 10 of infectious diseases. In 1905 a larger proportion of deaths were occurring in the older mature (40-64) and youngest (less than 5) age groups, whereas in the 1990s, the large majority occurred at age 65 and 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 the marked decline in heart disease deaths between 1983 and 1993 is a 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 by-pass surgery should not be underrated.

3.12 CAUSES of DEATH 1905-1997



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

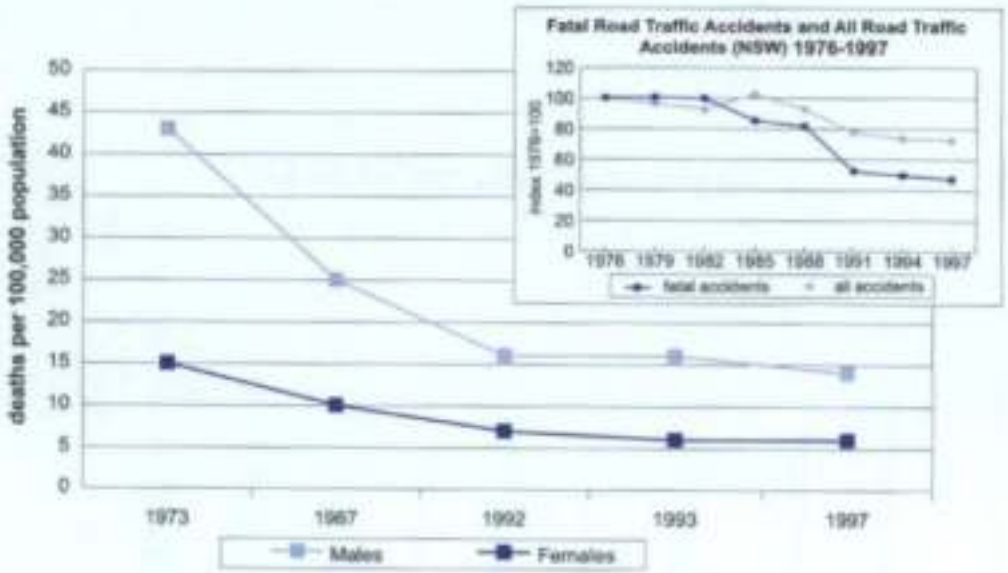
Violent Deaths (External Causes)

Figure 3.13 shows death rates due to motor vehicle accident from 1973 to 1997. As figures are not available for previous decades, we cannot tell whether this factor accounts for the rise in young male deaths in the 1970s (Figure 3.11). The decline in motor vehicle deaths, despite a rise in ownership and usage, is a triumph of interventionary regulation, especially seatbelts and random breath testing for alcohol usage. There was a levelling off in motor vehicle deaths between 1992 and 1997 as there have been no new initiatives to compare with seatbelts and random breath testing. The sex differential decreased between 1973 and 1992, but has remained steady since then.

The inset graph shows that fatal accidents in NSW (national data not available) declined more than other accidents, the main effect being in the period 1980 to 1990 during which the scope of seat-belt legislation was widened.

3.13 MOTOR VEHICLE DEATHS 1973-1997

males and females

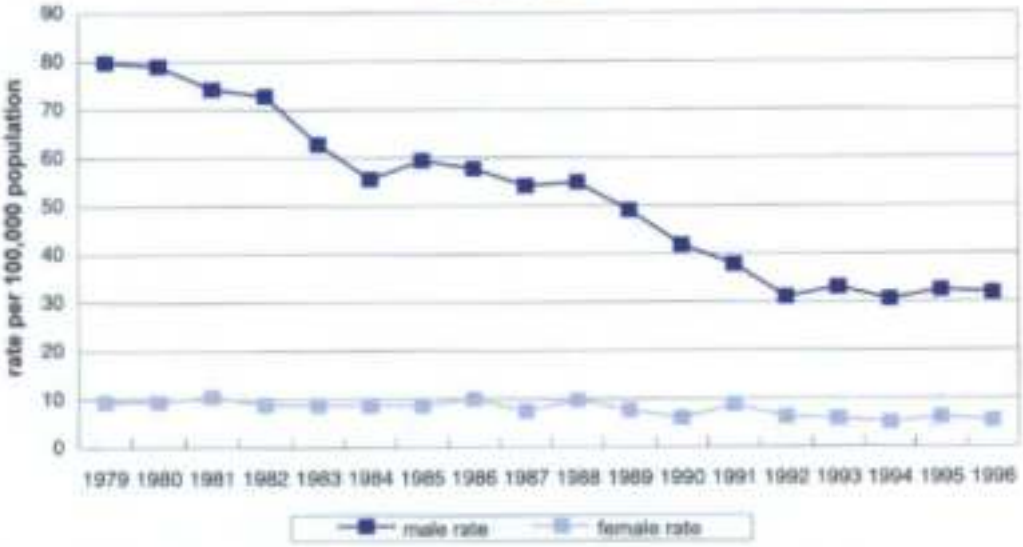


Source: *Yearbooks* (ABS Cat. 1301.0)
Deaths, Australia (ABS Cat. 3302.0)
Roads and Traffic Authority of NSW (unpublished data)

Rates for motor vehicle deaths for 15-24 year old males and females show the same patterns of decline as those for the population, with male rates having more than halved over the period 1979 to 1996. Male rates fell from 80 per 100,000 15-24 year olds in 1979 to 33 in 1996, and female rates from 10 to 5. The narrowing of the gap between male and female deaths is remarkable, but nevertheless, male motor vehicle deaths in this age group are still six times more numerous than female and double that of the total male population. It is conjectured that some of these deaths were suicides, but if so, the proportion cannot be established.

3.14 15-24 YEAR OLD MOTOR VEHICLE DEATH RATES 1979-1996

males and female



Source: National Injury Surveillance Database (National Injury Surveillance Unit)

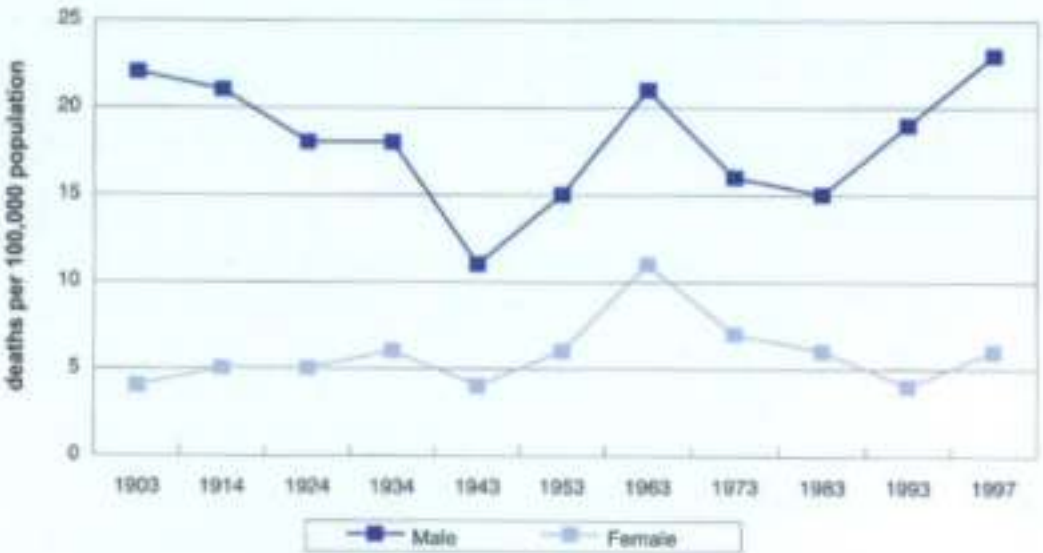
Suicide

Figure 3.15 shows suicide rates for males and females from 1903 to 1997. These have not shown the decrease evident in deaths that are responsive to medical and regulatory intervention and are worse 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 occupation of male energies 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 have shown similar trajectories except for the period 1983 to 1992 when the rate for males turned sharply upwards and female rates continued to fall. A similar rise in the female rate appeared between 1993 and 1997. Male rates in 1997 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, and female rates, apart from during the barbiturate epidemic, around 5, with neither showing convincing trends of increase or decrease, although the overall pattern for males is U-shaped, and for females, the reverse.

3.15 SUICIDE RATES 1903-1997

males and females



Source: *Yearbooks* (ABS Cat. 1301.0)
Causes of Death (ABS Cat. 3303.0)

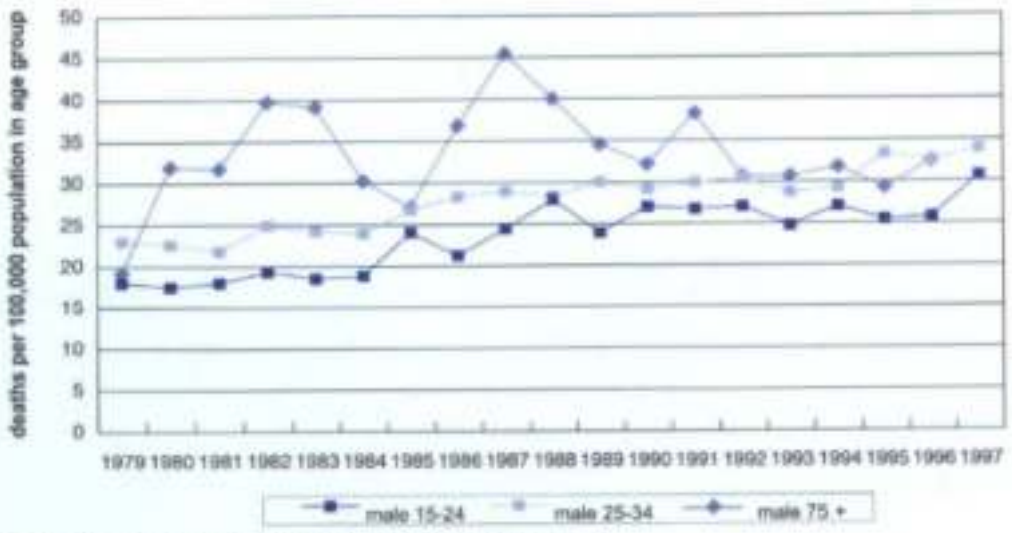
Figure 3.16 shows that male suicides rose steadily from 1979 to 1996 in the 25-34 age group, and with sizeable fluctuations in the 15-24 age group. In 1997, there was a sudden increase in the 15-24 age group, with 31 in 100,000 15-24 year old males taking their own lives. This sudden increase occurred after a seven year plateau from 1989 to 1995 of suicide rates around 25 to 28 per 100,000. This brings suicides of the 15-24 year olds to the same level as the 25-34 and the 75+ age groups. Suicides of elderly men have fluctuated wildly around the 35 per 100,000 mark since 1980, after nearly doubling between 1979 and a year later.

Like males, females aged 25-34 have had a higher suicide rate than those aged 15-24, but the 25-34 year old rate has fallen from 11 to 8 over the same period. There has been a marked rise in both age groups between 1993 and 1997. Unlike males, elderly females have a lower suicide rate than young women, and their rate has declined, with fluctuations, from 6.5 to 5 (Figure 3.17).

Although the 15-24 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 29% of male deaths and 18% of female deaths in the 15-24 age group. While the suicide rate for 25-34 year olds is higher (34 for males and 8 for females), suicide accounts for 23% of male deaths and 12% of female deaths in this age group, and a much lower percentage in the 75+ age group.

3.16 MALE SUICIDE by AGE 1979-1997

rate per 100,000 population in age group



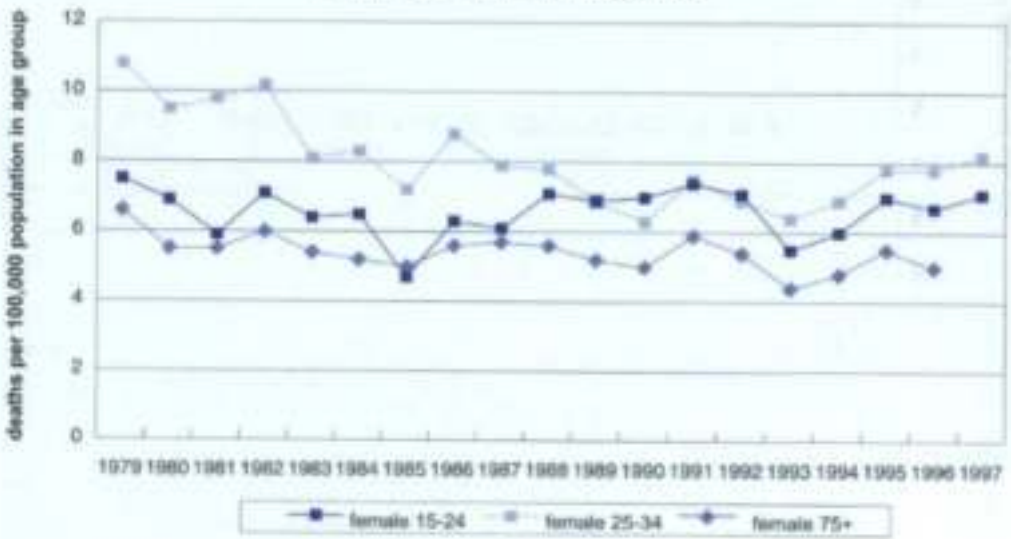
Source: National Injury Surveillance Database
(National Injury Surveillance Unit)

The high rates of suicide deaths among young males are currently attributed to two major factors. One is unemployment, which is higher in rural and remote areas, where youth unemployment is particularly chronic. 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. Comparisons should be treated with some caution, however, as methods and accuracy of reporting suicide deaths may differ between countries.

3.17 FEMALE SUICIDE by AGE 1979-1997

rate per 100,000 population in age group



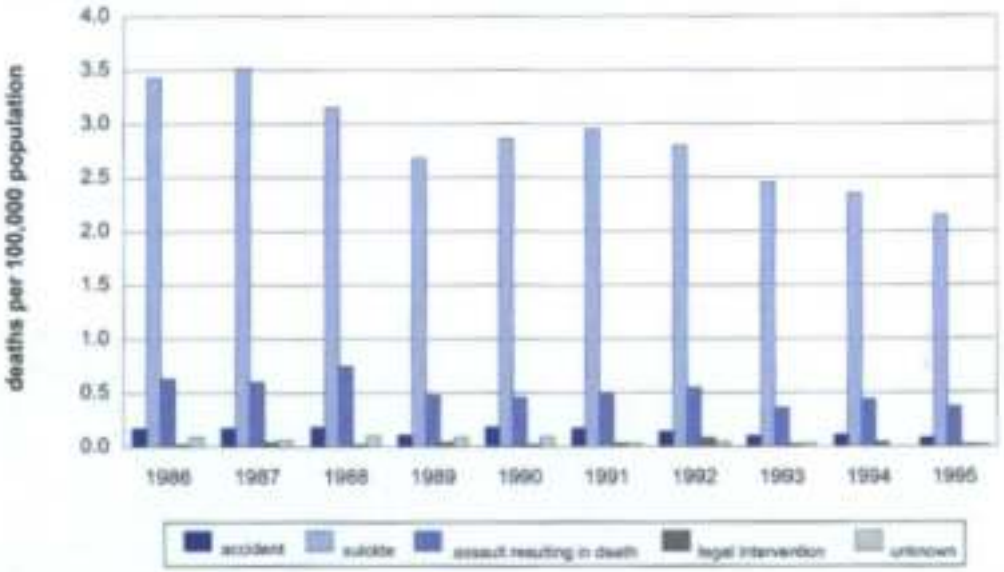
Source: National Injury Surveillance Database
(National Injury Surveillance Unit)

Figure 3.18 shows the rate of death caused by firearms in five categories in the period 1986 to 1995. The rates in all categories have decreased over this period. Death rates in the 'assault resulting in death' category show the most fluctuation, and were the 1996 statistics available, it is probable that they would show an increase on the preceding years due to the impact of the Port Arthur massacre in April of that year.

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 of the other categories combined. Deaths due to 'legal intervention' are the result of police action.

3.18 DEATHS CAUSED by FIREARMS 1986-1995

rate per 100,000 population



Source: Mukherjee, S & Carcach, C. (1996). *Violent Deaths and Firearms in Australia: Data and Trends.* Australian Institute of Criminology

SECTION 4:
HEALTH AND DRUGS

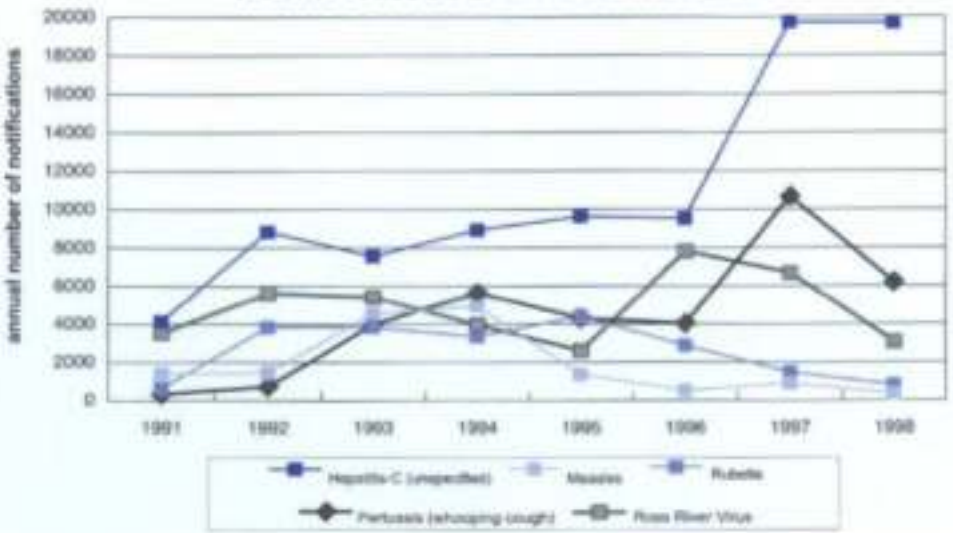
Disease

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. Figure 4.1 shows that the incidence of infectious diseases rose considerably in the course of the past decade, but in some cases appears to have been re-brought under control. Although people in Australia are not yet dying as a result of the resurgence of infectious or communicable diseases, an increase in infection rates is apparent.

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, the disease re-established itself swiftly with an increase from 337 to 10,668 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.

Hepatitis-C, primarily a blood-borne disease which is most commonly transmitted through intravenous drug use, increased 10-fold in the five year period from 1993 to 1998. The increase in Hepatitis-C notifications appears, anomalously, to be associated with needle-exchange programs. It was first identified after their introduction, and infection is strongly related to duration of participation in the program.

4.1 INFECTIOUS DISEASES 1991-1998

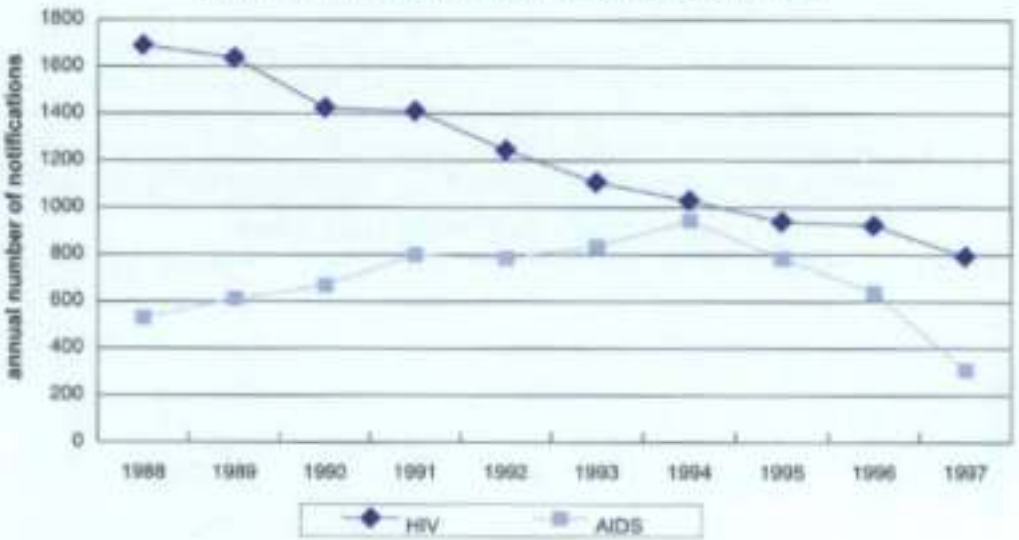


Source: Communicable Diseases Network-Australia New Zealand - National Notifiable Diseases Surveillance System

A major concern in the monitoring of infectious diseases in the 1990s has been the re-emergence to significant levels of mosquito-borne infections. Reduced use of pesticides, and the retention of 'wetlands', formerly called swamps, are contributing factors. Figure 4.1 shows the alarming increase in Ross River Fever. The incidence of malaria in Australians is increasing, although this has to date almost entirely been contracted overseas. Infected persons nevertheless create a pool for renewed native transmission, as the Anopheles mosquito, its vector, is present across much of Northern Australia.

New reports of HIV (human immunodeficiency virus) have decreased annually from a peak of 2500 diagnoses in 1986 (Figure 4.2). 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.

4.2 HIV and AIDS NOTIFICATIONS 1988-1997



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

Health Care

Public criticism of the efforts of the State in health care is largely associated with the functioning of its major health care institutions, the hospitals. Figure 4.3 shows the supply of hospital beds from the turn of the century to 1997. Figure 4.3 also shows admissions from 1988 to 1997 in the inset figure.

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, 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, as can be seen in the rising number of admissions despite fewer beds being available.

Between 1991-92 and 1996-97 the average length of stay fell from 5.2 to 4.2 days. The number of hospital beds per 100,000 population decreased by 20% between 1988 and 1997. During the same period, the rate of admissions increased by 35%.

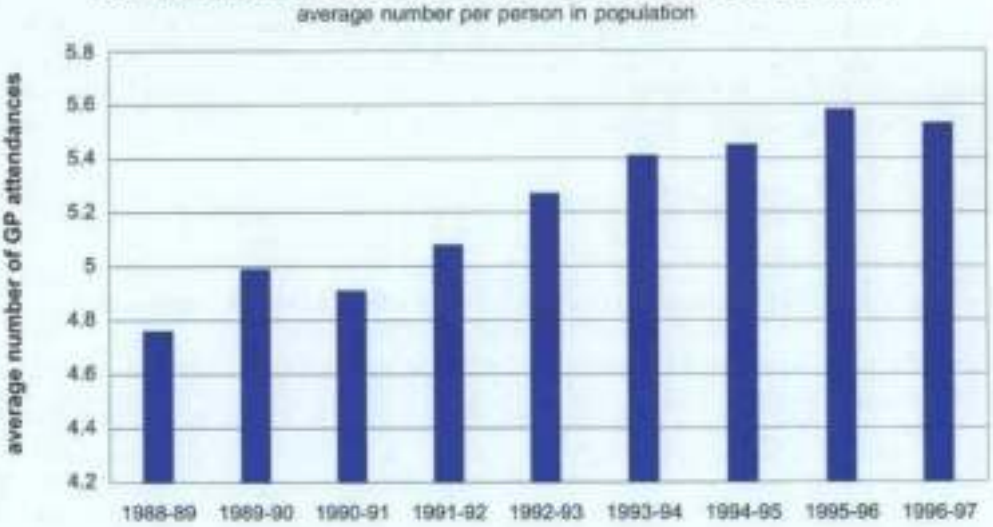
4.3 HOSPITAL BEDS 1903-1997 and ADMISSIONS 1988-1997

beds and admissions per 100,000 population

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

General practitioner care is the front line, and a major part, of our health care system. The average number of patient attendances with general practitioners increased by 16% in the period 1989 to 1997. This may be a consequence of an ageing population, as aged people typically use health services more frequently than the rest of the population. It may also result from shorter hospital stays.

4.4 GENERAL PRACTITIONER ATTENDANCES 1989-1997



Source: *Medical Labour Force* (1996, Australian Institute of Health and Welfare)

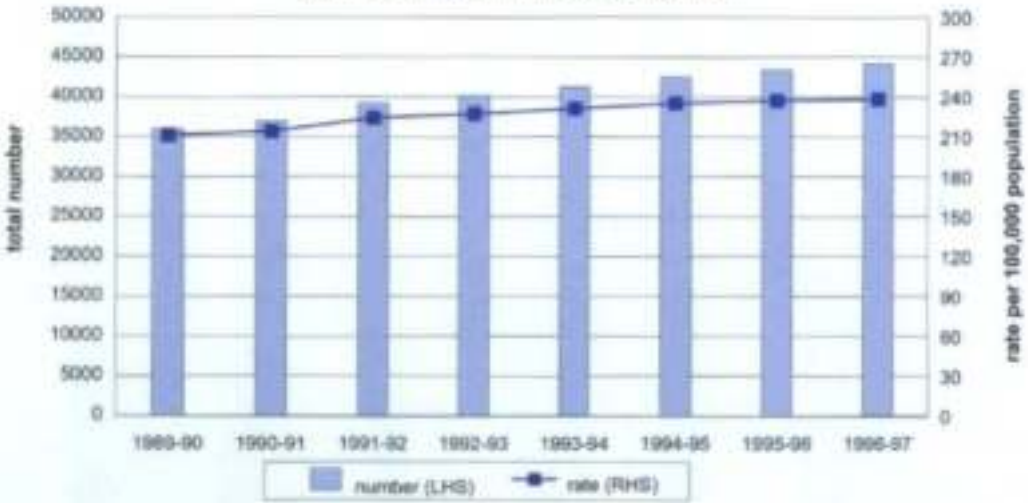
The total number of Medicare providers (medical practitioners providing Medicare services) increased by 23% between 1990 and 1997. The number of Medicare providers per 100,000 population rose from 210 to 240, an increase of 12%, in the same period.

Of the total Medicare providers, general practitioners (GPs) accounted for approximately 55% in 1996, a slight fall from 1990 (60%). The number of GPs per capita increased by only 4% in this period. Therefore, although the increase in the number of all Medicare providers corresponds to the increase in demand shown in Figure 4.4, the number of GPs has increased by a fraction of this amount.

There is an unmet demand for GPs in remote areas. In 1996, there were 88 primary care practitioners per 100,000 population in rural and remote areas compared to 122 in metropolitan centres. When the rates for all medical practitioners are included, the discrepancy is even greater – 143 per 100,000 population in rural and remote areas and 308 in metropolitan centres (Australian Institute of Health and Welfare).

4.5 NUMBER OF MEDICARE PROVIDERS 1990-1997

total number and rate per 100,000 population



Source: *Medical Labour Force* (1996, Australian Institute of Health and Welfare)

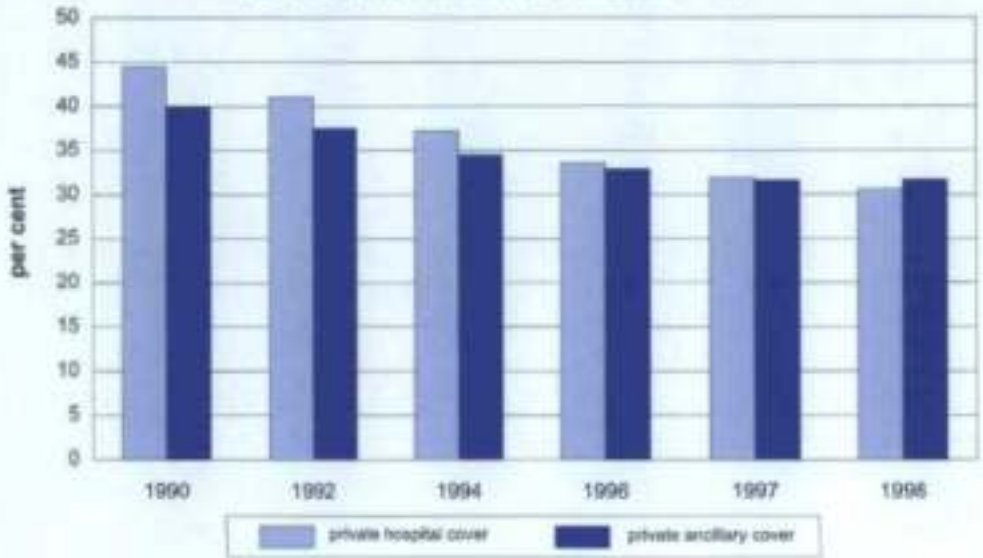
Private Health Insurance

The *National Health Act* of 1953 requires 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. So there are 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.

