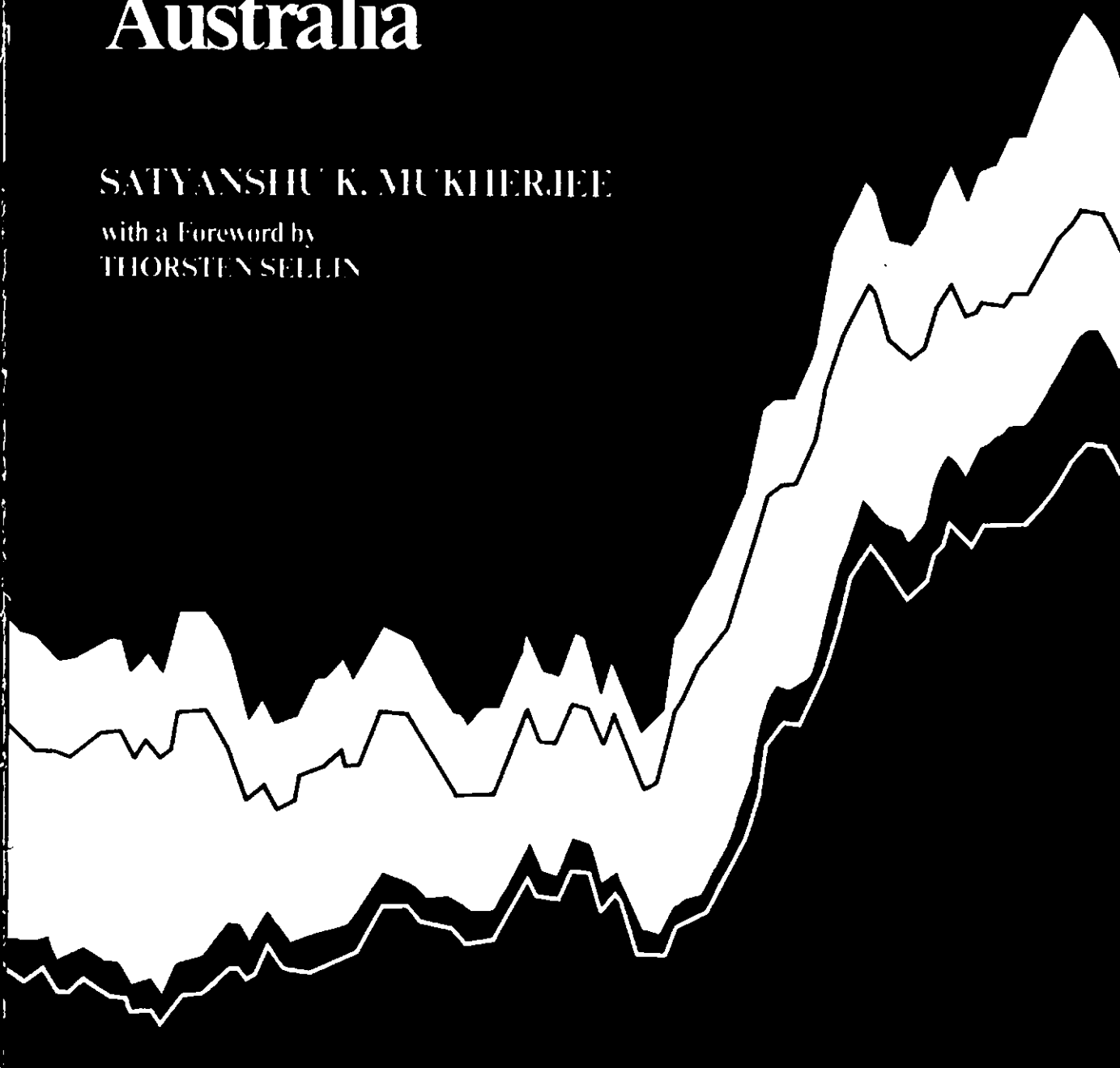
Crime Trends in Twentieth-Century Australia

SATYANSHU K. MUKHERJEE
with a Foreword by
THORSTEN SELLIN



'This volume is important beyond the boundaries of Australia. Dr Mukherjee has performed a research coup in being able to pull together the criminal statistical data from all over the country and to provide a model for time-series analysis. The data are rich, the statistical presentation clear, the temporal scope from 1900 to 1976 unusual and fascinating to scholars, legislators, and all others involved in criminal justice.'

Marvin E. Wolfgang, Professor of Sociology and Law, and Directorof the Center for Studies in Criminology and Criminal Law, University of Pennsylvania

Behind the constant public concern about crime, expressed in such terms as 'crime wave', and 'police crackdown' are commonly-held perceptions about changes in the level of criminal activity. This book analyzes these changes over eight decades. Data from the police, the courts, the prisons and a host of demographic, social and economic variables are analysed to reveal trends in crime and punishment, and the relationships between these trends and other aspects of Australian society.

Never before has such a comprehensive set of data over such a long uninterrupted period been assembled or analysed, in Australia or anywhere else in the world.

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Foreword

It gives me a very special pleasure to write a brief foreword to this excellent work. When, at the University of Pennsylvania in the early 1960s, we established a program of study and research leading to a Master of Arts degree in criminology, one of the first participants was a young man who was to become the first recipient of the degree. He is the author of this work in which the achievement of several aims is sought through a study of the phenomena of crime in Australia during the present century.

Foremost among these aims is the discovery of patterns and trends of crime associated with socio-economic structural and technological changes, such as the growth of the population, its age structure and sex ratios, life expectancy, family stability and urbanisation, as well as the increase in motor vehicle transportation, fluctuations in gross domestic productivity, unemployment, the strength and cost of police forces and prisons. The data assembled on these and many other variables will, it is hoped, provide uninterrupted time series facilitating future research.

The problem facing anyone who attempts to study criminality, especially as it evolves during a long period of time, is the reliability of available data permitting the construction of reasonably accurate crime rates. Nowadays, a few classes of serious crimes reported to and cleared by the police are usually relied upon for that purpose, but such uniform data were available for all states of the Federation only since 1963. Hence the research had to focus chiefly on information about offences found in the reports of the activities of magistrates' courts, which disposed of the vast majority of all offences, and of higher courts which dealt with persons accused of serious crimes against persons and property. In the process, distinct patterns of criminality were found and their nature analysed for several discrete spans of years identified by the occurrence of some special event such as war or economic depression. Some results of this analysis effectively challenge the validity of conclusions reached by earlier studies elsewhere concerning the association between crime and unemployment and crime and the age structure of the population.

The author has meticulously and judiciously analysed the wealth of data he has gathered; his conclusions are stated with the caution characteristic of a mature and experienced scholar thoroughly acquainted with prior research on the matters with which he deals. His findings should give added impetus to the burgeoning efforts to improve and reorganise the criminal statistics of the states and the Federation of Australia.

Gilmanton, New Hampshire
July 1980

Thorsten Sellin

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Acknowledgements

The Board of Management of the Australian Institute of Criminology, by approving my research project in February 1977, provided the initiative for this study. During the following three years the Board showed continuing interest and support. I am indebted to the members of the Board, to Mr F.J. Mahony, OBE, former Chairman, and Mr P.R. Loof, the present Chairman, for offering me the opportunity to carry out this research.

From the very beginning the Director of the Institute, Mr W. Clifford, has shown a keen interest in the project. Conscious of the size of this endeavour, he has been most generous in providing extra staff, equipment and funds to facilitate the study, but above all his help was valuable in the substantive area. In the process of many discussions and in reading through the drafts and the final manuscript he has made substantive comments which have only improved the quality of the book. I am grateful for his support, encouragement and comments.

A research project of this nature and magnitude necessarily involves the assistance and cooperation of many agencies and individuals. I am particularly thankful to the Australian Bureau of Statistics and its state offices, the Police Departments of various states, the Law Department of Victoria, the Solicitor-General's Office in Tasmania and the Reserve Bank of Australia for providing valuable statistics. Most of the data were collected from various libraries and I am grateful to the staff of the Australian National Library, State Library of New South Wales, Australian Bureau of Statistics Library, La Trobe University Library, Australian War Memorial Library and the J.V. Barry Memorial Library at the Institute.

In the initial stages of data collection and tabulation several individuals offered their valuable assistance. I am thankful, in particular, to Mr D. Churchill, Mrs E. Sullivan, Ms A. Waters and Ms D. Zorochich. Thanks are also due to Mr R.W. Fitzgerald who helped to collect data and provide, as required, graphs and tables from the computer.

Some of my present and former research colleagues at the Institute, my teachers and fellow students in the United States, and a few friends in Australia, have made substantial contributions through discussion and comments on the manuscript. In this connection I am grateful to: Mr D. Biles, Dr J. Braithwaite and Mr I. Potas of the Institute; Dr P. Grabosky, Director, and Ms J. Worrall, Statistician, of the Office of Crime Statistics, Adelaide; Dr A. Hopkins and Dr S. Mugford of the Australian National University; Dr B. Schwartz, University of Georgia, Athens, Dr R.A. Silverman, University of Alberta, Edmonton, Dr P.C. Sagi, University of Pennsylvania, Philadelphia, and Professor L.T. Wilkins, State University of New York, Albany.

Dr T.P. Thornberry, formerly a fellow student at the University of Pennsylvania and presently Director of the Research Program in Crime and Delinquency at the University of Georgia, has been of tremendous help since analysis of the data began. He read various drafts with great care, spent days in discussing the subject at his home in Athens, organised a colloquium at the University of Georgia where I presented some of the results of the analysis, and made substantive

and detailed comments which greatly improved the text. His help has been invaluable to the project and I am deeply indebted to him.

Dr Marvin Wolfgang, University of Pennsylvania, Philadelphia, a former teacher and mentor, was appointed honorary consultant to the project. During his visit to Canberra in 1978 and later during my visits to the United States he helped me solve many problems and made many substantive comments. Aside from this particular instance, my long association with Professor Wolfgang and my association with some of his major research projects have had considerable impact on my work. I am grateful, therefore, not only for his contributions to this project but also for his constant and continued interest and guidance in my work over the last two decades.

Professor Thorsten Sellin has been one of my mentors. I have had the privilege of being one of his students, and his classroom lectures and his writings have been most influential in my professional career. I am most grateful to him for writing the foreword.

Special thanks are due to my two associates. Mrs E.N. Jacobsen has participated in the project from the very beginning and assumed a major responsibility in data collection, tabulation, supervision of staff, computerising and editing of the data. She has had the additional responsibility of typing various drafts and the final manuscript. Her familiarity with the data enabled her to prepare the major appendix on sources of data. She has performed these tasks with admirable efficiency and diligence. Mr J.R. Walker joined the Institute in December 1979 and has worked with the utmost efficiency. His assistance in computer operation and advice on statistical problems were invaluable, and his comments on the draft chapters both editorial and substantive made significant improvements in the final manuscript. I am indebted to these two colleagues.

Finally, I am grateful to my life partner, Minoti, and to my son, Sujit, for helping and encouraging me to spend long hours at work which enabled me to complete the study in time.

1 Introduction: the Problem

Crime is not a new phenomenon and it has been a vexing problem for centuries. But how can we really be sure whether today's concern with the increase in crime is due to increased sensitivity to the phenomenon, to increased publicity or to a real increase in the volume of crime? From the variety of means many countries use to combat crime we are made painfully aware that none of these methods has proven successful in containing it; the lack of success tends to make crime look a much graver problem than it is.

When we speak of a relentless upsurge in crime in recent years we implicitly or explicitly make comparisons. In most modern societies, because a large number and variety of statistics are produced, the comparisons are often with previous years and are explicit. Although explicit, these comparisons are more often hazardous than not, whether short term or long term. At the same time compare we must. It is the elaboration of details which makes comparisons more meaningful. Thus, to say that the amount of crime in 1978 is x per cent greater than in 1968 does not mean much unless we also show the changes or lack of them in a variety of other factors which directly or indirectly might affect the level of crime. One could list these factors from the least complex to the most, but they will still be hypothetical until they are substantiated.

One of the basic elements of a comparative study of a social phenomenon such as crime is the changing value system. If we are going to examine present crime data *vis-à-vis* crime data of the past several decades, we must incorporate in our examination the definition of crime in terms of the updated value system. While it may not be entirely true to say that what was crime a hundred years ago may not be defined as crime today, it is beyond dispute that our attitudes towards crime and our perception of it have changed.

Admittedly, 'value system' is a difficult concept and one which attracts theoretical discussion; fortunately many scholars have done this and we can seek to be more pragmatic here. If a value system is, to a large extent, governed by structural and technological developments then one can recount these developments as an indication of how these developments have influenced our life style and reflect new or changed values. These developments instigate changes in values which help create a new social order. Our approach will be to use these indicators. We recognise also the important influence of the political system, but are unable to examine it in this study.

Numerous efforts have been made in the past to study crime and relate it to certain selected aspects of a society, but most of these efforts use cross-sectional data and thus could not ascertain changes over time. Since these aspects change from time to time such studies are generally valid only for the particular period under study. It is the purpose of this research to demonstrate changes in crime with respect to structural and technological changes.

Change in any aspect can be forward or backward. That is, a particular aspect, for example population, may increase or decline. The rate of change may also alter; that is, in some period the population growth may be faster than in another period. Therefore, when one attempts to examine

change, the pace as well as the direction becomes important. And since change does not necessarily take place in a short time it becomes imperative that the time period for a study of change should be as long as possible. Primarily for this reason, the present study covers the period 1900 to 1976. Thus the research attempts to describe changes in patterns of crime since the beginning of this century in relation to structural and technological change. It aims at examining relationships rather than finding causal linkages. It also aims at providing uninterrupted time series data for almost eight decades on a number of variables that would facilitate future research.

We do not attempt a detailed comparison of Australia with other countries as we do not have the time, resources and ready access to data. Nevertheless, the analysis and the findings may be of interest to researchers in countries with comparable structural and technological characteristics. With this in mind basic data on such factors as population, urbanisation, gross domestic product and unemployment were collected for the United States of America and the United Kingdom. We chose these countries mainly because they have common cultural backgrounds, belong to the same side of the political spectrum and have similar economic institutions and policies. Furthermore, data on selected variables for these countries were readily available in Australia.

It is not difficult to identify technological developments which have significantly changed our way of life; transport and communication systems are but two examples. As the impact of these developments has influenced our day-to-day thinking and behaviour, so also has it influenced illegal behaviour. Thus we not only need to define traditional crime in terms of updated value systems, we also need to examine the new crimes and the opportunities for crimes created by the changes in our way of life.

Some of the developments during the last few decades have influenced illegal behaviour directly and others indirectly. The advent and increasing use of motor cars, for example, have contributed directly to a large number and variety of offences. Manslaughters and bodily injury as results of reckless, wanton, or drunken driving are the examples of direct influence; so are thefts of motor vehicles and a large number of traffic offences. It is easier to understand the significance of motor vehicles with the help of figures. In Australia in recent years, of all the homicides charged before courts approximately 40 per cent are manslaughter by driving, and of all the offences charged before magistrates' courts in a year over 50 per cent relate to violations of traffic laws (cases which are settled by on-the-spot fines are not included). Thus the car has not only inflated the number of offences, but more importantly it has broadened the boundaries of the definition of a 'criminal'. Furthermore, cars have made it easier to commit offences such as robbery, burglary and theft. In spite of the heavy cost in life and money, the motor car has become a necessity in the industrialised nations. In Australia, about eight to ten times as many people die of motor accidents each year as homicides, and the number crippled is even larger. Other examples of factors which have changed our way of life and which have relevance to criminality are insurance, banking practices, display of goods in stores, credit cards, and so forth.

We will now describe structural and technological changes in a more systematic fashion, under two sections: demographic transformation and economic growth. Each of the variables presented in a descriptive fashion in the next few pages will later be related to the level and rate of criminal behaviour.

Demographic transformation

Perhaps population (growth as well as structure) is the single most important phenomenon which influences human activity. The association of population with criminal activity is well established. What is not certain, however, is why crimes have increased faster than population. Between 1900 and 1976 the population of Australia increased from 3 765 339 to 13 915 509.[1] The rate of growth was not uniform throughout the period; as may be observed from Figure 1.1, the population has grown faster since the Second World War than before. In 1946 the population numbered 7 465 157 that is, in the forty-six years since 1900 it had increased by 98.26 per cent, a compound yearly increase of 1.47 per cent. Between the war and 1976 the population grew at the compound yearly rate of 2.17 per cent.

Changes in the population were also recorded in other countries though not necessarily of the same order. As Figure 1.1 shows, the growth of

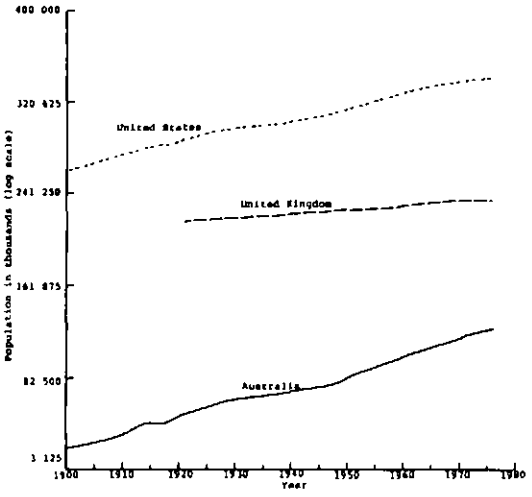


Figure 1.1 *Total population, 1900 to 1976*

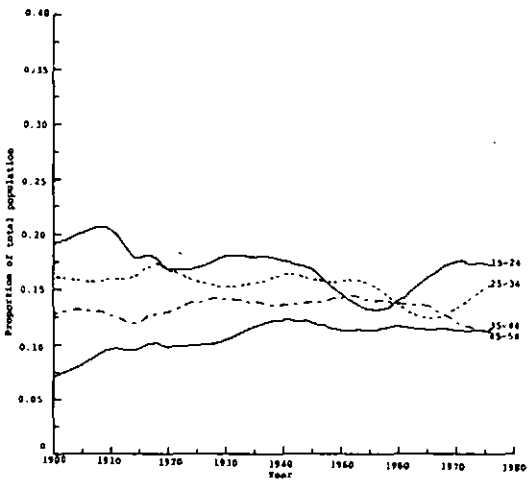


Figure 1.2*a* *Age groups as proportions of total population, Australia 1900 to 1976*

the population was less marked in the United Kingdom than in either Australia or the United States. Even after the Second World War the population of the United Kingdom increased at a compound yearly rate of 0.42 per cent; in the United States the corresponding figure was 1.38 per cent. Of the three countries Australia, with a low base population and proportionately high number of migrants, almost doubled its population since the end of the Second World War.

The age structure of the Australian population has undergone significant changes over the years and the changes in selected age groups are shown in Figure 1.2*a*. It is apparent from Figure 1.2*a* that in none of the age groups has there been a monotonic increase or decrease. Overall there have been net declines in all the age groups except 45-to 54-year-olds. Furthermore, as shown in Table 1.1, the lowest proportions for the first three age groups were obtained in 1941, 1956 and 1966 respectively. We must, however, point out a special feature of the 15 to 24 age group curve. In 1971 the proportion of this age group to total population reached 17.63 per cent and since then there has been a slight decline in this proportion. Many contemporary authors have written on the significance of this age group on socio-economic variables.[2]

Table 1.1 *Age groups as proportions of total national population, Australia*

Age group	*1900*	*Lowest*	*1976*
Under 10	24.97	15.61 (1941)	18.03
15–24	19.14	13.10 (1956)	17.27
25–34	16.14	12.36 (1966)	15.40
35–44	12.78	11.35 (1976)	11.35
45–54	7.05	7.05 (1900)	11.17

In this respect as well, the United States pattern, shown in Figure 1.2*b*, presents similarities with that of Australia. The pattern of age structure was strikingly different in the United Kingdom, Figure 1.2*c*, although the post-Second World War effects on the age structure were similar but less than in Australia and the United States.

Population records in Australia can be traced back to 1788 when the first colony of New South Wales was estalished. For the first few years it

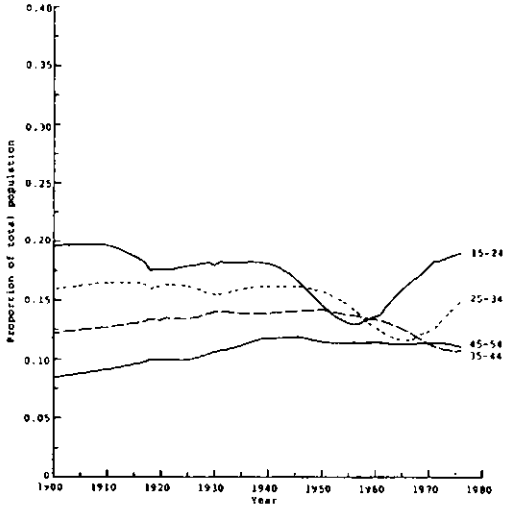


Figure 1.2b *Age groups as proportions of total population, United States 1900 to 1976*

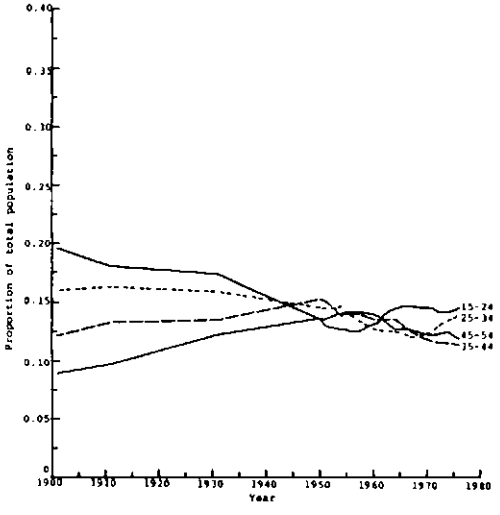


Figure 1.2c *Age groups as proportions of total population, United Kingdom 1900 to 1976*

consisted predominantly of male convicts. The overwhelming preponderance of males in the population continued until the middle of the last century: in 1840 there were 201.75 males per 100 females. This ratio dropped to 110.55 to 100 in 1900 and as can be seen from Figure 1.3 this is gradually declining. There are only two years in the entire twentieth century, 1917 and 1918, when there were more females than males; this was primarily because of heavy casualties during the First World War. In 1976 there were 100.62 males per 100 females in the population.

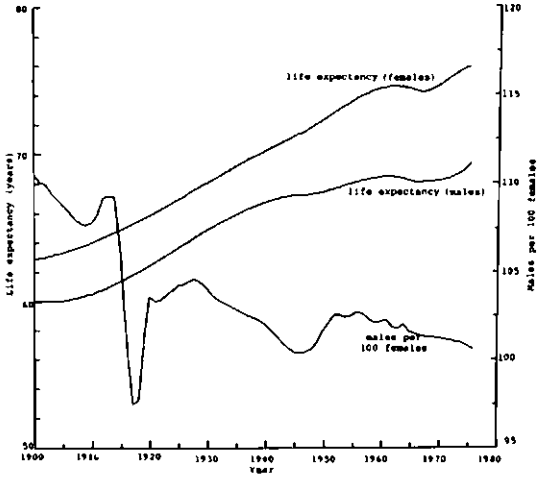


Figure 1.3 *Life expectancy and proportion of males, Australia 1900 to 1976*

The remarkable advances in medical technology and in the standards of sanitation and nutrition have had an impact on longevity. Although a large number of people die of various diseases and accidents every year, the life expectancy of males at age one has increased from 59.98 years in 1900 to 69.37 in 1976 and that of females from 62.88 to 75.96. Figure 1.3 shows that except for a brief period of decline between 1965 and 1969 the life expectancy of both males and females has gradually increased. Similarly, significant improvement has taken place in infant mortality: the rate was about 100 per 1000 live births in 1900 and in 1976 it declined to only 16.

Among the major social institutions the family has undergone far-reaching changes. The consolidation of the nuclear family and increases in divorce, single-parent families and working mothers are mainly twentieth-century phenomena and these have prompted new arrangements at

the family level in most Western societies. Marriage rates over the years have remained fairly stable. For example, for the years 1900 and 1976 the rates were 960 and 964 marriages respectively per 100 000 persons aged over ten. During the Depression the rate declined sharply and during and immediately after the Second World War it increased sharply. Divorce rates, on the other hand, have soared. In 1900 there were 13 divorces per 100 000 persons over ten; the corresponding rate for 1976 was 555 (see Figure 1.4). The dramatic increase in the divorce rate from 216 in 1975 to 555 in 1976 has been explained by the backlog of cases waiting for the introduction of the new *Family Law Act* which came into effect in January 1976, but there is evidence that social changes were taking place before this law and there are now signs of the divorce rate levelling out.

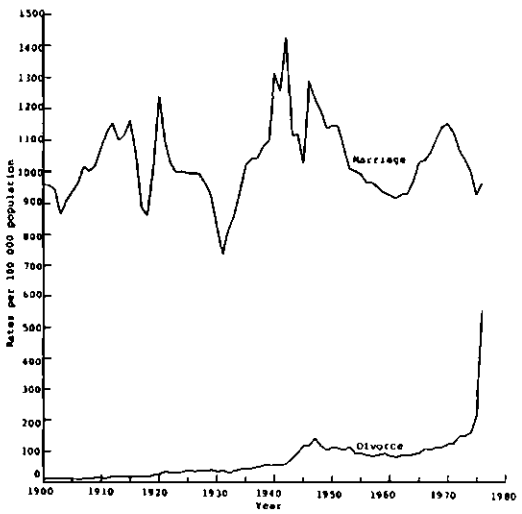


Figure 1.4 *Marriage and divorce rates per 100 000 population aged 10 years and over, Australia 1900 to 1976*

Like many other countries the Australian population was attracted to the urban areas. In 1900 over 56 per cent of the total population lived in urban areas, and of this approximately 67 per cent inhabited a handful of capital cities. With the post-Second World War economic and population growth urban population exhibited a sharp increase (Figure 1.5). But the proportion living in capital cities declined during the immediate post-war years, apparently as a result of the post-war resettlement program. Australia at present is one of the most urbanised countries in the world with about 86 per cent of the population living in a small part of the total area.

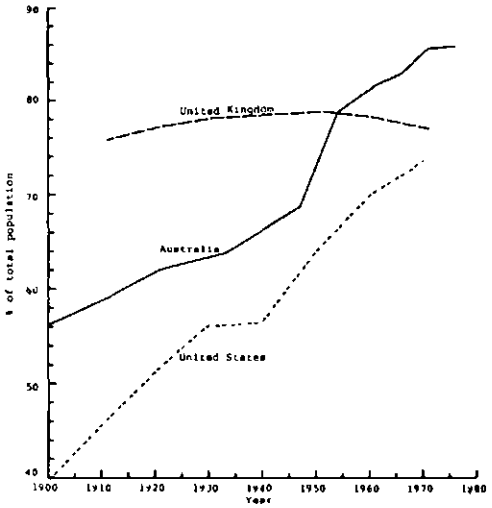


Figure 1.5 *Proportion of total population living in urban areas, 1900 to 1976*

Again the pattern of influx of population to urban areas in the United States was more similar to the Australian pattern than was that of the United Kingdom. In 1970 over 73 per cent of the United States population lived in the urban centres. The United Kingdom has been a predominantly urban nation for centuries. In 1911 approximately 76 per cent of the population lived in urban areas and after a slow increase this proportion began declining after the Second World War.

The above description shows that from the end of the Second World War there were at least two major demographic changes in Australia. The first was the large expansion of population and the second, the rapid concentration of population in urban areas. The implications of these two on the sheer provision of basic infrastructures gives us some sense of the huge economic and social

costs that were required to absorb the population changes.

Economic growth

Economically the growth rate since the late 1940s has been substantial (Figure 1.6). The Australian economic growth rate up to 1939 was characterised by a high degree of instability and the economy was subjected to major fluctuations. The real growth rate of Australian gross domestic product at 1966–67 constant prices was 2.2 for the period 1900 to 1939 and 4.7 for 1948 to 1974, the compound growth rate for this century being 3.2.[3] In money terms it increased from $3150 million in 1900–01 to $33 000 million in 1976–77 and the per capita gross domestic product increased from $836 to $2473 during the same period.