In 1984, approximately 50% of the population had private health insurance. This had dropped to 32% in 1998 (see Figure 4.6). 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 in the public system. In order 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. An additional (and apparently more successful) measure is the recent 30% rebate on membership premiums, but the effects are yet to be seen in the statistics.

4.6 PRIVATE HEALTH INSURANCE 1990-1998

per cent of population with private health insurance



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

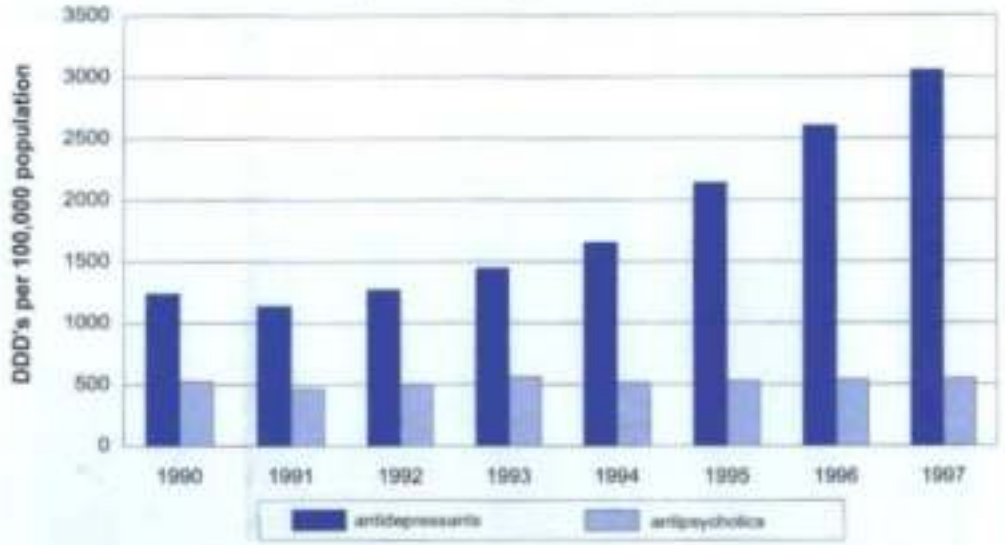
Psychoactive Drug Use

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 1240 to 3050 defined daily doses per 100,000 population, that is, from usage by one in eighty people to one in thirty. Prescriptions of anti-psychotics increased only marginally in the same period. The rising rate of prescription of anti-depressants suggests a recurrence of the barbiturate epidemic of the 1960s and 1970s.

4.7 ANTIDEPRESSANTS and ANTIPSYCHOTICS

defined daily doses (DDD's) per 100,000 population



Source: Drug Utilisation Sub-Committee, Department of Health and Aged Care

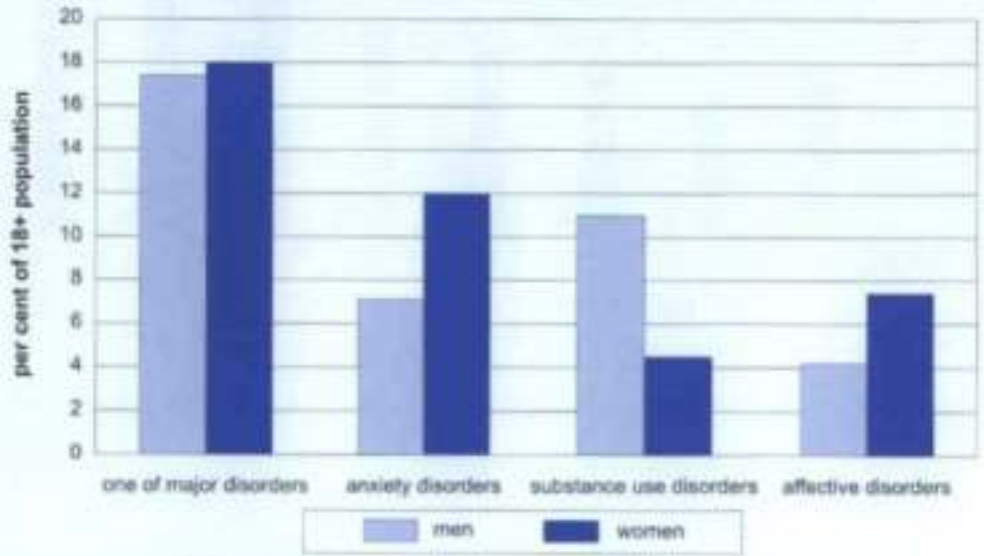
There are no time-series of statistics showing the prevalence of diagnosed mental disorders in the population for comparison with the increase in the prescription of psychoactive medication. The ABS conducted a National Survey of Mental Health and Wellbeing of Adults in 1997, involving 10,600 people aged 18 years or more, which showed that 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.

Figure 4.8 shows the percentage of the adult population who had experienced one of the major mental disorders in the 12 months previous to the 1997 survey. The highest prevalence of anxiety disorders was found among women aged 45-54 (16%). The highest prevalence of substance use disorder 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 disorders were most common among women aged 18-24 (11%). Of all people experiencing affective disorders, the most common was depression, accounting for 92% of women's and 85% 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-individual 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 is still much lower than the prevalence – roughly one in twenty five adults (aged 18 years or more) versus one in five adults (4% vs 20%).

4.8 MENTAL HEALTH of ADULTS 1997

per cent of population experiencing mental disorder in previous 12 months



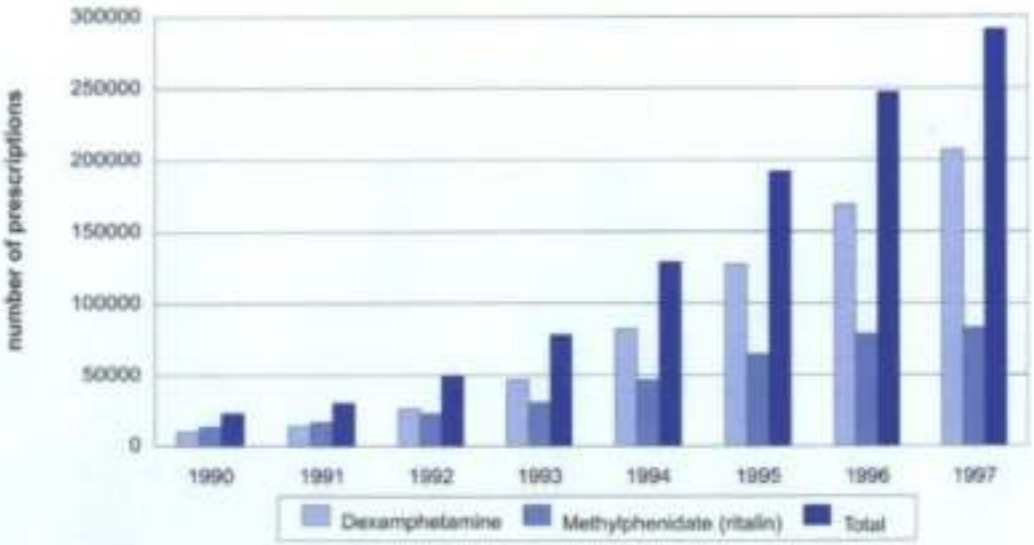
Source: *Mental Health and Wellbeing Profile of Adults 1997*, (ABS Cat. 4326.0)

In recent years, Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD) have been diagnosed increasingly in children who are perceived to be more 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 4.9 shows that there has been a remarkable 21-fold increase in the prescription of medication for these disorders since 1990. 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 over-prescription of ADD drugs has created a user-culture in some schools where children are selling the drugs on to other children in the school yard. At least one child has died as a result of taking sedatives that she had bought illicitly, believing them to be ADD amphetamines.

4.9 ATTENTION DEFICIT DISORDER MEDICATION PRESCRIPTIONS 1990-1997



Source: Drug Utilisation Sub-Committee, Department of Health and Aged Care

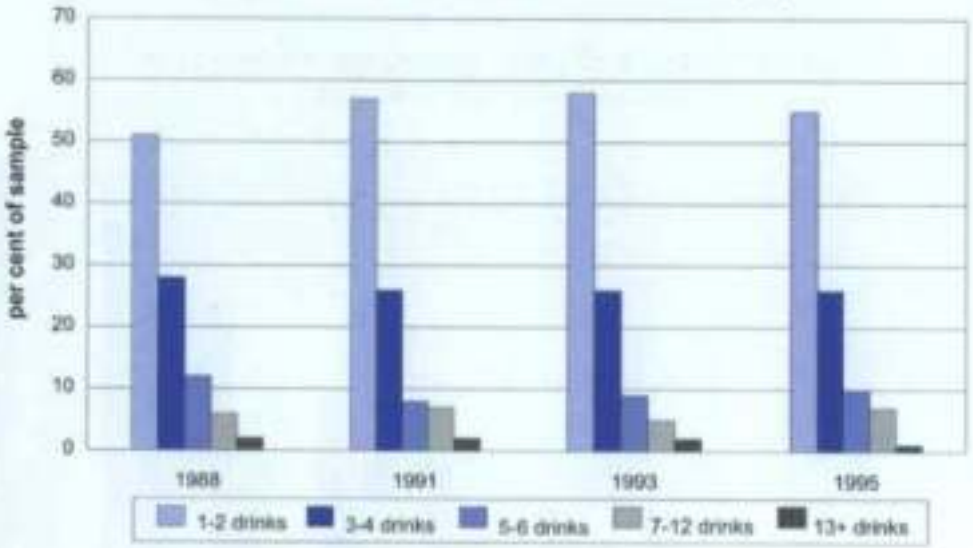
Legal Drugs

Figure 4.10 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 80% - had consumed only 1-4 drinks in a day across the period 1988 to 1995. There was a small increase in the heavy drinking range (7+) between 1993 and 1995, although the incidence of extreme binge drinking was lower 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.

4.10 ALCOHOL CONSUMPTION 1988-1995

number of alcoholic drinks consumed on a usual drinking day



Source: National Drug Strategy Household Surveys.

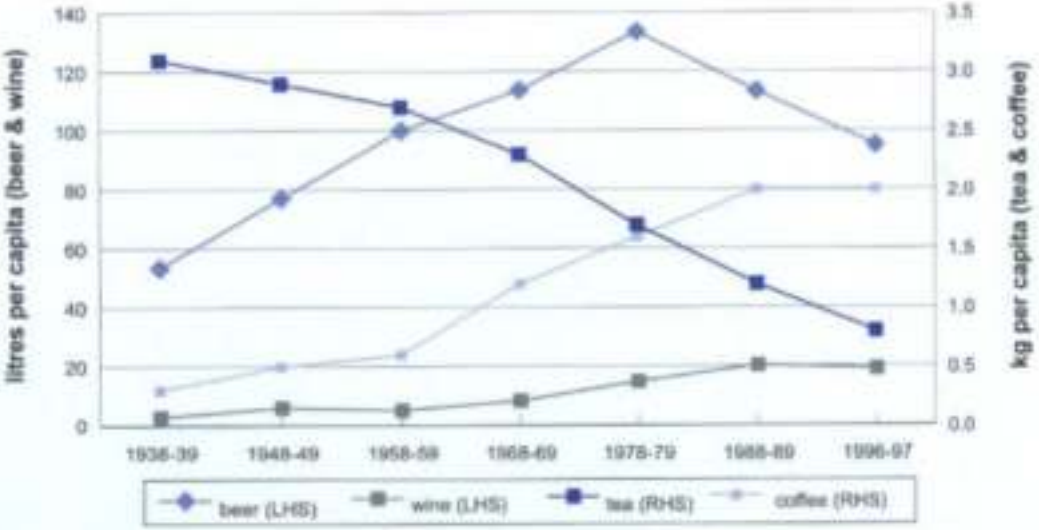
Figure 4.11 depicts the annual average per capita consumption of beer, wine, tea and coffee in Australia from 1938-39 to 1996-97. Consumption of beer increased dramatically between 1938-39 and 1978-79, firstly as it replaced spirits in common usage and then as part of a general increase in alcohol consumption, but it has decreased equally dramatically since 1978-79, without a notable switch to other alcoholic drinks.

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 1997 only a quarter of that in 1938-39, and coffee consumption showing an almost seven-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.

4.11 CONSUMPTION of BEER, WINE, TEA and COFFEE

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



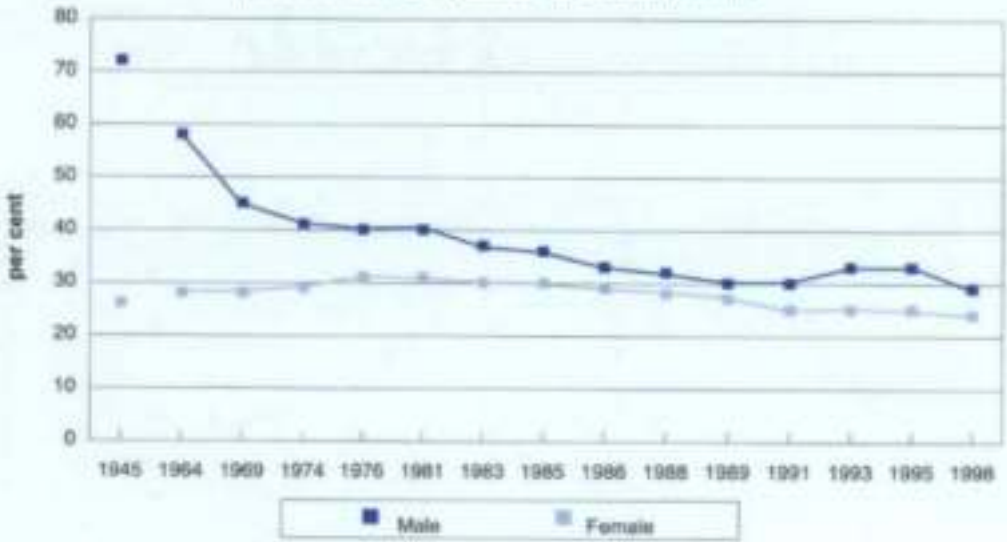
Source: *ABS Yearbook 1999* (ABS Cat. 1301.0)

Figure 4.12 shows population estimates, based on surveys, of the proportion of the population aged 20 years or more who are current smokers. Life-time 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 30% 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.

4.12 TRENDS in TOBACCO USE 1945-1998

per cent of sample population who currently smoked



Source: National Drug Strategy Household Surveys

Illicit Drugs

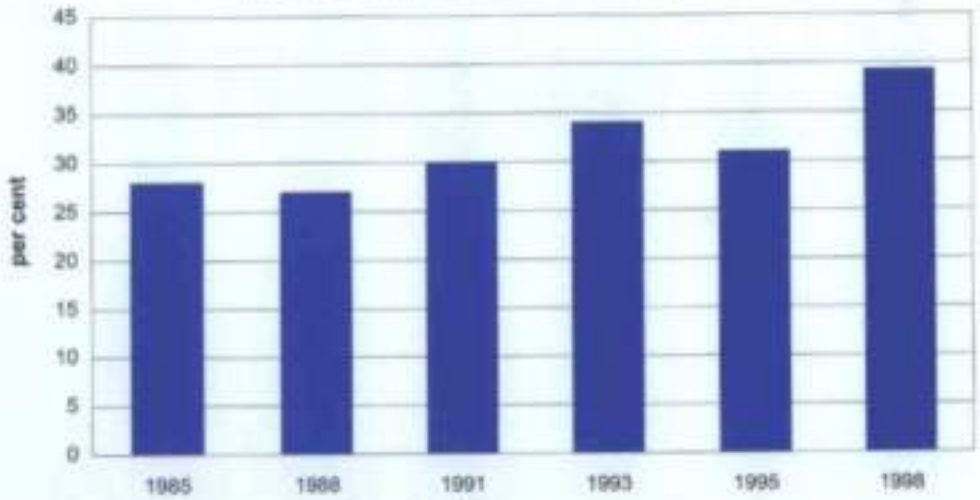
The problems inherent in collecting data on illicit drug use (eg honest answers to questions concerning illegal behaviour, concerns about confidentiality) mean that estimates of usage are less than completely reliable. In Australia, population drug-use prevalence is inferred from responses to surveys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

Figure 4.13 shows data on marijuana 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 superior 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, which is scarcely a significant index.

Figure 4.13 shows that the percentage of people who had ever tried marijuana rose from 27% in 1988 to 39% in 1998, an increase of 12%. This is more significant of population trends than it appears as a large percentage of the older population would have remained "never users". Marijuana use had its highest incidence among 20-29 year olds, almost two thirds of whom had ever tried marijuana in 1998.

4.13 PATTERNS of MARIJUANA USE 1985-1998

per cent of sample who had ever tried marijuana



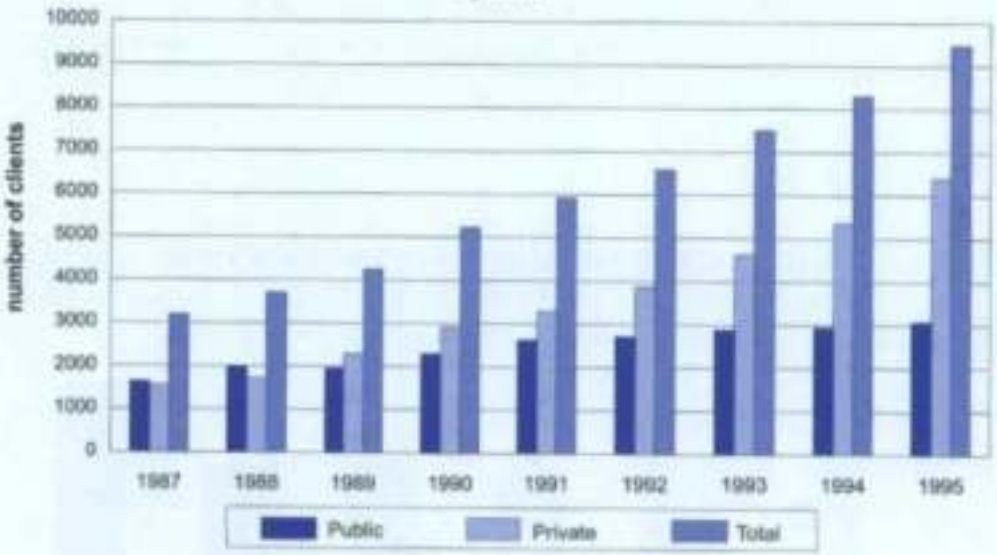
Source: National Drug Strategy Household Surveys

Methadone treatment as part of a national 'harm minimisation' strategy for drug abuse was launched in 1985. It provides free prescription of methadone by medical practitioners for heroin users, but with a few exceptions has no accompanying rehabilitation program or goals of a drug-free outcome. There is circumstantial evidence that methadone patients continue to use heroin and other drugs, and deaths of methadone patients have been found in studies elsewhere to be higher than those from heroin alone.

It can be seen from Figure 4.14 that the number of patients receiving methadone in NSW has grown steadily between 1987 and 1995, tripling in less than a decade. The increase was much greater in private practice than in state clinics.

4.14 CLIENTS on the NSW METHADONE PROGRAM 1987-1995

by sector



Source: *Annual Statistical Report 1994-95, NSW Methadone Program*, NSW Health Department.

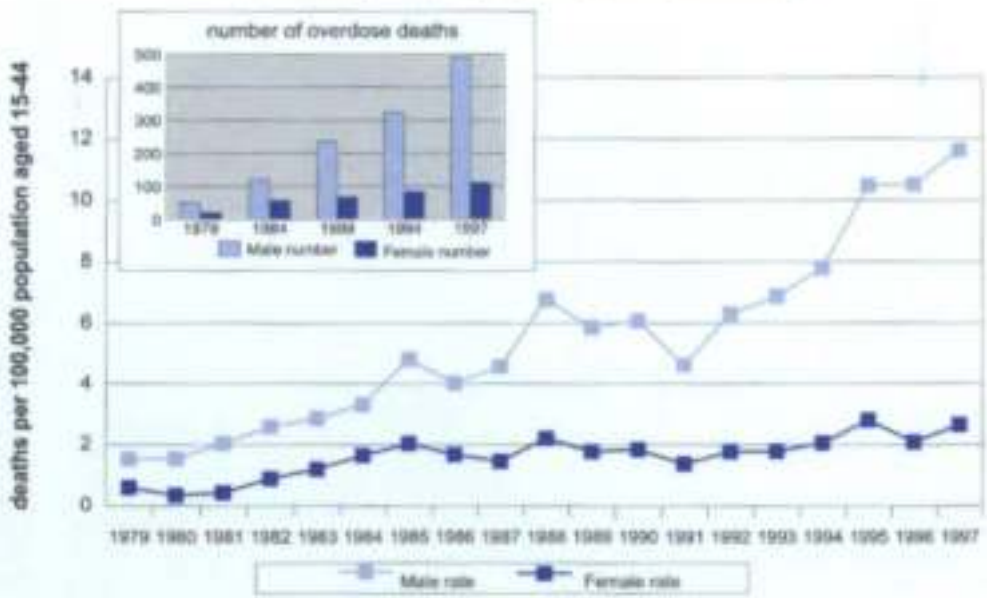
Figure 4.15 shows the number and rate of deaths attributed to opioid overdose from 1979 to 1997, published by the National Drug and Alcohol Research Centre (NDARC). Opioids are the decomposed elements of both heroin and methadone. Therefore, when they are detected in the blood *post mortem*, blood toxicology cannot distinguish which of the two drugs was used (or if both).

The increase in opioid overdose deaths over the period 1979 to 1997 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 7.2 in 1997. 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.

Most deaths occurred among older users who initiated their drug use in the late 1970s and early 1980s. The NDARC report does not explain why data is restricted to the 15-44 age group, but a possibility is that the number of opioid deaths outside this age range is so small as to dilute the mortality rate disproportionately. The data in Figure 4.15 does not include suicides from opioid overdoses. It is estimated that 9% of suicides are opioid overdoses.

4.15 OPIOID OVERDOSE DEATHS 1979-1997

number and rate per 100,000 population (15-44 year olds only)



Source: *Technical Report No. 49* (1997, National Drug and Alcohol Research Centre)

SECTION 5:
EDUCATION

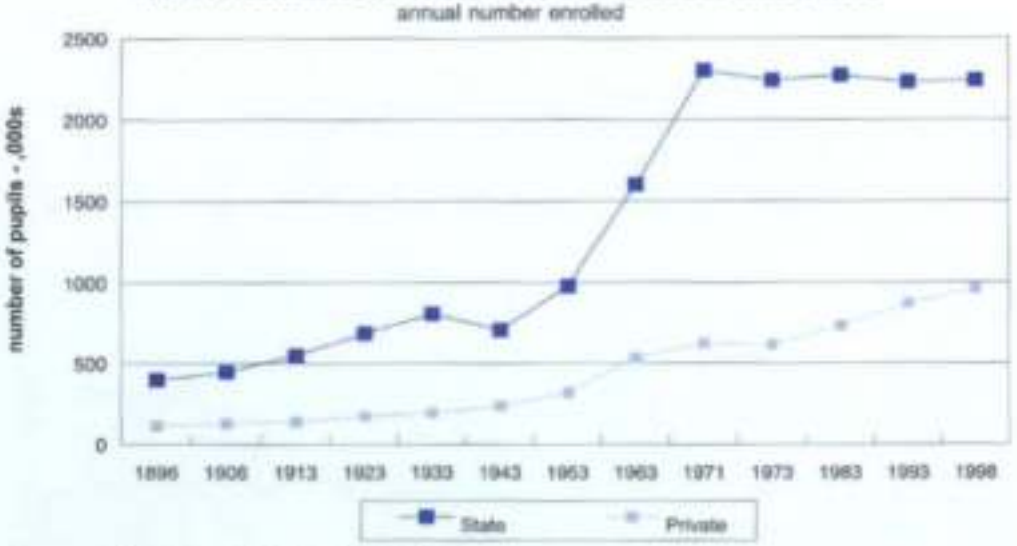
School education was initially a States' affair, but since the 1970s, the Commonwealth has increasingly exerted pressure on education policy, via its control of funding, in the on-going expansion of the Commonwealth role in social matters.

Schools

Universal free primary education (originally reaching into the early teenage years) was established in the Australian states in the latter decades of the nineteenth century. The very steep increase in pupil numbers from 1943 to 1973 is the result of a steep 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 reached 30% in 1998.

5.1 STATE and PRIVATE SCHOOL PUPILS 1896-1998



Source: *Yearbooks* (ABS Cat.1301.0)
Schools, Australia (ABS Cat. 4221.0)

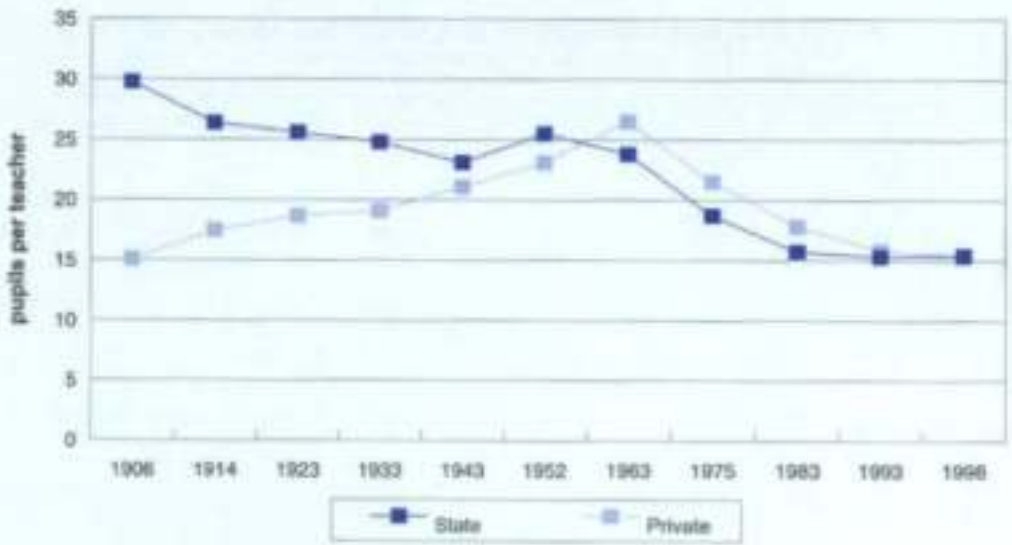
Figure 5.2 shows the number of pupils per teacher in state and private schools from 1906 to 1998.

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 1965, 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 1998), 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 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.

5.2 PUPILS per TEACHER 1906-1998

state and private schools



Source: *Yearbooks* (ABS Cat. 1301.0)
Schools, Australia (ABS Cat. 4221.0)

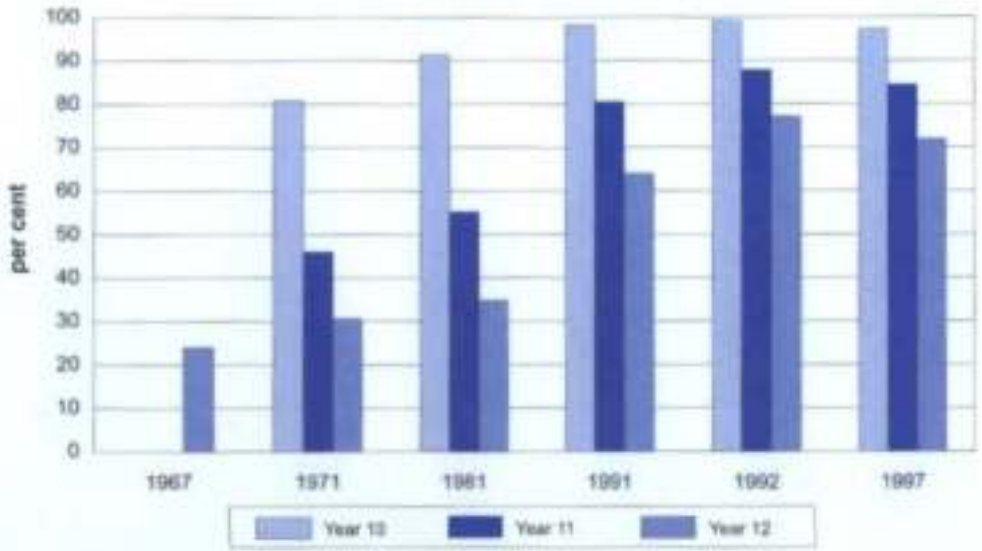
Retention Rates

Figure 5.3 shows retention rates at Years 10, 11 and 12 in Australian schools between the years 1971 and 1997, and also the retention rate to Year 12 in 1967. Retention to Year 10 has shown the least increase, because it was already close to ceiling at the beginning of the period. Eighty-one percent of pupils stayed at school to Year 10 (approximately one year beyond the compulsory school age) in 1971, and this had risen to almost 100% by 1990, making schooling to Year 10 virtually universal.

Retention to Year 12, by comparison, was low in 1967 (only 24%) and was still only 35% in 1981. Retention to Year 12 more than doubled between 1981 and 1992 as part of a government policy to combat youth unemployment, reaching 77%, and thereafter falling slightly as unemployment declined.

5.3 RETENTION RATES 1967-1997

Years 10, 11 & 12



Source: *Schools, Australia*. ABS (Cat. 4221.0)

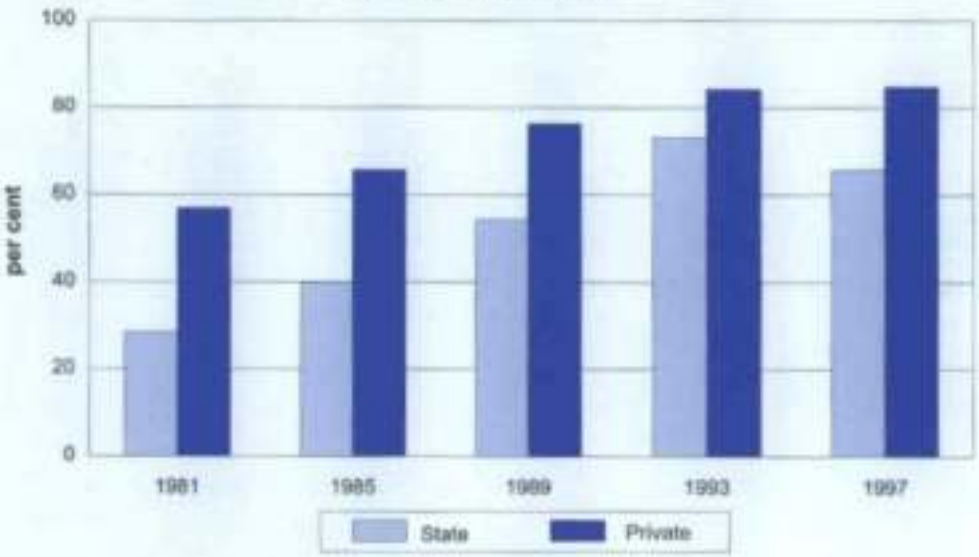
Figure 5.4 shows Year 12 retention rates in state and private schools from 1981 to 1997, which includes the period of massive growth in Year 12 retention rates. In 1981, the retention rate in private schools was 57%, double that for state schools (28%). By 1993, the private school Year 12 retention rate had risen to 85% (up 28 percentage points) while that for state schools had risen to 71% (up 43 percentage points).

The decrease in the number of students remaining until Year 12, following the peak in unemployment in 1993, occurred in state schools only, despite the payment of Austudy benefits to low income families on behalf of children remaining in school.

The Year 12 retention rate of private schools has remained at about 84%, whereas in state schools, it decreased from 74% in 1993 to 66% in 1997. Some part of this effect may be due to state school students transferring to private schools for Years 11 and 12.

5.4 YEAR 12 RETENTION RATES 1981-1997

state and private schools



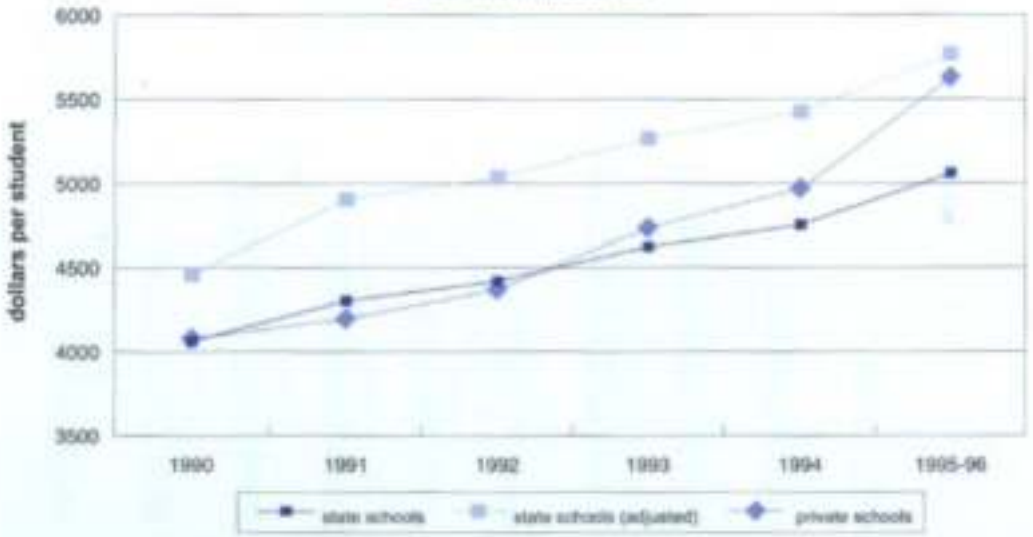
Source: *Yearbooks* (ABS Cat. 1301.0)
Schools, Australia. (ABS Cat. 4221.0)

Expenditure on primary and secondary education increased from $12 billion to $14 billion in the five years 1992-93 to 1996-97 in a period of very little inflation. Likewise, the annual amount spent per student increased (Figure 5.5). In the financial year 1995-96, expenditure per student was $5063 for state (or 'government') schools and $5632 per student for private (or 'non-government') schools. The official figures for government schools do not take into account the expenses incurred by superannuation and long-service leave, whereas the non-government school figures do. Gannicott (Centre for Independent Studies, 1997) estimates that this would amount to almost 15% on top of the official figure for government schools.

Thus, contrary to common opinion, the government school system is more costly per student than the overall private school system (which includes Catholic schools and Independent schools). Independent schools are more expensive than Catholic schools, but Independent schools' enrolments account for only 5% of the total school population in Australia.

5.5 EXPENDITURE per STUDENT 1990-1996

state and private schools



Source: *Education and Training in Australia*. ABS Cat. 4224.0
Gannicott, K. (1997). *Taking Education Seriously*. Centre for Independent Studies.

Educational Outcomes

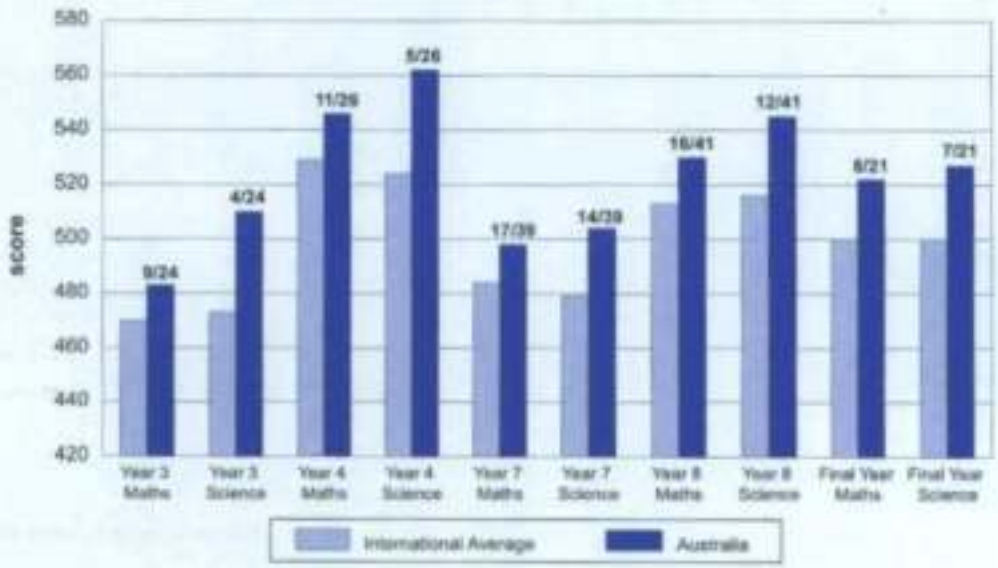
Pupil attainment, or the outcomes of education, is not treated in the *Year Books*, and is virtually undocumented in official reports of the last decade.

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 5.6 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 the Czech republic in Years 3 to 8, with Sweden, the Netherlands and Iceland taking the top positions in the final year. Nevertheless, Australia is consistently higher than the international average.

5.6 MATHS and SCIENCE ABILITY

international average score, Australia's score & rank



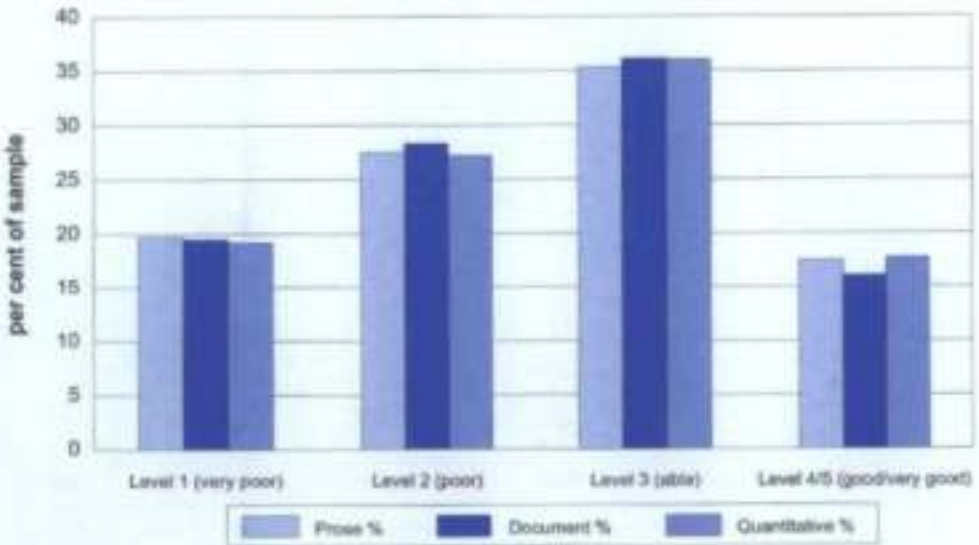
Source: IEA Third International Mathematics and Science Study, 1994-95.

The Australian Bureau of Statistics, in *Aspects of Literacy: Assessed Skill Levels, 1996*, published the findings of a survey of 9,300 fifteen to seventy-four year old participants. "Literacy" and numeracy skills in three areas were tested: prose, document and quantitative. Prose literacy is the ability to understand and use information from various types of prose texts eg. newspapers, magazines and brochures. Document literacy is the ability to locate and use information contained in materials such as tables, maps and graphs. Quantitative literacy, a type of numeracy, is the ability to perform arithmetic operations using numbers contained in printed texts or documents.

A small majority of participants demonstrated literacy and numeracy skills that were described as either 'able', 'good' or 'very good'. This ranged from 52% for prose and document to 54% for quantitative skills. Therefore, the remaining 46-48% of the participants had literacy skills at levels that were considered either 'poor' or 'very poor'. The most common score was 'able' (Level 3). Almost 20% were at the 'very poor' level in all areas.

The high percentages of people who have poor or very poor literacy levels is to some extent attributable to the population of people from non-English speaking backgrounds. In 1996, 2.5 million Australians (13% of the population) spoke a language other than English at home. Of these 2.5 million, 3.1% spoke no English at all, the majority being people aged 65+ (*Yearbook*, 1999). The ABS survey also revealed that while teachers have literacy skills that are above the population average, only about 50% of primary school teachers and about 70% of secondary teachers have literacy skills that are either good or very good in the three categories listed.

5.7 LITERACY SKILLS, 1996



Source: *Aspects of Literacy: Assessed Skill Levels, 1996*, (ABS Cat. 4228.0)

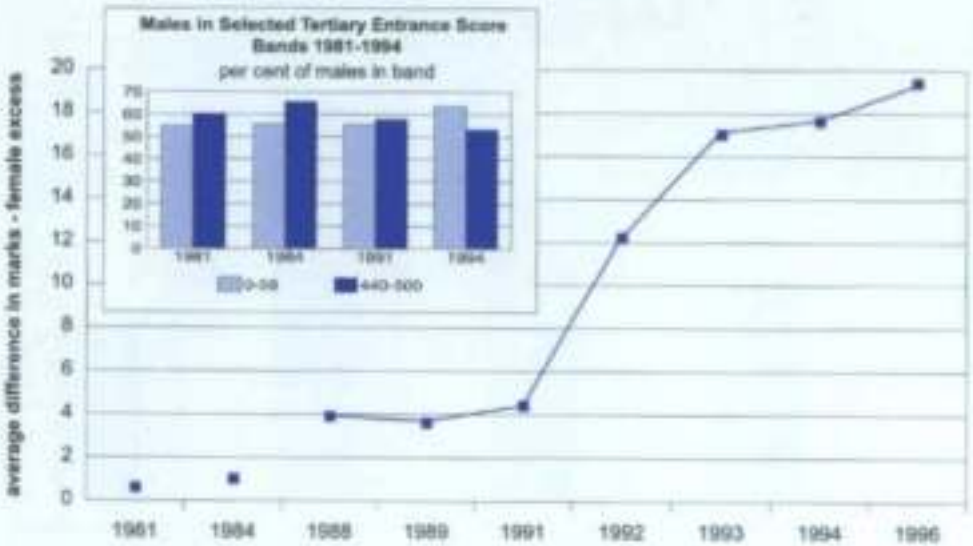
The debate about the existence of valid differences in male and female educational attainment reasserts itself at the end of every school year when final year public exam results are released.

Figure 5.8 shows the difference in the average New South Wales Tertiary Entrance Score (TES) of males and females drawn from data in MacCann (1995). It illustrates the number of marks by which the female average exceeded the male average each year from 1981 to 1996. The difference in the average male and female TES widened from 0.6 marks in 1981 to 4.4 marks in 1991, followed by a large increase to 12.2 marks in 1992 (when the scaling system was reformed so as to be fairer to humanities subjects, which are favoured by girls), finally reaching 19.4 marks in 1996.

This widening gap appears to stem from an increasing clustering of males at the bottom of the range. In 1981, the proportions of males and females in the lowest TES band (range of scores) were roughly equal. In 1994, males represented close to two thirds of students in this group. Meanwhile, the proportion of males in the top TES band dropped from 60% to 53% in the same period. Thus, rather than seeking to increase the number of male high achievers to boost the average male TES, it is important to consider the issues causing over-representation of males in the low-scoring range. Further, females still need consideration of their less than 50% representation in the top band.

5.8 DIFFERENCE in FEMALE and MALE AVERAGE TERTIARY ENTRANCE SCORES NSW 1981-1996

average marks by which females outscore males



Source: MacCann, R (1995). *A Longitudinal Study of Sex Differences at the Higher School Certificate and School Certificate: Trends over The Last Decade.* NSW Board of Studies.

Tertiary Education

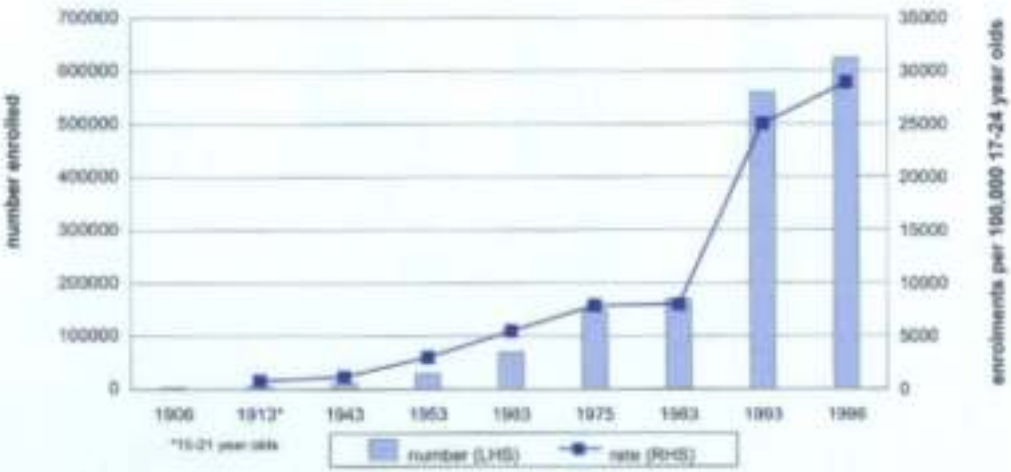
Figure 5.9 shows the number of students enrolled in universities in Australia and the rate per 100,000 17-24 year olds from 1913 to 1996 (with the 1920s and 1930s missing).

The Labor government's education reforms in the early 1990s, which involved the Colleges of Advanced Education achieving university status, saw many students in vocational courses, which in the past would have been within the TAFE/VET system, now enrolled in universities.

The university education rate in 1996 was 36 times greater than in 1913. The sharp rise in rates between 1983 and 1993 reflects the change in the structure of tertiary education institutions that occurred between 1983 and 1993, as outlined above. There has been a substantial increase in university enrollments in the 1990s also. The increase was 10% between 1993 and 1996, despite the fall in Year 12 retention rates.

5.9 UNIVERSITY EDUCATION RATES 1913-1996

number enrolled and rate per 100,000 17-24 year olds



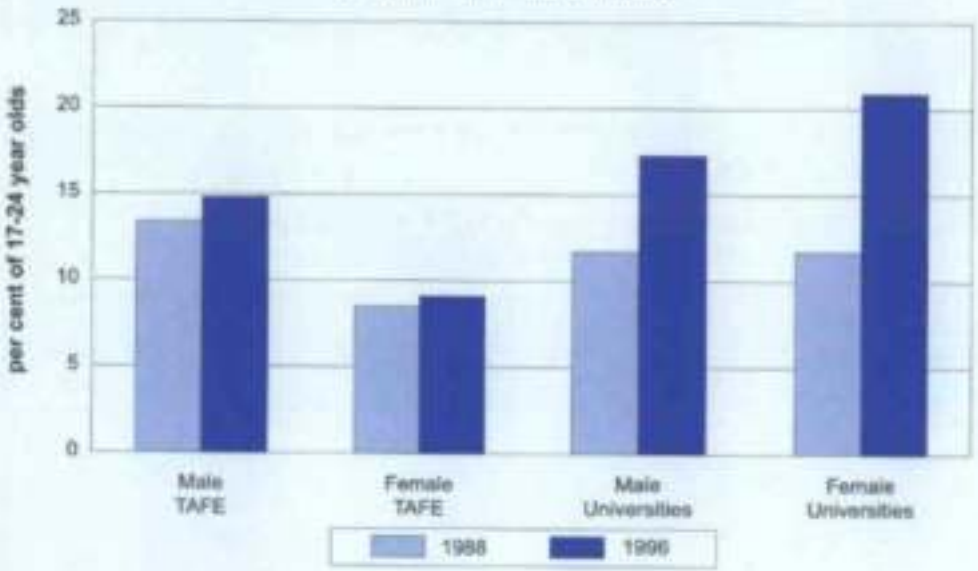
Source: *Year Books* (ABS Cat. 1301.0)
Estimated Resident Population by Age and Sex. (ABS Cat 3201.0)

Figure 5.10 shows the rate of enrolment of 17-24 year old males and females in TAFE (Technical and Further Education) colleges and in universities in 1988 and 1996.

Enrolment at TAFE colleges changed little between 1988 and 1996. Male enrolment increased from 13% to 15% and female enrolment from 8% to 9%. Female enrolments in trade courses were much lower than male. Male and female enrolments in universities were approximately equal in 1988 at 12%, but by 1996 females had higher participation rates than males (21% compared to 18%).

5.10 TERTIARY PARTICIPATION RATES 1988-1996

17-24 year olds, males and females



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

SECTION 6:
CRIME AND JUSTICE

Criminal Offences

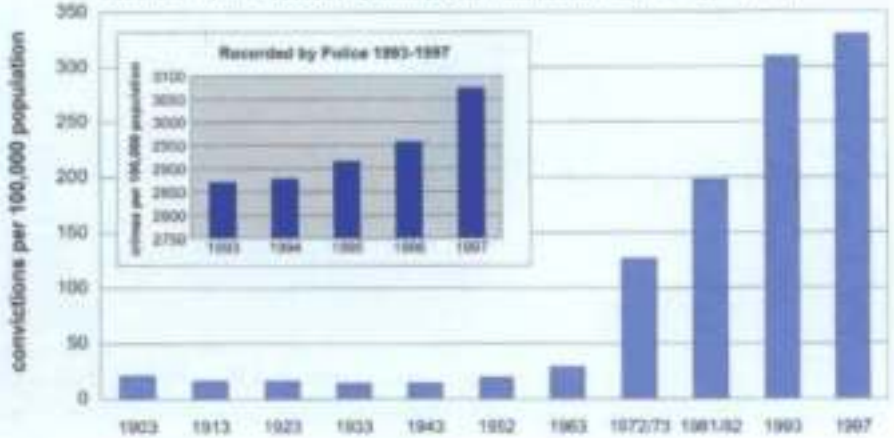
The *Year Books*, until the 1960s, presented crime data as charges and convictions. In 1964, crimes recorded by police were added to the statistics, and within a decade the record of charges and convictions ceased. It is, however, possible to convert crimes recorded by police into estimates of conviction rates, based on ratios derived from the period in which both statistics were reported, so as to create an unbroken series across the century. (Details of this procedure are provided in the Centre for Independent Studies publication, *Rising Crime in Australia*, 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 source is the ABS *Year Books* unless otherwise noted.

Crimes Against Property

Figure 6.1 shows conviction rates in the higher courts (estimated conviction rates after 1963) for crimes against property over a century, from 1903 to 1997. Crimes recorded by police in the 1990s are presented in the inset figure. The significance of the conviction series should be viewed not so much in terms of absolute rates (which are only about a tenth of crimes recorded for most of the second half of the century) as in terms of the dramatic trend of increase in the last three decades, beginning in the 1970s. Crimes against property, primarily the various forms of theft, in the 1990s are possibly 15 times higher (an increase of 1,500%) compared with their lowest level this century in the 1930s (the height of the Great Depression) and the 1940s (the middle of the Second World War). Each of the last three decades has seen rate *rises* of two to three times what was the *total* property crime rate in the years 1903 to 1963. Motor vehicle theft in 1973 represented 27% of property crime, and in 1997, 23%. 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.

6.1 CRIMES AGAINST PROPERTY 1903-1997

convictions per 100,000 population (estimated convictions 1972/3-1997)



All Violent Crimes

Figure 6.2 shows conviction (and estimated conviction) rates in the higher courts for violent crime (crimes against the person) over a century, from 1903 to 1997. The figures represent the combined conviction rates for homicide (murder, attempted murder, manslaughter, and driving causing death, except in 1997), rape (changing to sexual assault in 1997), and assault (except in 1994). Where figures are not included, it is because they were not reported by the ABS for that year. Rates of violent crime recorded by police for 1993 to 1997 are inset (sexual assault replaces rape for these years).

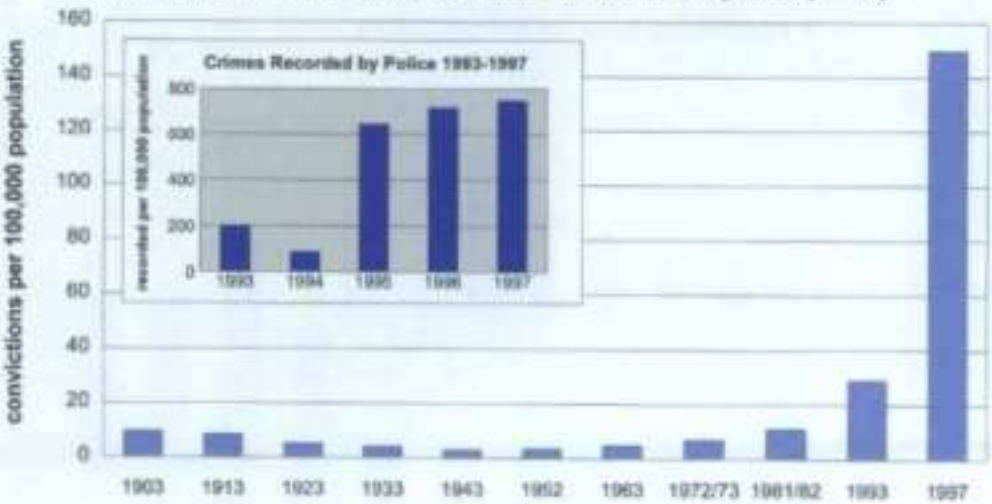
In contrast with crimes against property, it can be seen that the massive escalation of crimes of violence occurred only in the last 15 years, from 1981/2 to 1997, attesting to the accuracy of public perceptions of the growth in, and people's growing fear of, personal violence. Crimes of violence decreased steadily during the first half of the century, reaching their lowest point in 1943, the middle of the Second World War, partly explainable as due to the removal 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 1981/2. Looking only at the police record period, violent crime increased by a factor of 27 between 1963 and 1997, and more than tripled between 1993 and 1997.

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-seventh in 1993, but in 1997 it is again approaching half, and at a much higher level – 135 per 100,000 population compared with 10 at the turn of the century.