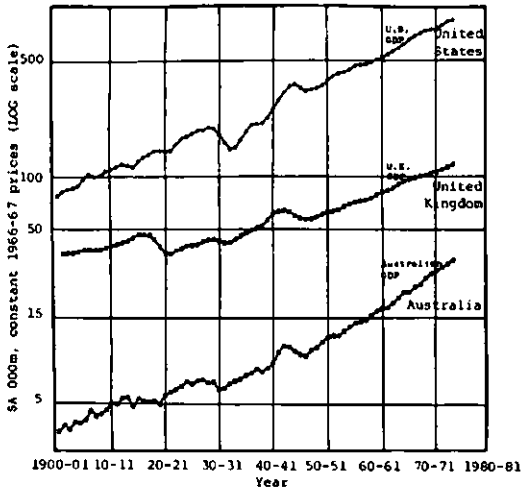


Figure 1.6 *Gross domestic product, 1900–01 to 1973–74*

Source: M.W. Butlin, A preliminary annual database 1900/01 to 1973/74, Research Discussion Paper No. 7701, Reserve Bank of Australia, Sydney, 1977 (unpublished), Figure 1.1. Reproduced with the permission of the Reserve Bank of Australia.

The rate of economic growth in Australia for this century was similar to that of the United States. However, there were differences during specific periods. During and immediately after the Second World War the United States growth rate was higher than that of Australia and this difference continued. The United Kingdom compound growth rate for this century was only 1.6 per cent.[4]

The main effect of the Depression in Australia was on employment, wages and prices; a record 19.74 per cent of the labour force was unemployed in 1931–32.[5] The characteristics of the post-Second World War period were a sustained high level of activity and high prosperity. These were facilitated by post-war reconstruction expenditure and domestic full employment policies. The pursuit of a full employment policy substantially reduced unemployment and ensured the operation of the economy at almost full capacity. As is shown in Figure 1.7, until the mid-1970s the unemployment rate was consistently lower than at any time before. It was also consistently lower than that of the United States.

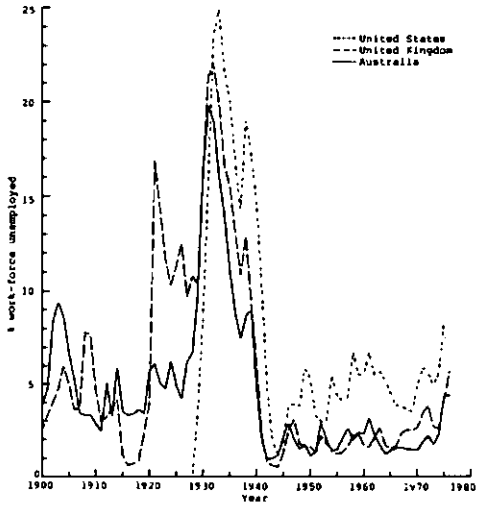


Figure 1.7 *Percentage of workforce unemployed, 1900 to 1976*

The impact of technological change and economic growth on life-style is widely recognised. We mentioned earlier the impact of transportation and communication on our day-to-day life. The products of high technology came within the reach of the masses as a result of general economic well-being and the organisation of various

economic institutions. Motor vehicles were introduced into Australia late last century. In 1921 there were approximately 2500 motor vehicles registered per 100 000 persons and at the end of the Second World War the figure rose to 13 566, that is, one motor vehicle for every seven people. Since the war, however, as shown in Figure 1.8, the number of motor vehicles registered has increased many times: in 1976 the ratio of cars to people was 1 to 2.1.

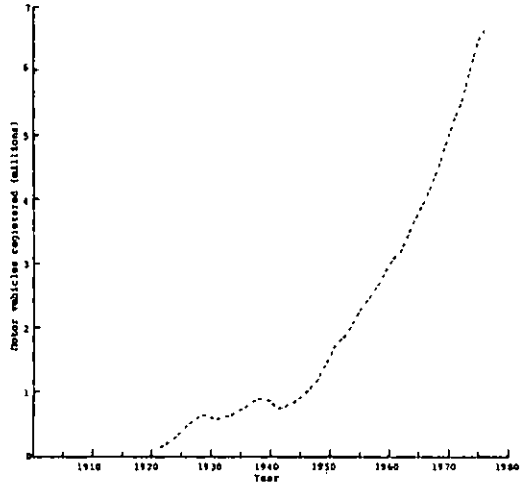


Figure 1.8 *Motor vehicles registered, Australia 1921 to 1976*

The patterns of changes in demographic and economic variables in Australia, the United States and the United Kingdom show that with the exception of proportion of population living in urban areas in the United Kingdom, the three countries demonstrate substantial similarities. The United Kingdom has been a predominantly urban country for centuries. The correlation coefficients presented in Table 1.2 suggest that the changes in these areas have been in the same direction. The underlying structures for the three countries seem to be very similar and hence the analysis constructed for Australia and the findings of this study can probably be extended to other countries with similar backgrounds.

Correlates of crime

We have so far described some major quantifiable social changes and have also implied interrelationships between these; we now discuss briefly these interrelationships with the help of a correlation matrix presented in Table 1.3. Population, as suggested earlier, demonstrates a high positive correlation with every variable except ratio of males to females and unemployment. In the light of the earlier presentation this is not surprising, but what seems important is that this high positive association between population and other variables might confound the association between any two other variables, for example gross domestic product and crime. To give another example, transportation planners have for many years used a curve developed empirically to forecast car ownership. The main features of this curve are a steeply rising section as car ownership spreads among the community, followed by a plateauing of the curve as car ownership reaches a theoretical saturation level. In the steep part of the curve, empirical results suggest that a causal connection exists between average household income and car ownership levels. Thus an increase in the number of cars registered can occur even if the population does not increase at all, so long as income levels

Table 1.2 *Correlation coefficients of major demographic and economic variables between Australia, the United States and the United Kingdom*

	Total population	*Age Group 15–24*	*Urbanisation*	*Unemployment*	*Gross domestic product per capita*
Australia–U.S.	0.994	0.964	0.973	0.816	0.967
Australia–U.K.	0.971	0.857	0.344	0.858	0.988
U.S.–U.K.	0.988	0.768	0.469	0.876	0.955

Table 1.3 *Correlation matrix of major socio-economic and crime variables: annual data, Australia 1900 to 1976 and United States§ 1933 to 1976*

Variable	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*
1 Total population*							.989	−.490	.982			.883	.955
2 Males per 100 females	−.590												
3 Life expectancy (males)	.885	−.727											
4 Life expectancy (females)	.952	−.678	.979										
5 Number of marriages	.949	−.614	.869	.916									
6 Number of divorces	.942	−.559	.811	.885	.938								
7 Proportion of national population urban	.983	−.565	.878	.956	.918	.917		−.607	.959			.826	.935
8 Percentage of work-force unemployed	−.391	.224	−.260	−.367	−.455	−.473	−.464		−.596			−.230	−.312
9 Gross domestic product	.964	−.484	.748	.848	.927	.952	.934	−.449				.916	.966
10 Number of motor vehicles registered* †	.972	−.462	.763	.863	.915	.944	.949	−.409	.994				
11 Total offences* ‡	.966	−.436	.745	.855	.897	.925	.954	−.438	.985	.994			
12 Offences against the person* ‡	.891	−.337	.602	.730	.843	.922	.862	−.456	.971	.965	.960		.971
13 Offences against property* ‡	.942	−.441	.711	.806	.889	.907	.893	−.314	.981	.981	.971	.956	

* Data relate to the six states only; all other variables are national aggregates.
† n = 56 (1921 to 1976). ‡ Number of offences charged before magistrates' courts.
§ The correlation coefficients above the diagonal relate to the United States.

are rising. On the other hand, when saturation is achieved the number of cars registered can only increase with increasing population. Thus, in this example the effects of changes in both gross domestic product and population levels must be controlled to avoid misinterpretation when high correlations are encountered.

Unemployment and the ratio of males to females were found to be inversely related with every other variable. In a data set spanning seventy-seven years these were the only two variables which demonstrated a declining pattern (see Figure 1.3 and Figure 1.7); every other variable, except perhaps marriages, show reverse patterns. Perhaps such changes in varying degrees may have taken place in other countries as well. It is fair to say that these changes have not occurred suddenly; neither have they taken place in a monotonic fashion.

Comparative crime data for the United States and the United Kingdom were not readily available. However, for illustrative purposes data on index crimes against the person and crimes against property reported to the police in the United States between 1933 and 1976 were assembled from various sources. These data were correlated with the United States demographic and economic data.[6] For easy comparison with the Australian results, the correlation matrix for the United States is presented in Figure 1.3, above the diagonal. The similarities between the two countries are remarkable. The differences in correlation coefficients of the two countries lie in the second and third decimal places only. Note, however, that the United States data refer to crimes reported whereas the Australian data relate primarily to the courts. Also the United States data cover the period 1933 to 1976 (forty-four years) as against seventy-seven years for Australia. Considerable caution is therefore necessary in interpreting the results.

Crime and environment

The purpose of this cursory review was to highlight the areas which will be examined in the following chapters. Crime as a social phenomenon cannot meaningfully be examined if studied in isolation. Even if some of the factors may not aid in the explanation of crime, they nevertheless point to the relationships of deeper structures. Furthermore, no matter how carefully one selects the variables, the results obtained will at best be approximations. In social science it is not uncommon to find the relationship of a set of variables reduced if more are added.

Since the variables or the different aspects of our environment mentioned above do not move in the same direction and at the same pace, that is, they exhibit phase relationships, they must combine to produce a different mixture at different times. Thus, the environment in which we live in 1981 is probably conditioned by the same variables as in 1950, but at least some of the variables may vary in strength and direction. If, therefore, one wants to know whether crime today is increasing one must not only examine the crime figures over a period of time but also identify the different environments and phase relations that existed during this period.

The environment, or environmental set as we will refer to it later on, is a complex concept. What we are concerned with are relatively short discernible periods during which significant changes have taken place in our day-to-day activity as well as in our thinking. In a sense, these changes are introduced by certain restraints or stimuli or a combination of both. Examples could be changes in family size, investments, education, leisure activity or travel. These are quite different from aspects such as religion and culture, which take a long time to establish themselves or to change. The emphasis in our definition of environment is on the changes in attitudes and behaviour resulting from people's different responses to the major events which affect their day-to-day life.

The identification of environments becomes possible if one has long-term data. It is difficult to decide what is meant by 'long-term'; in the social sciences at present a seventy-seven year time span is generally as good as one could hope for. Also it is relevant that alongside other socio-economic indicators the predictive reliability of a seventy-seven year curve is greatly enhanced. The main point to be made is that in past attempts to assess crime trends the lack or inadequacy of data for longer periods has frequently lead to a concentration on short-term fluctuations rather than on longer term trends of which the fluctuations are only a part.

Long-term trends

Crime trends are complex phenomena. To merit the name 'trends' they must be based on an analysis of fluctuations over long periods and must be read in relation to other social, economic and even administrative variations. There is the possibility of cyclical changes in society, familiar to early philosophy. A trend represents a 'macro'-level interpretation of data points which does not necessarily take into account independent point-to-point fluctuations. A trend may also consist of a number of cycles which are periodic, regular movements in the data which incorporate point-to-point fluctuations. Since cycles can vary in time and length, at least two full cycles are required to confidently discern a trend — and the longest possible time span is necessary for a trend analysis.

Longitudinal studies on the nature and extent of crime are few and those which relate crime to socio-economic change are fewer still. On the basis of short-term data, for example fifteen to twenty years, several authors have not only compared the volume of crime with socio-economic change but have also made projections for the future. There is a viewpoint among certain scholars that projections must be based on data from a 'normal' period. This position is untenable for a number of reasons and as a result long-term data are needed. First, there is hardly a period which can be defined as 'normal' and if one can identify one, the projections would have to assume that the future for which projections are made will remain 'normal'. As an example one could think of the influences of urbanisation and economic growth. There is a view that these two destabilise the integrative elements which traditionally unite society. As society becomes industrialised, family, kin and ethnic groups lose their importance as sources of social integration, which in the long run becomes dependent upon the economic function of the society. As this interdependence becomes stronger, even minor disturbances in the economy make social integration vulnerable.

Second, a long-term analysis offers information on certain major upheavals the examination of which is highly relevant in assessing present levels of crime as well as the future. We live in a world which is hardly immune from major catastrophes. The twentieth century, like its predecessors, has encountered several such crises. Two world wars, the Depression, the post-war economic and baby booms, and the current recession are the important events. Their direct impact on the economy and population structure cannot be minimised. As well as the actual period during which the event occurred (for example, the Second World War 1939 to 1945), the periods immediately before and after are important. Each event is preceded by a precipitation period and followed by a period of readjustment and stagnation. These periods therefore amount to a substantial part of this century. It is possible to divide the century into several time spans of different lengths and defined by different environmental sets. Examination of crime data in terms of the environmental sets will be a highly valuable exercise. These are not unlike Durkheim's 'social types' and each environmental set is differentiated and measured by a finite number of attributes or variables, but because of the limited number of variables the sets are not complete enough to parallel perfectly Durkheim's theoretical construct of 'social types'.[7]

If, with the aid of a long time series, not only for criminal justice data but also for many other socio-economic and cultural variables, it is possible to detect or delineate basic structures and relationships between criminal justice data and other variables which have either persisted through the entire time span despite the various catastrophes or which have existed in equilibrium for shorter time spans before shifting to another level, then not only is it possible to partly validate these structures upon the data set *per se*, but because these inherent structures have persisted through thick and thin they would form a far more resilient platform upon which to predict further system behaviour than hitherto possible.

Thus, the relationship between variables or the existence of specific environmental sets may demonstrate several patterns: (1) a constant static/dynamic relationship throughout the entire period, that is, a single long-term stochastic process; (2) an erratic (random process) relationship without any discernible pattern; or (3) a pattern of relationships persisting for a duration which may or may not repeat itself, that is, several short-term stochastic processes. Chapters 9 to 12 will seek to determine which of these patterns is most applicable to twentieth-century Australia.

2 Crime Statistics and this Study

Explaining criminal behaviour is not different from explaining non-criminal behaviour. In order to explain human behaviour in general there have been numerous attempts to formulate theories, relying on several of the behavioural sciences, namely psychiatry, psychology, social psychology, sociology and economics, as well as on biology, physiology and medicine. The theories so developed are sometimes reflections of sociocultural intellectualism and what is referred to as a theory may be more like a coherent presentation of the general cultural outlook of the time. Despite all the efforts invested in explaining it, however, human behaviour is still not fully understood; no theory is adequate to explain the whole range of human behaviour, or criminal behaviour in particular.

All the existing theories in criminology seek to explain criminal behaviour, that is, what causes crime. The present study does not propose to offer any theory or approach to explain crime; it is a study of the *pattern* of criminality. In other words, our aim is to identify the occurrence, increases or decreases in particular types of crimes under certain environmental conditions. Criminal behaviour is conditioned by the total environment, and this examination of the phenomenon of crime during the last seventy-seven years will be able to highlight its association with changes in the environment in Australia since the turn of the century. In order to accomplish this task we have opted for a multivariate approach. Since all variables, however relevant, could not possibly be incorporated there had to be a selection and the selection was influenced by recent works and the availability of information. Furthermore, although the environment affects crime through its effects on the individual person, the present study will not deal with individuals as such, but rather with the aggregate of individual criminal behaviour.

In every environmental set there will be one or two factors which will predominate. For example, during the Depression years of the 1930s, economic variables could obviously have played a significant role in the increase or decrease in criminality. Similarly, during war years social cohesion might have neutralised the effect of the usual economic forces. While the psychological impact on people of economic and social conditions during the periods under consideration cannot be ignored, it was not possible for this study to provide the measures which would have been needed to bring them into account.

There are several reasons why the Australian Institute of Criminology decided to undertake such a large-scale research study. First, there has been very little analytic work on patterns of criminality in Australia. Second, there is a tendency in Australia to blame the lack of analytic work on the inadequacies in the existing criminal justice statistics and therefore a stocktaking of existing statistics would be useful. Third, in some parts of the world there has been an increase in the number of research studies on crime patterns over a long period of time which tend to show a sharp increase in crime in recent years. This interest was bolstered by the Fourth and Fifth United Nations Congresses on the Prevention of Crime and the Treatment of Offenders. The Sixth United

Nations Congress held in August–September 1980 gave a prominent place to the study of crime trends. Also the United Nations itself conducted a world crime survey in 1976.

Considering these developments, the Board of Management in its meeting in February 1977 directed the Institute to gather statistics on crime already available in Australia and carry out a research project on patterns and trends of crime. After giving consideration to several approaches it was decided that a study of long-term analysis of crime data in conjunction with the changes in socio-economic aspects would be a most fruitful exercise.

Historical background of official crime statistics

During recent years at least three distinct and significant developments have taken place in analysing and improving crime data: a series of new methods and techniques to collect and present official crime statistics; well-designed and large-scale surveys on victimisation to assess the extent of crime in a society; and the use of advanced quantitative techniques in analysing crime data to address important theoretical issues. While these developments were taking root, the collection and presentation of criminal statistics by official agencies continued unhindered, and in measuring the extent and nature of criminality in a society this set of statistics is necessarily the one on which most studies are based. This study relies entirely on official statistics. We shall examine, therefore, some of the sources and limitations of these statistics.

Systematic collection of information on crimes and their perpetrators began early in the last century, though the need for it was expressed much earlier. The countries which pioneered in the collection of statistics on violations of the law have continued to publish such data, almost uninterrupted, albeit with some changes in the format and content over the years. But from the very beginning the accuracy and adequacy of these statistics were questioned and it was only after more than a century that some systematic alternative methods to assess the extent of crime developed.[1]

Before we discuss sources and limitations of criminal statistics it seems appropriate to trace the history of criminal statistics in Australia. Although a few books published in Australia in the 1970s include chapters on crime statistics, they seldom trace the history of crime statistics.[2] Invariably, when the authors speak of crime statistics, they relate them to police statistics (that is, number of crimes reported or becoming known to police and number of crimes cleared), and they also discuss uniform crime statistics.

Uniform crime statistics, for some reason, are linked with police statistics and this phrase implies a comparable national basis for statistics. If we begin with this perspective it can be said that there were no crime statistics in Australia until the mid-1960s. The initiative of producing nationwide uniform crime statistics was taken at the Australasian Conference of Police Commissioners in 1961, and since 1963 a subcommittee of that conference, with the assistance of a statistician, worked toward this goal. Uniform crime statistics for Australia relating to the years 1964 and 1965 appeared in the *Official Year Book of the Commonwealth of Australia*, 1966, under the heading 'serious crimes'. These covered seven categories of crimes with uniform definitions and counting rules in each jurisdiction. The crimes included were: homicide, serious assault, robbery, rape, breaking and entering (dwellings, shops, offices, etc.), motor vehicle theft and illegal use, and fraud and forgery. This series, which presents the number of offences reported or becoming known to police, crimes cleared, and persons involved by limited age and sex categories, has been published uninterrupted, with minor changes, ever since. In mid-1978 the Australian Bureau of Statistics began a project aimed at standardising crime and justice statistics throughout Australia. This ambitious project, when completed, will make available a minimum data set for each of the five major components of justice statistics, that is, police, courts, prisons, probation and parole. A draft classification of offences to be used by police, court and corrections has been widely circulated. It is understood that from July 1980 all police departments in Australia will participate in this scheme. Although the number of offences to be included in this scheme is much larger than the existing series, it will still be possible to extract data on the seven crime types and thereby maintain the continuity in time series.

If the concept of uniform crime statistics is extended to embrace judicial and prison statistics a lot more can be said. As in most other nations,

nation-wide judicial statistics were the precursor of all justice statistics in Australia. Soon after Federation in 1901, the *Census and Statistics Act* was passed in 1905, and in 1906 the Commonwealth Bureau of Census and Statistics was established. In 1908 the Bureau published the first authoritative year-book incorporating statistics on various subjects for the period 1901 to 1907. Thus, judicial and prison statistics for the entire country appeared for the first time in 1908. Separate statistics were provided for magistrates' courts and superior courts. The magistrates' courts data included the number of persons charged and convictions and committals, with the only breakdown being by state. Convictions for serious crimes (that is, crimes against the person and against property, forgery, and offences against currency) and for drunkenness and their rates per population unit were provided separately. In the case of superior courts, conviction data for all offences were provided separately. This series has continued uninterrupted and there has been practically no change in either content or format.

The data for prisons were presented in two tables and the information included was: the number of prisons, accommodation, greatest number in confinement during the year, prisoners at end of year, and the proportion of prisoners per 10 000 population. Currently, only the last two items of information are published.

Obviously, from a research point of view, the judicial and prison statistics of Australia as published in the year-books may not be adequate, primarily because these series do not provide enough breakdowns. The above is not a complete history of criminal justice statistics in Australia. The year-books provide only aggregated information. If one is disposed to search for published information elsewhere, there is no dearth. Each state in the Commonwealth, through the office of the Goverment Statistician, publishes an annual volume entitled *Statistical Register* or *Statistics*. The state of Victoria, for some reason, stopped publishing statistical registers in 1916. South Australia has recently decided to abandon it but to continue publishing statistics on various subjects in pamphlet form. While we have collected data only from the year 1900, some of the statistical registers go back to the middle of last century. It is quite easy to ascertain the beginning of these registers, but unless we have access to the documents we cannot say confidently when the judicial and prison data were first published. We have not been able to locate all the registers for each year in any one library in Australia.

Appendix A describes the type of information given in the registers. The degree of consistency in content and format between the states and over time is remarkable. One only wonders why in spite of the fact that there is only a handful of users outside the governments, such elaborate statistical series continued to be published, undoubtedly at significant cost. Although over the years the amount of information published has reduced, there is still more than enough. Besides the statistical registers, each state also publishes year-books which contain limited criminal justice statistics.

Inadequacies of official crime statistics

As the techniques of measurement in social sciences attain sophistication the quality and reliability of social data come under greater scrutiny. Thus, the major criticism that official statistics present only a partial picture of crime in a society was put forward in the mid-nineteenth century. The more recent works support this impressionistic assessment with the help of empirical data. Basically, two types of criminological studies are used in this context: hidden-delinquency studies and victimisation surveys. Hidden-delinquency (also known as dark number) studies, although aimed at depicting the true picture of crime, did not fulfil this goal; these studies described the non-reporting of crimes in terms of respondent characteristics. Since the 1940s a number of such studies have been conducted in the United States, Europe and Australia.[3]

Study of victims of crime on the other hand is not a new idea but the systematic use of survey methods in addressing the problem is of recent origin; the first such study was carried out for the United States President's Crime Commission.[4] The recent victimisation surveys also exhibit some of the methodological difficulties encountered in hidden-delinquency studies. However, they provide direct information on the reasons for non-reporting and the attitudes of victims towards law enforcement. A major contribution of the large victim surveys is to measure the extent and nature of crimes that are not reported. Since the early 1970s victimisation surveys with large sample sizes

have been conducted in many areas of the United States; elsewhere the interest is increasing.[5]

These studies, depending upon the credibility we can assign to them, could be of immense value in assessing the volume of crime. Since the large-scale victimisation surveys were taken, the studies on hidden delinquency have gone into the background. The recent proliferation of the surveys can assist in comparing their results with official statistics, but this will not enable us to portray the pattern of criminality over a long period of time; moreover such efforts in the future will depend on the continuation of and refinements in these surveys. There have been relatively few systematic attempts in the past to compare the results of the hidden-delinquency studies and victimisation surveys with official statistics.[6] In Australia only one victimisation survey has been carried out, by the Australian Bureau of Statistics in 1975, the results of which were made public only in June 1979; another survey is expected to be conducted in 1981–82. Thus, the major criticism against the official statistics, that they represent only a part of the totality of crime, will continue to be discussed in Australia in an impressionistic manner.

The earlier impressionistic view and the recent supportive evidence point to the unreliability of official statistics because of variability in reporting behaviour. Also there is variability in the reporting and processing by the police. There is also a point of view which is gathering support among quite a few American criminologists that the official statistics reflect the policies and behaviour of the law enforcement agencies.[7]

Similar views have been expressed by some academics in Australia as well.[8] Besides these arguments, the reliability of official statistics is also conditioned by differences in laws and counting rules in different jurisdictions. The Australian Bureau of Statistics claims that the report on selected crimes is based on uniform definitions and counting rules, but this has been disputed by some authors.[9] These statistical series are also criticised for not including one of the most common crimes, theft; the Australian Bureau of Statistics' current project would solve this problem.

The inadequacies of judicial statistics are of a different nature. The major problem of unknown crimes is not of much relevance, because the judicial statistics are not very often used to estimate the extent of criminality. However, the main problem in the statistics produced by the courts stems from the changing of charges and the recording procedure. Often the police level a charge against a person which subsequently is changed by the court. If we are interested in analysing only court statistics this practice may not pose major hurdles; in the circumstance where comparisons with police statistics are contemplated this could create anomalies. The other point about recording procedure is quite important, especially in a long-term study of a system which consists of several autonomous units. While at the police level it is usually the total number of offences that is reported, the court data may show total number of charges (or offences), one charge in the case of multiple charges, principal charge only, persons charged, or distinct persons charged. In Australia, both these inadequacies are taken care of because the statistics on the results of court proceedings were finally tabulated by the respective police departments in each jurisdiction. The magistrates' courts statistics were produced by the police department in their annual report and subsequently were in the respective statistical registers. Therefore, if there were changes in charges at the court level, these were altered accordingly by the police before statistics were published.

In the same context the major difficulty in court statistics arises when we compare the lower court data with the higher court data. While the lower court data are almost invariably in terms of total number of charges, the higher court data refer to distinct persons tried. Under the criminal procedures of various states a magistrates' court cannot try certain offences and in such cases the magistrate completes the committal proceedings.[10]

This point is of particular relevance to the present study since our primary data relate to court statistics. The committal cases are included in the total offences charged before magistrates' courts, their final outcomes are not. Even though we have higher court statistics, we cannot add the final dispositions of these courts to the magistrates' courts figures; as we mentioned earlier the dispositions relate to distinct persons.

Like the magistrates' courts data, some items of information on prisons have been fairly consistent across jurisdictions and over time. The daily average number of prisoners for each year is the most accepted datum used by researchers and administrators. However, these figures include convicted

prisoners as well as those on remand. This is because:

- separate data for prisoners on remand and convicted prisoners were not available consistently for all the jurisdictions;
- in the states where such data were available, a careful examination showed that on any one day the proportion of prisoners on remand to total prison population was less than half of one per cent;
- our discussions with magistrates and prison officials revealed that an overwhelming proportion of prisoners on remand were eventually convicted and the time spent in prisons was adjusted to the sentence imposed.

Choice of data

A few comments on our choice of the criminal justice data set must be made. The arguments for and against particular data sets have been very ably put forward elsewhere.[11] Views expressed in the criminological literature and research studies on measuring criminality suggest that figures for crimes reported and becoming known to police are the statistics closest to the true volume of crime in a society. In this regard Sellin's oft-quoted sentence, 'the value of crime rate for index purposes decreases as the distance from the crime itself, in terms of procedure, increases', is widely accepted.[12] This, however, has not prevented scholars in the United States from analysing arrest data for the same purpose. There are reasons for using arrest data. The number of crimes reported to police offers us the knowledge on the extent of known crimes but this information does not enable us to measure the extent or level of crime committed by a particular segment of the population. Information on sex and age of the perpetrator is available only when a crime is cleared and the accused apprehended. The emphasis also varies according to countries. Thus, in some countries of Europe judicial statistics are still used for measuring criminality.

It is generally agreed that official crime statistics, whether they relate to crimes known to the police or to arrests, do not offer an understanding of the true extent of crime; they at best reflect public and official concerns and reactions. An analysis of official crime statistics, conducted for a few decades, not only highlights these concerns and reactions but changes in these over time. In the present study judicial statistics form the primary data set for the following reasons:

- statistics on the number of crimes reported or known to police and crimes cleared are not available for the entire period under study and for all jurisdictions. The present uniform statistics on crimes reported relate to only seven selected crimes and cover only about 15 years.

- judicial statistics are available for all the states for the entire period, and these include arrests and summonses. The strength of the judicial statistics is that once a charge is laid it will enter the court records — even if it is withdrawn later or the accused acquitted this will be shown in the judicial statistics. Thus, the judicial data provide information not only on the number of charges but also on their outcomes.

- there exists a high positive correlation between the number of crimes cleared and the number of charges laid before magistrates' courts. Court statistics have the advantage over police statistics that they show police decisions to lay charges, the outcome of each charge, and also offenders sentenced to imprisonment or placed under other corrective treatment programs.