6.2 VIOLENT CRIME 1903-1997

convictions per 100,000 population (estimated equivalent convictions 1972/3-1997)

[1994 does not include assault, 1997 does not include driving causing death]



Homicide

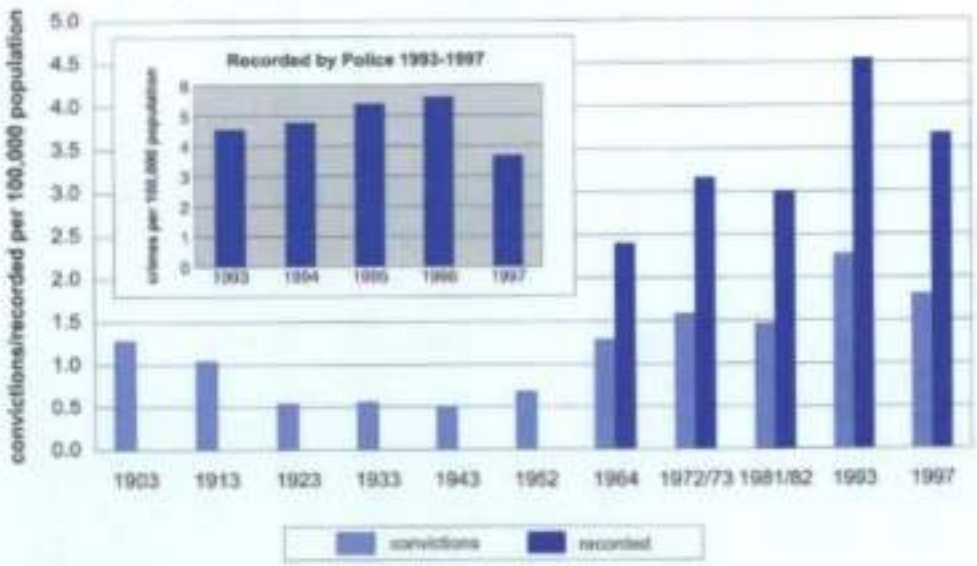
Figure 6.3 shows conviction (and estimated conviction) rates for homicide from 1903 to 1997, together with crimes recorded by police from 1964 to 1997. Homicide includes murder, attempted murder, manslaughter and causing death by driving (not reported in 1997). It can be seen that the homicide rate fell by half to the middle years of the century, reaching an all-time low in the Second World War, again probably due to the occupation of large numbers of young men elsewhere. By 1963 it had returned to turn of the century levels, then rose again by a quarter in the following decade, fell slightly in the early eighties, but showed another large rise in the nineties.

It might be assumed that death caused by driving made a significant contribution to this increase, in contrast with the situation before the sixties 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. So the major part of the rise in the early nineties cannot be attributed to this somewhat less culpable origin. In the later years of the 1990s it was approximately half, and would therefore bring the homicide figure for 1997 to about 5.4.

6.3 HOMICIDE 1903-1997

convictions 1903 -1964, estimated convictions 1972/3-1997, recorded by police 1964-1997

[1997 does not include driving causing death - not available]



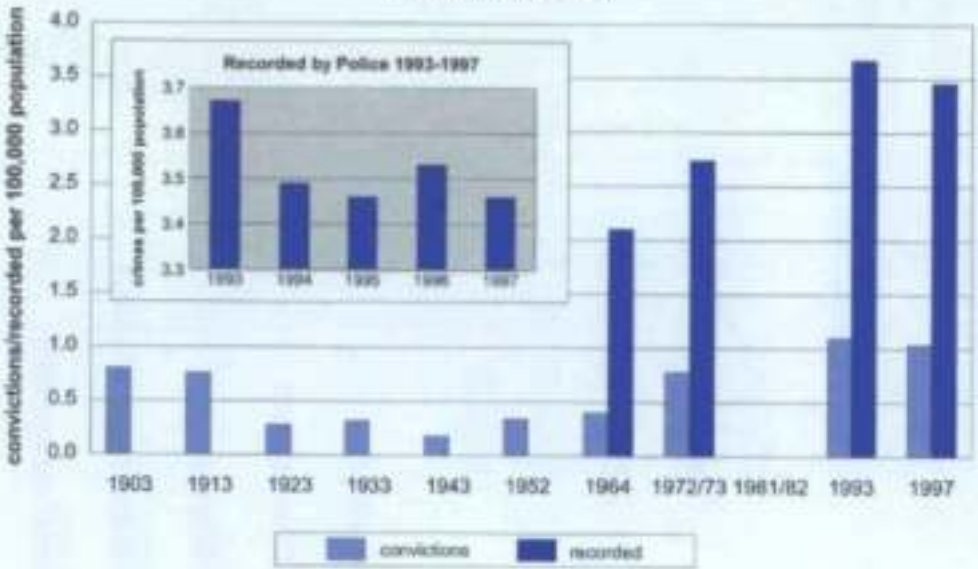
Murder and Attempted Murder

Figure 6.4 shows murder plus attempted murder conviction (and estimated conviction) rates from 1903 to 1997, together with rates recorded by police from 1964. The graph shows murder rates as comparatively high in the first two decades of the century, more than halving in the middle decades, and rising again in 1964, although still only to half the level at the beginning of the century. However, this figure almost doubled to approach the 1903 level in 1972/3, and in 1997 was nearly three times the rate in 1952. Murder was not distinguished from homicide in the figures for 1981/2, but the 1993 and 1997 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. Thereafter the rate levelled, following a slight decrease in 1994.

6.4 MURDER and ATTEMPTED MURDER 1903-1997

convictions 1903-1964, estimated convictions 1972/3-1997, recorded by police 1964-1997

[1981/2 not available]



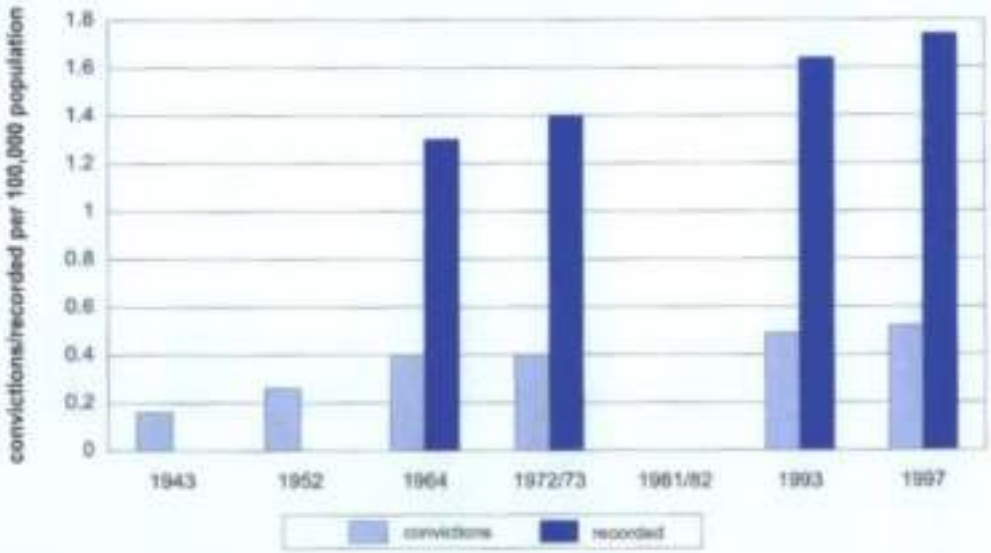
Murder

Only a limited set of statistics for murder separated from attempted murder is available and is presented in Figure 6.5. Although the rise is not quite so extreme, the murder rate in 1997 is nevertheless double that in 1952. Recorded murders are close to a third higher in 1997 than in 1964.

In 1997, the perpetrator was known to the victim in 54% of cases. Almost two-thirds of murders were committed in residential areas – in dwellings or on residential land.

6.5 MURDER 1943-1997

convictions 1943-1964, estimated convictions 1972/3-1997, recorded by police 1964-1997
[1981/2 not available]



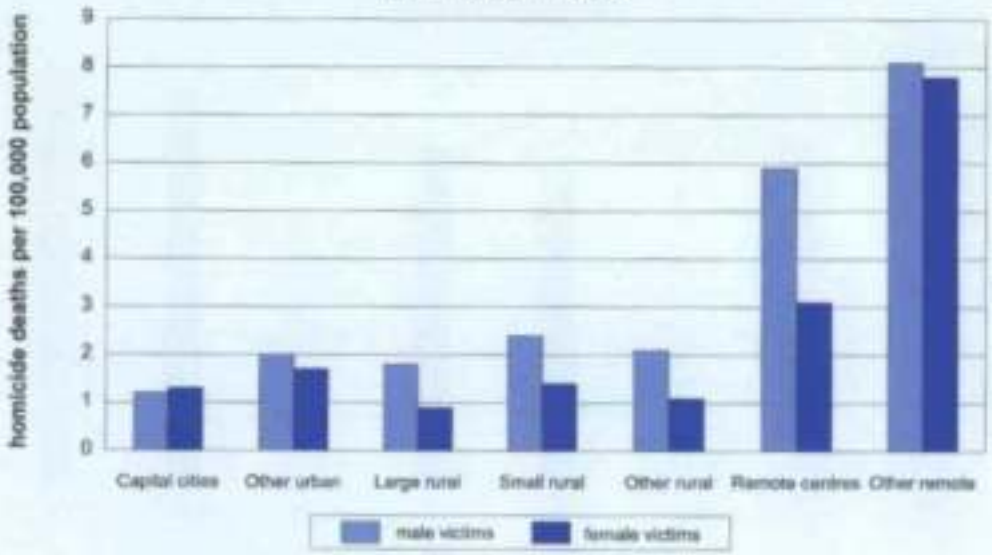
Rural and Remote Homicide

Just as death rates in rural and remote areas are higher than in urban areas (see Figure 3.6), so too are homicide rates, particularly in 'remote centres' and 'other remote' areas. This would appear contrary to the common argument that rising crime is due to greater urbanisation.

The Australian Institute of Health and Welfare (1998) suggests that the higher homicide rates in remote communities are largely attributable to the high proportion of Indigenous people in these localities.

6.6 URBAN, RURAL and REMOTE HOMICIDE RATES

annual average 1992-96



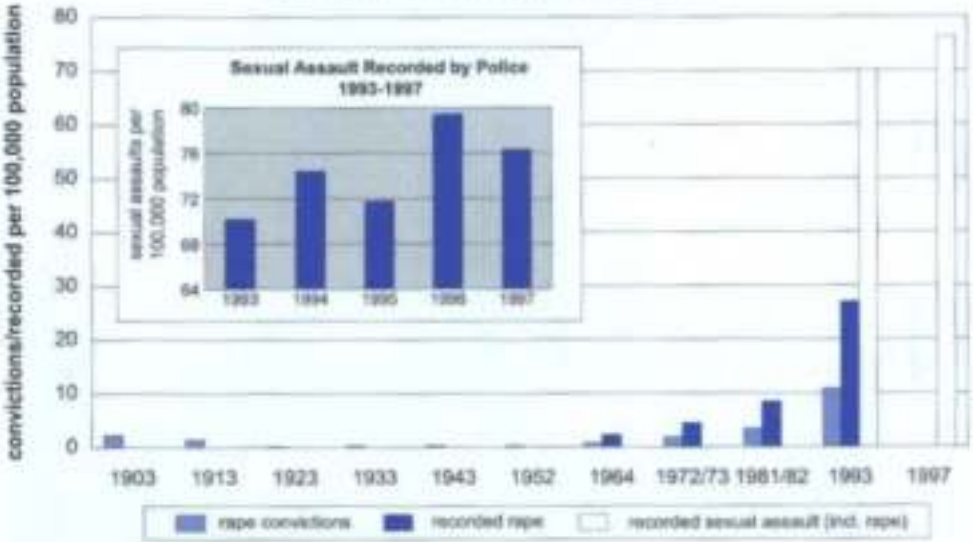
Source: *Health in Rural and Remote Australia* (1998, Australian Institute of Health and Welfare)

Rape/Sexual Assault

Rape (including attempted rape) and sexual assault rates are depicted in Figure 6.7. From 1903 to 1981/2, 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 1963 and 1993, rape rose by a factor of almost 14 or 1400%. The figures for recorded recorded sexual assault indicate that the rate of rise has slowed a little in the last four years, despite fluctuations.

6.7 RAPE/SEXUAL ASSAULT 1903-1997

rape convictions 1903-1964, estimated convictions 1972/3-1993, recorded by police 1964-1993
sexual assault recorded by police 1993-1997

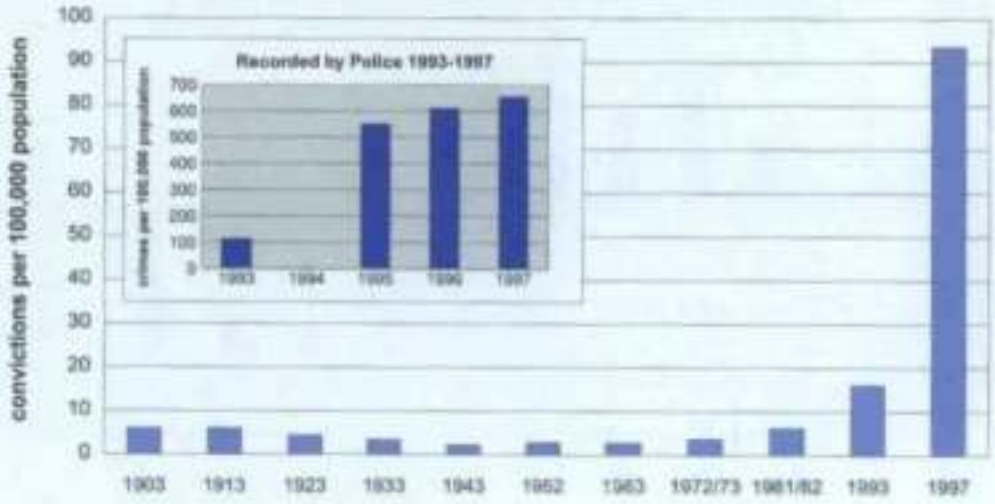


Assault

The serious assault rate was slightly higher than the rape rate 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 6.8). If the unusually low war-time 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 1981/2, this level was reached again and this was followed by a two-to-three-fold rise between 1981/2 and 1993. This preceded a massive five-fold increase in the four years to 1997. This increase had a major impact on the total violent crime and serious crime rates.

6.8 ASSAULT 1903-1997

convictions per 100,000 population (estimated convictions 1972/3-1997)
[1994 not available]



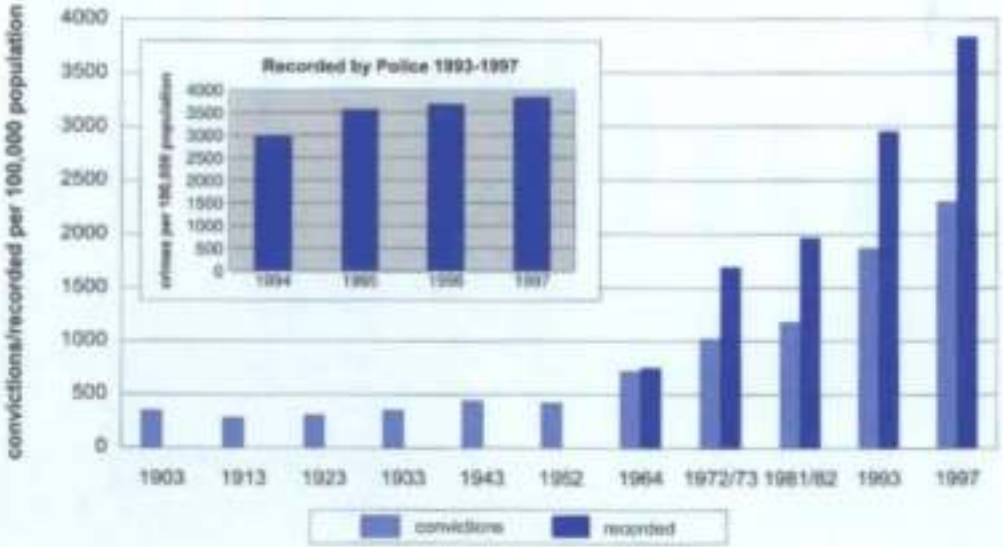
Total Serious Crime

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 6.10 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 6.9 shows the rate of serious crime per 100,000 population from 1903 to 1997, based on convictions and estimated convictions, 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 1997 which was more than six times that at the beginning of the century.

6.9 SERIOUS CRIME 1903-1997

convictions 1903-1964, estimated convictions 1972/3-1997, recorded by police 1964-1997

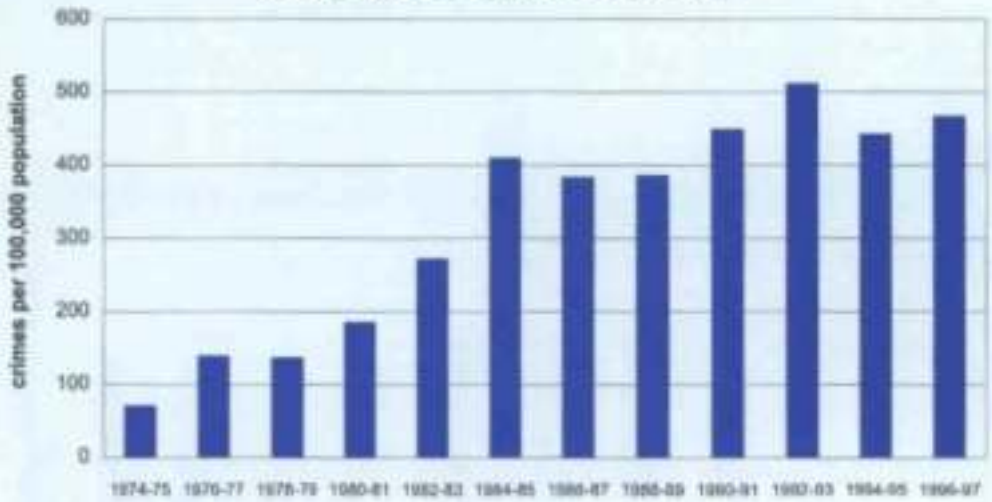


Drug Offences

Figure 6.10 shows the rate per 100,000 population of drug offences reported/becoming known to police from 1974/75 to 1996/97. These figures represent an aggregation of crime data from all States and Territories (excluding ACT from 1987/88 on). 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 1996/97 (86,500 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.

6.10 DRUG OFFENCES 1975-1997



Source: Australian Institute of Criminology (1997-98)

Explaining Rising Crime

The large increases in crime rates in the last three decades demand explanation, and it is reasonable to look for explanations in other major social and economic changes which have accompanied these increases and which may plausibly be thought to influence the genesis of criminal behaviour and failure to control it. If crime rates are considered as an outcome measure, they can be tested statistically against possibly influential social factors, such as changes in the culture of socialisation and reproduction. The causal link which is envisaged here is primarily the capacity of parents to enculturate, that is, to socialise and educate their children. This might be expected to be related to both the abilities of the parents and the time they allot to this task, as well as the beliefs and practices they transmit, on which we do not have data. A number of social trends which we have already documented are relevant here – the age of parents will reflect their maturity, and hence their own acquisition of the culture at the point at which they are required to transmit it; their economic well-being, in terms of employment, may be a factor, and the amount of parental availability, of both sexes, will be affected by divorce and ex-nuptial birth rates, and of maternal availability by female employment rates. The crime rate can reasonably be expected to be affected by the age and sex distribution in the population, as both property and violent crimes are committed predominantly by teenage and young adult males; and there is an apparent logic in expecting unemployment rates to affect crime directly.

Correlation is a statistical test which measures whether variations (rises and falls) in one set of events (or factor) are matched in a regular fashion by variations in another set of events (or factor). If a match occurs, this means that changes in the one set of events may be causing the changes in the other. It is also possible, however, that a third factor is causing the changes in both sets of events. So while finding a good correlation between two measures allows that they may be causally related, it does not definitely establish that one causes the other. Nevertheless, it does indicate that they are related to one another in some web of causality.

A positive correlation means that both factors rise or fall together, while a negative correlation means that as one factor rises, the other falls, but this does not affect the causal relationship. A low or absent correlation means that they are unlikely to be causally related to any major degree. A low correlation is one that is smaller than or equal to +/- 0.3, while a high correlation is +/- 0.8 or greater.

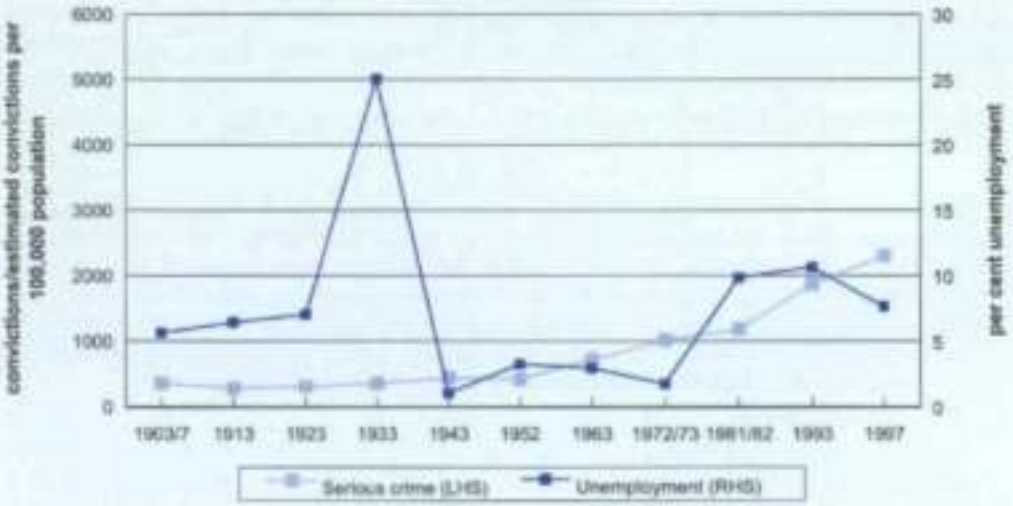
Graphically, a high correlation is indicated by a high similarity in the trend of two data sets when plotted on the same graph. A positive correlation will show the two lines moving in the same direction at similar angles, whereas a negative correlation will be illustrated by a mirror-image effect of the two lines. The absence of a correlation can be inferred from a lack of semblance.

Significance, in the statistical sense, means that a sufficiently strong relationship between two measures or events has been found for statisticians to agree that it is very unlikely to have occurred by chance, so that causality can be inferred. Statistical significance of a relationship between two factors is claimed when the probability of chance is either less than 5% (expressed as $p < .05$) or less than 1% ($p < .01$). The smaller the probability (p), the smaller the likelihood of chance

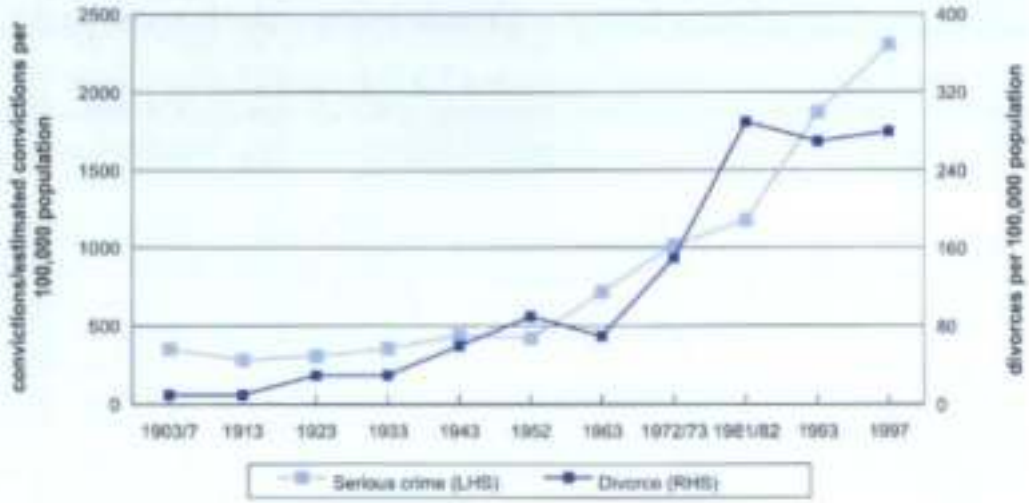
Calculations of correlations relating trends in these factors and crime trends are reported in detail in *Rising Crime in Australia* (CIS, 1997), and are briefly summarised here.

Figures 6.11, 6.12 and 6.13 show the comparative trends in some of these social factors and in overall crime rates, and illustrate the meaning of significant and non-significant correlation. Figure 6.11 shows trends in serious crime and in unemployment across the century. It can be seen that there are marked differences in the times of onset of rise and fall in serious crime and unemployment, and consequently their correlation is non-significant. By contrast, the patterns of rise and fall for serious crime and divorce (Figure 6.12) and serious crime and ex-nuptial births (Figure 6.15) are largely similar and their correlations are positive and significant. Because they change in a similar manner, it is possible that there is a causal relationship between them.

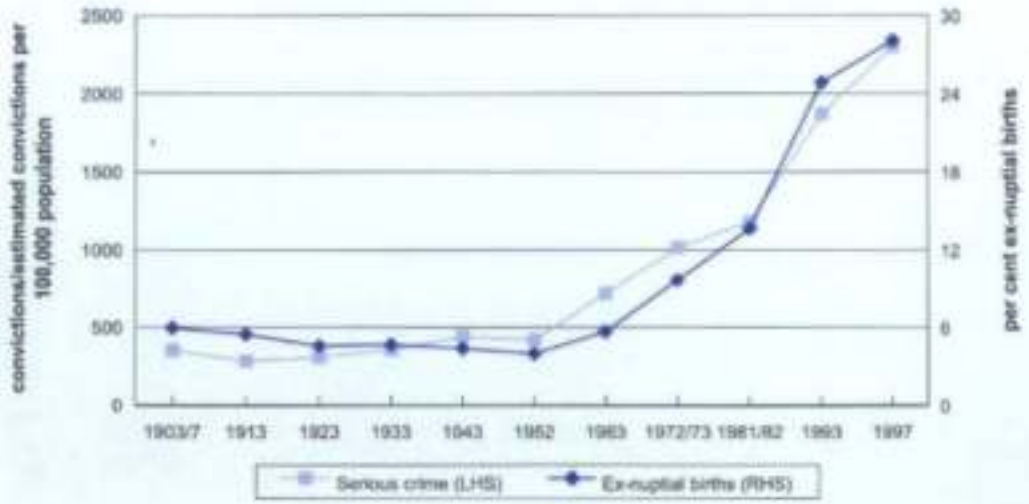
6.11 UNEMPLOYMENT and SERIOUS CRIME 1903-1997



6.12 DIVORCE and SERIOUS CRIME 1903-1997



6.13 EX-NUPTIAL BIRTHS & SERIOUS CRIME 1903-1997



Against expectations, although the correlations between violent and serious crimes and changes in age and sex distributions across the century are moderate, they are not significant. Any influence of these factors has been overridden by others which were more important. Correlations between violent and serious crimes and unemployment across the century are negligible and therefore also non-significant, despite what might be thought to be a logical connection. Indeed, reference to Figure 6.11 reveals that when unemployment was at its highest for the century, during the Great Depression of the 1930s, crime rates remained at their lowest. These three commonly mooted factors therefore do not control crime rates in Australia in any major way.

By contrast, a whole series of indicators of the culture of reproduction show significant correlations with crime rates, synchronous, and also time-lapsed, when the children exposed to these changes of culture have become young adults. The correlation between divorce and serious crime rates in the decades from 1903 to 1998 is a startling 0.90. If the effect of divorce on children as they mature is a factor, we would expect higher correlations with crime rates one and two decades later. The correlation between divorce and serious crime a decade later remains 0.90, and at two decades time lapse is 0.89, still highly significant.

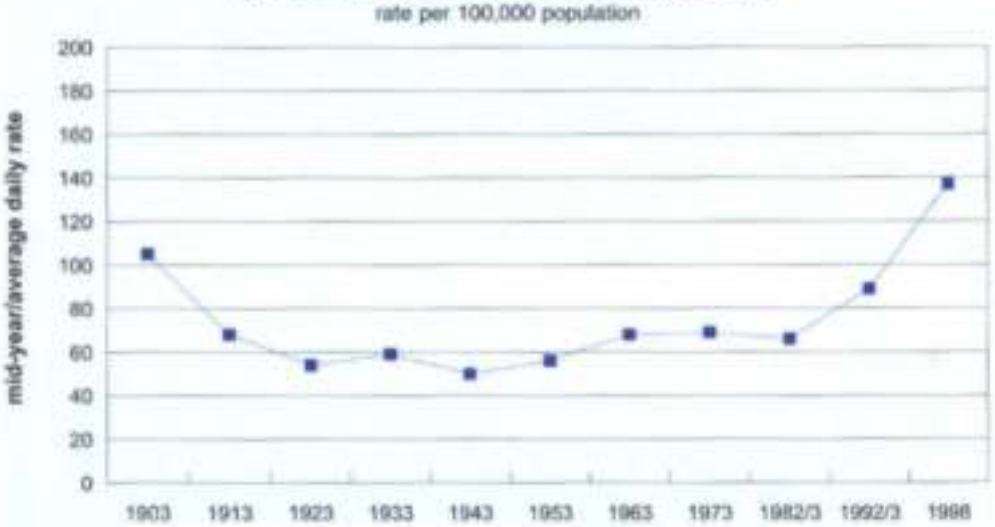
An increasing presence of mothers in the workforce is likely to mean less energy to devote to the guidance and education of children and less supervision of older children in out-of-school hours. One might therefore expect to find a relationship between the percentage of females in the workforce and crime rates. The correlation between percentage of female employment and serious crime rates in the decades 1933 to 1993 is 0.9, significant at the 0.01 level. That with violent crime is just short of significance, but the correlations of female employment with homicide, murder and rape are significant. The correlation with all violent crime becomes significant two decades later, suggesting a more severe impact on younger children.

Ex-nuptial birth (Figure 6.13) combines two possibly adverse effects on parenting – ex-nuptial births are frequently births to young mothers, and they imply the absence in many cases of the biological father, and parenting overload for the mother. The percentage of ex-nuptial births correlates highly significantly with serious crime at both one and two decades time lapse (0.96 and 0.99 respectively), and more strongly than does young maternal age alone. It also correlates significantly with contemporary crime (0.98).

Prisoners

Because of changes in sentencing policy, the numbers of ptisoners in gaol are generally considered to reflect theories of crime prevention as much as crime rates. Figure 6.14 shows the imprisonment rate in Australia (the number of prisoners at mid-year per 100,000 population) from 1903 to 1998. Imprisonment rates fell rapidly in the first decades 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 1998, the level was a third higher than that at the beginning of the century.

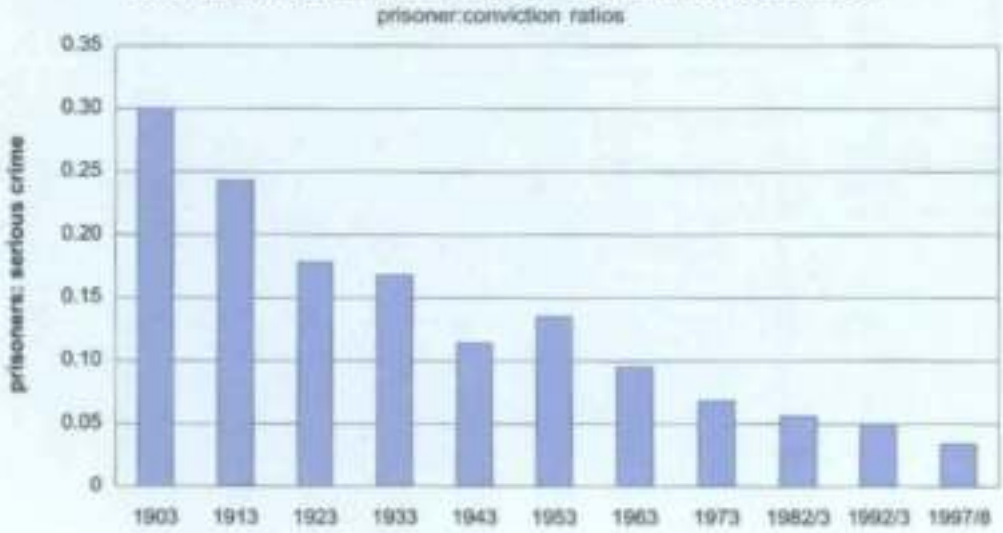
6.14 PRISON POPULATION 1903-1998



Nevertheless, 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 6.15 shows the ratios of prisoners to serious crime convictions from 1903 to 1997/98. The ratio fell considerably from 1903 to 1943. This means that fewer convictions 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 1963/4, the ratio fell away again, despite the fact that this is the period of marked rise of violent and property crime convictions in the higher courts, that is, of more serious crime. *Imposition of imprisonment was nine times lower in 1997/8 than in 1903.*

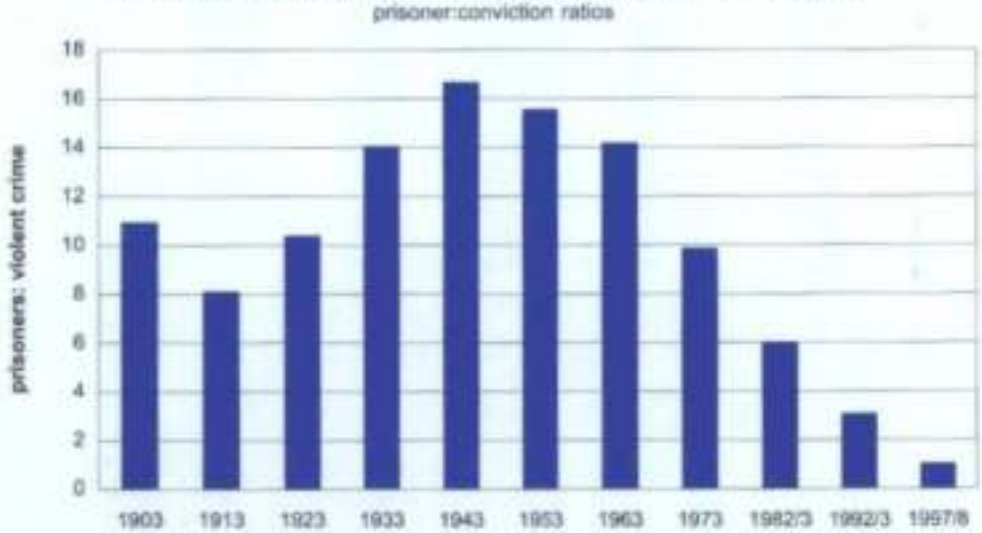
Because crime conviction rates for the last three decades have had to be estimated, it is impossible to tell whether the fall in imprisonment rates represents greater leniency in judges or increased inability of police to catch culprits and obtain convictions. In the second half of this century, falling rates of imprisonment have been accompanied by rising rates of crime

6.15 IMPRISONMENT for SERIOUS CRIME 1903-1997



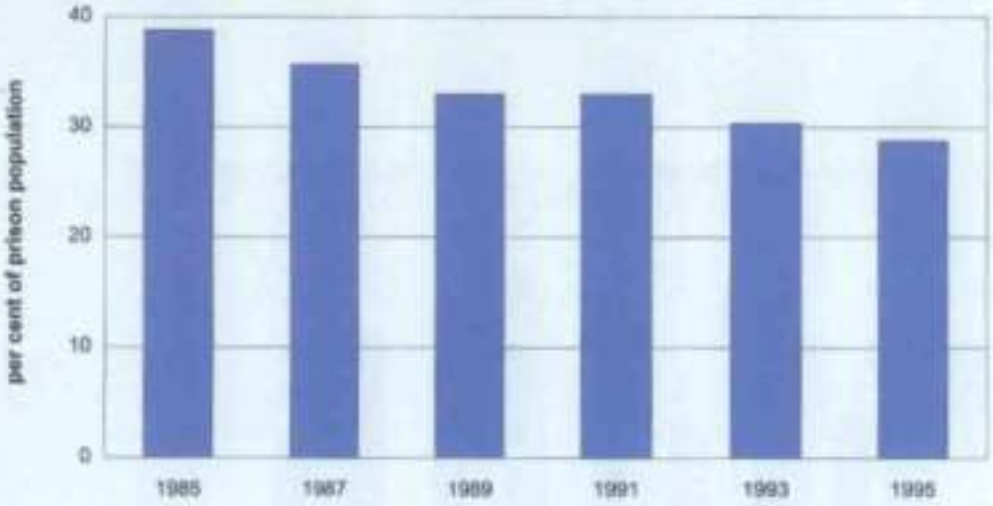
Imprisonment for violent crime is probably of greater concern to the public than imprisonment for crimes against property. The ratio of prisoners to violent crimes could only be calculated using all prisoners regardless of offence (because a breakdown by offence is not given in the *Year Books*). Figure 6.16 shows the long-term trend of this indicator. There was a fall from a ratio of 11 in 1903 to about 8 in 1913, then a rise above fifteen at mid-century, followed by a decline to less than 10 in 1973 and just over one in 1997/8. This represents a fall from about ten person years of imprisonment per violent crime committed in 1903 to an average of about one year in 1997/8 suggesting a much lesser occurrence of the longer sentences generally felt to be necessary for violent crimes (not the average length of sentence per violent crime, since imprisonment for non-violent crime had to be included in the ratio). 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 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.

6.16 IMPRISONMENT for VIOLENT CRIME 1903-1997



Over the decade from 1985 to 1995, the proportion of the prison population aged less than 25 years decreased from 39% to 29%. As there is no indication of a reduced involvement in crime among people of this age group, the decreased imprisonment rate may reflect a change in sentencing. In the fifteen year period from 1981 through 1996, the rate of juvenile detention (10-17 year olds in most states) in juvenile corrective institutions also decreased, from 105 males (per 100,000 males aged 10-17) and 23 females (per 100,000 females aged 10-17) to 62 males and 6 females per 100,000 in that age group.

6.17 PRISON POPULATION AGED LESS THAN 25 YEARS 1985-1995

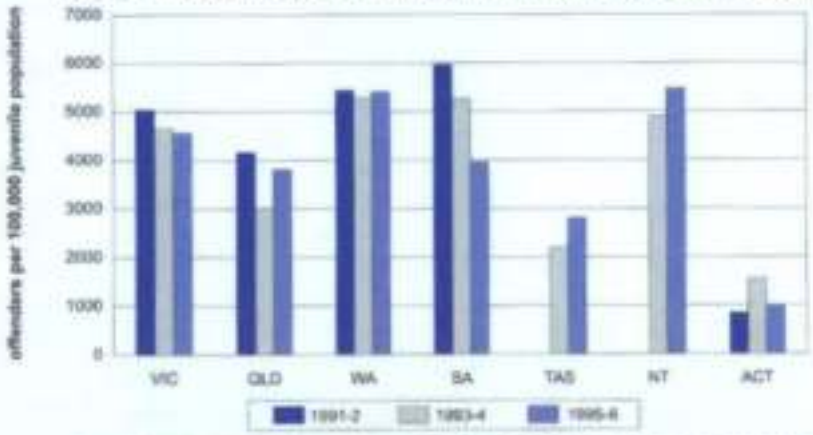


Juvenile Offenders

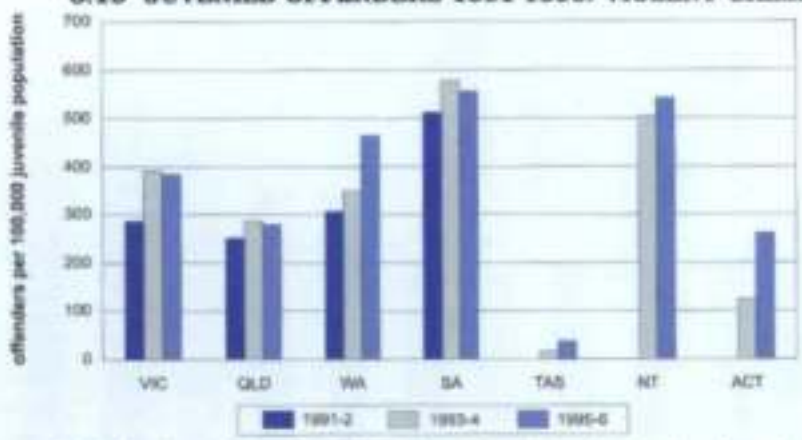
The majority of juvenile offenders are arrested for property offences. Juveniles are less likely to be arrested for violent crimes than adults. National statistics on juvenile offending are not available, as crime records are kept by states and territories, and definitions as to who is a juvenile vary across jurisdictions. Further, the records show juveniles involved in *cleared* crimes, the definition of which ranges from arrest to identification of an alleged offender, and not all jurisdictions use the same terminology. Such statistics as are available from the Australian Institute of Criminology do not include data for New South Wales.

Despite these problems, it appears that rates of property crime by juveniles in the 1990s (Figure 6.18) have shown variable trends, but rates of violent crime (Figure 6.19) have increased in all state and territories.

6.18 JUVENILE OFFENDERS 1991-1996: PROPERTY CRIMES



6.19 JUVENILE OFFENDERS 1991-1996: VIOLENT CRIME



Source: Mukherjee, S, *et al.* (1998). *Juvenile Crime & Justice*. Australian Institute of Criminology

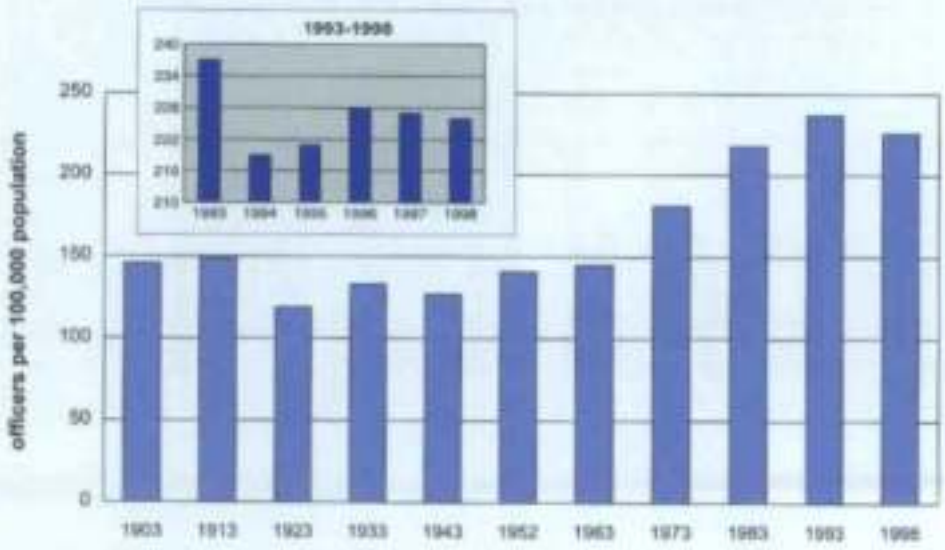
Police

The innovation explicit in Robert Peel's establishment of a police force in Britain in the early nineteenth century was prevention of crime by surveillance before the event, rather than detection and punishment afterwards. The ubiquity of police stations and police officers on the beat was an essential part of this strategy. An obvious requirement for successful prevention via surveillance is an adequate proportion of police, not only to terrain and population, but also to the potential and actual incidence of crime for the place and period.

The *Year Books* 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 6.20 shows the *Year Books'* figures of police officers per 100,000 population, from 1903 to 1998. 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 1998 it was slightly lower, at 226 officers per 100,000 population.

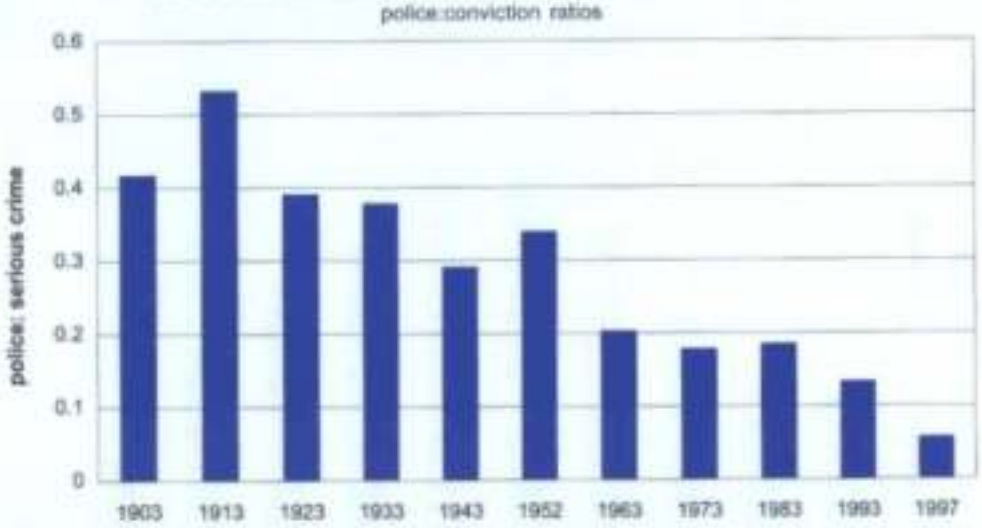
6.20 POLICE: POPULATION RATIOS 1903-1998



Nevertheless, these figures do not show whether the rise in officer numbers is appropriate to the rise in the crime rate

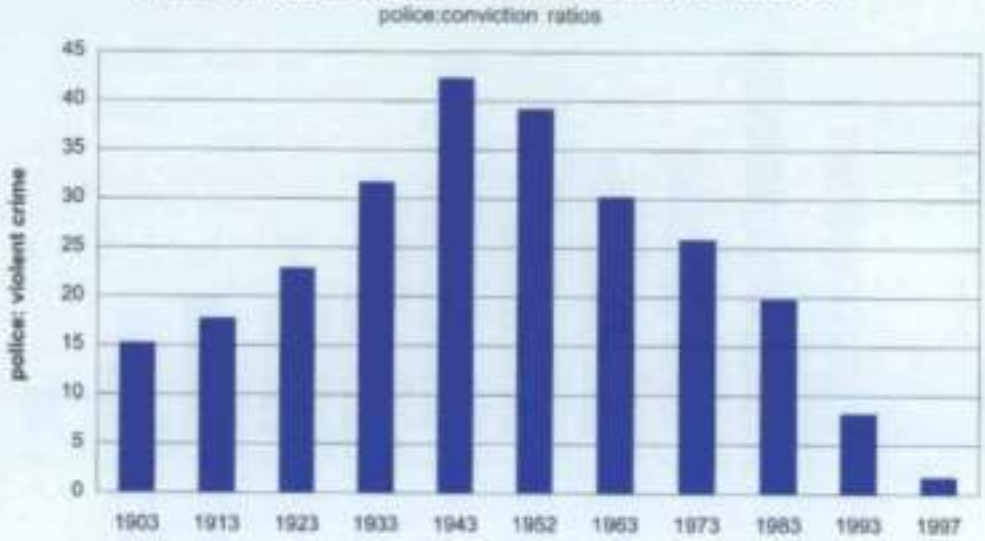
In Figures 6.21 and 6.22, officer numbers are presented as ratios, not to population, but to total serious crime convictions and to convictions for violent crime. These figures demonstrate that the rise in police officer numbers has completely failed to compensate for the large rise in crime rates of recent decades.

6.21 POLICE: SERIOUS CRIME RATIOS 1903-1997



There is a rise in police: 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 1997 it fell again by half. Similarly, the ratio of officers to violent crimes 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 face of the sudden rise of violent crime.

6.22 POLICE:VIOLENT CRIME RATIOS 1903-1997



Overview

A common pattern in the indicators of social welfare of citizens here presented, which in many cases provide a continuous series of data reaching back to the end of the nineteenth century, is a slow but steady development in a given direction in the first half of the century, and a marked change either of direction or gradient, often with rapid acceleration, not far into the second half of the century, with mostly no reverse of this changed development into the early 1990s. There are, however, some signs of change of direction or trend in the last half decade.

Thus, the population rose steadily until close to mid-century; then escalated upwards. The percentage of the population born overseas fell, then rose steadily. The percentage of Australians aged less than 15 fell steadily; then rose, then fell, to well below its mid-century level. The percentage of Christians fell slowly; then more rapidly.

The marriage rate, though fluctuating, showed an upward trajectory; then plummeted. The percentage divorced rose slowly but steadily; then escalated and finally slowed. The median age at marriage fell in the middle decades of the century, then rose steeply. The birth rate fluctuated wildly but with a marked downward trajectory; then settled into a steeper fall without fluctuation. Fertility rates fell; then rose and then fell to below their previous lowest level. The percentage of births to young mothers and fathers rose very slowly; then shot up and, finally, plummeted. The percentage of ex-nuptial births fell slowly; then rose rapidly and finally escalated.

Crime rates in all categories fell steadily; then increased and finally escalated. Deaths by suicide fell slowly (with some fluctuations); then rose sharply, fell and rose again. Illicit drug use was not an issue in the first half of the century, but has shown rising rates and harmful effects in the last three decades.

The number of school pupils rose slowly and steadily; then escalated upwards and finally levelled. The pupil-teacher ratio fell slowly; then plummeted and finally levelled. The rate of university education rose slowly; then more rapidly, with a dramatic leap upwards between the 1980s and 1990s.

We may differ, on ethical, ideological, sociological or economic grounds, as to whether various of these changes of direction are good, bad or indifferent. Rising divorce and ex-nuptial births may be viewed as indicators of liberation from social and sexual oppression, or as signs of loss of ethical standards; or as causes of cost to the tax-payer; or, simply as indices of the development of post-industrialism. There is possibly less disagreement as to whether increases in property and violent crime are good or bad developments for society. If we generally agree that increasing crime rates are not beneficial, then the correlations between the changes of direction in these social factors and rising crime suggest that we should look to the social policies, practices and beliefs, where we can identify them, which precipitated, encouraged and supported these precipitating factors of change.

In one area, health and longevity, the improving trends of the first half of the century showed little or no interruption in the second, until the last half decade, when there are signs of flattening. If crime and health are our best outcome measures, then the failure indicated by the former is still countered by extraordinary success in the latter. The story of health over the last century is one of almost unbroken success. Life expectancy for both men and women rose almost continuously across the century, maintaining its slope upwards even in the latter decades of escalating crime. There were persistent downward trends in death rates at all ages, except the oldest group of 65 and over. Perinatal and infant mortality fell steadily (apart from a brief period in the 1970s for the former) and maternal death has reduced to the almost non-existent. Only in the last five years have we seen persistent flattening or slight reversal of these trends.

Infection has disappeared as a major cause of death, to be replaced by the natural causes belonging to old age – heart disease and cancer. Death from external causes such as violence, poisoning and motor vehicle accident have continued to fall through the decades of increasing crime, no doubt due partly to the increasing ability to bring people back from the jaws of death. Major falls in all these areas, the causes of death within medical control, occurred after mid-century. Only suicide and illicit drug death, which are largely outside medical control, have not shown this pattern of sustained decline.

Infectious diseases have increased only where medical methods and tenets have been rejected or ignored. When rates of take up of immunisation fell, we had resurgences of whooping cough and measles. Disregard of personal hygiene has resulted in epidemics of HIV and hepatitis-C. Medical practice continued to be successful while it remained faithful to the scientific methods developed in the late nineteenth and early twentieth centuries, methods which recognise biological inflexibilities and seek to regulate the action of natural forces. The influence of the social sciences in medicine in recent years may have instigated the looming regression.

PART II
LEISURE, CULTURE & SPORT

Preface

If we were to compare the present indicators dealing with Leisure, Culture and Sport with those in the 1997 edition, the rapidity of change in some of them would surprise. They reflect changing tastes and preferences and, perhaps more fundamentally, the impact of new technologies and a minor revolution in the approach of governments to economic management.

Although some sections of the community are spending more time at work, for the majority leisure time has been steadily increasing, and in the pages devoted to Leisure, Culture and Sport, we are given a fascinating picture of the varied, and changing, uses of leisure time by Australians and their continued devotion to sport in its many forms. Television continues to dominate the evening hours, but here, too, there are signs of changing preferences. Going to the movies is on an upward trend, whilst opera, ballet and classical music are more or less holding steady. For sport, the statistics reveal the variety of sports that have large followings.

Perhaps the most significant change of all has been the deep penetration of computers into the family household and the increasing proportion of households becoming connected to the internet.

SECTION 7:
LEISURE, CULTURE & SPORT

Leisure at Home

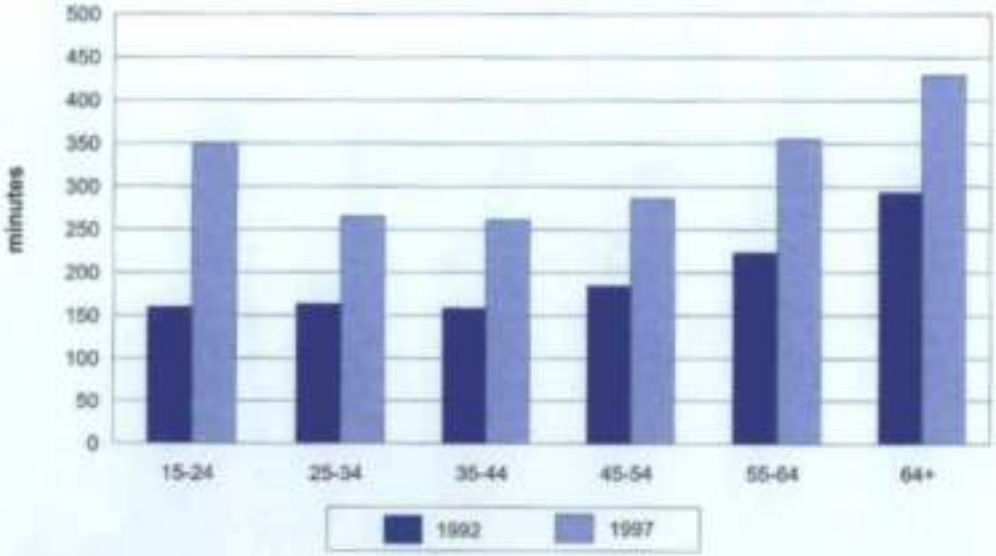
One indicator of relative prosperity and quality of life is the amount of leisure, or time free of work and attendance to the necessities of life, available to people. In general, the amount of leisure time available has increased significantly in the last generation or two.

In 1992 and 1997, the Australian Bureau of Statistics conducted a time use survey with time allocated to several categories: paid work, domestic, education, community, social, active leisure and passive leisure.

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 has 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.