Objectives and scope of this study

In light of the above the main objectives of this study are:

1. To identify distinct patterns of criminality. These patterns will be observed in the variations of the volume of crime across time and within the following stages:
   (a) Magistrates' courts: number of offences charged by types of dispositions and offences, 1900 to 1976;
   (b) Higher courts: distinct persons tried and convicted by two offence categories, 1900 to 1976;
   (c) Police: number of offences reported and cleared by offences, 1963 to 1976;
   (d) Prisons: daily average prison population, 1900 to 1976.

2. To observe patterns in changes in selected exogenous variables.
3. To identify the recurrence of distinct patterns. For example, possible periodicity within each of the groups in items 1 and 2 above.
4. To examine the possibilities of developing models through the search for relationships between the variables on the patterns observed in items 1 and 2, thereby providing groundwork for forecasting.
5. To provide a basis for further research in the area.

The study covers all the six states of Australia; the Northern Territory and the Australian Capital Territory have been excluded because of the incompleteness and inconsistency of the data. These two territories came into existence as separate entities in 1911 but their population for most of the century was very low, currently constituting 2 per cent of the Australian population. Given the peculiar characteristics of these two territories, there seems no major reason not to select only the states as the units of analysis. Table 2.1 provides essential population characteristics of all the eight jurisdictions.

Table 2.1 *Population characteristics as at 30 June 1977*

Jurisdiction	*Percentage of population*	*Population density/km²*
New South Wales	35.22	6.18
Victoria	26.87	16.89
Queensland	15.18	1.24
South Australia	9.07	1.30
Western Australia	8.51	0.47
Tasmania	2.92	6.06
Northern Territory	0.75	0.08
Australian Capital Territory	1.48	86.75
Australia	100.00	1.83

The data

The study is based on official criminal justice statistics which relate to the following stages:

1. *Magistrates' courts.*[13] All offences charged before magistrates' courts in all six states for the entire period and their dispositions by convictions, discharges and committals. For the purposes of this study these statistics have been organised into the following four offence categories. (Offences included under these headings are listed in Table 2.2.)
   (a) Offences against the person;
   (b) Offences against property;
   (c) Offences against good order; and
   (d) Petty offences.

   Considering the interest in the knowledge of movements in specific offences, we will also examine homicide, assault, rape, robbery, burglary, larceny, drunkenness and traffic offences in detail. None of these offence types is exclusive; each includes a number of variations. For example, homicide covers murder, attempted murder, manslaughter, manslaughter by driving, etc. A detailed description of the types of acts dealt with in each of the above specific offences is provided in Table A.6, Appendix A.
2. *Higher courts.*[14] Distinct persons tried and convicted for offences against the person and property for the entire period for all six states.
3. *Police.* As stated earlier statistics relating to total number of offences known to police and cleared are not available in Australia for the entire period. Since uniform statistics are available for a few selected crimes since 1963, the police statistics in this study will encompass the period 1963 to 1976. Also because there were certain major difficulties in classification and counting rules for some of these selected crimes, we were able to study only four offences, homicide, rape, robbery and burglary.
4. *Prisons.* Sentences of imprisonment imposed by various courts by offence types would have been an ideal set of statistics, but unfortunately these were not available in each of the states for the entire period. The only consistent set of statistics available was the daily average number of prisoners and this set is used for the study.

Among the exogenous variables statistics on the following were collected.

1. *Police strength.* Employees of the police departments from the Commissioner of Police of each state to the lowest grade officer excluding public service officers engaged in

Table 2.2 *List of offences included in each offence category**

Offences against the person	*Offences against property*	*Offences against good order*	*Petty offences*
Murder and attempt	Break, enter and steal	Drunkenness	Driving under the influence
Manslaughter	Malicious/Wilful damage	Drunk and disorderly	Driving with prescribed concentration of alcohol in blood
Manslaughter by driving	Larceny other than vehicle or boat	Indecent, riotous or offensive behaviour	Parking and allied offences
Infanticide	Larceny or illegal use of vehicle or boat	Vagrancy	Other traffic offences
Abortion	Stealing from the person	Offensive, threatening or abusive language	Drug offences
Kidnapping and abduction	Horse, cattle and sheep stealing	Evade fare on public vehicle	Breaches of Acts not elsewhere included such as *Public Health Act, Railways Act,* liquor laws, *Local Government Act,* child welfare laws, gaming and gambling laws, revenue laws
Rape and attempt	Embezzlement (including larceny by clerk or servant)	Public mischief	Perjury
Carnal knowledge	Fraudulent misappropriation	Escape from custody	Conspiracy
Incest	False pretences	Conduct scandalous or lewd	Desertion of wives and/or children
Bigamy	Forgery and/or uttering	Hindering/Resisting arrest	
Bestiality	Offences against currency		
Indecent assault	Receiving		
Aggravated/Major assault	Unlawful possession of property		
Inflicting grievous bodily harm	Arson		
Stabbing, shooting or wounding			
Common/Minor assault			
Dangerous driving causing injury			
Administering poison			

* This is not an exhaustive list in the sense that subdivisions of offences such as common/minor assaults and larcenies have not been separated. Over the years and across states there have been numerous classifications of these offences, but the above presentation adequately represents the types of offences included in each of the offence categories.

office management, native trackers, cadets, matrons, bandmaster, choirmaster etc. This represents the actual strength at the end of the year rather than authorised strength.

2. *Police expenditure*. Total expenditure of the police departments of each state for each year.

3. *Prison expenditure*. The total expenditure of the prisons departments of each state for each year.

4. *Population*. Besides total population the following groups were used:
   (a) persons aged 10 years and over
   (b) persons aged 15–24
   (c) persons aged 25–34
   (d) persons aged 35–44
   (e) persons aged 45–54.

5. *Proportion of males*. Number of males per 100 females in the total population.

6. *Life expectancy*. Expectancy of life at age one for males and females.

7. *Marriage*. Total number of marriages for each year as well as marriage rate per 100 000 persons aged 10 years and over.

8. *Divorce*. Total number of divorces for each year as well as divorce rate per 100 000 persons aged 10 years and over.

9. *Urbanisation*. Two measures of urbanisation were used:
   (a) proportion of total population living in urban areas as defined by the Australian Bureau of Statistics; and
   (b) proportion of total urban population living in capital cities or major urban areas. Before 1966 this meant the capital cities of Sydney, Melbourne, Brisbane, Adelaide, Perth, Hobart and Canberra, and after 1966 it included all urban areas with a population of 100 000 and over.

10. *Unemployment*. Average number of persons registered as unemployed as a proportion of the estimated workforce.[15]

11. *Gross domestic product*. Based on 1966–67 market prices.[16]

12. *Motor vehicle registration*. Number of motor vehicles on register at the end of each year. This includes motor cars, station wagons, utilities, panel vans, trucks, buses and motor cycles.

Particular adjustments had to be made especially in the criminal justice data set and the population data in order to address the objectives of the study effectively. Adjustments to the criminal justice data set were as follows:

Magistrates' courts data. As explained in Appendix A, the state-wide data were organised fairly uniformly across states. The five basic categories of offences against the person, against property and against good order, forgery and uttering, and petty offences were maintained in each of the states. Forgery and uttering were combined with offences against property because there were so few cases of forgery and uttering that a separate analysis would not have been justified. Moreover, a large majority of similar offences such as fraud, false pretences, embezzlement, were already included in offences against property and there were no means of separating them. The eight specific offence groups were selected not only because of their seriousness or volume but also because they constituted a major portion of all offences.

Higher courts data. In all states the higher courts data were also organised in the same manner as the magistrates' courts data but a careful examination showed that the cases going to the higher courts were primarily from two major categories, offences against the person and offences against property, so our analysis relates only to these two offence categories. Because the higher court data could not be compared with the magistrates' courts data and because, very often, the actual charges for which a case was committed for trial in the higher courts were changed, no attempt was made to analyse this data in terms of specific offence types. Also significant was the quite small number of cases which were tried at the higher courts for some of the specific offences.

Police and prison expenditure data. During the last decade or so there has been a growing interest in the cost-benefit and cost-effectiveness analysis of the criminal justice system. It has been

argued in many quarters that the abilities of the criminal justice system depend to a large extent on the resources available. Moreover, in the case of prison expenditure, there has been increased incentive to appreciate the cost primarily because of the controversy surrounding the efficacy of imprisonment and the usefulness of alternative methods of treatment. Admittedly the expenditure data are not complete because the figures for courts, probation and parole services were not readily obtainable. The expenditure data were standardised at 1966–67 constant prices based on the method adopted by the Reserve Bank of Australia.[17]

None of the criminal justice data described above demonstrates the age distribution of offenders. The major aim of this study in dividing the population into specific age groups has been to ascertain the movement in crime according to the age structure of the population. Current literature in many countries suggests that individuals in the age group 15 to 24 are overrepresented in the criminal population. This age group and also the three others already mentioned were examined. Usually the crime rate is calculated on the basis of total population in a country. This study deliberately departs from this practice not only because of the variable age of criminal responsibility (which is not 10 in all the states) but also because it is well established that children under 10 do not contribute substantially to the offender population appearing before the courts. Therefore, all

Table 2.3 *Conversion factors for calculating crude rates from rates based on population 10 years of age and over, Australia 1900 to 1976*

Year	Conversion factor	Year	Conversion factor	Year	Conversion factor
1900	0.7503	1926	0.7953	1952	0.8020
1901	0.7648	1927	0.7994	1953	0.7980
1902	0.7690	1928	0.8015	1954	0.7961
1903	0.7719	1929	0.8031	1955	0.7951
1904	0.7743	1930	0.8060	1956	0.7946
1905	0.7762	1931	0.8103	1957	0.7977
1906	0.7773	1932	0.8156	1958	0.7984
1907	0.7768	1933	0.8210	1959	0.7990
1908	0.7767	1934	0.8258	1960	0.8003
1909	0.7763	1935	0.8307	1961	0.8034
1910	0.7783	1936	0.8346	1962	0.8041
1911	0.7825	1937	0.8377	1963	0.8057
1012	0.7845	1938	0.8417	1964	0.8070
1913	0.7863	1939	0.8440	1965	0.8092
1914	0.7856	1940	0.8451	1966	0.8119
1915	0.7813	1941	0.8468	1967	0.8122
1916	0.7733	1942	0.8432	1968	0.8153
1917	0.7677	1943	0.8412	1969	0.8175
1918	0.7671	1944	0.8369	1970	0.8196
1919	0.7703	1945	0.8321	1971	0.8237
1920	0.7754	1946	0.8288	1972	0.8259
1921	0.7804	1947	0.8230	1973	0.8287
1922	0.7825	1948	0.8178	1974	0.8324
1923	0.7854	1949	0.8149	1975	0.8339
1924	0.7894	1950	0.8099	1976	0.8380
1925	0.7930	1951	0.8052		

$r_c(t) = r_e(t) \times cf(t)$
$r_c(t)$ Crude rate per 100 000 population at time t.
$r_e(t)$ Rate per 100 000 population 10 years and over at time t.
$cf(t)$ Conversion factor at time t.

rates given, unless otherwise stated, are based on this legally liable majority of the population. In order to facilitate comparison of these rates with the more commonly used crude rates based on total population, Table 2.3 provides data which includes the conversion factor for each year for the national data set only. By multiplying the rates presented in various tables in the text and appendices by the corresponding conversion factor of that year any reader who wishes can obtain the crude rate.

Analysis of data

Basically two types of analysis will be used, descriptive and inferential. Descriptive analysis will involve the use of rates, base rates, proportions, and polynomial curve fitting. The primary focus of the study will be the national data set but the state differences will also be examined. Inferential analysis will concentrate solely on the national data set and will entail the use of regression, partial correlation and autoregression. With the help of these techniques it is hoped to develop models to examine the patterns observed in the socio-economic and crime data, their periodicity and phase relationship.

3 Quantitative Analyses of Crime Data

In spite of their limitations, the officially published criminal justice statistics are used most commonly by writers and researchers of various persuasions. Thus avowed Marxist writers on the one hand deny the usefulness of official statistics and on the other use those very statistics to support their arguments. This is only by way of illustration; it is not intended to initiate a debate totally out of the context of this study. It is also to explain why the present study is based entirely on statistics produced by the various official agencies.

Official compilations of data on crime have an interesting history. It is generally agreed that France began the first systematic collection of judicial statistics, published by the Compte Générale in 1827[1]. Soon afterwards A.M. Guerry and A. Quetelet made their scientific studies on the basis of official statistics. Quetelet's contributions are significant not only in relation to the quality and reliability of official statistics but more importantly in his consideration of the volume of crime over time. Similarly, Guerry's use of geographical factors in explaining crime rates is considered to be the forerunner of ecological or area studies. During the decades which followed many well-known scholars added their contributions. These works, still based on official statistics, were characterised by their emphasis on the relationship between economic condition and criminality. It is impossible to review all these studies adequately here; D.S. Thomas and T. Sellin, however, have provided us with a systematic analysis of most of these studies.[2]

It would seem that research work of this nature was abandoned for a while. Works that followed (right up to the Second World War) moved in several directions but with the emphasis always on crime causation. Even after the war and until the 1950s, except for a few studies on hidden delinquency, causation studies dominated the criminological scene.

Scholars, researchers and administrators renewed their interest in the measurement of crime in the 1960s. Some of the works during the 1960s and 1970s related to certain specific offences and their scope was limited by the time period and geographical area covered. During this period several 'pattern' studies were carried out in the United States and the United Kingdom, relating to the characteristics of offenders and victims.[3] Although the present study also examines specific offences, its data set and analysis are very different from the information and methods in these earlier explorations of this field.

Indeed the studies that bear some direct resemblance to the present work are very few. The first one is by Shields and Duncan, and examines in detail the figures of crimes known to police in Scotland in 1954–55 and 1961–62.[4] This analysis is preceded by a brief survey of the instances of recorded crimes from the year 1900, and the Scottish data are compared with those of England and Wales. In most of the analysis the authors use percentage differences and differences based on rates per population unit. Crimes known to police and crimes cleared have been related to cities, burghs and counties, and to police strength.

Although the authors postulate the relevance of economic theory in explaining crime, they make no attempt to test this. The major finding is:

> the indubitable demonstration that in Scotland crime is mainly against property and that the recent rise in the crime rate can likewise be principally attributed to rises in crimes of house-breaking and theft, particularly the former, the number of cases of which has almost doubled between 1954–1955 and 1961–1962.[5]

A major shortcoming of this kind of analysis based on an arbitrary selection of two time periods derives from its necessary neglect of the concepts of cycle and trend. Shields and Duncan have selected the first time point as 1954–55 when the level of recorded crime was the lowest in 'recent' times and the last time point as 1961–62 when the recorded crime level was the highest. From Graph 1 presented on page 20 (reproduced below as Figure 3.1), which provides crime rates from 1900 to 1962, one can select innumerable time periods. They have considered at least two more time periods, that is, 1900 to 1927 and 1927 to 1962. In the former period crime actually drops while in the latter period it increases sharply. The authors offer no explanation for recent increases in the level of crime but claim that 'it is difficult to believe that the recent large increases in recorded crimes do not reflect a genuine increase in crime'.[6] Can we therefore say that the increase between 1939 and 1946 and the decline between 1946 and 1953 as shown in the graph were not genuine? Clearly, time series analysis is called for to avoid logical problems of this type.

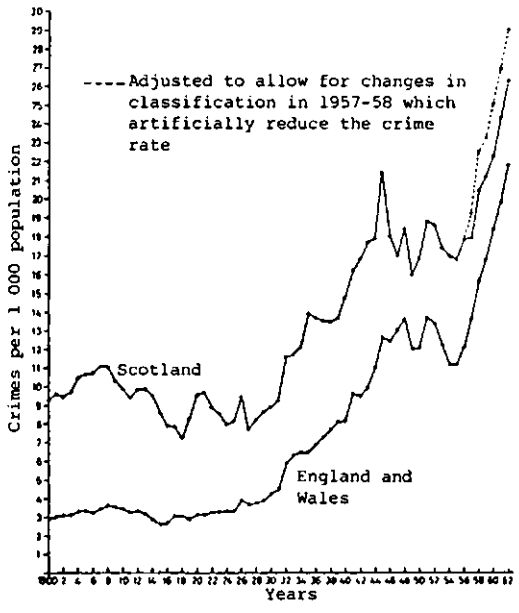


Figure 3.1 *Crimes made known (Scotland) and indictable offences made known (England and Wales) related to population aged 8 years and over, 1900 to 1962*

Source: J.V.M. Shields and J.A. Duncan, *The State of Crime in Scotland*, Tavistock Publications, London, 1964, p. 20. Reproduced with permission of the publishers.

McClintock and Avison's study on *Crime in England and Wales* is similar to that of Shields and Duncan, but its scope is much broader in that it deals with offenders and recidivists as well.[7] Besides arguing that population increases alone cannot account for the faster increases in crime, the findings of this study are similar to those of the Scottish study.

The President's Commission has rendered a signal service to criminological research during the last ten to twelve years.[8] The Commission not only produced a large number of reports and consultants papers, but lent impetus to research in diverse areas. In a paper based on the methodology developed by the Commission, Sagi and Wellford examine the relevance of age structure and crime.[9] They conclude, 'that 30 to 50% of the increase in absolute crime over the years 1958–1964 can be attributed to changing age-structure in the U.S.A'.[10] Although the authors arrive at this conclusion with great caution, many others make this assertion without much research. It is not uncommon to find in current literature the notion that young persons of age group 15 to 24 commit a disproportionately large number of offences. The basis for such observations lie in three factors: (1) a sharp increase in crimes during the 1960s; (2) a direct observation of the age distribution of the offender population at given points in time; and (3) the post-war baby boom which increased the proportion of this age group in the population during the 1960s. This is an observation, however, which cannot be generalised, neither to the past nor to future levels of crime, for it would clearly imply that people of this age group born at any time have equal propensity to commit crimes.

Yet writers often make such assumptions. Fer-

dinand examines the effects of age structure and urbanisation upon Class 1 crimes in the United States.[11] He selected the age group 10 to 24 'because it is very criminally inclined and because in recent years it has increased in size much faster than the rest of the population'.[12] He measures the effects of age structure on crime by calculating 'the volume of arrests that would have occurred in 1965 if the age-structure had remained unchanged since 1950 by multiplying the actual arrest rates in 1965 for each age-cohort . . . by its revised population size'.[13] He arrives at the conclusion 'that 11.6% of the overall increase in arrests between 1950 and 1965 can be attributed solely to changes in age-structure'.[14]

Ferdinand's study has serious limitations. First, he assumes that persons of a particular age group from each birth cohort are equally criminally inclined. Second, he assumes that the age structure of the population represented in the 1950 and 1965 FBI arrest data as well as in the national population were the same. This was one of the major issues discussed in the *Task Force Report: Crime and its Impact*. The report arrived at the conclusion that the assumption 'that the age, place, sex and race characteristics of the population represented in the arrest reports was the same as nationally . . . was patently untrue'.[15] Third, Ferdinand calculates rates on entirely unacceptable reasoning. He claims that the number of persons under 10 years of age in the arrest data was small and that the FBI does not distinguish between 10-year-olds and youngsters under 10. Thus, however small the number of 10-year-olds they were placed in the 10 to 24 age group. This may be unexceptional, but what seems absurd is that in calculating arrest rates for the 10 to 24 age group he uses only the population in this age group, yet while calculating rate for the age group 25 and over he uses the population aged 25 and over *plus* the population aged 0 to 9. By so doing Ferdinand deliberately inflates the arrest rate of the 10 to 24 age group and reduces the rate for age 25 and over. Children under 10 are a significant proportion of total population, currently forming 15 to 18 per cent. If the number of children under 10 arrested was indeed small, Ferdinand should have excluded this population altogether. Finally, he presents no age breakdown of 1950 arrest data and also assumes that the number of arrests increased monotonically between 1950 and 1965.

Blumstein, Cohen and Nagin's work on the dynamics of a punishment process is based on the theoretical framework 'that the standards of thresholds that define punishable behavior are adjusted in response to overall shifts in the behavior of the members of a society so that a roughly constant proportion of the population is always undergoing punishment.'[16] Imprisonment rates from the United States, Norway and Canada for a considerable period have been used to test this hypothesis. The authors observed that the second-order autoregressive process had the highest explanatory power and the data demonstrated trendless time series characteristics. The stability of the data were tested with the help of two models and the authors conclude that the model 'which includes the movements between the law-abiding and criminal populations, results in a better fit between the predicted and actual time series'.[17] The authors suggest however, that in order to explore the adequacy of this model further work is necessary. One of the major limitations of this model is the assumption that the flow rates among the populations are constant. Stability of punishment is closely linked with adaptive behaviour and this needs to be examined at various time periods.

Gurr, Grabosky and Hula published a major work in 1977 entitled *The Politics of Crime and Conflict*. The research carried out in London, Stockholm, Sydney and Calcutta covered a period from the early nineteenth century to the early 1970s. Undoubtedly this book reflects one of the best efforts invested in historically analysing public disorder, and it is extremely well documented. In relation to the data on crime and the types of analysis used, the work is less than satisfactory. The authors hope 'that it will be accepted as a contribution to a new, or at least rare, species of interdisciplinary study in which historical materials are used comparatively to formulate and test general theories germane to critical social issues'.[18]

The major difficulties with the book lie in the types of data, the inconsistencies, simple arithmetic errors and lack of any inferential analysis. The authors claim that the study relates to the four cities. This is not true. For example, in relation to London the crime data relate to the County of Middlesex (including the City of London) from 1820 to 1873 and for the period 1857 to 1974 the crime data relate to the Metropolitan Police Dis-

trict (excluding the City of London). How can one have confidence then that the analysis carried out by the authors reflects the conflict patterns in the City of London during this period? Similarly, the 'Sydney' data is for the whole of New South Wales and the authors observe that 'it is reasonable to assume that patterns of crime in New South Wales are those of Sydney writ large'.[19] This is patently untrue, because by taking New South Wales data to represent Sydney we are underestimating the crime rate of Sydney. It is common knowledge that cities, especially large ones like Sydney, have higher crime rates than rural areas. Also, there is empirical evidence to strongly support the higher crime rates in cities from the victims survey.[20]

Furthermore, in none of the cities have the authors collected one set of data which encompasses the entire period under study. They have used crimes reported to police or number of persons arrested or number convicted by higher courts or courts of summary jurisdiction. These sets of data represent different stages of the criminal justice system and it is known that the cases going to supreme courts are very few indeed and to estimate the rate of conflict with the help of supreme court data is quite misleading.

The deficiencies of the data may be either a reflection of the enormity of the task undertaken or the limitations of the actual set of data available. We can at least say that the data on 'convictions for lesser offences or cases disposed of summarily' (see Table 1.2.2, page 25) are publicly available for the missing period, that is, 1894 to 1913, for New South Wales.

In relation to the offences included in particular categories, for example crimes of violence, the data from the different cities include various crimes. The crimes included for Stockholm relate to murder and manslaughter only, whereas the London data relate to murder, attempted murder, manslaughter and assaults. But in any category of crimes of violence the majority of offences are likely to be assaults. Therefore, comparing London (with assaults) with Stockholm (without assaults) is misleading.

Thus, while the authors may have succeeded in documenting the historical events during the period they have proved poor guides to the reader on the comparability of crime data between the four cities. There is therefore a good deal of unjustified pretention in the concluding section of the book entitled 'The Comparative Analysis of Public Order'. To cite a simple example, on pages 643 to 645 the authors present the trends of crimes of violence and theft among three Western cities. They assume that these offences show trends 'similar enough to be plotted in a single graph'.[21] How can this be if one considers: (1) the figures preceding this section present numerous discontinuities in data — how the authors succeeded in synchronizing the boundaries of this data with their five-year or ten-year moving averages is arithmetically mystifying; (2) the entire method of averaging the ten-year moving averages of three cities and using this to demonstrate a general trend in crime is statistically unsound. Adding the crime rates of three cities and then dividing the total by three does not give an average crime rate. The correct way to average crime rates would be to take the raw frequencies of crime and raw population figures, add them separately for the three cities to calculate the combined rate for each city and then use whatever averaging techniques one desires.

It is also surprising to discover that the authors have not used any inferential techniques to test their hypotheses. Probably they were aware of the limitations of their data but it would seem to anyone slightly knowledgeable on the state of crime statistics that the procedure better suited to this kind of analysis would have been to select a time period for which comparative data are available for all the three cities and then compare the behaviour of the curves by using analysis of variance. Methodologically, therefore, the deficiencies of this study are too numerous for it to be possible to draw any of the conclusions that the authors offer.

During the 1970s there were a few other studies which not only used longitudinal crime data but which also demonstrated the utility of other statistical methods than simple regression techniques. We have cited one by Blumstein et al.[21] There are several others which make significant methodological contributions. For example, Brenner produced a major work in 1976 with emphasis on unemployment as an index of cyclic changes in the economy.[22] Using several 'social stress' variables he evaluates each variable to determine its sensitivity to changes in real income, to changes in rates of inflation, and to changes in rates of unemployment. Brenner finds that all the seven stress indicators are directly affected by changes

in economic variables and unemployment demonstrates the most profound impact. Thus, on the basis of a sound theory, Brenner examined the lagged relations between economic and social indices. In this context he 'hypothesised that increases in pathological indices would occur within five years after the onset of economic trauma'.[23] One of his findings which is of interest is that 'unemployment and inflation were both significantly associated with increased homicide mortality'.[24]

Brenner rightly cautions us on the interpretation of his results primarily because of the methods he has used and the confounding factors that plague social data. This is good sense. It has become a common practice among social researchers to accept social data and use them without examining their limitations. For example, population growth and economic growth have been found to show a high positive correlation. Similarly, increases in gross national product seem to be highly correlated with car ownership. But what do these relationships really mean? Will an economy ever grow as fast as it has during the last two to three decades if the population does not grow proportionately fast? Or again, would car ownership have increased if the population had not increased? What is implied is that population growth in this sense affects at least some other indicators. The need therefore is to isolate the population effects and in a sense 'purify' other data.

In 1978 Fox published an econometric analysis of crime data.[25] Reading Fox's book one receives the impression that he has the ultimate solution to the methodological problems involved in crime data analysis despite the many problems that exist with the work. For example, he thoroughly criticises existing trend analysis without even defining what trend analysis should be. Similarly, he discards the exploration of more complicated polynomial and trigonometric models as superfluous 'because it would be more an exercise in curve fitting than in trend determination',[26] yet he does not hesitate to indulge in an elaborate curve-fitting exercise himself. He does not even offer r^2 values of the fit of the model. Furthermore, we find very little difference between his two-segment model and a simple parabola; r^2 in both is about the same. In fact, a parabolic fit (r^2 = 0.97) is better than either part of his two segments.

Several other research projects, with similar perspectives, are currently underway, one of them in Canada.[27] It is difficult to comment on a number of these because sufficient information was not available at the time of writing. However, mention must be made of a particular approach to time series data stimulated mainly by the work of Box and Jenkins.[28] This method, generally known as spectral analysis, seems to have evolved a most promising technique in criminology, especially in analysing long-term time series data. Spectral analysis is a statistical technique which decomposes time series data into a number of frequency components or cycles. Efforts are then made to examine the contribution of each cycle to the variance of the total series. It also tests the null hypothesis that the time series is a random occurrence or generated by 'white noise'. Furthermore, cross-spectral analysis allows us to examine the coherence and phase relationships between pairs of variables.

The method of spectral analysis was originally used in such fields as oceanography, meteorology, engineering and physics; in social science its use is relatively recent. The two studies which stand out distinctly in the field of criminology are those by McPheters and Stronge[29] and by Vigderhous[30]. The former used the monthly data of reported crimes of robbery, assault, burglary, larceny and car theft for the city of Tampa, Florida, from January 1961 to December 1972. Their study showed

> that the crime series examined were not generated by a random process and were significantly different from white noise over most cycles. Such offences are systematic in nature and, thus, may be potentially forecast and, hopefully, deterred.[31]

McPheters and Stronge also used cross-spectral analysis to examine the relationship between pairs of crime variables. They observed that the crimes of robbery and burglary present different influences. Furthermore, the authors did not find any timing lead or lag for any offence type.

Vigderhous analysed United States homicide rates based on monthly data for 1963 to 1974 and yearly data for 1900 to 1974. On the monthly data he observed that 'homicide rates, when examined on a time series basis, reflect strong seasonal variations'.[32] His second conclusion was that 'at 95% confidence levels, peaks occurred in the

spectral density function that at short time periods — e.g., 2.4 and 3 months — were statistically significant'.[33] McPheters and Stronge also reported similar conclusions. Vigderhous continuously speaks of long and short time series which do not necessarily correspond to long or short time spans but to fewer or larger number of observations. Consequently he used monthly data for 1940 to 1974, offering him 420 monthly observations. He found significant peaks at high frequency corresponding to 2.85 months but no significant peaks at low frequencies such as six or twelve months or more. In annual time series data he observed only a small peak corresponding to a six-year cycle and states that 'the lack of significant peaks at the annual level is consistent with the general interpretation that no "long swing" cycles are observed for homicide rates'.[34]

Vigderhous's interpretations cannot stand unqualified. Conceptually it is quite possible to obtain larger cycles. A high spectral density of frequency zero might also suggest that the cycle length encompasses the entire period under study, provided the time series is stationary. Given that crime data manifest strong trends (are non-stationary) such trends must be removed by a suitable filter. Godfrey has pointed out that for non-stationary time series it is often true that the final results depend more on the filter used than anything else.[35]

This brief review confirms two observations: that studies of patterns of criminality over a long period of time have been few; and that there exist a number of techniques which could be used to analyse long-term trends in crime. Examination of cyclic or other patterns in crime presupposes the analysis of data over a long period of time and with the help of suitable techniques. Some of the works cited in the review did not use long-term data and some did not use appropriate inferential techniques. But a few studies, particularly in the 1970s, used both and they present definite potential. There is, however, one aspect which makes comparability of results hazardous, that is, the use of different sets of data. Only time and continued research can rectify this limitation.

The main task that remains, then, is the utilisation of appropriate statistical techniques to analyse our data. Observing fluctuations in crime and the existence or nonexistence of any regularity in the patterns still remains a major task. To this end, we would like to offer our results obtained through several techniques with a hope that these will contribute to the existing knowledge.

4 The Police and Crime

In this and subsequent chapters the patterns of crime in twentieth-century Australia will be described and analysed. For various reasons (cited in Chapter 2) most authors have used the number of crimes reported or becoming known to the police as a basis for estimating the extent of crime in a society. Unlike other studies on the subject, however, court statistics rather than police statistics form the backbone of this study. Nevertheless, the comprehensive title of this volume demands that at least a brief description of the patterns of crimes known to the police be presented.

Unlike the court statistics, police statistics published in Australia relate only to a selected group of serious crimes known and cleared for a brief period of time. Also, because of problems of definitions across jurisdictions all seven crimes on which published data are available could not be considered for this chapter and therefore only the crimes of homicide, rape, robbery and burglary are examined here.

There has not been any systematic long-term study on crimes known or reported to police in Australia. This was not possible because of a lack of uniform statistics. The only victimisation survey carried out in Australia was in 1975; the results were made public in June 1979. This survey included 8414 households and 18 694 persons aged 15 years and over. In a comparative analysis Braithwaite and Biles observe that the

> crime rate estimated from the National Crime Victims Survey varies from just under twice as high as the rate based on police records of reported crime in the case of break and enter, up to 16 times as high in the case of rape.[1]

There are, however, some limitations in such comparisons; the major one is the denominator used for calculating rates. In the official statistics the total population is used whereas in the victimisation survey the rates were based on population aged 15 years and over (in recent years the population of those under 15 years of age has been approximately 30 per cent of the total Australian population). Besides, there are difficulties specific to particular offences. Unless carried out on a regular periodic basis these surveys offer limited utility.

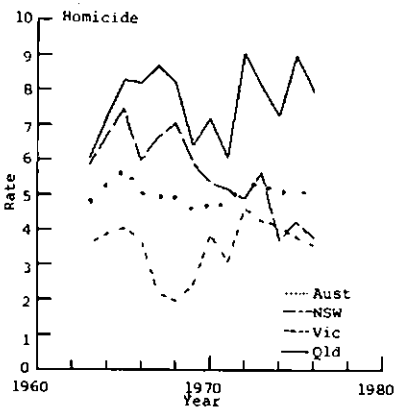
Crime rate

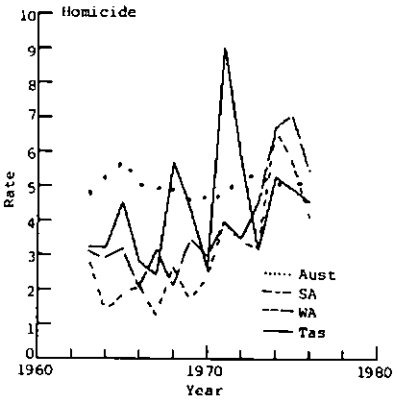
The pattern of known crimes in the past decade and a half reveals that of the four crimes, robbery and burglary increased significantly, the offence of rape increased gradually, and homicide had no marked movements up or down. Data for homicide, robbery and burglary for the period 1963 to 1976 are presented in Table 4.1 and Figure 4.1

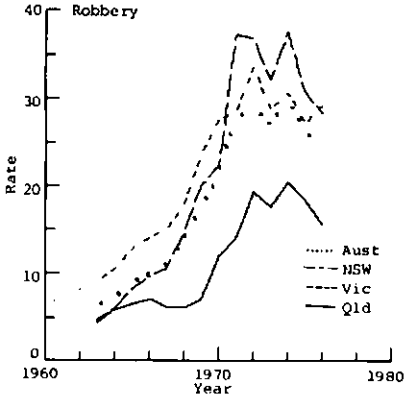
During the fourteen-year period the Australian reported homicide rate has varied between 4.4 and 5.7 per 100 000 population aged 10 years and over. The data, albeit for a short period, did not suggest any substantial increase or decrease in homicide rates. This finding is confirmed when the statistics in the six states are examined. Victoria, South Australia and Western Australia show generally lower rates than the national aggregate and in Queensland the reported homicide rates have always been higher than any other state. The data for Tasmania show some erratic

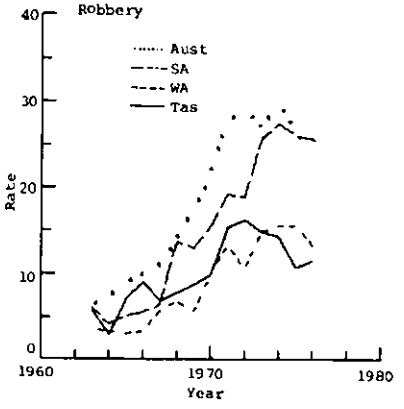
Table 4.1 *Selected offences reported to police per 100 000 population aged 10 years and over, 1963 to 1976*

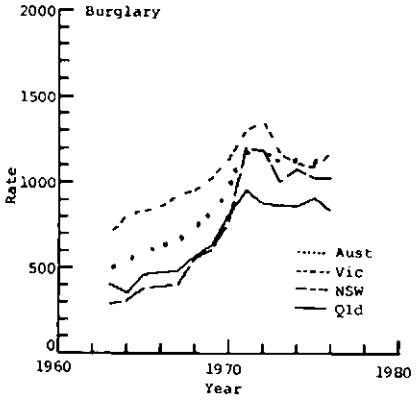
Year	Australia	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania
				Homicide			
1963	4.63	5.85	3.58	6.04	3.09	2.91	3.24
1964	5.12	6.66	3.87	7.19	2.89	1.35	3.19
1965	5.72	7.44	4.03	8.28	3.17	1.82	4.55
1966	4.90	5.96	3.69	8.18	2.07	2.09	2.76
1967	4.82	6.63	2.17	8.66	3.15	1.24	2.38
1968	4.93	7.03	1.94	8.16	2.09	2.65	5.71
1969	4.41	5.91	2.42	6.40	3.45	1.67	4.31
1970	4.65	5.34	3.84	7.18	2.97	2.33	2.62
1971	4.60	5.16	3.06	6.04	3.96	3.96	8.39
1972	5.18	4.87	4.58	9.02	3.47	3.39	5.75
1973	5.23	5.62	4.23	8.08	4.51	3.20	3.15
1974	4.92	3.70	4.08	7.24	6.69	6.65	5.27
1975	5.23	4.20	3.76	8.97	7.07	5.71	4.89
1976	4.55	3.77	3.52	7.91	5.45	4.10	4.53
				Robbery			
1963	5.98	4.68	9.13	4.35	6.06	3.60	5.76
1964	6.79	5.93	10.56	5.93	4.10	3.21	2.84
1965	8.55	8.16	12.81	6.50	5.05	2.98	7.00
1966	9.68	9.62	14.16	7.04	5.51	3.21	8.98
1967	10.30	10.58	15.03	6.07	6.29	5.56	6.81
1968	13.49	14.73	17.91	6.14	13.76	6.77	7.73
1969	17.10	20.04	23.79	7.03	12.95	5.55	8.62
1970	20.30	22.23	27.74	11.97	15.48	9.85	9.81
1971	27.16	37.22	28.50	14.14	19.20	13.43	15.48
1972	28.86	36.80	33.63	19.32	18.76	10.40	16.29
1973	26.43	32.04	28.75	17.59	25.65	14.85	14.79
1974	29.57	37.50	30.70	20.34	27.43	15.63	14.25
1975	25.59	30.75	27.26	18.42	26.06	15.62	10.69
1976	24.60	28.36	29.25	15.59	25.62	13.36	11.47
				Burglary			
1963	475.51	286.64	694.02	397.06	622.38	509.10	623.91
1964	517.70	300.60	803.95	347.72	604.91	494.64	707.49
1965	571.88	373.48	834.66	462.73	719.50	568.61	639.74
1966	615.63	389.88	855.23	474.63	905.89	770.75	585.55
1967	626.63	393.17	930.25	481.71	796.29	677.43	721.46
1968	723.38	546.75	952.13	566.19	771.74	996.27	736.34
1969	796.57	603.82	1026.72	636.54	910.18	1009.47	933.00
1970	928.05	767.75	1139.60	810.36	1004.49	1046.46	980.83
1971	1175.49	1203.47	1303.40	951.74	1282.47	962.51	986.98
1972	1177.71	1184.11	1352.36	871.86	1268.57	1125.52	875.80
1973	1090.11	1002.81	1166.59	864.29	1330.05	1321.21	1217.30
1974	1131.52	1082.87	1105.85	862.29	1435.55	1644.60	958.57
1975	1096.95	1024.41	1091.48	915.97	1355.15	1509.48	991.70
1976	1116.75	1026.82	1176.27	824.30	1386.08	1518.46	1181.76











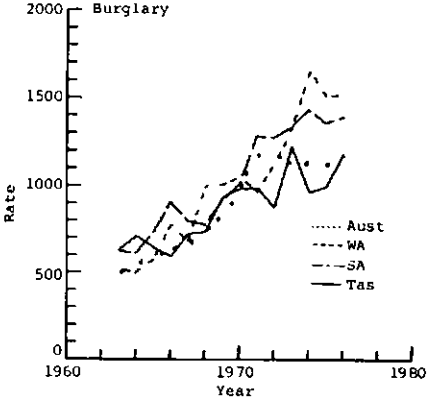


Figure 4.1 *Selected offences reported to police per 100 000 population aged 10 years and over, 1963 to 1976.*

fluctuations, which in part can be attributed to the smallness of the state with the slowest population growth, as a small change in absolute number of homicides could account for a noticeable change in rates. The short-term data demonstrate peaks and troughs and if these appear over two to three years, as seems to be the case, one can expect the homicide rates to increase slightly in the subsequent years. An examination of the clearance rates shows that on average about 95 per cent of the homicides are detected and brought before the courts.

Of the four offences described here, the offence of robbery shows the sharpest increase. At the beginning of this series, that is 1963, the Australian reported robbery rate was about 6 per 100 000 persons aged 10 years and over; in 1974 the rate reached a peak of 29.57 and was down to 24.6 in 1976. The two largest states, New South Wales and Victoria, have the highest robbery rates; these two states also contain the two big cities of Sydney and Melbourne — no other state has a city of comparable size. Detailed research carried out in Sydney and Melbourne suggests that robberies in general and armed hold-ups in particular have increased sharply in the two cities from the 1970s and that an overwhelming proportion of the states' totals for these offences occur in these two cities.[2] It is probable that city size and density and the location of industries which require the services of a large number of economic institutions create and exacerbate the opportunities for robberies. The low reported robbery rate and its slower increase in Tasmania support this argument. The states of Queensland, South Australia and Western Australia each has a city whose population is approaching a million and their rates of increase in reported robberies have been fairly similar. Also in these three states the highest robbery rate was obtained in 1974. Since 1974 a slightly declining pattern of reported robberies is observed in every jurisdiction.

The reported rate of burglary, which is many times higher than robbery, has increased by more than 100 per cent between 1963 and 1976. But, except for South Australia and Western Australia, this increase continued up to about 1971 and thereafter the reported burglary rate in Australia has been suprisingly stable. In the three largest states, 1971 was the year in which the highest burglary rates were recorded; in South Australia and Western Australia the highest rates were obtained during the last three years. Although the recent reported burglary rate is one of the lowest in New South Wales, the rate of increase in this state has been the fastest.

Clearance rate

The reported offence rates for robbery and burglary have increased substantially since 1963. One of the distressing factors has been the declining clearance rates. In 1963 over 49 per cent of robberies and approximately 38 per cent of burglaries reported to the police were cleared; in 1976 the percentages were 31 and 19.5 respectively. All offences cleared do not result in charges, unfounded cases are also classified as cleared.

A discussion of the clearance rate must take into account the objectives of law enforcement. In global terms the maintenance of law and order, thereby offering greater public satisfaction, could be considered the main goal. This again is conditioned by numerous factors. As has been shown, apart from homicides, crimes reported to the police have been increasing in number. At the same time, the number cleared is going down, but the ratio of offences cleared per police officer has remained fairly constant for high-frequency crimes such as burglary. Consider the data in Table 4.2. In 1963 the number of burglaries cleared per police officer was 0.97. This figure reached a low of 0.82 in 1967 and a high of 1.06 in

Table 4.2 *Number of offences cleared per police officer, Australia 1963 to 1976*

Year	Robbery	Burglary
1963	0.016	0.974
1964	0.018	0.847
1965	0.023	0.850
1966	0.023	0.836
1967	0.023	0.820
1968	0.025	0.915
1969	0.032	0.965
1970	0.039	1.040
1971	0.039	1.059
1972	0.039	1.058
1973	0.036	0.999
1974	0.040	1.030
1975	0.037	0.984
1976	0.034	0.973

1970 and 1971. For robbery the situation is slightly different in that there has been an almost monotonic increase in this ratio. This brings to mind at least two possible explanations: (1) the time at the disposal of police officers is limited and they can attend to only a finite number of cases; and (2) a low-frequency, high-violence offence will attract higher attention from police, resulting in a higher number of offences being cleared. According to (1), the larger number of offences can be cleared only if the size of the police force is increased. If (2) is true, then with police strength remaining constant the number of offences cleared per police officer should reduce, but this obviously has not happened.

This situation would tend to suggest that the police do not have to investigate all the offences reported. There are systematic selective criteria used to screen offences before initiating investigation. These may depend upon the nature of the offence among other things. In the case of burglary this could be the amount of property damaged and stolen and in the case of robbery the amount of violence used. Quite often 'stealing from the person' is included in robbery and it is possible that when such an offence is cleared it is placed under ordinary larceny. In any case a more accurate clearance rate can be obtained if this is based on the number of offences investigated rather than on the number of offences reported.

Finally, as is well known, over the years the police have assumed responsibility for activities which cannot squarely be placed under 'criminal justice activity'. Also, as will be shown in the next chapter, violations of certain types, for example, traffic offences, which were relatively infrequent before the Second World War, have increased tremendously and now take up a large proportion of police time. As a result, although the size of the police force has increased, it seems the extra police time thus available could not be used in crime control and detection function. Another aspect which may seem highly contentious is that traffic and drunkenness offences, which form a large majority of all offences known to police, also have over 95 per cent clearance rates. Therefore, by increasing police time in these areas significant increases in overall crime clearance rate can be obtained. Undoubtedly, from the police productivity point of view, this has obvious advantages.

The reported rate of rape has doubled during the period 1963 to 1976. Rates based on male population aged 10 years and over show that like the three offences described above there has been a sharper increase in reported rape during the 1970s than before. As in the case of robbery, the clearance rate of rape has dropped from about 92 per cent in 1963 to just over 67 per cent in 1976.

Comparison with other countries

In Australia there is a very strong interest in comparing crime figures with those of other countries. While it is hoped that the difficulties in such comparisons are well understood, the statistics presented in Table 4.3 are an attempt to satisfy this interest. It is clear from the statistics that among the five countries Australia presents the second lowest reported crime rate for all four crime categories. Also, reported rates for robbery and burglary in the most recent years are the lowest, compared to other countries. In the United States the crime rates for all the offences have been far higher than in the other four countries. The Australian homicide rates are similar to those in Canada and West Germany; rape rates are similar to rates in Canada; and robbery and burglary rates are comparable to those of the United Kingdom. As stated above these conclusions must be considered with caution.

Police resources

It is generally recognised that police staffing levels and expenditure are associated with the crime rate and the crime clearance rate. In a recent study Fox asserts that:

> The size of the police force and the police expenditure also influence the crime rate, but only through a causal chain intervened by the clearance rate. Therefore, appropriations that increase manpower should assist in reducing the crime rate, but only to the extent that the clearance rate is boosted.[3]

In an effort to forecast Canadian crime statistics for the years 1978 to 1984, Hasenpusch arrives at the following conclusions:

> An increase or decrease in the number of police officers per 1000 population and in the clearance rate for all offences would probably have little or no effect on the number of homi-

Table 4.3 *Number of offences reported per 100 000 total population for selected countries, 1963 to 1978*

Year	Australia	United Kingdom	Canada	United States	West Germany	Australia	United Kingdom	Canada	United States	West Germany
			Homicide					*Rape*		
1963	3.7		2.0	4.6	2.3	3.0			9.4	11.4
1964	4.1		2.1	4.9	2.5	3.2			11.2	10.6
1965	4.6		2.2	5.1	2.6	3.3			12.1	10.0
1966	3.9		2.1	5.6	3.0	2.8			13.2	10.2
1967	3.9	0.7	2.4	6.2	3.2	3.7			14.0	10.4
1968	4.0	0.7	2.4	6.9	3.0	3.9			15.9	10.5
1969	3.6	0.7	3.1	7.3	3.3	3.8	1.8		18.5	11.1
1970	3.9	0.7	3.4	7.9	3.9	4.3	1.8	5.0	18.7	11.2
1971	3.7	0.8	3.7	8.6	4.0	4.9	1.6	5.7	20.5	10.7
1972	4.2	0.8	4.3	9.0	4.4	4.7	1.8	5.9	22.5	11.4
1973	4.3	0.8	4.6	9.4	4.3	5.5	2.1	7.2	24.5	11.3
1974	4.1	1.1	4.9	9.8	4.4	5.4	2.2	8.1	26.2	11.4
1975	4.4	0.9	5.9	9.6	4.7	5.7	2.1	8.1	26.3	11.1
1976	3.9	1.3	5.9	8.8	4.5	6.3	2.6	7.9	26.4	11.3
1977	3.6	1.4	5.8	8.8	4.2	6.4	2.0	8.0	29.1	11.0
1978	4.0	1.4	5.7	9.0	4.1	5.9	2.5	8.5	30.8	10.8
			Robbery					*Burglary**		
1963	4.7			61.8	11.7	374.2	450.2		576.4	465.5
1964	5.3			68.2	12.4	409.3	480.6		634.7	514.0
1965	6.8			71.7	13.0	452.8	519.2		662.7	510.8
1966	7.7			80.8	15.1	486.9	566.9		721.0	668.4
1967	8.2			102.8	16.3	499.8	547.2		826.6	748.9
1968	10.8			131.8	16.2	577.6	589.8		932.3	765.1
1969	13.7	12.4		148.4	18.9	639.0	864.4		984.1	769.3
1970	16.5	12.9	54.4	172.1	21.5	750.4	886.4	831.3	1084.9	1050.8
1971	21.8	15.3	51.8	188.0	25.3	944.2	927.6	869.2	1163.5	1330.2
1972	23.3	18.3	54.2	180.7	30.5	948.0	901.3	874.6	1140.8	1472.1
1973	21.4	15.1	59.6	183.1	29.5	884.2	807.7	896.3	1222.5	1448.1
1974	24.1	17.8	75.5	209.3	30.6	919.6	993.9	1039.6	1437.7	1581.0
1975	20.8	23.2	93.4	218.2	32.9	894.7	1072.0	1143.2	1525.9	1689.4
1976	20.1	28.0	86.8	195.8	31.6	914.3	1230.0	1161.1	1439.4	1716.3
1977	21.1	27.1	83.6	187.1	34.6	983.5	1191.4	1162.0	1410.9	1844.6
1978	24.9	25.9	83.7	191.3	35.3	1120.7	1115.8	1185.9	1423.7	1972.4

* The figures for West Germany relate to 'theft under aggravating circumstances'.

Sources: Australia: Annual Reports of Commissioners of Police of all the six states and two territories, 1963 to 1978.
United Kingdom: *Criminal Statistics England and Wales*, 1971 to 1978.
Canada: *Crime and Traffic Enforcement Statistics*, 1971 to 1978.
United States: *Uniform Crime Reports*, 1963 to 1978.
West Germany: *Polizeiliche Kriminalstatistik*, 1976, 1977, 1978.

cides, rapes, assaults, frauds, thefts, and on the total number of offences recorded. However, greater police efforts (Scenario II) are likely to result in lower rates of wounding, breaking and entering, and overall criminal code offences, while the number of car thefts reported to the police and the number of offensive weapon infractions detected by the police would presumably increase. A decrease in police officers per 1000 population, together with a fall of the clearance-rate (Scenario III), on the other hand, would in all likelihood lead to lower reporting rates (and possibly to more primary prevention efforts and even vigilantism on the side of dissatisfied citizens) and thus to a falling number of criminal code offences, thefts of motor vehicles, and break-ins recorded, while the number of woundings would probably grow drastically.[4]

Henry Pontell observed high zero-order correlations (ranging from 0.88 to 0.92) between police resources (number of police officers and expenditure) per capita and felony crime rate in California.[5] There have been a number of other attempts to examine the impact of police expenditure on crime rates.[6]

Although the research studies cited above have dealt with the issue of relationship between police resources and crime rate with considerable methodological sophistication, none of the studies has examined the two fundamental issues, that is, the organisational ethos of various police departments and the ratio of civilian to operational police personnel. Admittedly, these are difficult issues and perhaps could not have been examined within the limitations of the studies. Neither of these two issues is easily assessable and at the same time both of them may have far-reaching consequences on crime clearance rates. The general impression one obtains from the current literature is that an increase or decrease in police resources will have similar consequences on clearance rates. In a sense, this conclusion is obvious in Fox's work.

One of the major limitations of the United States research studies is that the examination of relationship between police resources and crime is restricted to index crimes only. It is well known that especially in recent years a significant portion of police resources has been invested not only in minor crime control activities but also in non-criminal-justice activities. Therefore, whether an increase in police resources will have concomitant effect on crime clearance rates depends largely on where the increased police resources are allocated. The allocation of resources will be dictated by organisational imperatives, which may change over time as well as with the change of police chiefs. Similarly, two police departments may have completely different approaches to dealing with certain types of acts.

On the issue of the ratio of civilian to operational police personnel, it is submitted that in recent years the number of police department employees undertaking desk work has increased substantially. Thus, an increase in the police force need not necessarily mean an increase in the number of operational personnel. In this context it could be misleading to relate the total number of police (or police per capita) to the crime rate.

The organisational ethos of police departments is an issue which requires detailed review and could form a large research study by itself. The ratio of civilian to operational police, on the other hand, can be examined. In the following discussion of police strength and expenditure an attempt has been made to deal with this problem. In calculating police force strength in each of the six states, public service officers engaged in office management, native trackers, cadets, matrons, bandmasters and choirmasters have been excluded. Therefore, the number of actual police strength at the end of the year reflects only uniformed personnel from the rank of Commissioner of Police down to the lowest grade officer. Although this procedure is an advance over other works, it only partly resolves the issue under consideration. There are uniformed personnel some of whom perform office duties and are not therefore engaged in operational activities, and it is difficult to obtain their number for the entire period under study. The expenditure data in the present study have been standardised to constant 1966–67 prices. In this case too some research studies, for example Pontell, have used expenditure in current prices, whereas Fox has used expenditure in terms of 1974 constant dollars. In a comparative study over time the importance of the inflation factor must be taken into account.

Size of the police force

Table 4.4 shows police strength per 100 000 persons and police expenditure per capita at constant

Table 4.4 *Police strength per 100 000 total population and police expenditure per capita (at constant 1966–67 prices), 1900 to 1976*

	Australia		New South Wales		Victoria		Queensland		South Australia		Western Australia		Tasmania	
Year	Police strength	Cost	Police strength	Cost	Police strength	Cost	Police strength	Cost	Police strength	Cost	Police strength	Cost	Police strength	Cost
1900	148.4	4.31	154.8	4.44	123.7	3.42	178.2	5.22	100.2	3.12	288.4	9.90	144.6	3.48
1905	146.4	4.39	164.1	4.76	124.1	3.48	158.5	5.16	101.8	3.20	204.7	7.76	124.9	3.06
1910	141.9	4.02	153.6	4.13	125.5	3.44	158.7	5.13	106.1	3.15	177.4	5.82	123.3	2.91
1915	132.1	3.09	133.5	3.15	121.3	2.49	154.8	3.95	121.6	3.05	145.6	4.08	118.8	2.43
1920	126.9	3.53	128.7	3.90	114.6	2.69	147.9	4.47	116.4	3.06	147.5	4.03	114.2	2.88
1925	124.3	3.63	127.6	3.89	112.2	2.87	138.0	4.49	117.2	3.43	145.9	4.16	110.3	2.92
1930	134.1	5.02	147.2	6.37	118.5	3.36	135.5	4.90	133.0	4.97	131.0	4.93	114.1	3.79
1935	130.7	4.82	133.0	5.71	122.3	3.40	134.0	5.80	139.6	4.25	131.9	4.46	124.0	4.09
1940	134.1	4.80	136.2	5.69	122.0	3.36	143.3	5.62	154.9	4.52	129.7	4.38	123.7	3.96
1945	124.1	4.38	119.4	4.72	104.9	3.36	154.3	5.77	147.0	4.23	133.3	3.87	127.5	4.10
1950	139.8	4.56	135.3	4.57	124.6	3.90	176.6	6.09	137.8	4.04	148.6	4.57	142.1	4.53
1955	138.8	5.76	133.0	5.80	123.5	5.31	171.6	6.78	143.1	5.16	147.8	5.86	153.8	6.17
1960	146.2	6.70	137.2	6.74	137.3	6.27	171.5	7.85	151.4	6.29	161.9	6.35	161.7	6.83
1965	150.7	7.47	146.6	7.66	138.1	6.83	174.3	8.53	149.4	7.20	159.8	7.07	183.5	7.66
1970	157.5	9.52	158.0	10.32	138.5	8.20	172.9	10.00	170.2	9.15	163.0	9.54	198.9	10.74
1975	176.1	13.16	172.2	12.76	165.5	12.58	176.2	13.90	203.5	15.10	199.3	11.28	237.2	18.82
1976	183.5	13.75	170.9	13.03	173.2	13.23	181.6	14.92	215.1	16.15	200.5	11.63	237.4	19.93

Note: Expenditures prior to 1966 have been converted into dollars and are at constant 1966–67 prices, as standardised by the Reserve Bank of Australia in M.W. Butlin, A Preliminary Annual Database 1900/01 to 1973/74, Research Discussion Paper No. 7701, Reserve Bank of Australia, Sydney, 1977 (unpublished).

1966–67 prices; the number of police personnel per 100 000 persons is also illustrated in Figures 4.2*a* and 4.2*b*. (Complete data for police strength and expenditure for this century are provided in Appendix B.) It is interesting to note that the increase in the ratio of police to population to the current level has not been monotonic. In Australia as a whole, as well as in every state except South Australia, the twentieth century began with a high ratio and gradually declined until the 1930s and thereafter started increasing. (The Victorian data show that in 1923 there were 77.8 policemen per 100 000 persons; this was because of a police strike and the dismissal of over 500 police officers). In South Australia the ratio of police to population showed an almost monotonic increase between 1900 and 1976. In Western Australia there was one police officer for every 350 inhabitants in 1900 and in 1976 one for every 500. Currently the ratio is highest in Tasmania and lowest in New South Wales. Interestingly these two states have similar densities of population, a little over six inhabitants per square kilometre.