7.1 PASSIVE LEISURE 1992 & 1997

average time spent per day, by age



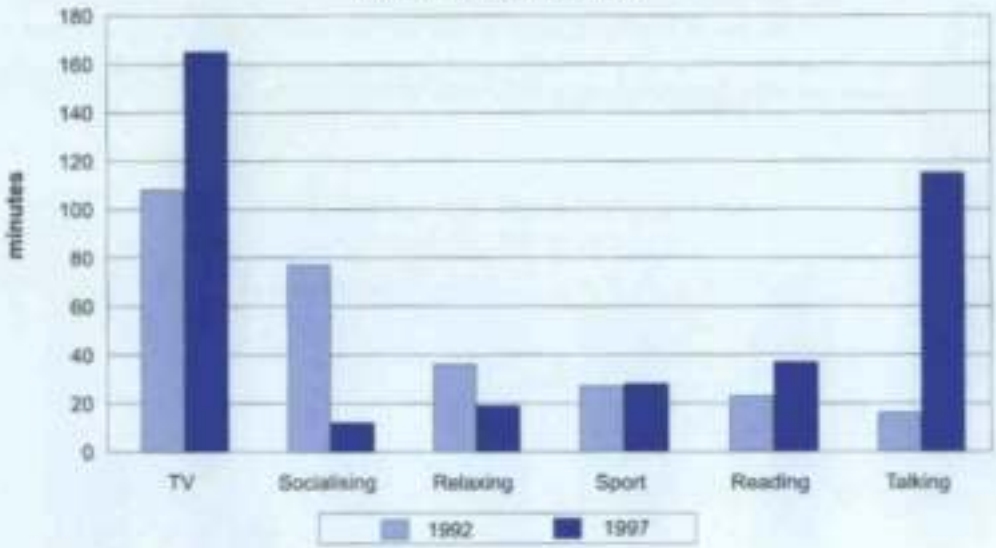
Source: *How Australians Use Their Time.* (ABS Cat.4153.0)

Main Leisure/Cultural Activities

The figures on main leisure activities in Figure 7.2 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.

7.2 MAIN LEISURE ACTIVITIES 1992 & 1997

average time spent per day



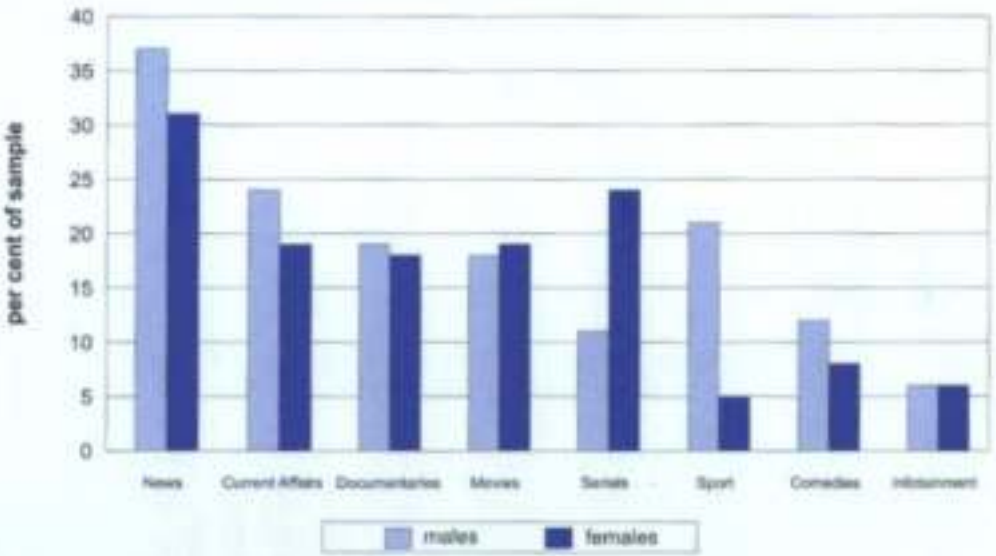
Source: *How Australians Use Their Time*. (ABS Cat. 4153.0)

Television

As already noted, television watching 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 Nielsen reported in 1998 that in both regional and metropolitan areas, 100% of homes had at least one television and 87% had at least one VCR (video cassette recorder). Around 58% of homes have more than one television and around 20% have more than one VCR.

A 1992 survey commissioned by the (then) Australian Broadcasting Tribunal asked which categories of programs were viewed 'with full attention'. As can be seen in Figure 7.3, news had the highest rating, followed by current affairs, documentaries, movies and serials.

7.3 TV WATCHING with FULL ATTENTION



Source: *Living With Television*, Australian Broadcasting Tribunal.

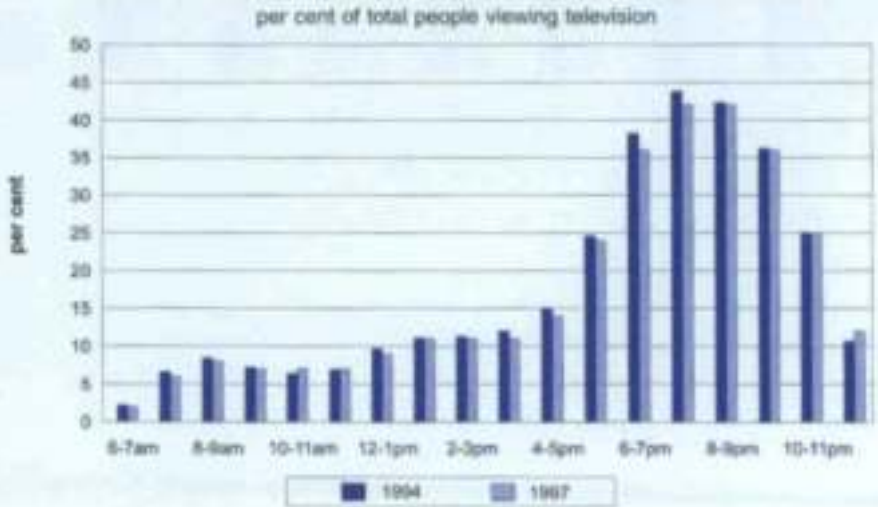
The Nielsen organisation maintains a continuing coverage of TV viewing behaviour throughout Australia with 'people meters' installed in a sample of 3600 households. This is claimed to be representative of the 6 million households and almost 19 million people in Australia. It is also claimed to be more accurate than the diary-based method of estimating viewing time used by the ABS (as for Figure 7.2) to collect the figures reported above. This is reflected in a larger average viewing time per day (over 3 hours compared with the 2 and a half hours reported by the ABS). The statistics which follow are derived from the Nielsen sampling.

- Daily average viewing time changed only slightly from 1991 to 1997 in all age groups reported. When extrapolated to a weekly average, however, weekly viewing was one hour less than in 1991 and 1994 for all age groups except teens 13-17 and people 16-24.

1997	Daily	Weekly (approx.)
All People	3hr 12mins	22 hrs
Ages 5-12	2hr 31mins	18 hrs
Ages 13-17	2hr 40mins	19 hrs
Ages 16-24	2hr 23mins	17 hrs
Ages 25-54	3hr 04mins	21 hrs
Ages 55+	4hr 24mins	31 hrs

- 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 7.4). 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.

7.4 TV VIEWING THROUGHOUT the DAY 1994 & 1997



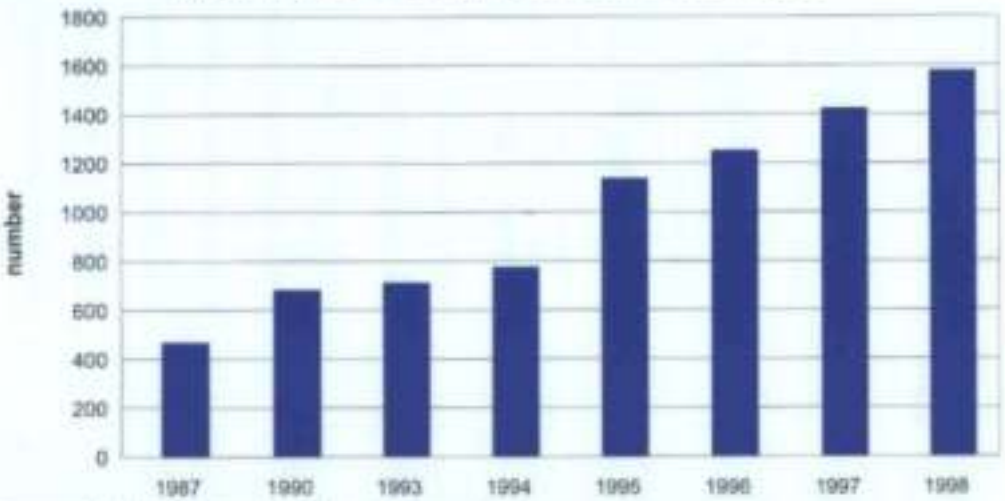
Source: *TV Trends 1995, 1998*, Nielsen

Film and Cinema

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

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 housing the screens.

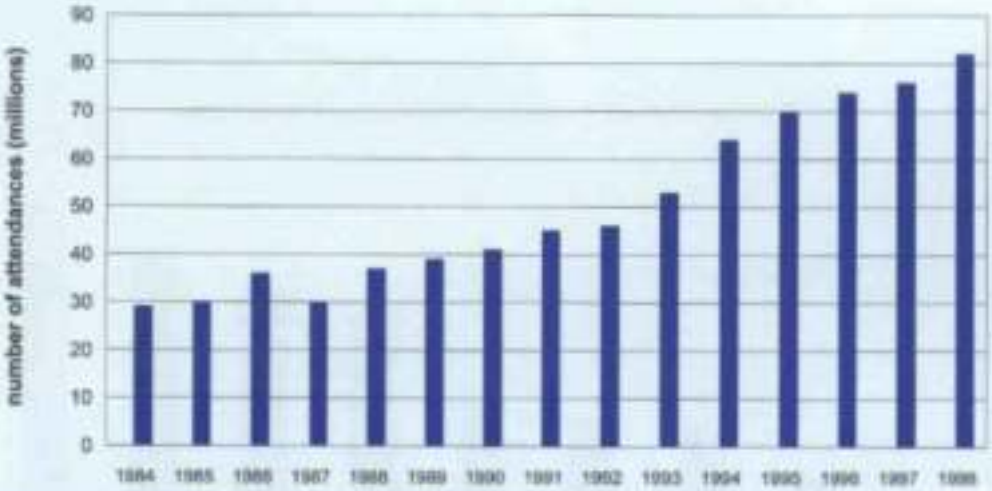
7.5 NUMBER of CINEMA SCREENS 1987-1998



Source: Motion Picture Distributors Association.

Figure 7.6 shows that, with the exception of 1987, cinema attendances have increased every year from 1984 to 1998, almost tripling over that period. Box office figures reached 629 million dollars in 1998 – a 7.8% increase on the previous year.

7.6 CINEMA ADMISSIONS 1984-1998



Source: Motion Picture Distributors Association

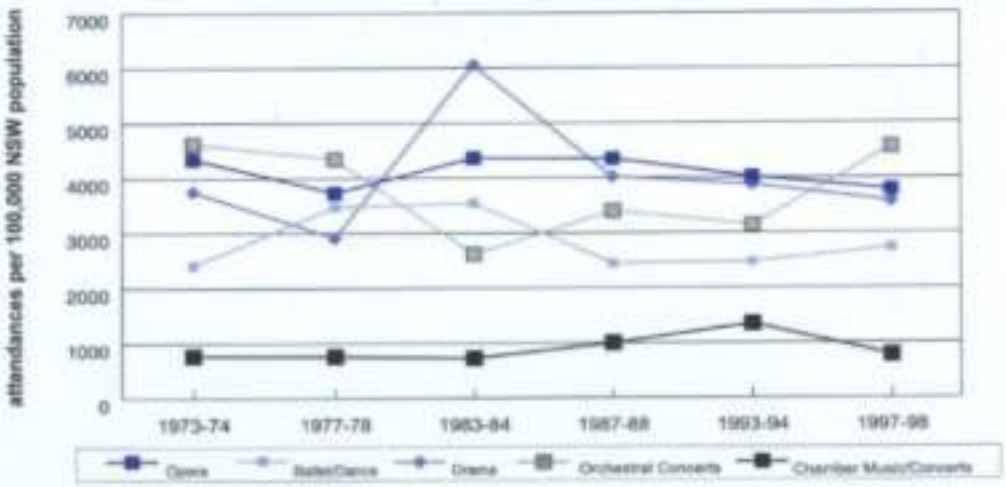
Cultural Attendances

The most recent survey on attendances at cultural venues and events conducted by the ABS was in 1994-95. Selected results from that survey can be found in the 1997 edition of *State of the Nation*. In the absence of a more recent report, attendances at the Sydney Opera House from 1973-74 to 1997-98 are shown in Figure 7.7. The attendances are shown as the rate per 100,000 population in New South Wales.

Attendances fluctuated quite strongly in the twenty five year period, except in the case of chamber music/concerts, which had lower attendances than the other types of performances, and were relatively consistent.

7.7 ATTENDANCES at SELECTED PERFORMANCES at the SYDNEY OPERA HOUSE 1974-1998

attendances per 100,000 New South Wales population



Source: Annual Reports of the Sydney Opera House Trust, various years

The Social and Cultural Effects of Television and Film

There can hardly be any question that both television and films have given immense pleasure, entertainment, and instruction to hundreds of millions, and modern life without them would be greatly impoverished in many ways. Yet there are many who deplore their effects in supplanting established forms of social interaction, and in supposedly lowering aesthetic and critical standards in drama and the arts; as there are many, also, who blame films and television for the deadening of humane sentiment and standards of decency through excessive violence, the celebration of sexual licence, distraction from educational effort, and the implicit dismissal of some moral norms.

There is no general agreement about the criteria of measurement that should be adopted in assessing the balance for good or ill, or how such measures, if agreed, can be reliably applied. Psycho-social tests of various kinds have in fact been used to show connections between film and television watching and the frequency of, for example, aggression in children, with recent results particularly indicating that there is a positive relationship. Others argue that television, in particular, is implicated in inducing individual passivity, reduced social interactivity, and the withdrawal of energies from a variety of civic engagements to the privacy of the living room and the TV screen.

Children and Television

Concern is frequently expressed about the effects of television watching on children, and whether it contributes to increased violence and moral laxity, or whether it disturbs them emotionally. Beyond the strong intuition of most people that so powerful a medium, and the ***legitimating*** impact of its cultural authority, must have consequences in shaping the attitudes of the young, these are difficult questions to answer scientifically and conclusively, and beyond the scope of this book. However, studies by the Australian Broadcasting Authority of children's viewing behaviour and reactions give us some insights.

- Some 62% of the children surveyed claimed to watch television every day, and 27% said they watched most days but not every day.
- Parental and adult rules about watching television were reported by 89% of children.
- Over half the children surveyed indicated that, on occasion, they had stopped watching a program because something upset them (66% of girls and 44% of boys).
- The type of violence shown largely influenced the way children reacted. Half claimed they liked to watch programs that are action-packed with fights, guns and car chases; but 62% said they did not like programs that showed children being hurt or "whacked", and a majority did not like to see programs where animals were hurt or killed.

Unlike television, charges of reducing social interaction have not been laid against movies for the obvious reason that the cinema itself is an arena of human contact, albeit of a relatively impersonal and passive kind. The charge against movies has been condemnation of the violent and amoral content of the movies themselves.

Whatever might be the varying judgements about the social and moral consequences of television and film, there is no doubting their power to inform, entertain and influence those who watch them. They are cultural and social forces of the first order, and their excellence or otherwise will continue to play a major part in shaping national attitudes.

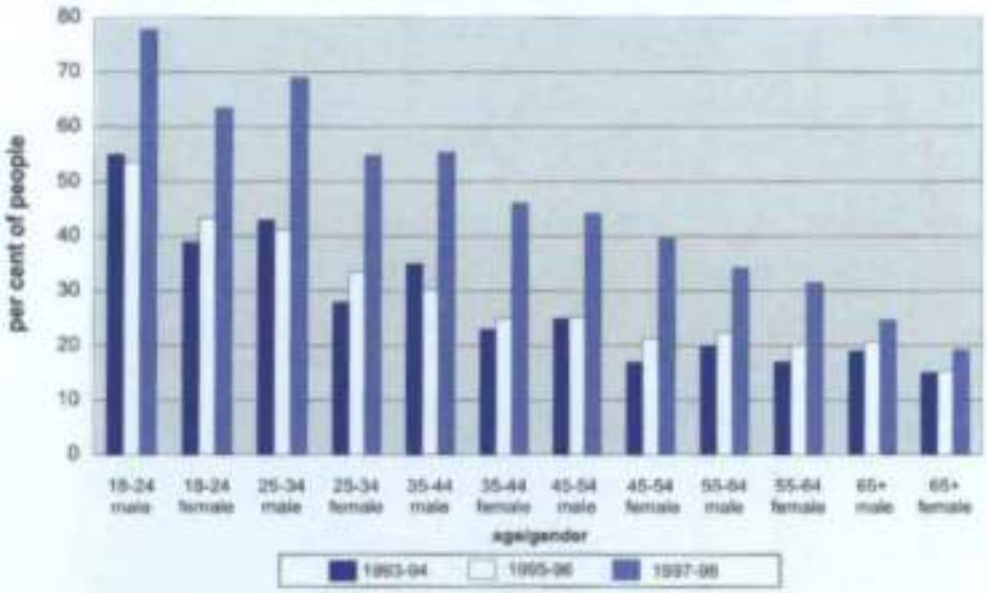
Sport

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 in 1993-94, 1995-96 and 1997-98 to estimate how many people were involved in sports. The content of this survey changed in the 1997-98 survey to include organised competitions and non-organised sports such as fishing and golf, whereas the earlier surveys reported only organised sports.

7.8 PARTICIPATION in SPORT 1994, 1996, 1998*

per cent of people

*(*1998 includes non-organised sports)*



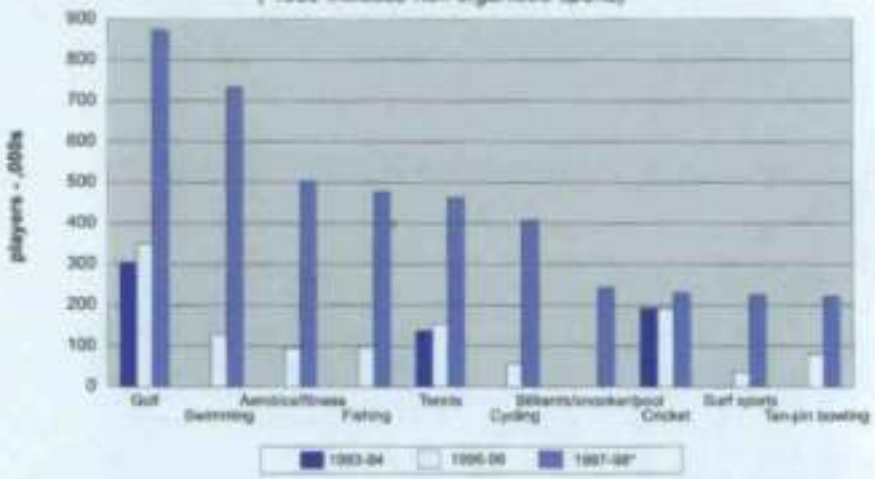
Source: *Participation in Sport and Physical Activities*, (ABS Cat. 4177.0)

The change in sport participation rates as a result of the inclusion of non-organised sports has been quite dramatic. Of the most popular sports in organised competitions in 1993-94 for men - golf, cricket, basketball, Australian Rules football, tennis, lawn bowls, indoor cricket, squash, rugby league and rugby union – only golf, tennis and cricket remained in the top 10 popular sports for 1997-98, when non-organised sport is included.

A similar picture emerged for women's sport participation. The sports with the highest participation in 1993-94 were netball, tennis, golf, basketball, lawn bowls, squash, hockey, indoor cricket, cricket and Australian Rules football. In 1997-98, with the inclusion of non-organised sports, only netball, tennis and golf remained in the top 10.

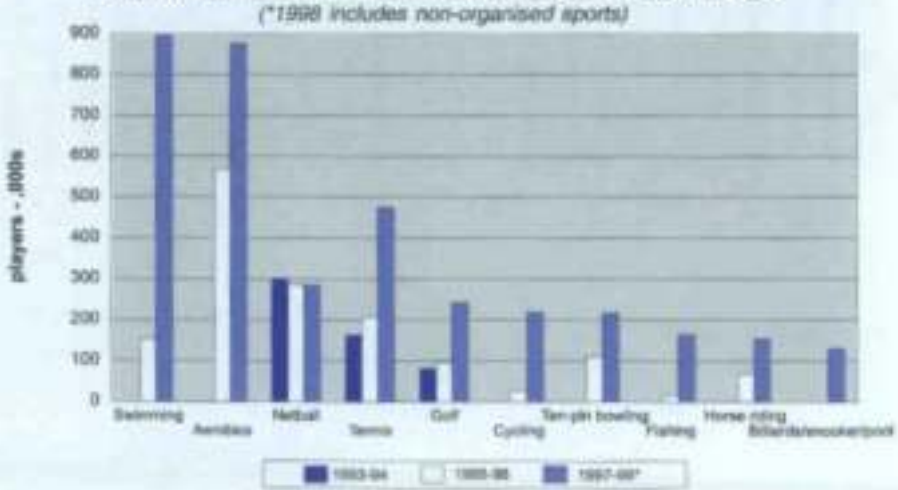
7.9 MEN PLAYING SPORT 1994, 1996, 1998*

*(*1998 includes non-organised sports)*



7.10 WOMEN PLAYING SPORT 1994, 1996, 1998*

*(*1998 includes non-organised sports)*



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

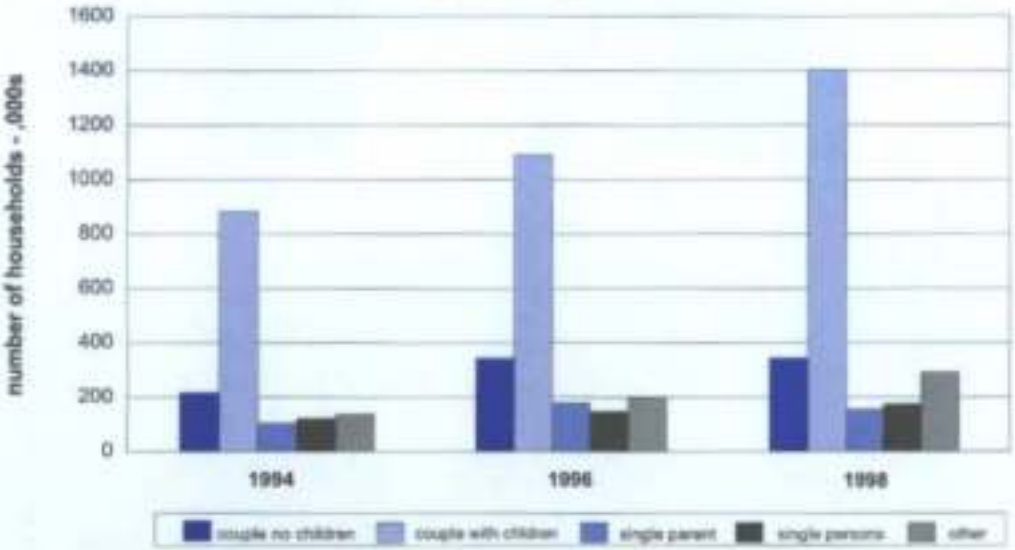
Information Technology

Figure 7.11 shows the number of households in Australia where a computer was used frequently (at least once a week) in 1994, 1996 and 1998. It also shows the family structure of these households – whether they consist of a couple with no children, a couple with children, a single parent with children, single persons, or other.

The largest, and fastest growing group of frequent users of computers is couples with children. Between 1994 and 1998, the number of couple families with children who used a computer frequently increased from 880,000 to 1,400,000 families. This figure represents 60% of all like households. The total number of computers in Australian households increased from 1.9 million in 1994 to 3.3 million in 1998.

7.11 HOUSEHOLDS FREQUENTLY USING a COMPUTER 1994-1998

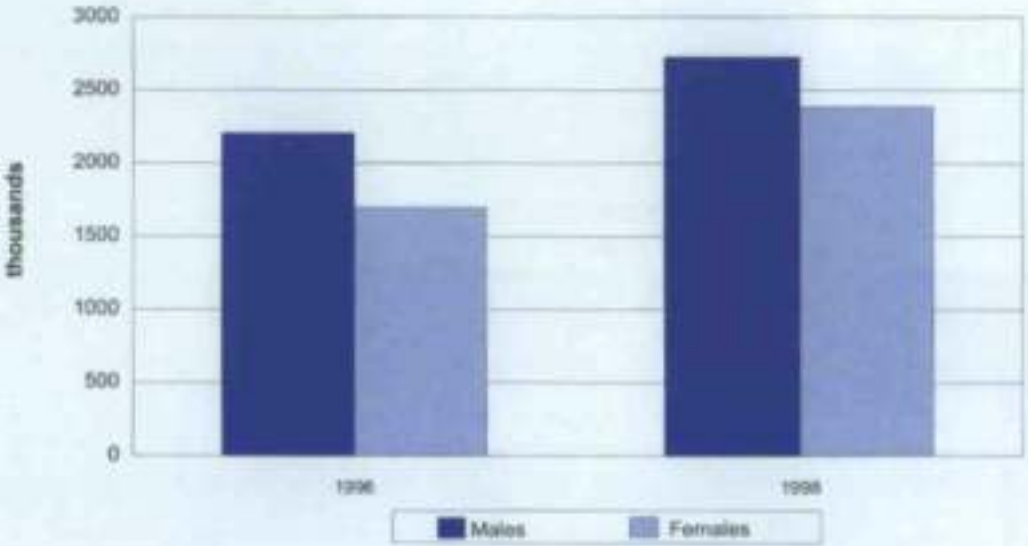
by household type



Source: *Household Use of Information Technology* (ABS Cat. 8128.0)

Figure 7.12 shows the number of male and female frequent computer users in 1996 and 1998. In 1996, 30% more males than females used a computer frequently at home. By 1998, this difference had decreased to 14%. In both years, the highest prevalence of home computer use was among people aged 5-17 (50%).

7.12 PEOPLE USING a COMPUTER FREQUENTLY 1996, 1998

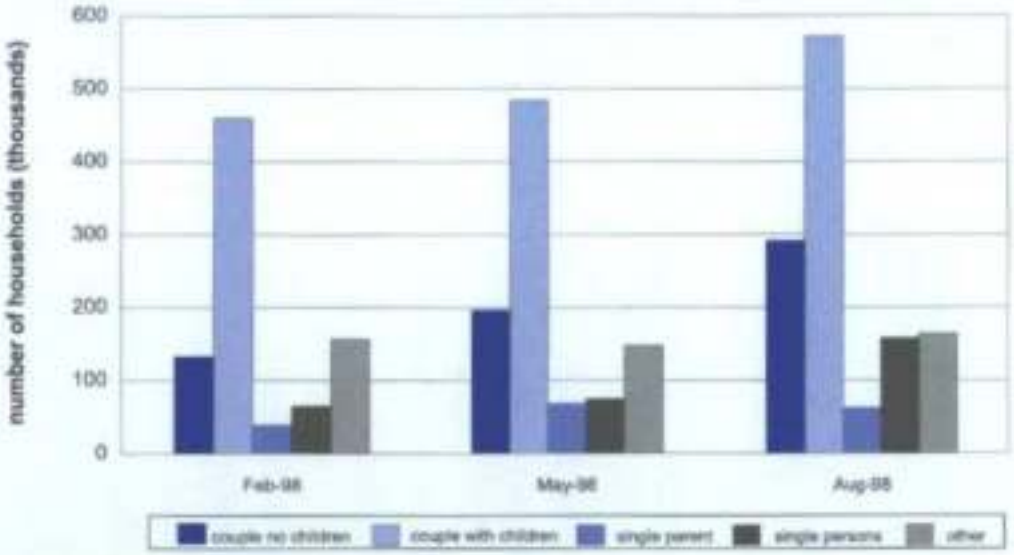


Source: *Household Use of Information Technology* (ABS Cat. 8128.0)

The number of households with home internet access is growing rapidly. In the 6 months from February to August in 1998, this number increased by 45% - from 854, 000 to 1.2 million. Figure 7.13 shows that again, the largest group of home internet users is couples with children, who account for almost half of all households with internet access.