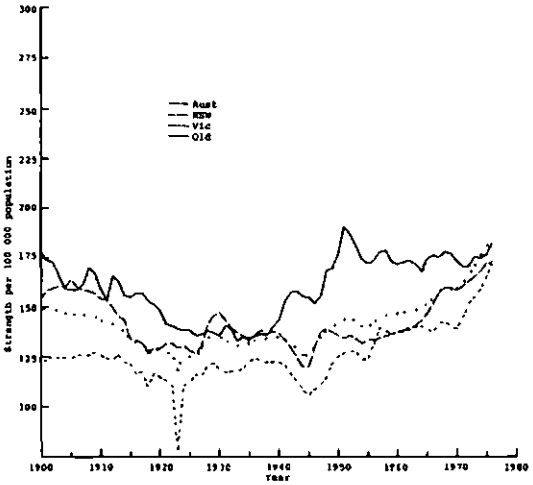


Figure 4.2*a* *Police strength per 100 000 total population, 1900 to 1976*

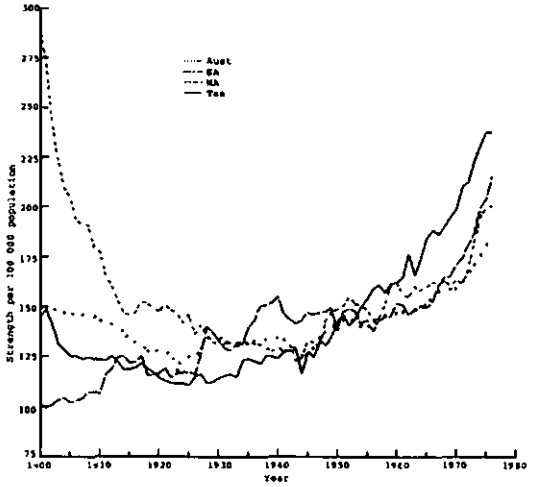


Figure 4.2*b* *Police strength per 100 000 total population, 1900 to 1976*

Considering that the ratio in Australia was 148 per 100 000 persons in 1900, the data suggest that this level was reached again only in the early 1960s and since then the ratio has grown by about 35 police officers per 100 000 persons. A measurement of change in this ratio reveals that during the entire period the mean annual change in police strength per 100 000 persons was only 0.462 and the variations remained within −0.196 to +1.120 at 95 per cent confidence level.

Ratio of police strength to crime rate

The non-availability of data on crimes reported to police and crimes cleared precludes an examination of the relationship between the size of the police force and crime rates. At the same time, data from some states for which reported crime rates and clearance rates for several decades are available tend to show that the overall clearance rate has declined. It is also found from these data that an overwhelming proportion of offences cleared result in charges before courts; this proportion ranges from over 90 per cent for assault, rape, robbery, burglary, theft, etc. to 100 per cent for offences such as homicide, drunkenness and traffic. This situation enables us to examine the ratio of number of offences charged (in this case almost analogous to offences cleared) per police officer in Australia during the period 1900 to 1976.

Data presented in Table 4.5 offer interesting insights. Considering the total of the three offence

categories it seems that irrespective of the increases or decreases in police force strength the number of offences charged per police officer has remained fairly constant. Mean annual change in this ratio for the entire period was −0.042, signifying a slight overall decline. At 95 per cent confidence level the interval of variation was −0.276 to +0.192; this is quite similar to that obtained for good order offences. In the case of offences against the person the mean change was almost negligible. Furthermore, at 95 per cent confidence level the intervals for both offences against the person and property straddle zero. While the changes in this ratio on a year-to-year basis have been small it must be pointed out that the ratio of offences per police officer for the three offence categories, namely offences against the person, against property and against good order, have ranged between 0.65 and 1.66, 2.09 and 6.84, and 7.58 and 17.70 respectively. It must also be pointed out that these ratios have neither decreased nor increased simultaneously across offences.

This situation points to the issue of organisational ethos discussed earlier. Are there certain standards expected of police officers? In other words, is it possible that each officer within a police department is expected to clear a certain number of offences? Of course the number will vary according to the offences investigated. It is valid to assume that a homicide case will require more time than a simple assault, or a burglary case will require more time than a case of drunkenness. Thus, there might exist an implicit equation which allows officers to meet the standards and at the same time deviate markedly in terms of total number of offences cleared. The data presented in Table 4.5 seem to indicate the existence of such an equation.

We could argue this point from another perspective. It could be said that the ratio of offences per police officer has actually increased in recent years. Consider the extra criminal justice duties that the police are expected to perform and the change in police role over time. Webster carried out research on the activities of patrolmen in a police department in a middle-sized city in California. The results of his investigation

Table 4.5 *Number of offences charged per police officer by offence, Australia 1900 to 1976*

Year	*Offences against the person*	*Property offences*	*Good order offences*	*Total offences*
1900	1.66	2.71	13.44	17.81
1905	1.32	2.50	13.57	17.39
1910	1.19	2.28	16.27	19.75
1915	1.11	2.48	15.54	19.13
1920	1.11	2.93	11.08	15.12
1925	0.96	2.79	13.13	16.88
1930	0.85	3.70	9.63	14.18
1935	0.75	4.28	9.52	14.54
1940	0.65	3.77	9.59	14.01
1945	1.03	3.68	11.79	16.50
1950	0.99	2.73	15.80	19.51
1955	1.05	3.55	14.37	18.97
1960	1.04	5.08	12.90	19.01
1965	1.14	5.54	10.17	16.85
1970	1.33	6.41	8.44	16.18
1975	1.43	5.87	8.05	15.34
1976	1.35	5.70	7.58	14.63
Mean change	−0.077	0.039	−0.042	−0.004
Variation at 95% confidence interval	−0.300 to +0.146	−0.016 to +0.095	−0.276 to +0.192	−0.017 to +0.009

indicate that unnecessary and incorrect emphasis is being placed by the public, police administrators and the police themselves on the role of the patrolman as a crime fighter involved in dangerous daily activities which require the use of force and violence. Instead, what the investigation shows is that crimes against persons, the most common catalyst of current fears, actually constitute less of the daily realities of police work and consume far less of the patrolman's actual energies than popular conception supposes. In view of the data presented in the following chapters serious reevaluation of police recruitment, training and work so that the attitudes about and responses to police work held by the public and the police themselves reflect actual police activity rather than an image which bears little resemblance to the reality of a policeman's role.[7]

Webster also found:

> Social service and administrative activities combined occupy over half the frequency of events and about two-thirds of the time! Crimes against persons and property combined occupy about 16 percent of the patrol time.[8]

It is very likely that this situation will vary according to city size, size of the police force, economic and sociodemographic structure of the area, etc. The important point here is that just over 16 per cent of the police time was consumed by the two types of crimes. If it can be assumed that the proportion of police time in criminal justice activities has declined over time, then the police are doing a better job with less time. What this suggests is that if the administrative and social service duties are reduced the police may be able to do an even better job in crime prevention and control. However, there are many factors which may influence crime clearance rate and the increased available time need not produce crime clearance rate in equal proportion.

For the greater part of the study period it has been observed that there is an inverse relationship between the ratios of property and good order offences, that is to say that whenever the number of property offences cleared per policeman increases, the number of good order offences decreases and vice versa. In a future work this topic will be examined in greater detail; for the time being consider the scatter plot in Figure 4.3. The data in the figure relate to the number of serious crimes (offences against the person and

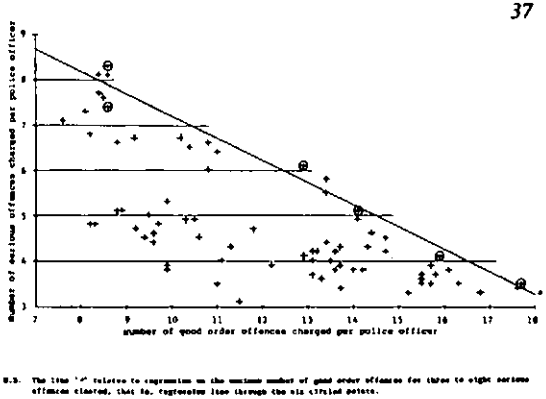


Figure 4.3 *Relationship between the number of serious offences and good order offences charged per police officer, Australia 1900 to 1976*

Note: The line *a* relates to regression on the maximum number of good order offences for three to eight serious offences cleared, that is, regression line through the six circled points.

against property) charged per police officer as against the number of good order offences charged per officer. The inverse relationship between serious offences and good order offences charged per officer is relatively strong (r = –0.695). Moreover, the data suggest some systematic movements in this relationship.

It is of interest to note that for every serious offence charged by a police officer there is a maximum number of good order offences which will be referred to the courts. Thus, when an officer clears three serious offences he will also clear a maximum of 18 good order offences; when he clears four serious offences he will also clear a maximum of 16 good order offences, and so on. What seems interesting therefore is that when the number of serious crimes increases by one there is a concomitant decline of two in the maximum number of good order offences cleared. This pattern is consistent up to seven serious offences; beyond this there are too few points to discern any set pattern. A regression on the maximum number of good order offences for three to eight serious offences cleared produces an r^2 of 0.995 and a slope of 0.490. This discussion is presented only as an exploratory exercise, as the data collected for the present study were not adequate to make a conclusive statement. It is, however, possible and fruitful to examine the issue in greater detail with the help of additional data.

Police expenditure

As presented in Table 4.4 and Figures 4.4*a* and 4.4*b*, per capita expenditure on police, barring minor fluctuations, has remained constant up to the end of the Second World War. The lowest per capita expenditure in Australia and in each state was during the First World War, the Depression years recorded a slight increase and thereafter the per capita expenditure reached a trough until the late 1940s. Since the early 1950s the per capita expenditure has increased steadily with the sharpest increase in the 1970s. While the Australian per capita expenditure has tripled between 1900 and 1976 (in actuality between 1948 and 1976), state figures show some differences. In New South Wales, Queensland and Western Australia the per capita police expenditure between 1948 and 1976 rose two and a half times; in Victoria and South Australia 3.7 times and in Tasmania almost five times. Note that the ratio of police strength to population also showed maximum growth in Tasmania.

Compared to police strength, per capita cost has shown a much sharper growth since the 1960s. While the salaries of police personnel still constitute a major portion of expenditure, the introduction of modern technology during the past decade and a half has resulted in increased investment in equipment, motor vehicles, computer facilities, etc. Also, during this period the increase in civilian employees in police departments has contributed to the increase in overall expenditure.

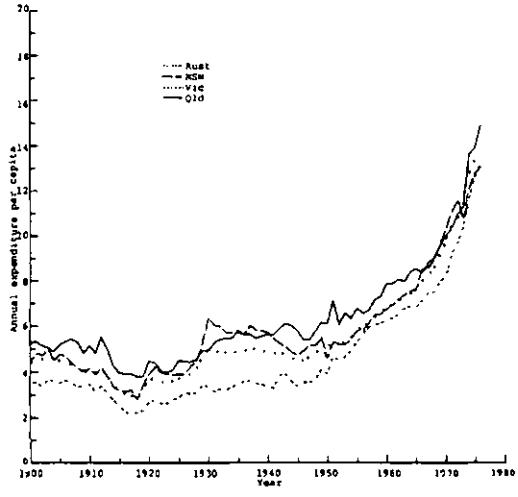


Figure 4.4a *Annual expenditure per capita on police activities, Australia and states 1900 to 1976 (at constant 1966–67 prices)*

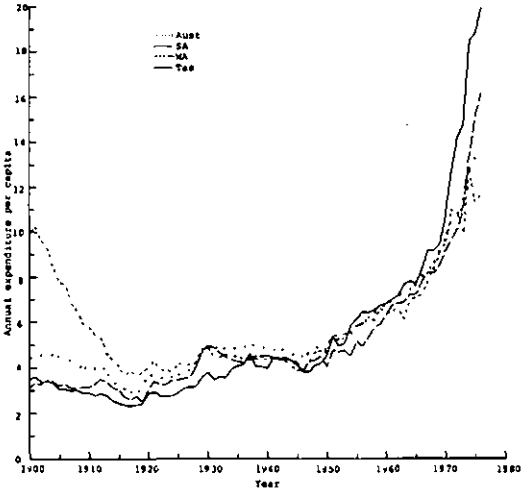


Figure 4.4b *Annual expenditure per capita on police activities, Australia and states 1900 to 1976 (at constant 1966–67 prices)*

Summary

The patterns of reported crimes described in this chapter show that except for homicides, rates of all the other offences reported or becoming known to police have increased during the period 1963 to 1976. Also, the clearance rates of most offences declined substantially. Several research studies cited in this chapter have indicated positive relationships between crime rates and police resources. Such associations are not surprising, indeed the nonexistence of such relationships would be unusual. Especially during this period there was growth in almost every factor. The data demonstrate that both the size of the police force and police expenditure increased much faster during this period than any time before.

The crime rate was found to be positively associated not only with criminal justice resources, but also with several socio-economic variables.

These associations, therefore, suggest that different analytical approaches need to be used to examine the meanings of these correlations. Police activities, like those of any bureaucratic organisation, may be influenced by organisational and functional requirements. There are therefore at least two issues which must be considered: (1) in using police strength data it seems desirable that non-operational personnel be excluded; and (2) implicit or explicit criteria for efficiency, for example the expected number of arrests an officer is expected to make, should be taken into account. Neither of these issues are easy to resolve. In this study the first issue has been dealt with superficially by excluding certain categories of employees of police departments from the analysis.

An attempt has been made to examine the ratio of police numbers to offences. Since data on reported crimes were not available prior to 1963 this examination used the number of offences charged before magistrates' courts. This analysis produced some very interesting results. It was found that the number of offences charged per police officer was fairly constant over the seventy-seven year period, varying between 14 and 20 offences per officer. When this ratio was examined by offence type we obtained a curious finding. It seems that in the arrest procedure there is a pattern of trade-off between offences. That is to say, that if the police make more arrests for minor offences the arrests for serious offences would decline. Furthermore, our preliminary analysis indicates that if arrests for serious offences (that is offences against the person and against property) increase by one there is a concomitant decline of two arrests for minor offences. The apparent constancy of these findings over time rules out the possibilities of coincidence. Could there exist departmental standards or quota systems? This is rather perplexing especially when we are reminded that the data come from six autonomous states over seventy-seven years.

If these findings are taken at face value they suggest that the police in later years have performed better than in earlier years. It is a generally accepted fact that police roles in the last two decades have expanded significantly and they perform more work unrelated to criminal justice now than ever before. But one could also argue that there have been significant advances in crime detection and investigation and in police patrolling. So the situation at best could be described as unclear.

5 The Courts and Total Offences

While it may be irrefutable that crime exists in every society, it is obvious that its form changes not only between societies but also within any given society over time. Crimes such as murder, assault, rape, robbery and arson have existed for centuries. The same can be said of burglary and larceny, with certain reservations concerning the amount of money involved. The examination of the twentieth-century Australian data offers valuable information on these crimes. During this period some new crimes have emerged which have clogged the criminal justice systems not only in Australia but elsewhere as well. On the other hand there are some acts which once were crimes but are no longer so. In the former category come offences such as violations of traffic laws, television and radio laws, and environmental laws; in the latter acts such as homosexuality, prostitution and gambling.

In recent years scholars and criminal justice administrators around the world have been engaged in a continuing debate on decriminalisation and criminalisation. The two major themes which have dominated these debates relate to the scope of the criminal law and excessive burden on the criminal justice system. Thus, Morris and Hawkins say:

> The function, as we see it, of the criminal law is to protect the citizen's person and property, and to prevent the exploitation or corruption of the young and others in need of special care or protection. We think it improper, impolitic, and usually socially harmful for the law to intervene or attempt to regulate the private moral conduct of the citizen.[1]

Smith and Pollack, addressing the second theme, say:

> For every murderer processed through the system there are dozens of gamblers, prostitutes, pushers, and alcoholics. If our criminal justice system is breaking down, it is the processing of the latter type of offender that is causing the breakdown. We have sufficient resources — enough police, courts, etc. — to handle quickly and efficiently every apprehended perpetrator of every serious crime, *if we could remove petty offenders and morals offenders from the system.*[2]

The first theme is not new; Bentham, Beccaria and Mills,[3] to cite just a few, have written extensively on it. On the second theme, recent years have seen numerous scholarly contributions. In Australia, the crimes of murder, assault, rape, robbery and burglary have constituted between 4 and 5 per cent of the total charges before magistrates' courts during the first seventy-seven years of the present century. If larceny of all types is added, the proportion is between 10 and 11 per cent. In recent years, traffic-related offences alone (excluding driving resulting in injury or death and on-the-spot fines) have formed 50 to 60 per cent of the total charges before magistrates' courts. On-the-spot fines for traffic law violations, which are settled out of court, number about two million a year. Undoubtedly, traffic offences present characteristics different from offences such as gambling, prostitution, obscenity, homosexuality, alcoholism and so forth, in that they do not reflect private

morals; on the contrary, they impinge upon the person and property of the citizen. In the debates on decriminalisation this offence category has not received a prominent place. This is a question more fully considered in Chapter 6.

This chapter and the next deal with descriptive analysis, that is, the volume of crimes and their disposition over the entire period under study. The major concern here is to describe the totality of crimes; the actual data relate to the magistrates' courts. The offences and their dispositions are described first in terms of Australia as a whole and then state by state.

Offence rates

Figure 5.1 presents data on the volume of offences charged before magistrates' courts and the conviction rates in Australia. (Detailed tables showing volume of charges and dispositions for total offences and for the four offence categories are presented in Appendix C.) The immediate reaction of anyone who looks at this figure should be alarm. It is unmistakably clear that crimes

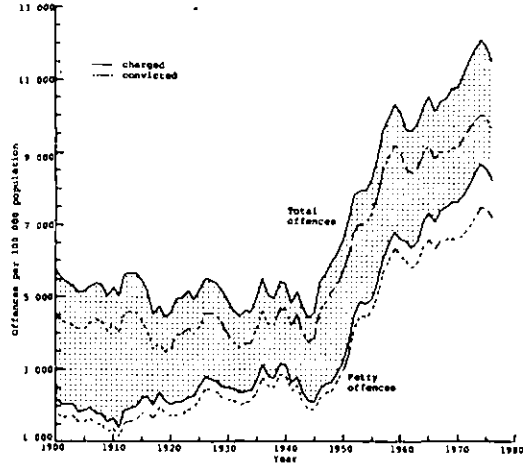


Figure 5.1 *Volume of offences charged before magistrates' courts and convicted per 100 000 population aged 10 years and over, Australia 1900 to 1976*

have been increasing since the Second World War at a rate never experienced earlier this century. A close examination reveals, however, that the alarm may not be justified because it is quite clear that *minor* infractions of laws are responsible for the overloading of the criminal justice system. The curve relating to petty offences since the late 1930s represents an almost exact replica of the total offences curve. As may be recalled, the petty offence category consists mainly of violations of traffic laws, radio and television laws, and state and local government laws. The post-war economic boom brought about in Australia as in many other Western countries, a tremendous change in transport and communication. Due to general economic well-being the rate of motor car ownership leaped and one result of this increase was a sustained growth in traffic offences. It can therefore be said with a great degree of confidence that the sharp growth in the number of charges before magistrates' courts after the war was mainly due to the rise in petty offences.

That the increases in petty offences enhanced the total offences figures is demonstrated by Table 5.1. Although the emphasis here is on the period following the Second World War, the same pattern is discernible during the earlier period as well. Petty offences in Table 5.1 can be examined in two parts, that is, 1900 to 1945 and 1950 to 1976. In the first period the relative strength of petty offences was matched and at times surpassed by good order offences, but since 1950 the increase in petty offences consistently surpassed increases in any other offence category.

The impact of any particular offence category on the total of offences charged can be examined more meaningfully by considering the percentage contribution of each offence category to the total offence change (see Table 5.2). Percentages have been calculated on the basis of total change in each year. The influence of petty offences on total charges is quite clear. Whether there is an increase or a decline in total offences, such changes have been brought about to a large extent by the changes in petty offences. Thus, from Table 5.2 we can say that except for 1910, 1920 and 1930, changes in petty offences constituted the largest proportion in total offence change.

Perhaps the volume of crime was high during the later part of the last century. Gurr, Grabosky and Hula, among others, have argued this to be the case.[4] From the data of this study it is not

Table 5.1 *Changes in rate of offences charged before magistrates' courts, Australia 1900 to 1976*

Year	Offences against the person	Offences against property	Offences against good order	Petty offences	Total
1900	328.5	535.9	2657.8	2205.9	5728.1
1905	- 79.4	- 64.0	- 98.9	- 338.5	- 580.8
1910	- 31.6	- 55.5	+ 407.8	- 214.5	+ 106.1
1915	- 29.3	+ 3.2	- 336.8	+ 567.5	+ 204.6
1920	- 7.2	+ 59.8	- 815.4	- 166.8	- 929.5
1925	- 31.3	- 42.0	+ 246.3	+ 478.3	+ 651.2
1930	- 8.7	+180.5	- 455.4	- 27.6	- 311.1
1935	- 23.4	+ 56.8	- 104.7	+ 196.5	+ 125.3
1940	- 14.0	- 74.4	+ 26.5	+ 410.5	+ 348.6
1945	+ 49.7	- 48.8	+ 237.5	-1008.9	- 770.4
1950	+ 18.1	- 78.7	+ 975.2	+1084.6	+1999.1
1955	+ 13.0	+150.8	- 217.9	+1726.5	+1672.4
1960	+ 6.7	+310.5	- 148.5	+1687.3	+1856.0
1965	+ 24.1	+110.5	- 456.7	+ 714.2	+ 392.1
1970	+ 44.7	+209.3	- 267.6	+ 278.2	+ 264.6
1975	+ 50.8	+ 25.6	+ 105.7	+ 929.0	+1111.1
1976	- 9.5	- 3.1	- 57.5	- 323.1	- 393.2

Note: Rate change = rate(year n + 5) — rate(year n). Rates of change in percentage are unduly sensitive to the size of the base figure. If the base year rate is unusually high, comparison with that year may be deceptive.

Table 5.2 *Percentage contribution of major offence categories to total offence change, Australia 1900 to 1976*

Year	Offences against the person	Offences against property	Offences against good order	Petty offences
1900	5.7	9.4	46.4	38.5
1905	13.7	11.0	17.0	58.3
1910	4.5	7.8	57.5	30.2
1915	3.1	0.3	36.0	60.6
1920	0.7	5.7	77.7	15.9
1925	3.9	5.3	30.9	59.9
1930	1.3	26.9	67.7	4.1
1935	6.1	14.9	27.5	51.5
1940	2.7	14.2	5.0	78.1
1945	3.7	3.6	17.7	75.0
1950	0.8	3.6	45.2	50.3
1955	0.6	7.2	10.3	81.9
1960	0.3	14.4	6.9	78.4
1965	1.8	8.5	35.0	54.7
1970	5.6	26.2	33.5	34.8
1975	4.6	2.3	9.5	83.6
1976	2.4	0.8	14.6	82.2

Note: These proportions have been calculated by adding column values of all major categories in each year ignoring the sign of the change. This was used as the base for the percentages.
This table must be read in conjunction with Table 5.1

possible to make such a definite assertion. During all the three major events of this century, that is, the two wars and the Depression of the 1930s, total offences actually declined. It is also interesting to note that each event was preceded and followed by a higher rate of crime. After the Second World War, for at least a decade, there was sustained growth in total offences, halted temporarily by the mini-recession of the late 1950s and the early 1960s. The same trend could be observed in the mid-1970s, when a recession set in in Australia.

During the First World War and the Depression, and to some extent during the Second World War, the dip in the total offence rate was mainly because of a decline in the volume of the other three offence categories, but thereafter it is the movements in the petty offences which determined the shape of the volume of total offences.

It is clear from the above discussion that petty offences, at least for the past three decades, have put enormous pressures on the criminal justice system. But there is a much more significant finding which is hidden in the above analysis and that is the pattern of offences which traditionally have been labelled as crimes. During the entire century offences against the person, against property and against good order have shown remarkable constancy. Consider the data in Figure 5.2. The lower curve indicates that during the period 1915 to 1945, these crimes declined significantly. Also the post-Second World War level of these crimes is still lower than that experienced during 1910 to 1914. We now propose to examine these offences in detail by separating them into three components of offences against the person, against property and against good order.

Figure 5.3 presents the movements in the volume of offences against good order, offences against property and offences against the person. It is quite apparent that up until the mid-1950s the movements in the volume of these offences were conditioned by the movements in the offences against good order, the largest of the three categories. The shaded area in the figure shows the contribution of the two other categories. Since the mid-1950s the line relating to the total of these three offences and the one for the offences against good order diverge significantly. This is primarily because the good order offences

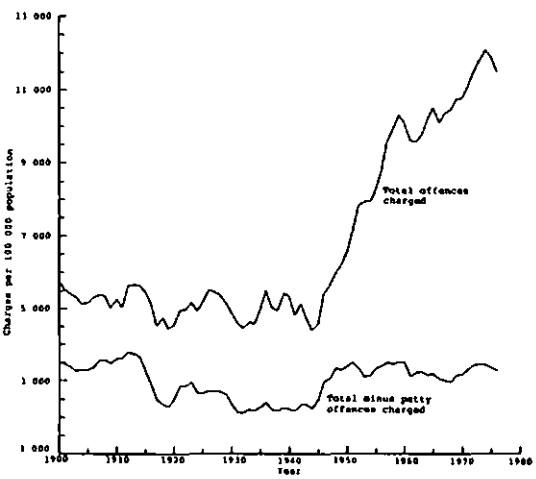


Figure 5.2 *Offences charged before magistrates' courts per 100 000 population aged 10 years and over, Australia 1900 to 1976*

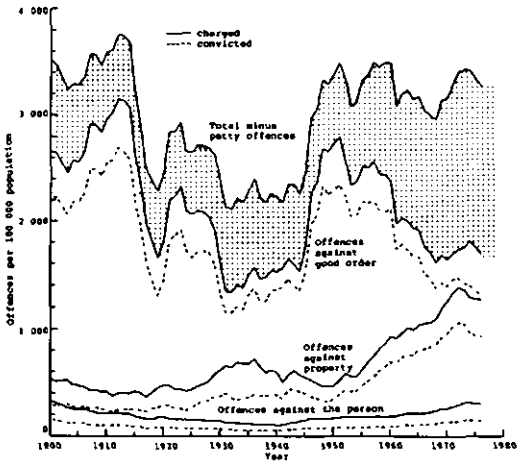


Figure 5.3 *Offences charged before magistrates' courts and convicted per 100 000 population aged 10 years and over, Australia 1900 to 1976*

begin to decline and the two remaining categories of offences begin to increase. This is also demonstrated by the data in Table 5.1. The highest volume for these three offences in this century was recorded between 1910 and 1914. The declining volume of good order offences since the mid-1950s seems to be an enlarged repetition of the pattern observed in the early part of the century. As a corollary, the rising rates of offences against property and against the person show some similarities between the two periods. Finally, the fluctuations in the volume of property offences, at least during the Depression years, demonstrate a significantly different pattern from those observed for total offences as well as for the other three offence categories; only property offences increased during this period.

In terms of contribution of these offence categories to total offence change, the data presented in Table 5.2 suggest that petty offences and offences against good order are responsible for the largest proportional change. Except for 1905, offences against the person account for 6 per cent or less of the change in the total offence rate. Property offences demonstrate wider fluctuations in their contribution to total offence change. There are, however, certain other points which must be made with regard to the data presented in Tables 5.1 and 5.2. First, offences against the person show a steady decline up to 1940 and since then an increase. Second, property offences, interestingly enough, show an increase during the Depression years and since the mid-1950s. One interesting feature of the data in Table 5.1 is that between 1910 and 1970 offences against property and against good order have moved in opposite directions, that is, increases in one were accompanied by decreases in the other. Thus, as observed earlier, while property crimes have increased rapidly since the mid-1950s, good order offences have decreased equally rapidly. Third, the good order offences do not show any systematic pattern except the one mentioned above, but they did increase significantly in 1950. This increase was comparable to the increase in petty offences. While explanations will be sought in a subsequent chapter, it is important to mention that at the peak of the Second World War there were over 700 000 young Australians fighting overseas. During the immediate post-war years when the soldiers returned home a massive resettlement program had to be undertaken. The period was characterised by uncertainty and the consequent result was a sharp increase in good order offences. Soon afterwards there was a significant drop in this offence category, but petty offences continued to rise.

Offence proportions

In spite of these fluctuations in the volume of crime it must be stated that trivial offences, that is petty offences and offences against good order, have constituted about 85 per cent of the total charges before magistrates' courts in Australia during the entire period. As can be seen from Figure 5.4 and Table 5.3 the major shifts have taken place in the above two categories only. During the first two decades, with the exception of the war years, good order offences constituted the largest proportion of all offences and since 1924 petty offences have been consistently higher in proportion. It is interesting to note that since 1930, with the exception of 1944 to 1950, petty offences have formed over 50 per cent of total charges before magistrates' courts and during the 1970s these constituted over 70 per cent. Although Figure 5.3 shows a sharp rise in

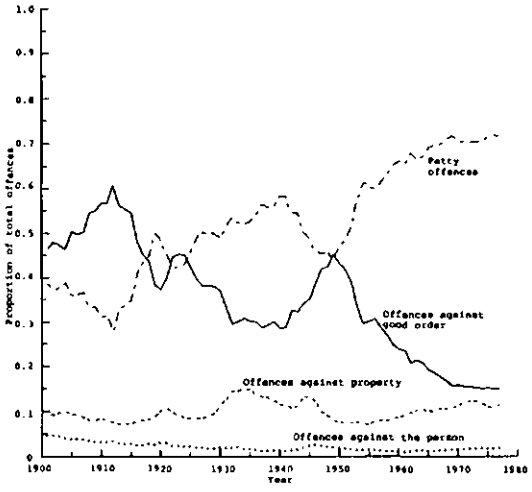


Figure 5.4 *Four major offence categories as proportions of total offences charged in magistrates' courts, Australia 1900 to 1976*

Table 5.3 *Four major offence categories as proportions of total offences charged, Australia 1900 to 1976*

Year	*Petty offences*	*Offences against good order*	*Offences against property*	*Offences against the person*
1900	38.51	46.40	9.36	5.74
1910	31.46	56.47	7.93	4.14
1920	45.36	40.07	10.59	4.00
1930	51.45	32.98	12.69	2.90
1940	58.24	28.59	11.24	1.94
1950	48.50	41.70	7.20	2.61
1960	65.36	23.50	9.25	1.89
1970	70.60	15.33	11.66	2.42
1976	71.46	14.79	11.12	2.63

property offences since the mid-1950s, proportionally this offence has not increased. Thus the greatest decline in proportion is observed in the good order offences. Offences against the person, which include such offences as minor assaults to murder, have been a small fraction of the total offences charged since the 1950s; their proportion was much higher during the first three decades than in subsequent years. In this case too, the recent increases in volume have not resulted in substantial increases in proportion.

In a clear situation like the one presented above it seems unnecessary to use any sophisticated tests to support the assertions made. The volumes of all the offence categories except offences against good order have risen in the last two decades and without exception the volumes for each of the offence categories show a plateauing effect during the mid-1970s. If the crime rates are influenced by certain social factors, our analyses in Chapters 9 and 10 will be able to provide some clues, and at that point attempts will be made to predict whether the declining patterns of the mid-1970s are likely to continue. Each of the four categories of offences includes a number of specific offences and it will therefore be interesting also to observe whether specific offences, analysed in the next chapter, demonstrate any set patterns.

For almost the entire period since 1930 the three offence categories which have traditionally been defined as crimes (offences against the person, against property and against good order) have together constituted less than 50 per cent of the total charges before magistrates' courts, and since 1970 this proportion has been less than 30 per cent. It has also been shown in Figure 5.4 and Table 5.3 and in general that petty offences and good order offences move in opposite directions and one displaces the other. Although in terms of the volume of these two offence categories the relationship may seem acceptable, a closer examination suggests that there has been a similar systematic interchange between good order offences and property offences during the entire period under study. Petty offences are not actually offences in the strict sense of the word. Hence, in Figure 5.5 and Table 5.4 we present information on the three offence categories, that

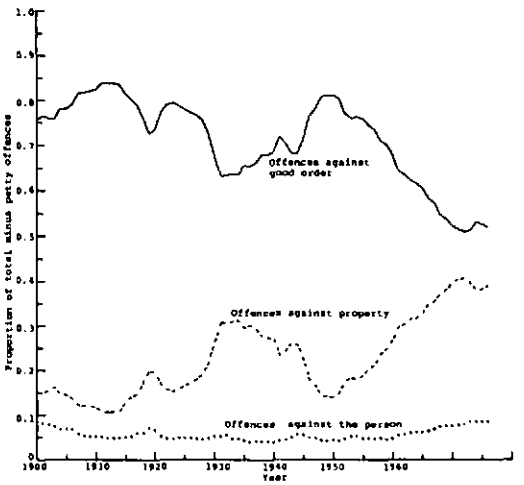


Figure 5.5 *Three major offence categories as proportions of total offences charged minus petty offences, Australia 1900 to 1976*

Table 5.4 *Three major offence categories as proportions of total offences charged minus petty offences, Australia 1900 to 1976*

Year	Offences against the person	Offences against property	Offences against good order
1900	9.33	15.21	75.46
1910	6.04	11.56	82.39
1920	7.32	19.37	73.32
1930	5.97	26.13	67.90
1940	4.65	26.90	68.45
1950	5.07	13.97	80.96
1960	5.47	26.70	67.84
1970	8.22	39.64	52.14
1976	9.20	38.97	51.83

is, offences against the person, against property and against good order, as proportions of the total of the three. It is quite evident from the property and good order curves that every minor or major increase in the proportion of one has resulted in a corresponding decrease in the other and vice versa. This symmetry is to be expected because of the constancy in the proportion of offences against the person.

This situation raises an interesting question of the normality of certain levels of crime in a society as postulated by Durkheim:

> what is normal, simply, is the existence of criminality, provided that it attains and does not exceed, for each social type, a certain level, which it is perhaps not impossible to fix in conformity with the preceding rules.[5]

Thus, there are two fundamental issues: (1) the level of crime does not exceed a certain level; and (2) the level and the forms may change according to 'social type', the type of society in question.

The definition of a social type, and especially a lower or higher type, is a theoretical as well as empirical issue which needs extensive discussion. There is no attempt at this stage to test a hypothesis with regard to social types. Also 'social type' is a more general concept than changes in one country in one century. Assuming, however, that the social types do change over time, it may be argued that the social types in Australia during the last century and during the different periods of this century have been in some ways different.

In relation to the violations which might properly be considered crimes, a glance back at Figure 5.3 offers some interesting patterns. The top curve, which represents the volume of the three offences, can be separated into three parts: up to about 1915, 1916 to 1946, and 1947 to 1976.

If Durkheim can be understood to suggest that the level of crime in a social type will vary within certain limits of a stationary mean, then it is possible to show that during the above three time periods the levels of crime varied around their respective means. This is not to go as far as to imply that the three time periods correspond to three distinct social types, but it could be possible. With the formation of the Commonwealth of Australia there emerged the Australian identity which shed its colonial status. Within a decade and a half, Australia, like many other countries, entered a period of social and economic upheaval lasting for approximately thirty years. The third period, since the Second World War, is characterised by completely different circumstances. So the material for a tentative proposition of three different social types is there. This division of the twentieth century into three parts will be further examined in a later chapter.

With regard to the forms of crimes, Figure 5.5 suggests that during these three periods some forms of crimes increased and others decreased. It is also likely that within each offence category there is a limit and if the plateauing of the two curves during the 1970s continues or shifts in different directions this could be tested.

In all these presentations one thing which comes out very clearly is that the offences against the person show practically no sensitivity to the changes in the outside world. Could that be a reflection of the very personal nature of these offences? Could it reflect a constancy of aggression? While in almost every country concern is expressed that violent crimes are increasing at an unprecedented rate, the finding of stability in the volume of offences against the person in Australia should give some hope for the future.

Patterns of rate of change

Having demonstrated the changes in the volume of various categories of crime, we now examine the relative movements, that is upturns, downturns and synchronicity, with the help of

polynomial curves. Polynomials smooth the rough edges of the basic curves by removing erratic perturbations, thereby emphasising the more fundamental movements in the data. All the curves presented in Figures 5.1 and 5.3 seem amenable to polynomials of reasonable order. In a study with a long time span it is always possible that the spread of the data might require a high-order polynomial curve to obtain a good fit. Our aim was to select the lowest order polynomial which produced the highest F-ratio of regression and explained variance. This involved an arbitrary decision; whenever the contribution of explained variance (r^2) was 2 per cent or less the order preceding this point was selected. The results of the polynomials for each offence category are presented in Table 5.5 and the slopes

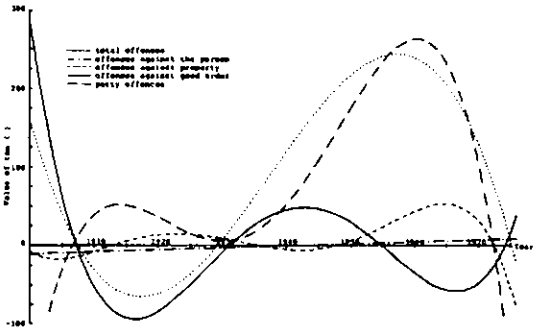


Figure 5.6 *Slopes of the polynomial curves (value of $f'(t)$) for major offence categories, Australia 1900 to 1976*

Total offences

$$f'(t) = -9.6946E-3.t^3 + 1.0897.t^2 - 29.1985.t + 162.8914$$

Offences against the person

$$f'(t) = 0.2492.t - 9.1582$$

Offences against property

$$f'(t) = -4.0322E-6.t^5 + 6.7678E-4.t^4 - 3.8658E-2.t^3 + 8.5857E-1.t^2 - 5.4238.t - 7.2780$$

Offences against good order

$$f'(t) = 3.1195E-4.t^4 - 5.2215E-2.t^3 + 2.8833.t^2 - 57.7381.t + 285.3512$$

Petty offences

$$f'(t) = -4.4064E-4.t^4 + 6.1494E-2.t^3 - 2.7282.t^2 + 45.1764.t - 198.1321$$

of the curves produced in Figure 5.6. The data in the table show that, except for good order offences, the F-ratios for all offence categories are very high and their explained variance is over 0.93. For good order offences, although the F-ratio is relatively low, it is still significant at the 0.001 level.

Besides good fit, the polynomial stationary points present some interesting findings. Stationary points represent the times when the curves cross the X axis — in other words, when the slopes of the curves are zero. First, three periods in this century are indentified when the total, petty and good order offences all coincide, 1907 to 1908, 1930 to 1932 and 1973 to 1976. That is to say, that these three offences change the direction of their movements during these periods. While between 1908 and 1932 the good order and petty offences moved in opposite directions, good order and property offences show an almost perfect inverse phase relationship. The turning points for these two offence categories coincide within five to six years of each other and during the entire century they have moved opposite to each other. Thus, although changes in good order offences, due to their numbers, may make significant impact on the total offences, such changes seem to result from synchronous movements in property offences. Therefore, as observed in Figure 5.5, the displacement characteristic is manifested more between good order and property offences than between good order and petty offences (as shown in Figure 5.4). Finally, the slope of the offences against the person curve shows only one turning point, that is, in 1937, before which these offences always declined and afterwards always increased; this is consistent with our earlier observations.

The polynomial curves presented in Figure 5.6 show the general tendency in the fluctuations of offences and their rate of change. The reading of these curves in conjuction with those in Figures 5.1 and 5.3 helps in identifying the movements clearly. Thus, considering the property offences curve we observe that the first directional change takes place in the year 1913, when the rates of property offences began to increase. From 1900 to 1912 these rates declined. Furthermore, this curve also allows us to say at which point between 1900 and 1912 the angle of the slope was maximum, in other words, in which year the rate of decline was the maximum. In this case 1906

Table 5.5 *Measures of the goodness of fit and polynomial stationary points for offences charged in magistrates' courts, Australia 1900 to 1976*

Offence category	F-ratio of regression $F^{df_1}_{df_2}$	r^2	Order of f(t)	Polynomial stationary points: f'(t) Year
Total offences	396.083^{4}_{72}	0.95653	4	1908 1930 1976
Offences against the person	556.532^{2}_{74}	0.93766	2	1937
Offences against property	325.164^{6}_{70}	0.96536	6	1913 1936 1948 1973
Offences against good order	32.076^{5}_{71}	0.69315	5	1908 1932 1955 1975
Petty offences	450.101^{5}_{71}	0.96942	5	1907 1973

Note: df_1 and df_2 are the degrees of freedom of the regression and residuals respectively. All the F-ratios are significant at less than 0.001.

presents the year when the rate of decline in property offences was the highest; after 1906 this rate began to fall. Similarly, these offences increased between 1913 and 1936 and the increase was faster up to 1926 than after.

Petty offences on the other hand present a different picture. Although the curve of best fit is the fifth-order polynomial it has only two stationary points, 1907 and 1973. The overall trend in these offences was that of increase from 1907 to 1973. Nevertheless, the rate of increase was unlike the increases in other offences. For example, the curve for petty offences shows a dip in 1930; the angle of the slope was indeed small but the rate was still increasing. The curves of other offence categories can be examined in the same manner.

The goodness of fit of these polynomials and their stationary points offer justification for speculation. The convergence of curves at certain points in time invites attention. Why, for example, do the stationary points for total, property and good order offences and the slowest increase in petty offences all occur in the early 1930s? Why, for example, does the property offence rate begin to decline whereas rates of other offences increased after the early 1930s? Similarly, the stationary points for all offence categories, except those against the person, converge during the period 1973 to 1976. Why does only the rate of good order offences start increasing at this point? These findings indicate that whatever is responsible for these occurrences does not have similar effects on all the offence categories. We may further argue that opposite directional changes in property and good order offences show that events during specific periods have opposite effects on these two offence types. In the introductory chapter we proposed a concept of environmental sets. The polynomials indicate that an investigation into the existence of environmental sets in this century could be a profitable exercise; such an attempt will be reported in Chapter 10.

Dispositions of offences

As in the case of charges before magistrates' courts, the dispositional outcomes are also influenced by minor offences. The results of the cases were divided into three categories: convictions; discharges, etc.; and committals to higher courts. As a preliminary comment on the

significance of the data, it is important to recall that convictions and discharges are not complete; they relate only to cases *triable* at the magistrates' courts. The cases committed to higher courts may also result in conviction or discharge. Nevertheless, of the charges before magistrates' courts, on average over 98 per cent are triable there and less than 2 per cent are committed to higher courts. Although the higher courts data are available for the entire period these cannot be added to the magistrates' courts data because the former relate to distinct persons and not to offences. It is also important to note that committals to higher courts depend upon, among other factors,[6] the gravity of the offence and hence will come primarily from two categories, offences against the person and offences against property. Almost 100 per cent of the cases in the remaining two categories are tried at the magistrates' courts.

Table 5.6 presents the data for convictions, and Figures 5.1 and 5.3 present this information graphically. Figure 5.1 shows a remarkably consistent pattern in conviction rate both in total offences and petty offences. This is extraordinary. Why should it be so regular? Why, in spite of all the changes over time, not the least of which is the number of magistrates employed during these seventy-seven years, has this consistency been maintained?

The first part of Table 5.6 presents the mean of the proportion of cases convicted over the entire period under study and shows that no less than 83.6 per cent of all offences charged before magistrates' courts result in a conviction. The consistency of conviction disposition on the centrality of the mean is also demonstrated by the fact that the standard deviation is only 4 per cent of the mean. Similar results are obtained with the good order and petty offences. Here again the proportion of convictions to total charges becomes the reflection of the conviction disposition rendered in the case of these two offence categories. It must be remembered that an overwhelmingly large number of cases in these two categories are decided on the basis of guilty pleas, so that the consistency is not so surprising. Disposing of so many of these cases as convictions becomes routine or automatic and has apparently very little to do with the particular attitudes and traits of the magistrates.

For offences against the person and against property a different situation obtains. The mean

Table 5.6 *Dispositions as proportions of total charges by offence categories, magistrates' courts, Australia 1900 to 1976*

Offence categories	*Minimum proportion*		*Maximum proportion*		*Mean proportion*	*Standard deviation*
	Year	*Value*	*Year*	*Value*		
			Convictions			
Total	1920	78.00	1960	89.44	83.6	3.4
Petty	1916	79.26	1957	93.81	87.6	3.8
Good order	1974	77.15	1940	89.14	84.8	2.7
Property	1933	49.37	1967	78.42	66.4	8.2
Person	1953	41.55	1969	51.17	47.5	2.0
			Discharges			
Total	1960	8.54	1920	20.06	14.7	3.4
Petty	1957	6.08	1916	20.54	12.2	3.8
Good order	1940	10.83	1974	22.56	15.1	2.6
Property	1958	8.73	1933	41.70	20.9	9.3
Person	1963	31.89	1918	44.28	39.0	3.6
			Committals			
Total	1936	1.21	1971	2.07	1.7	0.2
Petty	1954	0.04	1906	0.40	0.2	0.1
Good order	1916	0.00	1975	0.41	0.1	0.1
Property	1936	6.61	1957	17.80	12.7	2.4
Person	1918	8.22	1960	20.73	13.5	3.1

proportion for property offences resulting in conviction is 66.4, and the standard deviation is over 12 per cent of the mean. Also in this offence category the conviction outcome ranges between 49.37 per cent and 78.42 per cent over time. Fewer than half the offences against the person are convicted at the magistrates' courts.

During the entire century the disposition of conviction has been used evenly for all offences except those against property. Thus for the three major categories of offences it is not possible to identify any particular period when the conviction rate was unusually high or unusually low. In the case of property offences, however, there is a relatively low conviction rate during the Depression years. As can be seen from Figure 5.3 the total charges during this period increased but the conviction rate dropped to less than 50 per cent. Whereas in the case of the other three categories of offences it looks as if the proportion of conviction depends upon the number of charges, this is not so in the case of property offences. It is not clear at this stage whether because of the prevailing economic distress, some acts which otherwise would have been ignored were brought to the court or if the attitudes of the magistrates changed. Could it therefore be assumed that in handing out relatively fewer convictions the magistrates demonstrated attitudes and concerns which reflected the realities of the times? This assumption gains credence in relation to the discharge category. During the Depression years not only did the conviction rates drop but also the discharge rates were higher than at any other period in this century. While there is no proof that the magistrates expressed social responsiveness, it is an inference which can reasonably be made. The evidence is consistent with magistrates taking the economic and social conditions into account in their judgements.

A corollary of the data is that whenever the conviction rate is low the discharge rate is relatively high and vice versa; the minimum and maximum ranges shown in Table 5.6 are good examples. However, the committals to higher courts change this pattern in the case of offences against the person and against property. The discharge rate for offences against the person is the highest of all offences and so is the committal rate. There are certain very minor offences in these two categories which are triable at the magistrates' courts, for example simple assault, simple larceny, malicious damage and some burglaries. There are some offences which must in almost all instances be committed to higher courts, for example murder, rape, grievous injury, robbery and some burglaries. That these two categories of offences consist of a majority of less serious offences is demonstrated by the ratio of committals to convictions and discharges.

Thus, an interesting phenomenon seems to emerge from this analysis. A person charged with a relatively serious offence such as larceny or assault may have a better chance of getting discharged than someone charged with a good order or petty offence. Of course, it is the more serious offences which are more likely to be defended, and hence more likely to challenge the evidence.

State differences: offences charged

The data on the total charges before magistrates' courts for Australia as a whole showed that the post-Second World War increases in volume were much higher than any time before. It is the purpose of this section to examine whether a similar pattern is obtained across the states. Since

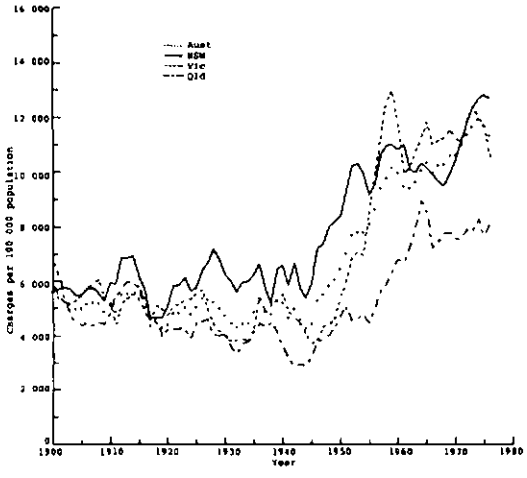


Figure 5.7a *All offences charged before magistrates' courts per 100 000 population aged 10 years and over, by state 1900 to 1976*

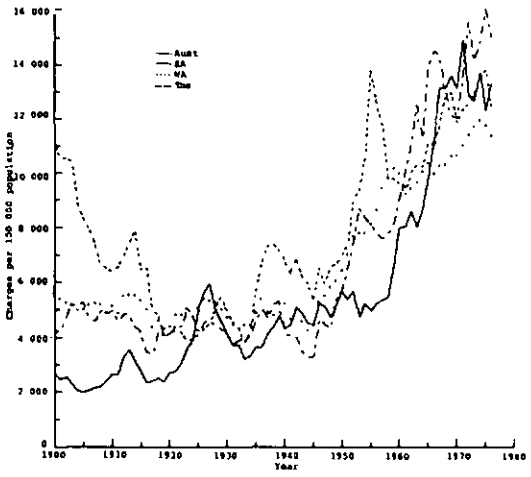


Figure 5.7*b* *All offences charged before magistrates' courts per 100 000 population aged 10 years and over, by state 1900 to 1976*

the basic purpose is state comparison, this section will necessarily involve presentation of data with the help of a large number of graphs and tables. It is difficult to attempt any rank-ordering of states in terms of high or low crime rates but the data presented will provide readers some basis for drawing conclusions. For the sake of clear visual presentation Figures 5.7*a* and 5.7*b* each contain data for three states and Australia, and the scales have been kept uniform. To avoid confusion it should be borne in mind that the rates for Australia as a whole are not the means of the states' rates; rather they are aggregate rates, that is, the number of total charges for all the states divided by the total population 10 years and over and multiplied by the constant 100 000. Data in both the figures suggest that except for Western Australia the pattern in each state is similar to that for Australia as a whole. Whereas the century begins with a volume of about 6000 charges per 100 000 persons for the five states and for Australia, for Western Australia it is about 11 000. Earlier it was suggested that the total charges curve is a reflection of the charges for petty offences. Here again Western Australia differs substantially; the higher rate at the beginning of this century is not because of any particular offence category. In fact in each offence category this state starts with a significantly higher rate than other states.

There are several other observations that should be made on the basis of these two figures: New South Wales and Western Australia exhibit generally higher rates than the national aggregate; Queensland shows a consistently lower rate; the three smaller states of South Australia, Western Australia and Tasmania demonstrate a faster increase since the early 1960s; and Tasmania in recent years shows the highest rate of offences charged.

Figures 5.8*a* and 5.8*b* present data on petty offences on the same scale as the earlier two figures. From the shape of these curves it is apparent that the post-Second World War increase in total charges is primarily because of increases in petty offences. The curves of these two figures fall in two distinct divisions, up to 1950 and after 1950. During the first period all the states show fairly stable patterns and during the latter all show sharp increases; no other offence category presents such clear patterns. For this offence category as well, the pattern is quite

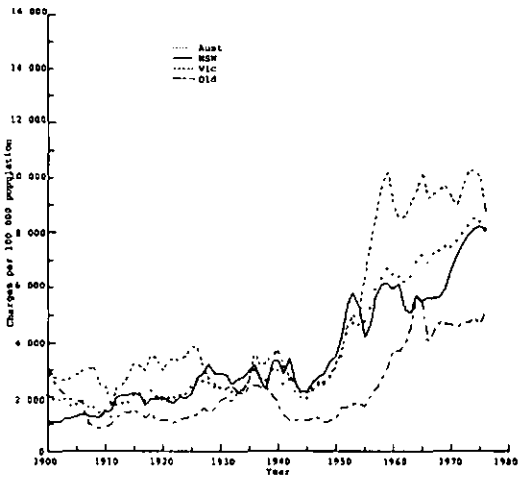


Figure 5.8*a* *Petty offences charged before magistrates' courts per 100 000 population aged 10 years and over, by state 1900 to 1976*

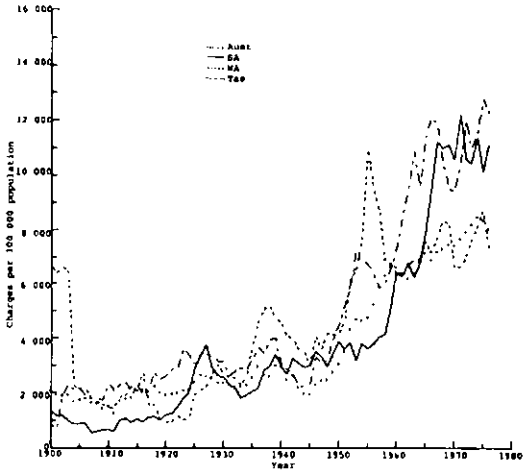


Figure 5.8b *Petty offences charged before magistrates' courts per 100 000 population aged 10 years and over, by state 1900 to 1976*

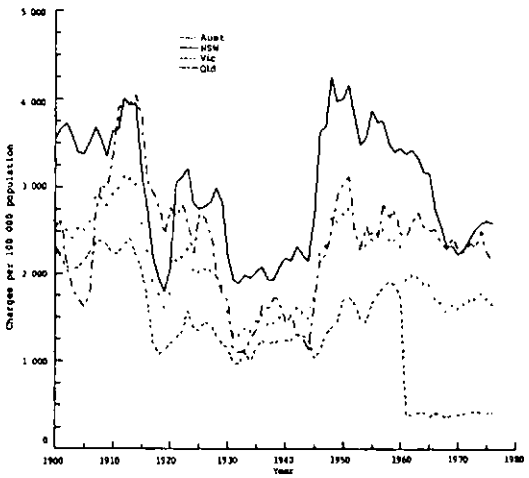


Figure 5.9a *Offences against good order charged before magistrates' courts per 100 000 population aged 10 years and over, by state 1900 to 1976*

similar to the total offences; Queensland demonstrates a consistently lower rate than other states and Tasmania in recent years exhibits the highest volume of petty offences.

Offences against good order, in marked contrast to petty offences, show erratic fluctuations. As can be seen in Figures 5.9*a* and 5.9*b* the recent level of charges for these offences is much lower than at the initial period of this century. An interesting feature of these offences is that during the two world wars and the Depression, charges dropped. It is equally interesting to note that since 1950, with the post-war economic growth, the level of charges for good order offences started decreasing in all the states except South Australia and Western Australia. While it is possible to inspect visually the movements in the curves for various states and to speak in general terms about which states show greater or lesser movements, the data in Table 5.7 enable us to examine the fluctuations in the volume of charges against good order in relation to the beginning of this century.