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.

7.13 HOUSEHOLDS ACCESSING the INTERNET from HOME
Feb 1998 - Aug 1998
by household type



Source: *Use of the Internet by Householders* (ABS Cat. 8147.0)

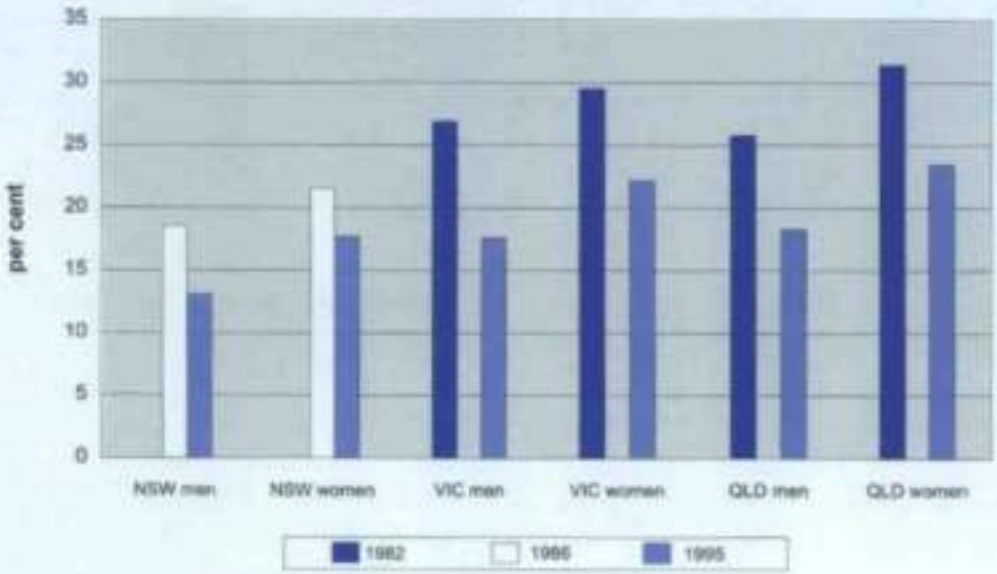
Civil Society

In a special report for the Australian Bureau of Statistics, Associate Professor Mark Lyons, from the University of Technology in Sydney, suggests that there are signs that the number of non-profit organisations and people's involvement in them might be declining. The organisations where this decline is apparent include churches, political parties, trade unions (see Figure 8.18), service clubs, scouts and guides, and local sporting associations. Further, the introduction of poker machines to hotels has placed some strain on the revenue opportunities of registered clubs.

Figure 7.14 shows the rate of volunteering (the proportion of men and women aged 15 or more who reported having volunteered at least once in the previous 12 months), in 1982 and 1995 for Victoria and Queensland, and in 1986 and 1995 for New South Wales. This survey data from the ABS was published in the Australian Journal of Volunteering in 1998. There has been a marked decline in the number of people volunteering from the 1980s to the 1990s in all three states. However, other statistics from the ABS show that, in Victoria and Queensland, both the average and the total annual number of hours worked by volunteers increased between 1982 and 1995. This indicates that fewer people are making a larger contribution to volunteering work.

7.14 VOLUNTEERING 1982-1995

per cent of 15+ population in New South Wales, Victoria and Queensland who volunteered in previous 12 months



Source: Lyons, M. & Fabiansson, C. (1998). Is volunteering declining in Australia? *Australian Journal of Volunteering, 3(2)*, 15-21.

PART III
ECONOMIC INDICATORS

Preface

Economic performance, measured by national productivity, underpins the possibilities of social and cultural life and profoundly influences the opportunities for individual well-being. This century has shown that the economies which best meet the material needs of their citizens are those in which productive capacity is overwhelmingly privately owned and operates within a competitive environment under a governmental and regulatory system based upon the integrity of institutions, the rule of law and equality before the law. Although the Australian economy remains heavily regulated in comparison with many other developed countries, in recent years governmental policies have begun to open up the economy to international competition, to privatise enterprises and utilities that were formerly government-operated, to re-establish monetary stability and low inflation, to balance government budgets, and in other ways to lay the groundwork for enterprise and greater efficiency. The results of these changes are becoming apparent in a challenging but more stable and predictable environment for enterprise, and increasing productivity and national wealth.

Nevertheless, unemployment is still unnecessarily and unacceptably high, and Australia continues to lag behind many other countries on a number of economic measures despite our very considerable natural advantages and an able population. So, much remains to be done.

In the pages that follow, changes and trends in major segments of the economy, including the labour market, are tracked and recorded. The brief commentaries accompanying the figures and tables are designed to draw attention to the more significant features revealed and, where appropriate, to suggest some of their implications.

SECTION 8:
THE ECONOMY

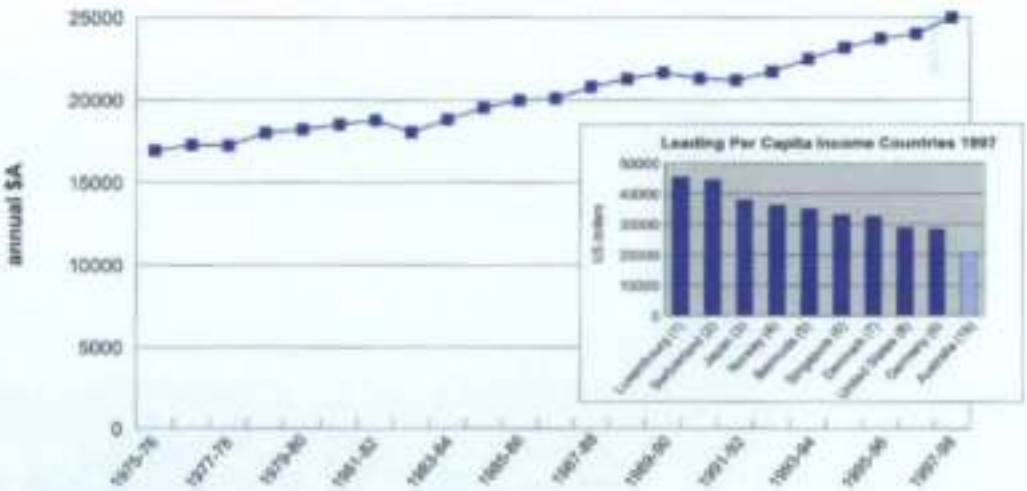
Structure of the Economy

A hundred years ago, Australia's per capita income was the highest in the world (together with Argentina). Fifty years ago, Australia had the third highest per capita income in the world. It had dropped to 19th place by 1997. Australia's productivity and per capita income growth was overtaken by many other industrial and developing countries such as Japan and Singapore. Since the middle 1990s, Australian productivity and GDP per capita growth has improved, reflecting the reforms that began in the 1980s. Other industrial countries, however, have also accelerated their growth, so that Australia's ranking in the world performance tables is not improving.

Gross Domestic Product (GDP): The measure, at market, or quasi-market prices, of total production of goods and services in a given time period not taking into account wearing down of capital assets and not including goods and services used up in the production process.

8.1 GDP per CAPITA 1976-1998 (SA)

1989-90 constant prices



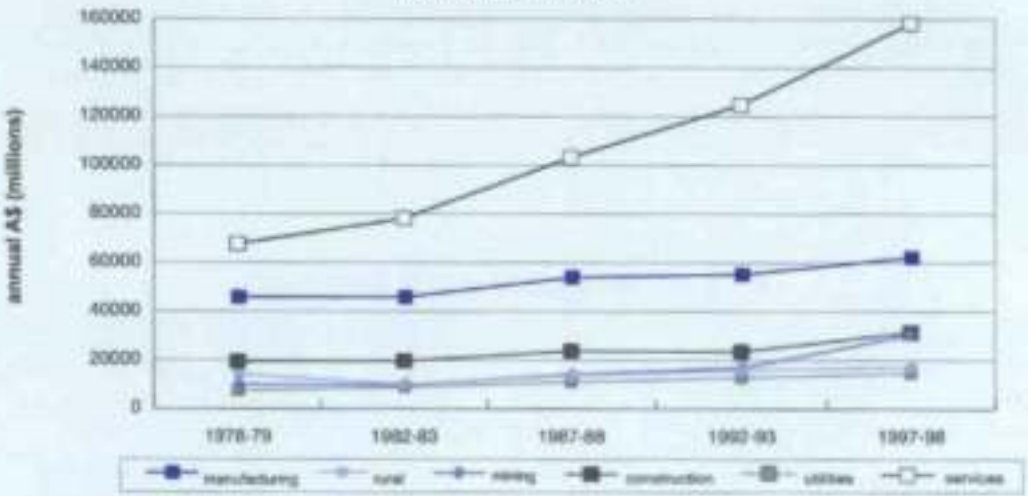
Source: *Australian Economic Indicators* (ABS Cat. 1350.0)
World Development Indicators 1998 (World Bank)

The distribution of GDP derived from the different industries has changed markedly from 1978-79 to 1997-98. Service industries generated 26% of production-based GDP in 1978-79, followed closely by manufacturing, which had an 18% share. In 1997-98, these figures were 34% and 13% respectively. The growth in GDP shown in Figure 8.1 has been largely fuelled by service industries. In terms of wealth created, there is no difference in value added between say, manufacturing and services. Changing industry shares of GDP indicate that Australia is keeping up with world trends.

The effect of this change on the employment sectors can be seen in Figures 8.14 and 8.15.

8.2 GDP by INDUSTRY

1989-90 constant prices



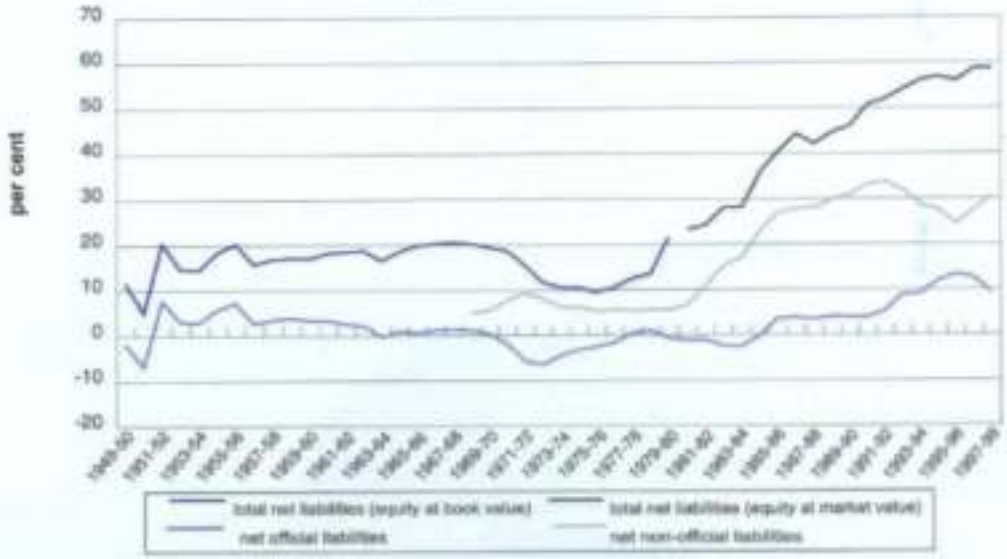
Source: *Australian Economic Indicators* (ABS Cat. 1350.0)

Figure 8.3 shows the trend for overseas (foreign) borrowing by government (official liabilities) and the private sector (non-official liabilities). The break in the line at 1980 reflects a move from assessment of liabilities at book value to assessment at market value.

Australia is increasing its external debt. Official (government) borrowing has not been increasing markedly, but private borrowing in the form of direct foreign (including equity) investment has risen. To the extent that this foreign investment flows into internationally competitive enterprises, this is very healthy for the Australian economy, as it adds to domestic savings and hence to productive investment. Where such investment flows into protected industries such as automobiles, it doesn't add to Australia's internationally competitive productive capacity. Total external debt has grown from 8% of GDP in 1976 to 59% of GDP in 1997-98.

8.3 NET FOREIGN LIABILITIES 1950-1998

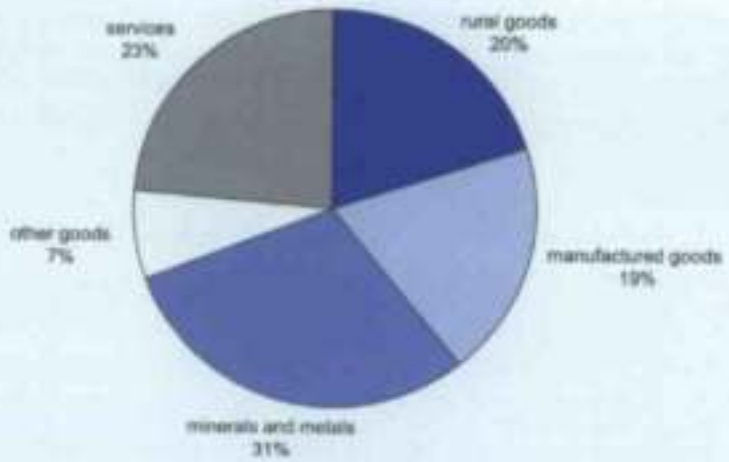
per cent to GDP



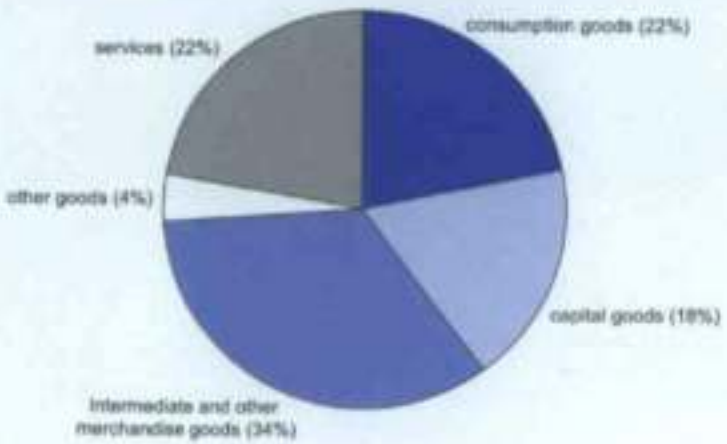
Source: Foster, R.A. (1996). *Australian Economic Statistics 1949-50 to 1994-95*. (Reserve Bank of Australia).
Australian Economic Indicators (ABS Cat. 1350.0)

Australia's exports are dominated by minerals and metals, services (tourism and education) and rural goods. Australian exports of goods and services are relatively low for a country of its size, ie. around 20% of GDP in 1997-98. A ratio of 30% would be much more comfortable for the economy. In the mid-1980's it was about 15%. Since then, it has risen but it is still low.

8.4 EXPORTS of GOODS and SERVICES 1997-98



8.5 IMPORTS of GOODS and SERVICES 1997-98

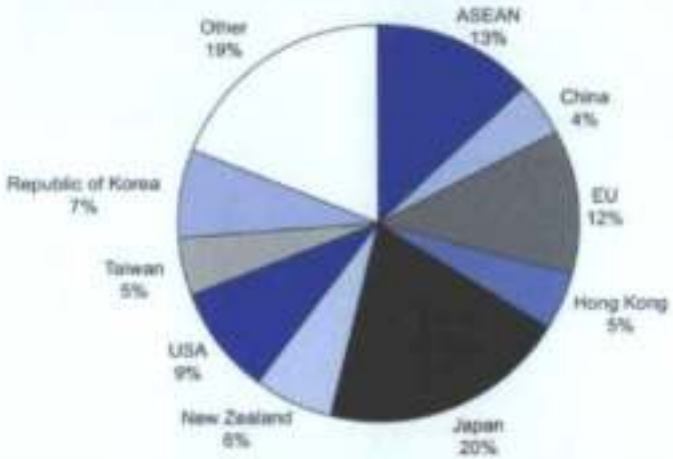


Source: *Australian Economic Indicators* (ABS Cat. 1350.0)

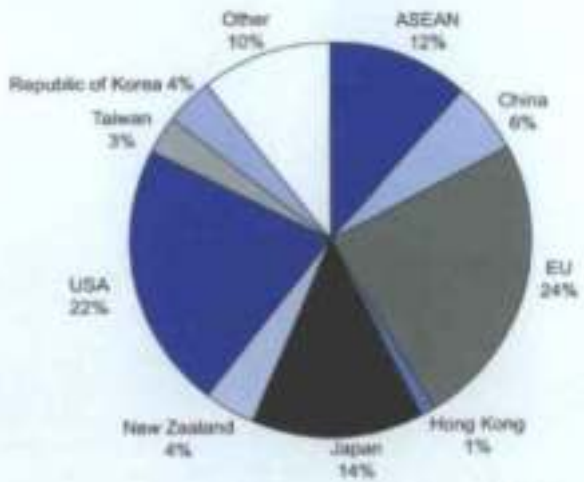
Imbalances of trade have no economic meaning as such and bilateral trade balances are unimportant in a liberal trading world. Nevertheless, it is important to diversify export and import markets in order to minimise the impact on Australia of changing economic conditions, especially recessions in other countries.

During the last 50 years, the United States, the United Kingdom and other European countries have declined in importance as export customers. Japan and other Asian countries have become more important. Imports have also become more diversified.

8.6 MERCHANDISE TRADE by COUNTRY: EXPORTS 1997-1998



8.7 MERCHANDISE TRADE by COUNTRY: IMPORTS 1997-1998



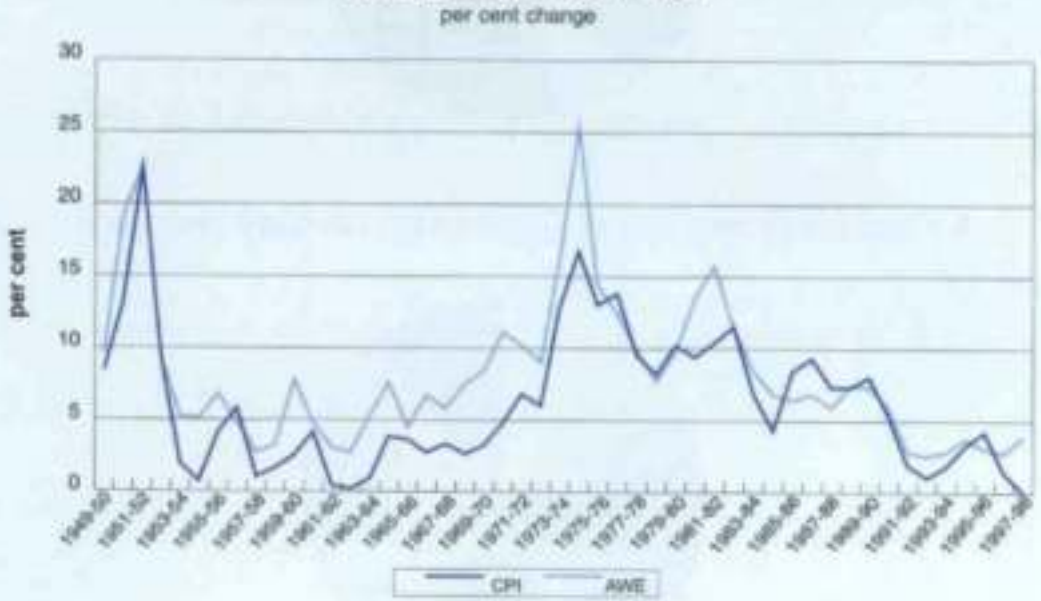
Source: *Australian Economic Indicators* (ABS Cat. 1350.0)

Inflation

Inflation may be defined as a general rise in the price of goods and services, that is, a situation where money is relatively plentiful in relation to the supply of goods and services so that their prices are driven upwards. Inflation is thus a 'monetary' phenomenon. It is a 'tax' on those with low incomes, particularly on groups such as pensioners and social security recipients, whose incomes are relatively inflexible.

Figure 8.8 shows the history of inflation in Australia as measured by percentage changes in consumer prices since 1950. The sudden rise in 1951 reflects the huge increase in wool prices during the Korean War, leading to increases in incomes, and the consequent rise in prices as demand for goods increased. Inflation then subsided until the 1970s when increases in the price of petroleum led to world-wide high rates of inflation. In Australia, where the 1989 to 1991 recession was unduly deep, there were considerable costs with monthly unemployment peaking at more than 12%. Subsequently, inflation has been maintained at low levels.

8.8 AVERAGE WEEKLY EARNINGS (MALE) and CONSUMER PRICE INDEX 1950-1998



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

Australia was not a good performer in terms of controlling inflation in the 1980s, but has greatly improved and now has one of the best records in the world (Table 1).

Average earnings increased faster than inflation from 1955 to 1975 (Figure 8.8), probably contributing to the difficulties of containing inflation, but have since closely followed price trends.

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. Bringing inflation under control has thus encouraged growth in recent years (see Figure 8.1).

Table 1. INFLATION in SOME HIGH INCOME COUNTRIES

average annual percentage growth

Country	% growth 1980-1990	% growth 1990-1996
Switzerland	2.9	2.6
Japan	1.7	1.1
Norway	7.4	2.1
Singapore	1.6	2.4
Denmark	5.5	1.9
United States of America	4.2	3.0
Germany	2.2	3.3
Australia	*7.9*	*2.4*

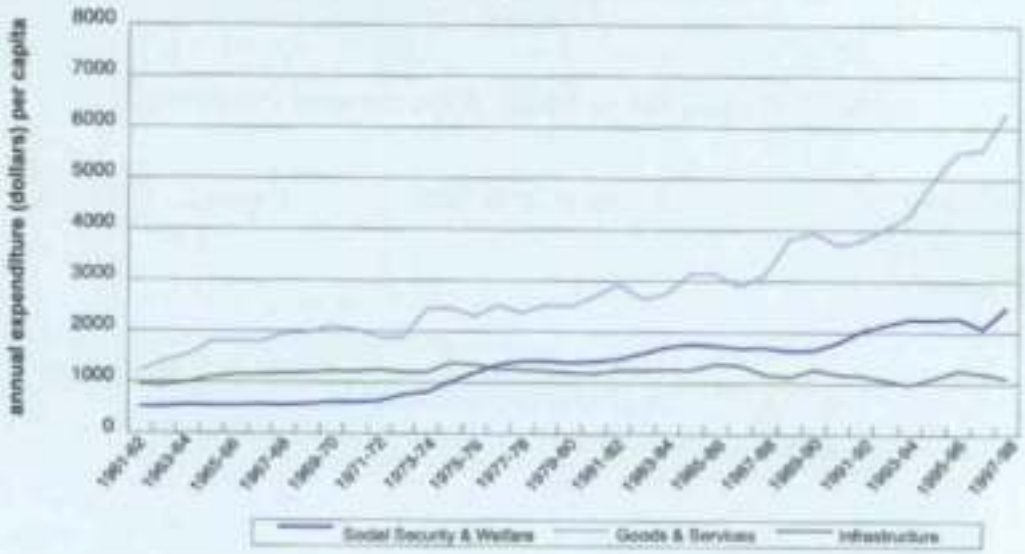
Source: *World Development Indicators 1998* (World Bank)

Government Expenditure

Government expenditure has consumed an increasing share of GDP, with the biggest increase in per capita spending going to pensions and other social benefits. The share of GDP devoted to social security payments has been rising steeply and so has expenditure on public goods and services. Expenditure on infrastructure (roads, bridges and other public utilities) in contrast, has remained static.

8.9 REAL GROWTH in GOVERNMENT EXPENDITURE 1962-1998

annual expenditure per capita, constant 1989-90 prices

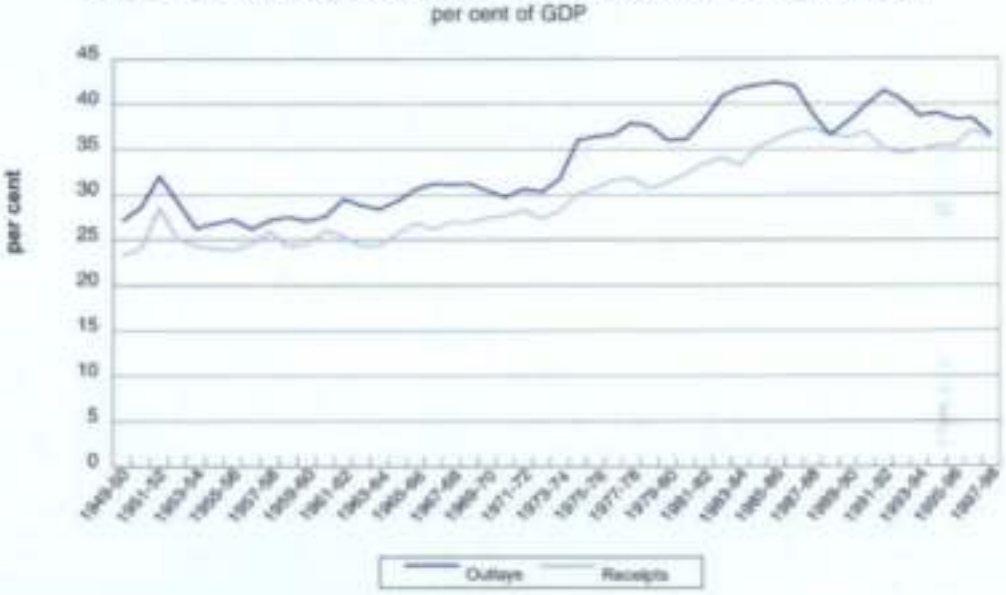


Source: *Australian National Accounts: Income, Expenditure and Product*, (ABS Cat. 5206.0)

Until 1997-98, an increased rate of public spending ("outlays") outstripped the rate of growth of the economy and also the rate of increase in revenue. The rapid growth in public expenditure as an increasing share of GDP led to a chronic budget deficit and therefore an increase in public debt, until the adoption of balanced budget policies.

Governments have to follow reasoned, transparent qualitative and quantitative expenditure and revenue policies if budgets are to play a positive economic and social role.

8.10 PUBLIC SECTOR OUTLAYS and RECEIPTS 1950-1998



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

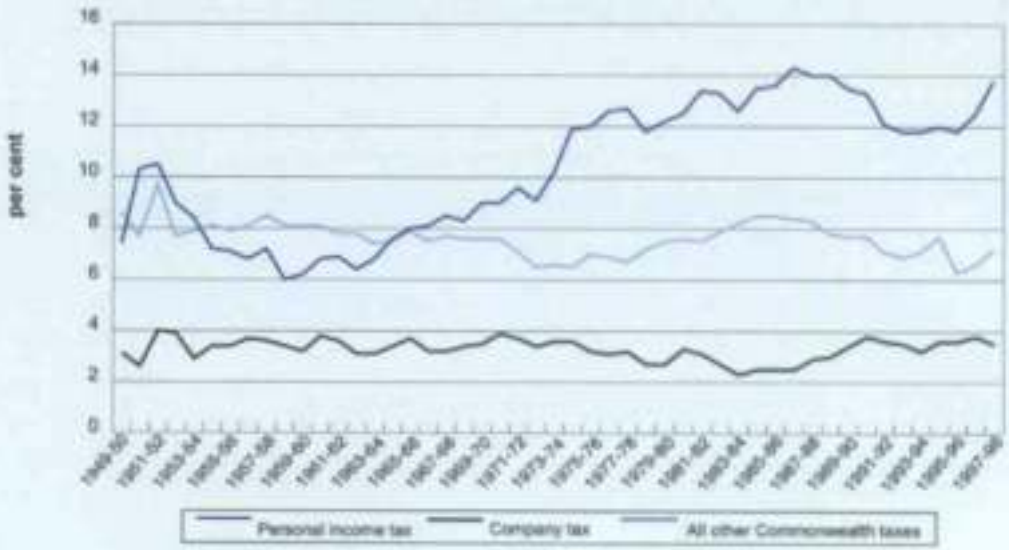
Taxation

Tax revenues as a percentage of GDP have increased to cover rising expenditure. The increase consists largely of growth in personal income tax. Other taxes have remained stable, or fallen. Personal income tax has doubled since 1950. A fall from 1987 to 1995 largely reflects the effects of the 1989 to 1991 recession.