The base rate comparisons show that of all the five-year intervals, the Australian aggregrate rates were higher than the 1900 base rates only twice,

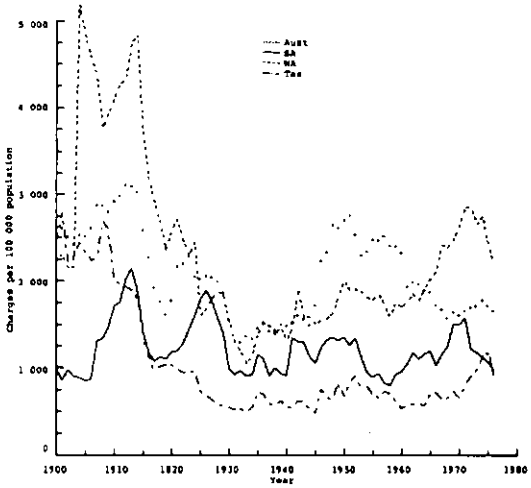


Figure 5.9b *Offences against good order charged before magistrates' courts per 100 000 population aged 10 years and over, by state 1900 to 1976*

Table 5.7 *Base rate comparison of offences against good order charged before magistrates' courts, by state 1900 to 1976*

Year	Australia	New South Wales	Victoria*	Queensland	South Australia	Western Australia	Tasmania
1900	2657.79	3540.31	2338.23	2545.33	979.50	2284.24	2493.29
	= 100.00	= 100.00	= 100.00	= 100.00	= 100.00	= 100.00	= 100.00
1905	96.28	95.23	92.34	63.41	86.45	211.45	94.72
1910	111.62	102.76	95.30	132.47	174.07	179.95	80.54
1915	98.95	88.58	88.06	150.26	143.53	163.69	56.32
1920	68.27	57.89	51.08	108.57	119.65	113.24	42.48
1925	77.54	77.69	57.20	106.70	182.01	70.04	29.52
1930	60.40	62.27	49.54	67.75	101.15	67.60	22.08
1935	56.47	57.24	49.64	65.21	118.08	61.28	29.16
1940	57.46	61.96	52.45	56.64	92.95	57.36	22.14
1945	66.40	75.68	44.24	66.02	107.49	65.71	19.02
1950	103.09	112.93	72.51	120.25	136.79	87.65	26.70
1955	94.89	109.54	70.50	93.08	91.49	78.22	27.98
1960	89.30	97.18	74.30	96.66	96.99	74.19	21.21
1965	72.12	89.32	15.43	98.51	122.12	88.81	28.51
1970	62.05	62.96	16.52	89.40	152.13	115.13	26.66
1975	66.03	74.10	17.41	88.19	109.41	105.96	48.80
1976	63.86	73.50	17.65	84.66	100.40	95.89	36.62
	=1697.29	=2602.11	= 412.60	=2154.97	= 983.46	=2190.42	= 913.04

* Information on 'drunkenness' charges, which constitute a major proportion of good order offences, were not available since 1961; hence the sharp drop shown from 1965.

that is, in 1910 and 1950. In Victoria and Tasmania charges for good order offences were always lower than 1900; in New South Wales and Queensland only on a few occasions were these rates higher than the base year rates; in Western Australia the rates were lower than the base rates between 1925 and 1965; and in South Australia the rates were almost always higher than the base rates. In 1950 the charges for this offence category demonstrated a significant increase in all the states. The table presents the actual rate of charges for 1900. While South Australia may seem to be a delinquent state as far as these offences are concerned it may be pointed out that the base rate for South Australia was the lowest among all the states. Thus, even the recent level of charges in this state, in terms of actual rates, is much lower than most states; lower than that of New South Wales, Queensland and Western Australia. Tasmania presents a distinctly different pattern in good order offences. Not only has the volume been lower than the early years of this century, but since 1915 the rate for these offences has always been less than 30 per cent of that of 1900 with a very few exceptions.

Unlike offences against good order, the charges for offences against property have been higher in recent years than any time before 1970 in all the states except Queensland. Figures 5.10*a* and 5.10*b* present the movements in property offences for each state. The rates of property offences in Queensland and Western Australia at the turn of the century were relatively higher than other states but thereafter the data demonstrate a remarkable similarity in all the states. As observed in the case of the Australian aggregate, property offences during the Depression years present a pattern different from that observed in other offence categories. During this period the charges for property offences increased in all the states except Queensland and the increases were sharper in New South Wales and South Australia than in any other state.

The data for these figures are presented in Table 5.8 which provides base rate comparisons of five-year intervals. For the first few years of this century property offences declined but the later increases did not start at the same time in all the states. Thus, in New South Wales charges for property offences increased beyond the base rate

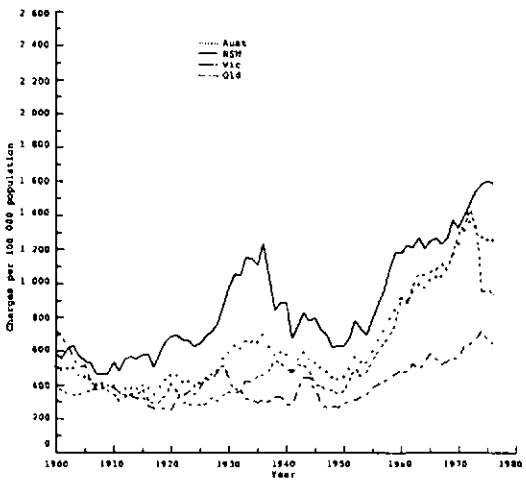


Figure 5.10a *Offences against property charged before magistrates' courts per 100 000 population aged 10 years and over, by state 1900 to 1976*

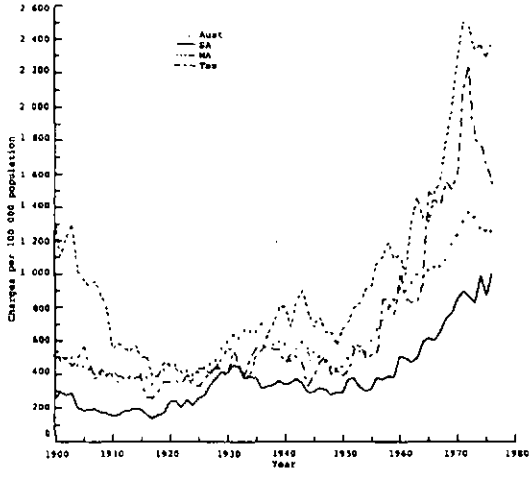


Figure 5.10b *Offences against property charged before magistrates' courts per 100 000 population aged 10 years and over, by state 1900 to 1976*

in 1920 and they have always been higher since. In Victoria this pattern emerges in 1935 and with the exception of 1950 it continues. In South Australia the pattern begins in 1930 and in Western Australia and Tasmania much later. Compared to the base rate South Australia presents the maximum increase but as in good order offences the base rate for property offences was the lowest and even an increase of over 288 per cent in rates results in a volume of under 1000 per 100 000 population. Queensland shows the lowest volume of property offences, as compared to any other state, since the mid-1930s.

Offences against the person exhibit patterns quite different from those observed in the three offence categories described above. Figures 5.11*a* and 5.11*b* show that for each state the curve is dish-shaped, the bottom falling between the early 1930s and early 1940s. During the entire period under study the rates of charges have always been lower than those at the turn of the century in New South Wales, Queensland and Western Australia; in the remaining three states higher rates are obtained only since the 1960s. The base rate comparisons are presented in Table 5.9. One of the most striking features of the data is that in Queensland and Western Australia the rates of charges for offences against the person were quite high in the beginning and for most of the period since 1900 these rates have remained well below 50 per cent of the base rate. Another feature which seems to be an established pattern appears in the data for South Australia: the pattern similar to that observed for good order and property offences is also manifested in the data for offences against the person. That is, the base rate for this state is lowest of all and even in 1976, with a 61 per cent increase, the volume of offences against the person is less than in all the states except Queensland.

The discussion above reveals that the total offences charged before magistrates' courts in Australia and in all the states have increased sharply since the end of the Second World War. This is also true for the petty offence category.

Except for South Australia, offences against good order have declined during the last two decades in all the jurisdictions. Apart from Queensland, property offences have increased fairly sharply during the last forty years, and except for Victoria and South Australia, the rate of offences against the person have rarely reached

Table 5.8 *Base rate comparison of offences against property charged before magistrates' courts, by state 1900 to 1976*

Year	*Australia*	*New South Wales*	*Victoria*	*Queensland*	*South Australia*	*Western Australia*	*Tasmania*
1900	535.91	581.62	391.34	714.58	256.94	1314.74	547.67
	= 100.00	= 100.00	= 100.00	= 100.00	= 100.00	= 100.00	= 100.00
1905	88.06	93.21	90.66	72.55	71.99	73.37	104.70
1910	77.70	91.58	87.68	52.68	58.97	41.64	76.85
1915	78.29	98.77	94.84	47.33	73.66	37.72	68.41
1920	89.44	118.22	104.41	35.59	89.30	35.19	65.30
1925	81.60	111.11	72.18	54.90	99.98	33.41	59.43
1930	115.28	168.16	91.14	61.21	159.48	41.86	71.46
1935	125.89	190.31	114.07	41.28	147.87	39.12	101.49
1940	112.01	152.87	127.42	40.18	132.16	61.18	85.25
1945	102.91	136.99	102.19	50.79	113.78	51.77	71.81
1950	88.23	108.64	93.56	41.60	112.97	50.66	71.00
1955	116.37	136.82	138.52	54.47	121.92	70.38	96.72
1960	174.30	202.92	235.00	68.13	197.72	84.48	184.06
1965	194.92	214.27	272.96	82.04	239.81	99.39	272.70
1970	233.97	228.20	331.31	79.02	329.46	173.38	291.34
1975	238.75	275.92	248.52	94.29	336.31	173.87	303.69
1976	238.18	273.67	238.98	90.28	388.70	180.41	281.04
	= 1276.40	= 1591.68	= 935.11	= 645.07	= 998.57	= 2371.80	= 1538.95

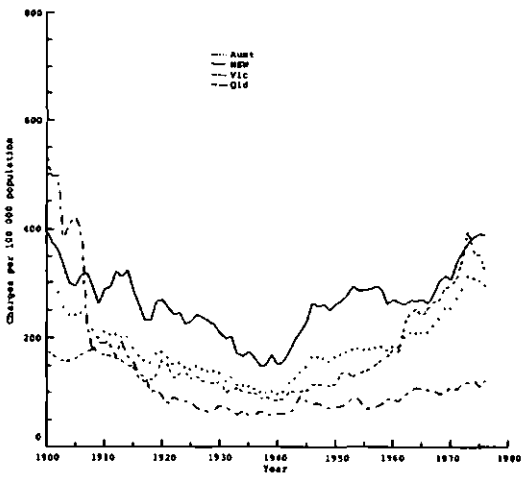


Figure 5.11a *Offences against the person charged before magistrates' courts per 100 000 population aged 10 years and over, by state 1900 to 1976*

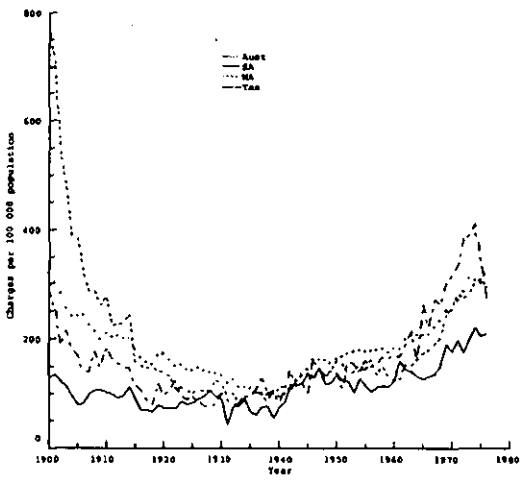


Figure 5.11b *Offences against the person charged before magistrates' courts per 100 000 population aged 10 years and over, by state 1900 to 1976*

Table 5.9 *Base rate comparison of offences against the person charged before magistrates' courts, 1900 to 1976*

Year	Australia	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania
1900	328.53	395.16	178.63	532.78	130.43	771.58	286.28
	= 100.00	= 100.00	= 100.00	= 100.00	= 100.00	= 100.00	= 100.00
1905	75.84	74.55	90.53	79.28	60.31	49.92	59.42
1910	66.22	73.12	94.20	35.64	78.42	36.18	65.43
1915	57.32	72.17	83.01	29.55	69.16	20.58	40.33
1920	55.13	68.15	89.21	17.69	56.49	18.13	33.84
1925	45.60	58.04	70.17	15.56	62.69	13.00	34.28
1930	42.96	52.64	65.79	14.00	67.98	15.25	35.26
1935	35.84	44.36	55.35	10.77	51.13	12.35	34.51
1940	31.57	38.06	48.27	11.49	57.97	14.01	29.01
1945	46.69	57.99	57.98	16.01	105.71	17.96	35.59
1950	52.19	66.06	65.19	13.77	103.96	20.64	48.70
1955	56.16	72.56	77.42	13.44	86.73	18.48	56.41
1960	58.21	68.30	100.28	16.45	95.12	16.22	59.92
1965	65.54	68.40	133.43	19.77	97.35	22.49	91.96
1970	79.16	77.29	163.82	20.87	135.48	33.28	111.08
1975	94.62	98.50	196.11	20.82	156.54	40.21	120.16
1976	91.72	97.70	176.65	22.74	161.46	42.15	95.90
	= 301.31	= 386.03	= 315.50	= 121.14	= 210.54	= 325.20	= 274.46

the level of 1900. Also observed is the fact that the movement in total offences since the Second World War reflects the movements in the petty offence category. Furthermore, by a grading of the contribution of each offence category to total offences it can be seen that during the first three decades good order offences constituted the largest proportion of total charges but thereafter petty offences became the largest component. In terms of proportion to total charges, offences against property and the person have always ranked third and fourth respectively. The size of the proportions over the years have changed mainly for good order and petty offences, whereas the contribution of the latter two offence categories have remained much the same. This is because even though the rate of property offences has increased, this increase has been much slower than the increase in the rate of petty offences.

These findings were examined for each state in terms of changes in rates and percentage contributions of each offence to total offence change, the data for which are incorporated in Appendix D. While there emerge certain differences between states, the overall pattern is similar to that observed for Australia as a whole. That is to say major changes in total offences charged are brought about by the changes in good order and petty offences and relatively serious offences, those against the person and against property, contribute a small proportion of total offence change.

Not only in terms of their contribution to changes in rate, good order and petty offences constituted the largest proportion of total offences charged. Data from various states show that over 80 per cent of the charges before magistrates' courts result from these two offence categories; only in Western Australia this proportion has declined to 78 per cent in recent years. The ten-year interval data presented in Table 5.10 exhibit differences between states. Victoria, Queensland and South Australia, in spite of increases in crimes against the person and against property during the last two decades, indicate that these two offence categories constitute a small proportion of total offences charged, often smaller than in earlier years. In 1950 all the states exhibit the lowest proportion of offences against the person and property.

State differences: disposition of offences

The above discussion demonstrates the differences and similarities between states with regard to

Table 5.10 *Proportions of the four major categories of offences to total offences charged, by state 1900 to 1976*

Year	*Offences*	*New South Wales*	*Victoria*	*Queensland*	*South Australia*	*Western Australia*	*Tasmania*
1900	Person and property	17.5	9.6	18.6	14.4	18.9	19.9
	Good order and petty	82.5	90.4	81.4	85.6	81.1	80.1
1910	Person and property	13.9	9.8	11.8	9.7	13.0	12.3
	Good order and petty	86.1	90.2	88.2	90.3	87.0	87.7
1920	Person and property	19.1	12.0	8.2	11.4	14.5	11.0
	Good order and petty	80.9	88.0	91.8	88.6	85.5	89.0
1930	Person and property	19.0	12.0	12.4	12.2	13.6	11.7
	Good order and petty	81.0	88.0	87.6	87.8	86.4	88.3
1940	Person and property	15.8	10.6	9.7	9.7	13.4	13.3
	Good order and petty	84.2	89.4	90.3	90.3	86.6	86.7
1950	Person and property	10.6	8.9	8.0	7.5	11.9	9.3
	Good order and petty	89.4	91.1	92.0	92.5	88.1	90.7
1960	Person and property	13.4	9.3	8.5	7.9	12.9	13.0
	Good order and petty	86.6	90.7	91.5	92.1	87.1	87.0
1970	Person and property	15.6	14.1	8.9	7.8	21.5	16.0
	Good order and petty	84.4	85.9	91.1	92.2	78.5	84.0
1976	Person and property	15.6	12.0	9.4	9.1	22.0	12.1
	Good order and petty	84.4	88.0	90.6	90.9	78.0	87.9

charges before magistrates' courts. Up to this stage courts did not have any role to play, as laying charges before the magistrates' courts is a function of the police. Hence the differences and similarities obtained reflect in a sense police activity; for courts it reflects the volume of offences heard and determined. Dispositions of these offences on the other hand reflect mainly court action; therefore, an examination of the state data on dispositions seems particularly relevant.

The conviction rate and convictions as proportion of total offences charged in Australia as a whole have been described in the previous section. The parallel between charges and convictions observed for Australia as a whole is also observed for certain offence categories in most of the states. Table 5.11 shows the range of convictions

Table 5.11 *Convictions as proportion to total charges by offence categories, magistrates' courts, by state 1900 to 1976*

State	Minimum Proportion Year	Minimum Proportion Value	Maximum Proportion Year	Maximum Proportion Value	Mean Proportion	Standard Deviation
			Total offences			
New South Wales	1933	79.34	1953	93.11	86.7	3.6
Victoria	1916	67.85	1958	92.98	82.8	7.1
Queensland	1950	38.79	1902	83.47	65.6	10.8
South Australia	1973	81.43	1941	94.01	87.6	2.4
Western Australia	1900	66.78	1955	96.13	90.0	5.8
Tasmania	1975	66.44	1937	94.50	85.1	6.8
			Petty offences			
New South Wales	1900	76.89	1950	95.79	88.4	4.1
Victoria	1916	73.42	1958	95.44	88.0	4.4
Queensland	1969	74.06	1955	97.35	83.1	4.8
South Australia	1911	67.57	1941	94.95	85.0	5.8
Western Australia	1909	70.43	1955	96.87	88.3	7.4
Tasmania	1975	65.67	1937	96.18	85.7	7.6
			Offences against good order			
New South Wales	1938	90.84	1953	98.50	95.5	2.0
Victoria	1916	60.32	1949	96.32	79.0	12.2
Queensland	1976	12.80	1900	99.86	48.1	23.1
South Australia	1976	87.71	1906	99.19	97.3	1.8
Western Australia	1900	56.68	1955	98.53	94.3	8.0
Tasmania	1974	71.52	1933	96.46	89.0	6.8
			Offences against property			
New South Wales	1933	38.66	1959	76.63	62.0	10.4
Victoria	1924	54.73	1966	78.87	65.5	6.4
Queensland	1901	53.04	1935	90.34	77.6	9.6
South Australia	1901	51.89	1969	90.29	73.1	9.9
Western Australia	1902	55.39	1964	92.26	81.4	10.2
Tasmania	1963	52.48	1937	87.93	74.0	8.2
			Offences against the person			
New South Wales	1953	36.05	1921	51.38	43.3	3.1
Victoria	1959	40.58	1942	55.88	48.2	2.9
Queensland	1947	42.68	1975	68.65	52.3	5.4
South Australia	1924	34.86	1969	79.12	53.5	10.0
Western Australia	1903	44.92	1973	79.96	61.1	9.2
Tasmania	1902	44.72	1939	75.52	61.1	6.5

as proportions of total charges for each offence category, their means and standard deviations for each state. An examination of the total offence category reveals that except for Queensland, on average 83 to 90 per cent of the offences charged before magistrates' courts result in convictions. The use of mean as a measure of central tendency in this case seems quite appropriate especially when we consider the standard deviations. In the five states the standard deviations are always 8 per cent or less of the mean proportion convicted. The range of the proportion of offences convicted over the entire period is also reasonably small in every state except Queensland. The data show that at no period during this century less than 66 per cent of the offences charged were convicted and in Western Australia a maximum of 96 per cent of all offences were convicted in 1955. Queensland presents a picture different from all other states: the lowest and highest proportion convicted were 39 and 83 per cent respectively.

The above observations may suggest that between states there are no differences in the proportion of offences in which there is a conviction. The tests of the means, on the contrary, show significant differences between states except in three pairs. The results of these tests are presented in Table 5.12. We found no

Table 5.12 *Differences of the means* of proportions of convictions to total charges between states by offence categories, magistrates' courts, 1900 to 1976*

State	*Victoria*	*Queensland*	*South Australia*	*Western Australia*	*Tasmania*
		Total offences			
New South Wales	4.35	-16.30	1.74†	4.21	1.82†
Victoria		-11.67	5.62	6.91	- 2.11†
Queensland			17.45	17.47	-13.46
South Australia				3.38	2.98
Western Australia					4.78
		Petty offences			
New South Wales	0.60†	- 7.41	- 4.21	- 0.12†	2.74
Victoria		- 6.64	- 3.62	0.30†	2.28†
Queensland			2.21†	5.21	- 2.58
South Australia				3.10	- 0.67†
Western Australia					2.14†
		Offences against good order			
New South Wales	11.73	-17.90	6.10	- 1.21†	8.02
Victoria		-10.35	13.09	9.26	- 6.31
Queensland			18.62	16.57	-14.88
South Australia				- 3.22	10.43
Western Australia					4.47
		Offences against property			
New South Wales	- 2.49	9.67	6.82	11.70	- 8.00
Victoria		9.19	5.71	11.60	- 7.23
Queensland			- 2.84	2.37	2.46
South Australia				5.10	- 0.62†
Western Australia					4.93
		Offences against the person			
New South Wales	-10.09	12.67	8.55	16.15	-21.84
Victoria		5.89	4.51	11.82	-16.06
Queensland			0.98†	7.30	- 9.24
South Australia				4.89	- 5.58
Western Australia					- 0.01†

* t-test difference of two sample means with pooled or separate variance.
† Not significant at $\alpha \leq 0.01$.

significant differences between the means of New South Wales and South Australia, New South Wales and Tasmania, and Victoria and Tasmania. Comparing these, we observed that all other pairs of means of proportions of convictions show significant differences at the 0.01 level. Furthermore, for example, the *t*-value for New South Wales and Queensland is −16.30; this implies that the means of the two states are not only significantly different but also Queensland's mean is significantly less than the New South Wales mean.

In the earlier discussions it has been shown that over 80 per cent of the total offences charged consisted of petty and good order offences and that the patterns in total offences are reflections of patterns in these two offence categories. Now these offences are examined separately. The data for petty offences show that the means of proportions of convictions for all the states are fairly close, that is, between 83 and 88 per cent, and their standard deviations are in no case more than 9 per cent of the mean. Yet we observed that of the fifteen possible pairs of means eight are significantly different.

Offences against good order show a remarkably high proportion of convictions and the ranges of these proportions, particularly in New South Wales and South Australia, were very small indeed. On the other hand, Queensland[7] demonstrates a peculiar distribution, the proportions ranging from 12.8 to 99.9 per cent. Compared to the petty offence category the means of these proportions are not that close. Except for the means between New South Wales and Western Australia we find all the pairs of means to be significantly different.

In the case of the remaining two offence categories, the means of proportions convicted are much lower than those of petty and good order offences. In every state offences against the person are convicted less often than the property offences. For property offences, the means of proportions convicted are significantly different in all cases except between South Australia and Tasmania. In the case of offences against the person only two sets of means, Queensland and South Australia, and Western Australia and Tasmania, were not found to be significantly different.

To conclude, then, the magistrates' courts in various states generally differ significantly but not substantially in their decisions on offences. It is only in the case of petty offences, which are predominantly traffic violations, that there are similarities in the conviction disposition. Also, from every point of view it emerges that in general the proportion of offences convicted in recent years is not the highest for the seventy-seven years covered by this study.

Table 5.13 presents test results of the differences of the means of proportions of discharges. For the petty and good order offence categories these results are similar to those obtained in Table 5.6. That is to say, that if the means were not significantly different for proportion of convictions they were not different for proportion of discharges as well. This finding is not unusual. In fact, very few of these offences are ever committed to the higher courts, which means that they are either convicted or discharged at the magistrates' courts level; hence similar differences between means for the proportion convicted and the proportion discharged are logically consistent.

In the two relatively serious offence categories the pattern is slightly different. For property offences the means between Queensland and Western Australia, South Australia and Western Australia, South Australia and Tasmania, and Western Australia and Tasmania, do not show significant differences in proportions of discharges and in the case of offences against the person significant differences are observable between the six pairs of means. It will be recalled that the offences against the person present a different picture when compared to the rest of the offence categories. Of all the major offence categories the lowest conviction rate is for offences against the person. These offences also carry the highest proportions of discharged cases and cases committed to higher courts. Hence, whereas there is a trade-off between conviction and discharge in other offence categories it is not so in offences against the person. An interesting point which emerges from the data is that the means of proportions discharged for New South Wales and Victoria are significantly different from all other states but the means of the other four states are not significantly different from each other.

The test results of means of proportions committed are presented in Table 5.14. The one expected result is the similarity between the means for petty offences; only two pairs of means, that is between New South Wales and

Table 5.13 *Difference of the means* of proportions of discharges to total charges between states by offence categories, magistrates' courts, 1900 to 1976*

State	*Victoria*	*Queensland*	*South Australia*	*Western Australia*	*Tasmania*
		Total offences			
New South Wales	- 4.59	16.39	- 0.48†	- 3.03	- 2.60
Victoria		11.48	- 5.12	- 6.26	1.84†
Queensland			-17.02	-17.06	13.27
South Australia				- 2.97	- 3.08
Western Australia					- 4.59
		Petty offences			
New South Wales	- 0.63†	7.59	4.28	0.18†	- 2.85
Victoria		6.70	3.64	- 0.26†	- 2.36
Queensland			- 2.22†	- 5.26	2.56
South Australia				- 3.10	0.64†
Western Australia					- 2.18†
		Offences against good order			
New South Wales	-11.60	17.91	- 6.38	1.24†	- 7.98
Victoria		10.39	-13.00	- 9.14	6.30
Queensland			-18.65	-16.57	14.94
South Australia				3.29	-10.51
Western Australia					- 4.38
		Offences against property			
New South Wales	3.12	- 8.04	- 5.62	- 6.94	5.57
Victoria		- 7.26	- 3.76	- 5.65	3.69
Queensland			3.28	1.36†	- 3.87
South Australia				- 1.86†	- 0.35†
Western Australia					- 2.33†
		Offences against the person			
New South Wales	8.69	-17.11	-11.15	-17.48	17.71
Victoria		-10.77	- 6.60	-10.41	10.68
Queensland			1.83†	1.02†	- 0.74†
South Australia				- 1.03†	1.26†
Western Australia					0.29†

* *t*-test difference of two sample means with pooled or separate variance.
† Not significant at $\alpha \leq 0.01$.

Tasmania, and Victoria and Tasmania, were found to be marginally different. For the rest of the offence categories the means are different in the majority of cases.

Summary

One of the major findings of this study so far is that acts that are traditionally labelled as offences, that is, offences against the person, against property and against good order, have remained remarkably constant during the entire century. The analyses indicate that increases in the total volume of crime have been primarily because of increases in petty offences. The implication is that petty offences place undue pressure on court resources.

Of all the offence categories, the one which contains the most violent offences demonstrates the least fluctuations. Also, the recent level of offences against the person is barely approaching the level exhibited during the early part of this century. These offences do not seem to show any sensitivity to changes in the outside world. Since the 1930s these offences have always constituted less than 3 per cent of the total charges before

Table 5.14 *Difference of the means* of proportions of committals to total charges between states by offence categories, magistrates' courts, 1900 to 1976*

State	Victoria	Queensland	South Australia	Western Australia	Tasmania
		Total offences			
New South Wales	4.83	- 7.81	-6.95	-13.42	7.27
Victoria		- 2.82	-2.81	- 8.24	3.12
Queensland			-0.43†	- 5.48	0.73†
South Australia				- 4.24	0.27†
Western Australia					-3.94
		Petty offences			
New South Wales	0.74†	- 1.09†	-1.33†	- 2.34†	-2.92
Victoria		- 0.66†	-0.91†	- 2.17†	2.85
Queensland			-0.04†	- 1.10†	1.66†
South Australia				- 1.24†	1.87†
Western Australia					0.60†
		Offences against good order			
New South Wales	-2.76	- 3.58	0.80†	- 2.40	-3.42
Victoria		- 3.92	-1.84†	- 3.58	0.24†
Queensland			2.38	1.11†	-5.09
South Australia				- 1.92†	-1.96†
Western Australia					-4.58
		Offences against property			
New South Wales	-2.94	- 2.88	-2.45	-13.44	3.45
Victoria		- 5.62	-5.30	-17.70	5.58
Queensland			0.49†	- 8.75	1.09†
South Australia				- 9.72	1.51†
Western Australia					-5.59
		Offences against the person			
New South Wales	-1.47†	10.18	6.49	- 1.88†	0.88†
Victoria		8.67	4.93	- 2.95	1.93†
Queensland			-3.91	-10.98	9.68
South Australia				- 7.49	6.22
Western Australia					-0.54†

* *t-test difference of two sample means with pooled or separate variance.*

† Not significant at $\alpha \leq 0.01$.

courts. Furthermore, the two most serious offence categories, that is, offences against the person and against property, together have constituted 15 per cent or less of the total offences charged before magistrates' courts in Australia.