Australia's progressive tax system, combined with the inflationary conditions which prevailed until recently, meant that nominal (money) incomes rose to match increasing prices. Taxpayers moved into a higher tax bracket ('bracket creep'), so that they had to pay more tax. Inflation was thus a kind of tax magnifier; while nominal incomes rose, actual purchasing power rose more slowly.

8.11 COMMONWEALTH TAXATION 1950-1998

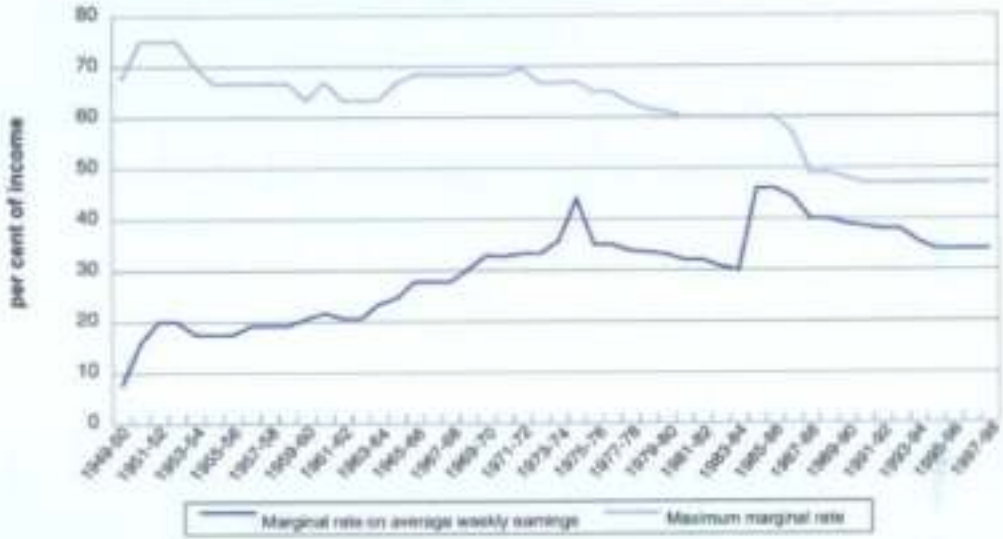
per cent of GDP



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

The maximum personal income tax fell to 47% (plus Medicare levy) in 1990-91 and has remained stable at that rate during the 1990s. The tax rate on average weekly earnings, however, increased after 1950. Recent decreases have brought it back to the level of the late 1970s.

8.12 PERSONAL INCOME TAX RATES 1950-1998



Source: Foster, R.A. (1996). *Australian Economic Statistics 1949-50 to 1994-95*. (Reserve Bank of Australia).
Taxation Revenue. (ABS Cat. 5506.0)

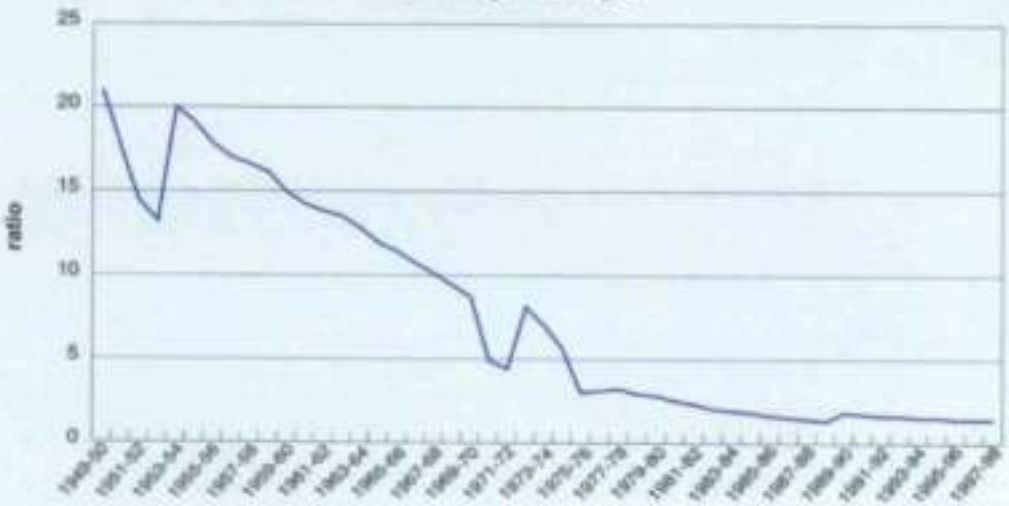
In 1950 it was necessary to earn twenty times the average weekly wage to attract the top marginal tax rate. By 1995, the top marginal rate came into effect at less than twice average weekly earnings. In 1998, the maximum marginal tax bracket was only 1.4 times the average weekly wage.

Because this trend reduces the proportion of earnings in the wage earner's hands, it also reduces the incentive for additional work or effort at relatively low levels of earnings. Additionally, it increases the attractiveness of tax minimisation schemes and so diverts resources from wealth creation and productive employment to tax minimisation.

A recent OECD study demonstrates that Australia's income tax structure is one of the most regressive in the developed countries.

8.13 THRESHOLD for TOP MARGINAL TAX RATES 1950-1998

ratio to average male wages



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

Labour Force

Australian labour participation rates (ie. working full-time or part-time, or looking for work) for men have been falling as more men have been staying longer in education.

Australian women's participation in the labour force, although higher than 20 years ago, is still lower than some other industrial countries In Sweden, women's labour force participation rates are over 75% (World Development Indicators, World Bank).

More men and women have been choosing part-time employment. The part-time proportion of the labour force has increased from 7% in 1965 to 26% in 1998. More than 70% of part-time workers are women and 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.

Table 2. LABOUR FORCE PARTICIPATION

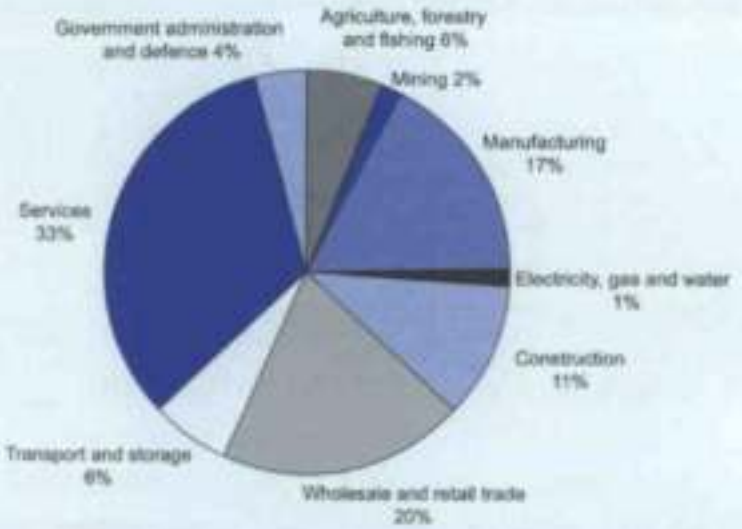
number and rate per 100,000 population

	MEN		MARRIED WOMEN		UNMARRIED WOMEN	
	millions	*rate*	millions	*rate*	millions	*rate*
1978-79	4.1	*78.5*	1.4	*41.0*	1.0	*46.4*
Feb 1999	5.4	*73.0*	2.3	*55.0*	1.7	*53.1*

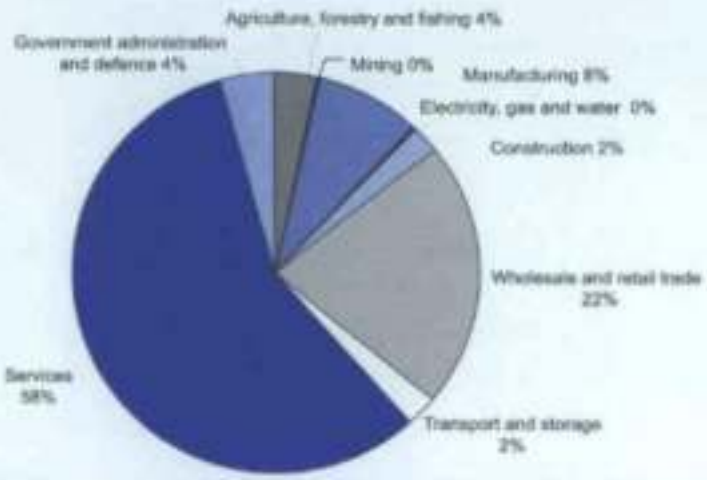
Source: *Labour Force, Australia: Annual* (ABS Cat. 6204.0)
Labour Force, Australia: Monthly. (ABS Cat. 6203.0)

Changes in the sectoral structure of the economy are reflected in changing employment characteristics. Services have become the leading employer, opening up new opportunities for women workers. These changes are also apparent in the distribution of GDP (Figure 8.2).

8.14 MALE EMPLOYMENT by INDUSTRY 1997-98



8.15 FEMALE EMPLOYMENT by INDUSTRY 1997-98

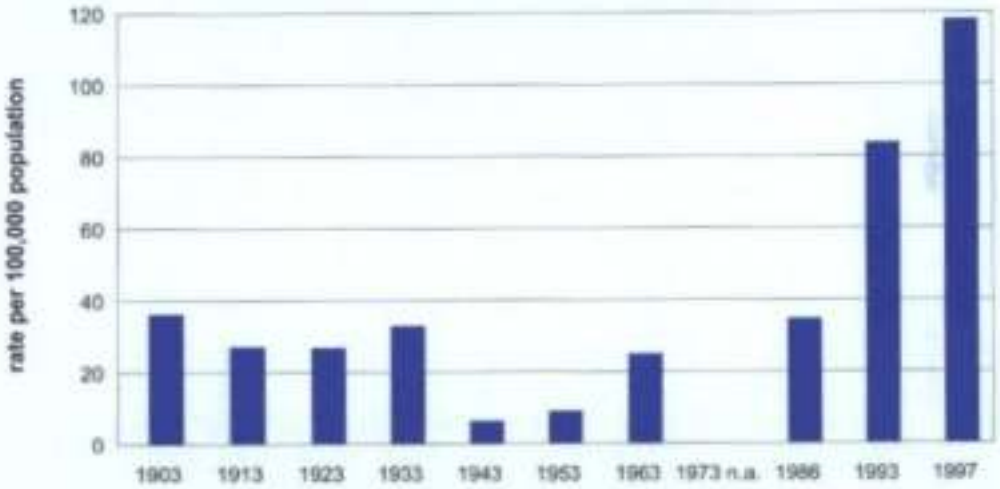


Source: *Labour Force, Australia.* (ABS Cat. 6204.0)

The essence of a market system is that while some businesses succeed, others fail. Bankruptcy laws enable those who fail to deal fairly with their creditors and to try again if they wish. Rising numbers of bankruptcies are indicators of several trends, including the appropriateness of macroeconomic policies. Their main meaning, however, is to show the venturesomeness of entrepreneurs. As protectionism declined in Australia, the incidence of bankruptcies has risen, perhaps reflecting the effects of both increasing competition and attempts to exploit new opportunities.

8.16 BANKRUPTCIES 1903-1997

business and non-business bankruptcies per 100,000 population



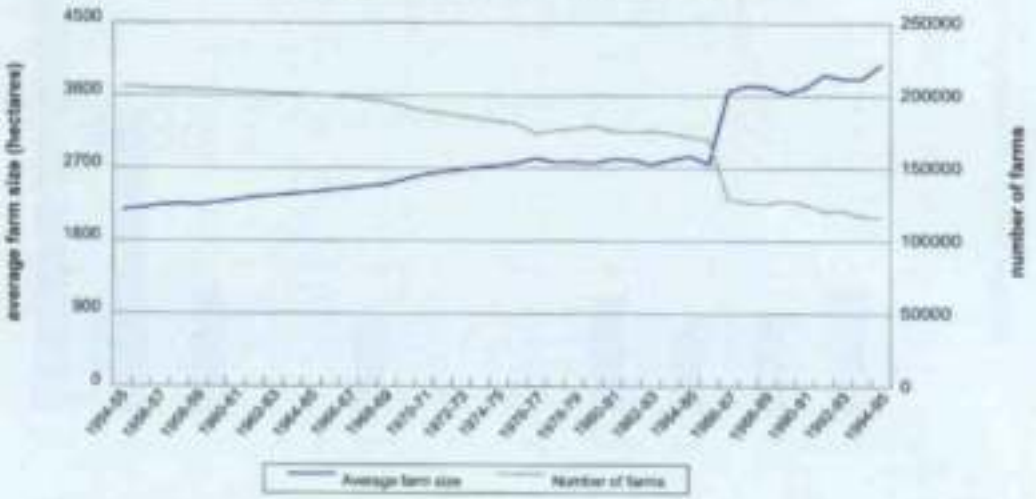
Source: *Bankruptcy Act 1966, Annual Report 1996-97* (AGPS)

While the total area farmed in Australia has remained unchanged since the 1950s, the number of farms has declined steeply as their size has increased. To continue to compete internationally, Australian farming has had to become capital and technology intensive, and therefore to exploit economies of scale and to become technologically sophisticated. Computerised management covers crop and animal innovation. Cost accounting, investing in commodity, interest and exchange futures markets has become essential.

Many farmers, like those in other rapidly changing sectors, have had difficulties adjusting. Some have had to change their occupations (Figure 8.14).

8.17 FARM CONSOLIDATION 1955-1995

total area of farms, number of farms, average farm size

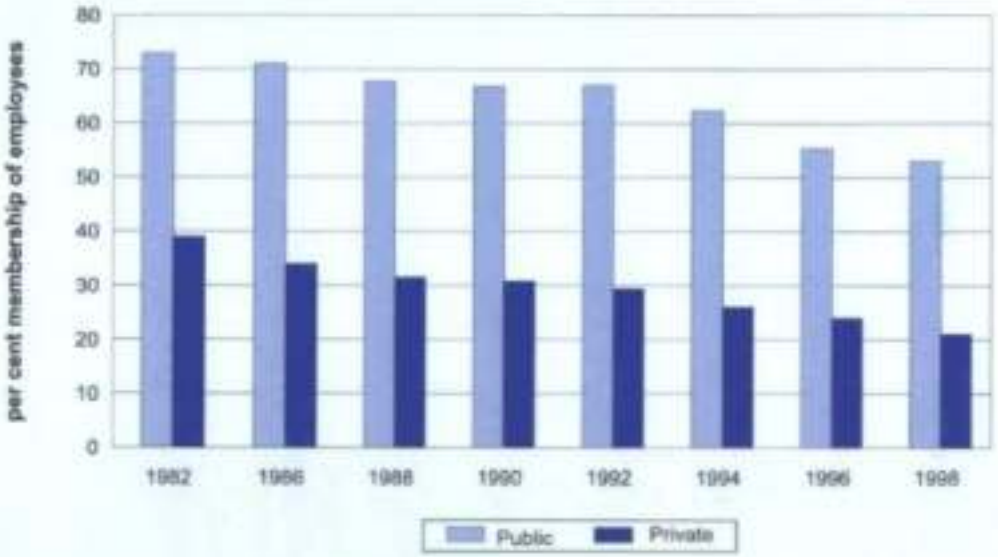


Source: Lewis, P., *et al.* (1998). *Issues, Indicators & Ideas.* South Melbourne: Longman.

Declining trade union membership is a world-wide 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 groups, rather than individually calibrated, earnings and working conditions. While the private sector is reflecting these trends in Australia, trade unionism continues to be coerced by regulation in the public sector.

8.18 TRADE UNION MEMBERSHIP 1982-1998

public and private sectors



Source: *Trade Unions, Australia.* (ABS Cat. 6325.0)

Unemployment

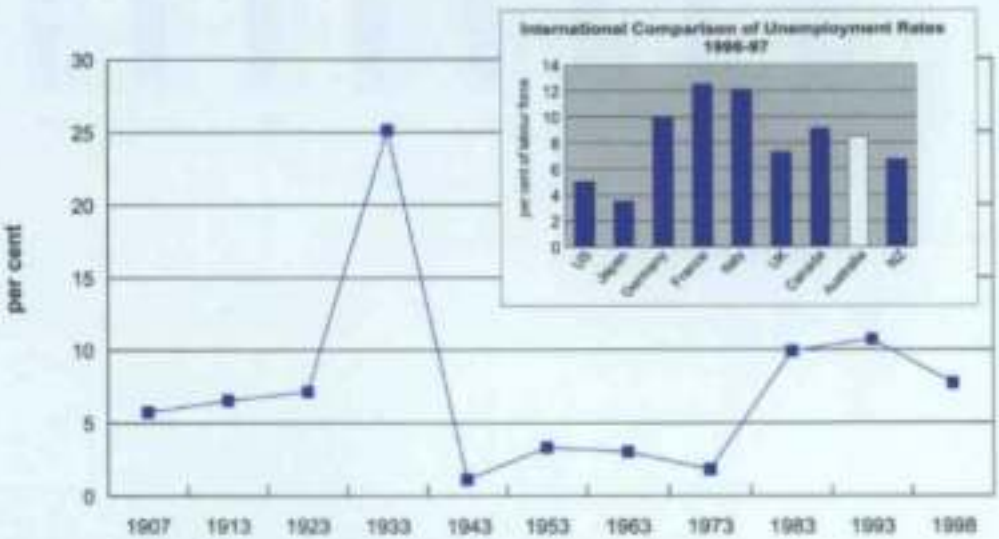
Unemployment rates in Australia have been reduced in recent years in keeping with the growth of the economy, but as the export levels (Figure 8.4) suggest, Australia is not yet competitive internationally. This is reflected in high rates of unemployment.

Figure 8.19 shows unemployment rates from 1907 to 1998. These figures do not represent all of the people who are not in paid employment, being based on the number of people who are registered as unemployed according to the criteria at the time. The figures fall into four periods of relative stability: a moderate level of unemployment, of 5% to 7%, between 1907 and 1923; very high unemployment rising to 25%, in 1933, at the height of the Great Depression; very low rates of unemployment, between 1% and 3%, from 1943 to 1973; and a return to moderate, though unacceptably high, levels of unemployment, between 7% and 10%, in the 1980s and early 1990s.

The proportion of unemployed people who are long-term unemployed (52 weeks or more) has doubled in the past 20 years from 16% in 1979 to 32% in 1998 (peaking at 37% in 1994).

8.19 UNEMPLOYMENT IN THE LONG TERM 1907-1998

per cent of labour force aged 15+



Source: *Labour Force, Australia.* (ABS Cat. 6204.0)
Yearbooks (ABS Cat. 1301.0)

Approximately 38% of the unemployed are aged 15 to 24 years old. This is much higher than their proportion (about 20%) of the labour force. Of these, the highest unemployment is among the 15 to 19 year olds who are not participating in education.

Unemployment rates are higher for girls than for boys in this age group (32% and 29%, respectively, in 1997-98). The lack of education and skill are the principal causes of unemployment for all age groups. For young people, not overcoming these disabilities often means a lifetime of poor employment experience

8.20 UNEMPLOYED 15-19 YEAR OLDS 1979-1998

per cent of 15-19 year olds

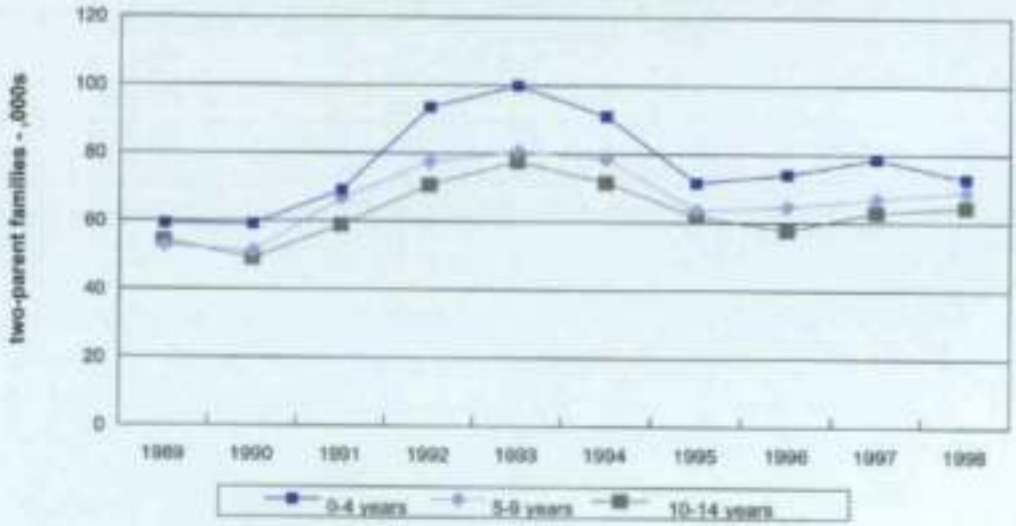
Source: *Australian Economic Indicators*, (ABS Cat. 1350.0)

Approximately 175,000 two parent families with dependent children aged 0 to 24 years have neither parent working. This number is large, but it represents only about 8% of two parent families. In terms of government policy, this group represents a socially important problem.

Figure 8.21 analyses trends for two parent families with neither parent working, by age of dependent children. The pattern is the same for the three groups represented, with a large increase in parental unemployment in the early 1990s, stabilising in the mid to late 1990s. The number of unemployed parents of children aged 0 to 4 have been consistently higher than for the other age groups. Some mothers take up work when their children reach school age.

8.21 TWO-PARENT FAMILIES with CHILDREN with NEITHER PARENT EMPLOYED

families with children aged 0-4, 5-9, 10-14



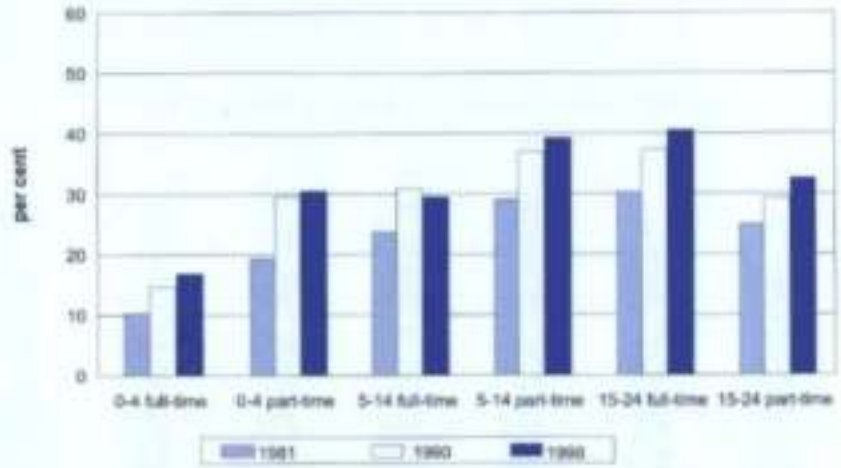
Source: *Labour Force Status and Other Characteristics of Families* (ABS Cat. 6224.0)

The lowest employment rates for both single and married mothers are for those with children aged less than 4 years old. Employment rates increase as children reach school age and then again, particularly for single mothers, when children reach 15 years.

The proportion of married mothers employed full-time and part-time has changed little from 1990 to 1998, In the same period, however, part-time employment increased and full-time employment decreased for single mothers of children of all ages.

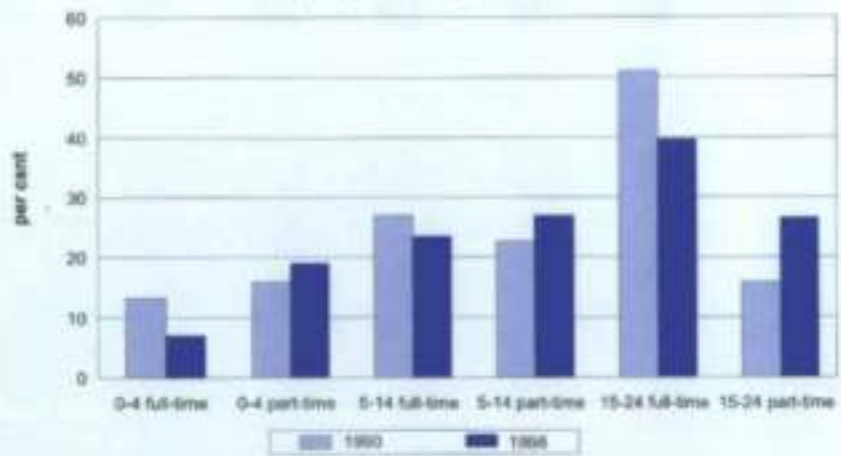
8.22 EMPLOYED MARRIED MOTHERS 1981-1998

per cent of married mothers employed full-time and part-time with youngest child aged 0-4, 5-14, 15-24



8.23 EMPLOYED SINGLE MOTHERS 1990-1998

per cent of single mothers employed full-time and part-time with youngest child aged 0-4, 5-14, 15-24



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

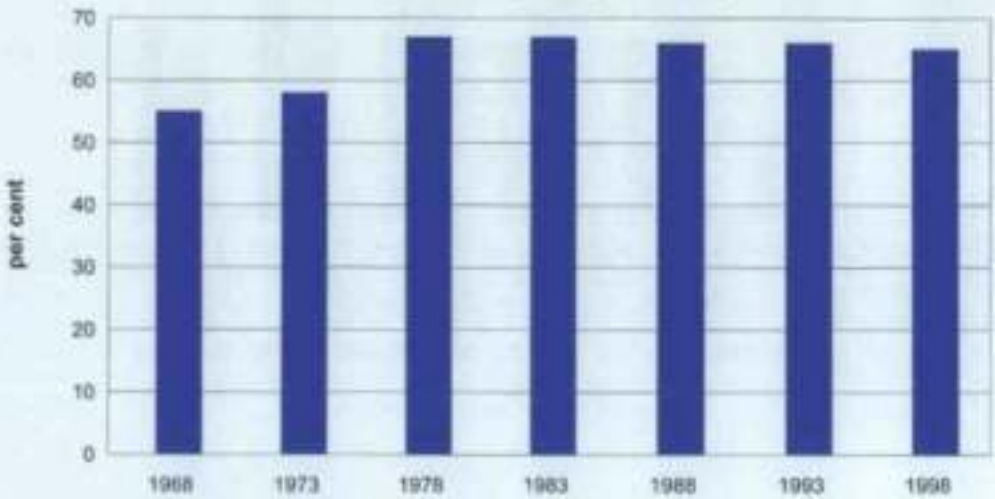
Earnings

Since the introduction of equal pay in Australia, the gap between men and women's average weekly earnings has declined. Australia now has one of the lowest gender earning gaps in the world. Women's earnings were 65% of male earnings in 1998. The gap results from a higher proportion of female than male part-time workers and the interruptions in women's work experience that impede career development.

Figure 8.24 shows female average weekly total earnings (all female employees) as a proportion of male average weekly total earnings (all male employees).

8.24 AVERAGE WEEKLY FEMALE EARNINGS

as a percentage of average weekly male earnings



Source: *Average Weekly Earnings, Australia*. (ABS Cat. 6302.0)

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