The patterns of property and good order offences present interesting results in that increases or decreases in their rates at any given time are in opposite directions. Also, analysis with the help of polynomial curve fitting indicates that changes in the rate of increase or decrease in various offence types often take place at the same time, that is, within a period of a few years; and that whatever may be the influencing factors their effects vary according to type of crime.

With regard to disposition of offences, on average over 83 per cent of all the offences charged result in conviction and less than 2 per cent of the offences are committed for trial at the higher courts. Petty offences, which consist mainly of traffic offences, have the highest conviction rate; offences against the person are convicted least frequently. Also, offences against the person and property are more likely to be discharged than petty and good order offences.

The proportion of offences resulting in conviction has been fairly constant over time for all offences except property. In the case of property offences this proportion has varied between 49 and 78 per cent of the charges. During the Depression of the 1930s the charges rate of property offences increased sharply and the conviction rate for these offences was the lowest.

The six states of Australia show certain similarities and differences in rates of offences charged as well as in disposition pattern. First, with regard to all offences except those against good order, all the states show similar patterns and in that sense the Australian patterns will represent those of the states. The patterns of good order offences differ markedly between states. Second, the present century began with a very high rate of charges for each offence in Western Australia. Third, except for good order offences, Queensland presents the lowest rate of offences charged during the recent decade and a half. And finally, serious offences such as those against the person and against property have constituted less than 20 per cent of the total offences charged and in recent years, except in Western Australia, these account for only 15 per cent or less.

With regard to dispositions the states differ significantly in relation to offences against the person and property but not so much in the other two offences. Nevertheless, the conviction rates for good order and petty offences have always been high in all the states as observed for Australia as a whole.

6 The Courts and Specific Offences

The previous chapter presented an overview of the patterns of the totality of offences charged before magistrates' courts in Australia and the six states. The analysis there was concerned with the four general categories of offences, an analysis which has the merit of reflecting some understanding of the crime problem facing the nation. While it is difficult to establish a precise relationship between the offences known to the police and the offences charged before magistrates' courts, it is not unrealistic to assume that major decreases and increases in crimes known to the police will be reflected in the statistics on charges before magistrates' courts. In the absence of statistics on known crimes, court statistics offer the best possible picture of the crime situation in Australia.

The four general offence categories analysed in the previous chapter do not provide information on specific offences. Of the numerous types of offences, it is believed that a few concern the ordinary citizen and administrators most, and these include offences involving violence, theft or damage to property. At least some of these offences occasion fear and insecurity in the members of the society. Therefore, it is of greater interest to know whether such offences are increasing or decreasing compared to others. This chapter is concerned with the history of some of these offences during the twentieth century. A note of caution, however, is in order. The classification of offences by various criminal justice agencies presents a serious problem when the statistics of all these agencies are examined. Changes in classification can occur not only between agencies but also within the same agency over a period of time. The emphasis on major categories of offences in the preceding chapter was, to a certain extent, to avoid this problem. An offence of stealing from the person, for example, may often be placed under the offence type 'stealing' or 'larceny' or under 'robbery'; but it will always be under the major category of offences against property. Moreover, the changes in classification are often encountered in the various property offence types and much less in offences of violence or good order. This classification problem was compounded by the very nature of the study which includes statistics on various agencies from six states with different criminal laws. An effort to rectify this problem has been made, wherever possible, but when a serious doubt persisted two similar offence types have been combined or an offence type has been excluded for a particular state.[1]

Eight specific offences were selected for detailed analysis: homicide, rape, assault, robbery, burglary, larceny and car theft, drunkenness and violations of motor vehicle laws. These were chosen for various reasons, some because of their grave nature and others because of their frequency. The first six offence types fall mainly in the former category and the last two in the latter. Furthermore, all these offences together form the majority of offences dealt with in the preceding chapter. Thus, for example, this selection includes only three offences (homicide, rape and assault) which fall in the major category of offences against the person, yet these three form over three-quarters of the offences in this category. Similarly, robbery, burglary and larceny are

but three of the many property offences and still these together make up about two-thirds of the total property offences. Among the good order offences drunkenness alone constitutes two-thirds; and traffic offences, especially since the 1950s, form 75 per cent or more of the total petty offences.

In the sections which follow each of these offences is taken separately. In accordance with the style established for the preceding chapters, the examination of Australian aggregate data is followed by comparisons between states. However, the data on all the specific offences were not available for all six states: Victoria published such statistics only for traffic violations. Hence, in this chapter, the Australian aggregate represents only five states, but data on traffic violations relate to all six.

Homicide

Homicide is an act reprehended in every society and one which also invites the most severe sanctions under the law. Reflecting on this topic Sellin writes that:

> Of the many actions made punishable by criminal law, the taking of the life of a human being is generally regarded as the most abominable, especially when it is done deliberately and with that degree of foresight which places it in the category of murder in the first degree. No other offense — not even treason — is so often threatened with the death penalty by the criminal codes of American states.[2]

It is not surprising therefore that there exists extensive scientific literature on homicide, yet longitudinal studies are few indeed. In a study of homicide in 110 nations, Archer and Gartner[3] argue persuasively the need for longitudinal and cross-national analysis of homicide data. The authors raise false hopes when they claim that their Comparative Crime Data File (CCDF) contained time series data on homicide since 1900; in their analysis they rarely cite a city or a nation which provides data from that year. What is then obtained is a mishmash of data for different periods for different nations.

The Australian homicide data include such offences as murder, attempted murder, manslaughter, manslaughter by driving and infanticide. Ideally, it would have been preferable at least to analyse the data on 'manslaughter by driving' separately; unfortunately, separate data were not available for all the states for the entire period. The homicide data for Australia and the states are presented in Figures 6.1*a* and 6.1*b*. Examination of the national data reveals that homicide rates during the seventy-seven years from 1900 remained fairly stable and varied between a low of 3.05 per 100 000 persons aged 10 years and over in 1942 and a high of 6.67 in 1974, the mean rate being 4.70. In the mid-1970s we obtained high rates of over 6 homicides per 100 000 persons but the century also began with a similar rate. It is also interesting to note that total homicides constituted about 2 per cent of the offences against the person in 1900 as well as in 1976; this proportion has remained about the same throughout the period except for a few years in the mid-1930s and early 1940s when the proportion increased to approximately 3 to 4 per cent.

The Australian homicide data presented in Figures 6.1*a* and 6.1*b* show a series of peaks and fluctuations. Except for a few years at both ends of the time span, the Australian aggregate homicide rate has generally varied between 3 and 4 per 100 000 persons; complete data have been pre-

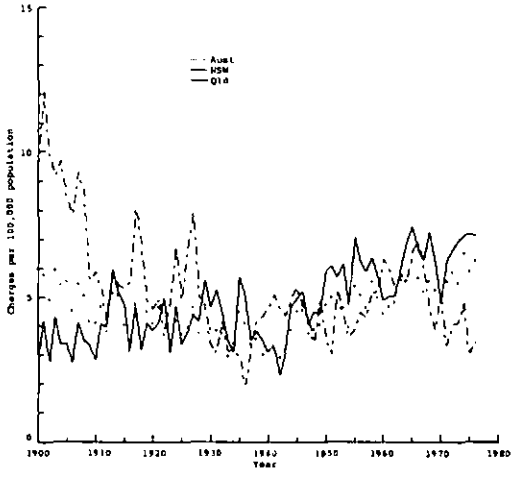


Figure 6.1*a* *Homicides charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

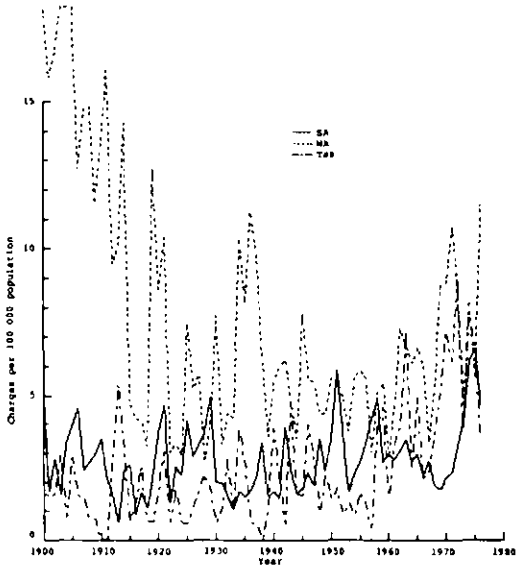


Figure 6.1b *Homicides charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

sented in Appendix E, Table E. 1. While detailed analysis in relation to time periods and other socio-economic variables will be undertaken in a subsequent chapter, it can be said at this stage that whenever increasing patterns in homicide rates are observed they coincide with economic and population growth, that is, the 1950s and 1960s; this also represents a period with very low levels of unemployment.

One of the major emphases in this study has been on change; also noted frequently has been the impact of motor cars. Since the homicide data also include manslaughter by driving, it is important that the impact of this offence on total homicide rate be highlighted. As indicated earlier such data were not available for the entire country: Table 6.1 presents, therefore, data for New South Wales for the few recent years. Between 1954 and 1978 manslaughters by driving constituted at least 31 per cent of the total homicides in the state and in 1974 this proportion was over 57 per cent. Admittedly the magnitude of this offence may be conditioned, among other factors, by the volume of road traffic and the density of the population; New South Wales therefore may not be representative of all the states of Australia. But it is not only the largest state in terms of population but also the most industrialised. Naturally the Australian homicide rates will be substantially affected by the rates in New South Wales. While no comparisons between states are intended, for illustrative purposes such data are revealing.

Subtracting these data from total homicides for the period 1954 to 1978 new homicide figures are obtained for New South Wales (columns 5 and 6). These data are compared with the total homicides and their rates for the first twenty-five years of this century (columns 8 and 9). It is apparent that homicide rates for the period 1954 to 1978 are generally lower than those for 1900 to 1924. This is quite significant and the comparison is realistic for several reasons. First, there were not as many motor vehicles on the road during the first two decades of this century as there were since the 1950s and thus there could not have been so many manslaughters by driving. One could argue that even a few deaths by cars could have produced a high rate because of the small population at that time. On the other hand many deaths in the early period might not have occurred today, given the state of medical technology and the more speedy provision of medical relief services. If, therefore, these conditions have continued unchanged during the 1950s and 1960s, the number of deaths by driving could have been significantly greater. It is therefore possible to say that, considering both data in Table 6.1 and Table 6.2, the homicide rates during this century have remained fairly constant; if there is any discernible pattern it shows a slight decline in the rates during the two recent decades as compared to earlier periods.

Examination of state data reveals marked differences in homicide rates between states. Data pertaining to Figures 6.1*a* and 6.1*b* are presented in summary form in Table 6.2. For a major part of this century Tasmania has experienced the lowest level of homicide rates, closely followed by South Australia. Western Australia, on the other hand, has experienced the highest level of homicides; in the first decade and a half the rates were extraordinarily high and they recurred during the post-First World War years, the pre-Second World War years and the 1970s. Queensland exhibited high homicide rates during the first few years and since the 1930s these rates stabilised. New South Wales demonstrates the lowest range of fluctuations in homicide rates during the entire period.

Table 6.1 *Comparison of total homicides minus manslaughter by driving (1954 to 1978) and total homicides (1900 to 1924), New South Wales*

Year (1)	Total Homicides (2)	Manslaughter by driving n (3)	Manslaughter by driving % of total Homicides (4)	Total Homicides minus Manslaughter by driving n (5)	Total Homicides minus Manslaughter by driving Rate (6)	Year (7)	Total Homicides n (8)	Total Homicides Rate (9)
1954	129	58	45.0	71	2.60	1900	27	2.67
1955	197	82	41.6	115	4.13	1901	43	4.18
1956	177	72	40.7	105	3.70	1902	29	2.76
1957	170	56	32.9	114	3.94	1903	46	4.30
1958	188	63	33.5	125	4.24	1904	37	3.39
1959	172	60	34.9	112	3.72	1905	38	3.41
1960	150	56	37.3	94	3.05	1906	31	2.72
1961	158	70	44.3	88	2.80	1907	48	4.12
1962	160	83	51.9	77	2.41	1908	42	3.52
1963	196	105	53.6	91	2.80	1909	41	3.36
1964	227	109	48.0	118	3.57	1910	35	2.80
1965	250	122	48.8	128	3.81	1911	52	4.07
1966	228	124	54.4	104	3.04	1912	52	3.97
1967	219	92	42.0	127	3.64	1913	80	5.96
1968	258	94	36.4	164	4.61	1914	71	5.16
1969	226	100	44.2	126	3.46	1915	67	4.76
1970	178	56	31.5	122	3.28	1916	45	3.12
1971	240	79	32.9	161	4.21	1917	69	4.67
1972	229	105	45.9	124	3.19	1918	48	3.17
1973	278	134	48.2	144	3.66	1919	64	4.12
1974	224	128	57.1	96	2.41	1920	61	3.84
1975	281	131	46.6	150	3.73	1921	67	4.12
1976	274	138	50.4	136	3.35	1922	83	4.98
1977	304	161	53.0	143	3.49	1923	53	3.11
1978	304	153	50.3	151	3.63	1924	82	4.70

Note: Manslaughter by driving includes culpable driving resulting in death.

In this section it is not possible to discuss the outcome of these offences at the magistrates' courts mainly because they are committed to the higher courts for trial. Therefore, the dispositions rendered by the magistrates' courts would give a false impression of the charges laid.

Assault

Among the offences against the person in general and violent offences in particular, assaults constitute the largest single group. In 1900 over 75 per cent of the total offences against the person in Australia were assaults, and the proportion in 1976 was exactly the same. Similarly, of the three major offence categories (offences against the person, against property and against good order), assaults constituted only 7 per cent both in 1900 and in 1976. While it is acknowledged that court statistics are far removed from the total offences actually committed, nevertheless if the total offences actually committed have increased then at least some of this increase will be reflected in the court statistics. The Australian magistrates' courts data show that from all points of view the level of offences of assaults in recent years has not reached that of the early part of this century.

The magistrates' courts statistics include numerous offences under the heading 'assault' (see Appendix A for details). Because of the difficulties inherent in comparing each of these offences between states and over time, all have been

Table 6.2 *Homicides charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

Year	Australia	New South Wales	Queensland	South Australia	Western Australia	Tasmania
1900	6.21	2.67	9.63	4.78	31.99	1.56
1905	5.67	3.41	8.51	3.95	19.20	2.30
1910	4.24	2.80	5.88	3.47	13.61	0.00
1915	4.15	4.76	5.30	2.58	4.68	0.66
1920	4.23	3.84	4.59	3.68	8.62	1.86
1925	3.85	3.36	4.89	4.11	7.45	0.59
1930	4.03	4.62	3.36	1.99	7.74	0.56
1935	4.60	5.69	2.99	1.47	8.16	2.79
1940	3.27	3.09	4.64	1.66	5.53	3.85
1945	4.64	4.93	5.35	1.76	7.84	1.53
1950	4.89	5.90	3.69	3.54	5.63	1.38
1955	5.51	7.08	3.89	2.64	5.88	1.65
1960	4.56	4.87	6.32	2.96	2.83	1.50
1965	6.41	7.44	6.58	2.94	6.62	4.90
1970	5.09	4.78	5.13	2.12	8.81	7.20
1975	6.05	7.18	3.07	6.59	5.60	6.72
1976	6.41	7.13	3.43	4.69	11.47	3.62
Mean 77 years	4.70	4.78	5.32	2.77	7.95	2.42

included under the general heading of 'assault'. Therefore, instead of identifying only serious assaults, which have been investigated by many researchers, it was necessary to be satisfied with an account of all assaults. Among the violent offences (besides homicide) there are two which generate maximum fear. These are serious or grievous injury and robbery with violence. A scrutiny of the magistrates' courts data throughout Australia reveals that cases involving serious bodily injury are very few indeed and statistically it is very difficult to deal with such cases. Fear of being mugged on the street is a fear which recent research has shown refers to receiving not only serious bodily injury but also minor injuries. Therefore total assaults probably provide a better indication of violence than a count of only serious assaults.

Assault rates per 100 000 persons aged 10 years and over are presented in Figures 6.2*a* and 6.2*b*. Obviously the Australian curve is similar to that obtained for offences against the person (see Figure 5.3). The lowest assault rate ever recorded in this century was in 1940 (92.22) and the highest of 248.12 was in 1900. Also we observe a monotonic decline in assault rates from 1900 to 1940 and an almost monotonic increase since 1941.

Although crimes of violence have received significant attention in research studies there exists almost nothing on the types of assaults included

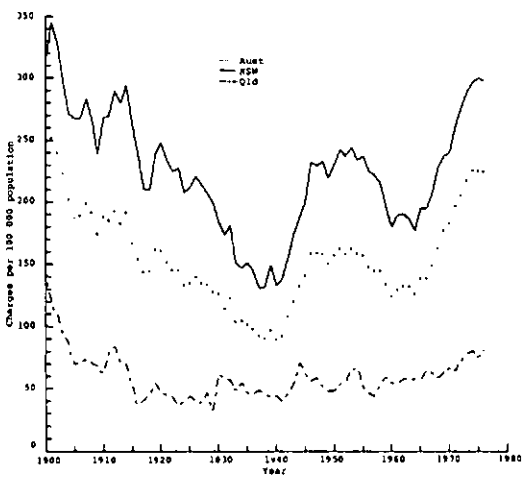


Figure 6.2*a* *Assaults charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

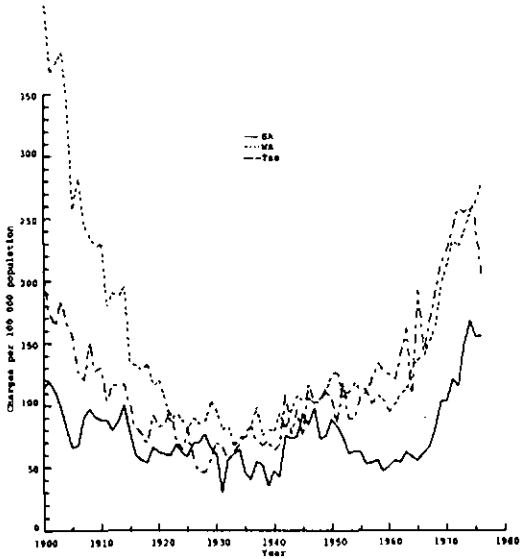


Figure 6.2b *Assaults charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

in the present study. Within crimes of violence, aggravated or serious assault have received considerable attention. Research findings generally show that the age group 15 to 24 is responsible for a majority of these crimes, especially since the mid-1950s, and that this age group, relative to other age groups, is involved in crimes of violence disproportionate to its numbers. Unfortunately, age distribution of magistrates' courts data for Australia is not available. Nevertheless, the age structure of the population presents some interesting comparisons.

Table 6.3 presents data on the assault rates per 100 000 persons aged 10 years and over and the proportion of people aged 15 to 24 and 25 to 34 in that population. In general the higher rates of assaults during the first two decades and during the 1960s and 1970s roughly coincide with the higher proportion of youths aged 15 to 24 in the population. If this pattern is valid the plateauing of assault rates in the mid-1970s should be an indication of a decline in the coming years. It is difficult, however, to make any conclusive statements. During the years immediately after the Second World War assault rates increased and so did the proportion of the population in the 25 to 34 age group. While examining offences against the person in the previous chapter it was observed that these offences do not seem to be affected by major catastrophes like wars and economic crises. To a certain extent this observation is applicable to assaults as well. However, during the Depression years assault rates did decline, even though the decline had started much earlier. On the other hand, the lower assault rates during the war years are explainable if it is valid to assume that a majority of such offences are committed by young persons. The population figures relate to individuals having an address in Australia irrespective of whether they were living in Australia or overseas. Thus, while the 15 to 24 age group constituted 20.89 per cent of the population in 1940 a large number of them were outside the country. Therefore, whereas the contribution of this age group to offences can not be assessed accurately the indications are that the current research findings have some validity.

Table 6.3 *Assault rates and population 15 to 24 and 25 to 34 as proportion of population aged 10 years and over, Australia 1900 to 1976*

Year	Assault rate	15–24 age group	25–34 age group
1900	248.12	25.51	21.52
1905	190.19	25.92	20.49
1910	190.97	26.17	20.56
1915	169.20	22.89	21.02
1920	163.61	21.70	21.66
1925	137.51	21.46	19.92
1930	128.78	22.46	18.98
1935	104.54	21.62	18.79
1940	92.22	20.89	19.44
1945	143.21	20.31	19.12
1950	159.73	18.17	19.56
1955	159.87	16.60	19.66
1960	126.84	17.67	17.19
1965	141.42	20.19	15.63
1970	185.64	21.76	16.53
1975	227.72	21.19	18.50
1976	227.64	21.07	18.78

The examination of data from different states shows a pattern similar to that obtained for Australia. The data in Table 6.4 show that in all the states assault rates were high at the beginning of the century as well as during the 1960s and 1970s,

Table 6.4 *Assaults charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

Year	Australia	New South Wales	Queensland	South Australia	Western Australia	Tasmania
1900	248.12	312.75	143.30	103.91	422.62	207.71
1905	190.19	266.84	69.54	65.72	257.87	156.70
1910	190.97	268.24	61.68	88.38	230.34	131.15
1915	169.20	261.36	52.99	77.58	133.25	100.25
1920	163.61	247.76	45.88	62.35	120.26	81.95
1925	137.51	210.79	43.57	58.29	81.19	80.48
1930	128.78	184.21	62.38	61.08	95.64	72.33
1935	104.54	150.87	45.25	45.91	74.60	78.67
1940	92.22	132.55	44.15	47.56	79.51	63.23
1945	143.21	200.25	63.29	93.26	104.03	74.88
1950	159.73	230.25	47.48	88.90	125.68	105.45
1955	159.87	237.25	51.61	62.45	112.60	107.50
1960	126.84	179.70	52.78	50.39	94.56	126.37
1965	141.42	194.75	57.27	55.60	136.61	192.48
1970	185.64	239.85	68.47	103.70	212.71	225.67
1975	227.72	299.72	74.31	155.20	263.59	248.92
1976	227.64	297.28	81.65	156.04	277.75	204.11
Mean 77 years	158.55	224.45	59.88	75.93	151.84	120.25

with differences in the magnitude of rates. Among states, except for the very early years of this century, New South Wales exhibits a consistently higher rate of assaults than any other state; Queensland represents the opposite extreme. Except during the 1970s in South Australia and Tasmania, the level of assaults has never been higher than that of 1900 at any time and in any state. It is interesting to note that when the proportion of 15 to 24 age group was the lowest (late 1950s and early 1960s) every state except Tasmania demonstrates a relatively lower assault rate. As shown in Figures 6.2*a* and 6.2*b*, the recent rise in assaults started in the early 1960s when the post-Second World War baby boom boosted the population of this age group.

It has been shown in the previous chapter that the offences against the person receive a conviction less often than any offence category, and these offences are either discharged or committed for trial more often than the rest. Since assaults constitute three-quarters of the total offences against the person these disposition patterns should emerge. Data in Table 6.5 support these findings. For Australia, at any time this century, the highest proportion of assault offences disposed of as convicted was slightly over 55 per cent of those charged. However, this conviction rate has obtained only since the 1960s. It is interesting to note that generally when the conviction rate was high the discharge rate was low and vice versa. Furthermore, during the entire century less than 10 per cent of the charges for assaults were committed for trial at the higher courts.

An examination of the differences between states reveals that in every state except New South Wales the conviction rate for assaults was much higher than the Australian conviction rate. New South Wales shows a consistently lower conviction rate, and rarely has this rate been more than 50 per cent of the total charges. This state, being the largest in terms of population, grossly affects the national pattern. This finding holds true for committal cases as well. Whereas the committal rate was seldom more than 5 per cent of the charges in the four states, New South Wales often showed a rate of 10 per cent. Finally, the relatively higher conviction rate since the 1960s occurred only in South Australia and Western Australia, and aside from this, it is difficult to identify periods which demonstrated a unique disposition pattern.

Rape

Charges for rape have been on the increase in re-

Table 6.5 *Proportions of assault charges resulting in convictions and discharges at magistrates' courts, 1900 to 1976*

Year	Australia		New South Wales		Queensland		South Australia		Western Australia		Tasmania	
	Convic-tions	Dis-charges	Convic-tions	Dis-charges	Convic-tions	Dis-charges	Convic-tions	Dis-charges	Convic-tions	Dis-charges	Convic-tions	Dis-charges
1900	49.32	47.29	43.32	52.32	75.24	24.76	71.37	26.34	52.29	45.05	41.95	56.55
1905	47.98	47.05	43.53	50.62	78.32	21.33	68.31	25.14	46.38	51.06	55.45	41.71
1910	50.34	44.98	45.13	49.13	76.33	22.97	58.21	40.36	63.14	34.01	58.82	39.57
1915	50.94	43.84	47.66	46.25	84.81	14.07	42.44	54.98	59.42	27.70	67.76	30.92
1920	49.26	45.51	47.13	47.11	69.23	28.46	53.16	43.88	52.12	43.82	59.85	39.39
1925	50.08	42.59	45.88	45.78	78.62	19.93	51.87	45.23	72.49	26.20	67.15	23.36
1930	50.81	40.33	47.47	42.62	60.45	30.11	53.43	42.60	64.72	33.33	73.64	22.48
1935	49.62	42.26	46.23	44.91	64.94	25.86	49.32	47.03	58.59	38.28	74.47	21.28
1940	54.35	37.68	51.11	40.11	64.20	26.70	57.64	37.55	64.10	32.60	79.13	20.00
1945	49.91	42.35	45.87	45.81	61.76	28.68	60.80	34.80	64.82	31.16	61.90	34.69
1950	49.06	43.72	43.92	48.57	57.11	29.78	61.03	33.20	74.19	22.58	77.83	20.87
1955	48.53	47.29	42.93	53.33	73.53	15.81	57.46	38.81	71.65	24.87	73.18	22.61
1960	55.21	42.70	50.00	49.37	67.31	19.74	66.13	28.27	71.96	24.86	79.76	19.64
1965	54.04	41.40	45.94	50.08	69.05	17.97	81.82	12.26	81.60	15.74	64.91	33.27
1970	55.03	40.12	45.24	50.45	68.13	15.98	87.12	8.90	73.98	23.40	72.17	25.51
1975	55.29	39.72	44.90	50.30	76.49	15.73	76.15	18.23	79.49	17.82	62.45	28.22
1976	55.19	40.17	44.90	50.31	76.14	18.87	71.20	24.08	78.30	17.54	66.12	30.92

cent years and compared to other offences against the person the rate per 100 000 males has surpassed the relatively high rate of the early years of the century. However, the pattern of rape charges closely resembles that observed for the violent offences. That is to say that the high rate of the early 1900s was followed by a low rate until the mid-1950s and a sustained increase thereafter (see Table 6.6). This pattern emerges in every state. There are two minor observations which deserve mention. Except for most recent years, the level of rape charges in Queensland has been higher than in any other state. And the South Australian rates in recent years show a much sharper increase, compared to the rest of this century, than in other states. (This could be partly as a result of changes in the law in 1975 whereby the definition of 'rape' was extended to include also anal intercourse and rape in marriage.) In spite of the increases, however, the offence of rape constitutes only a fraction of the total offences against the person.

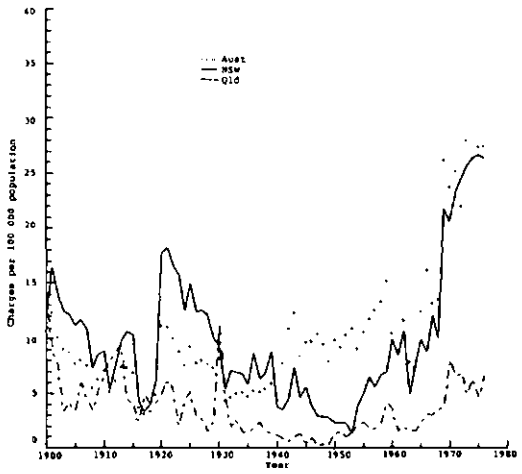


Figure 6.3a *Robberies charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

Robbery

Among property offences in particular, and all offences in general, robbery is the most complex one. An offence becomes a robbery if the elements involved in it are actual or intended violence and property loss. Except for murder in the process of robbery all other offences presenting the two elements are generally classified as robberies. Therefore, a relatively minor act such as stealing from the person and such serious acts as stealing and inflicting grievous bodily harm both may fall within the definition of robbery. There is, therefore, a greater probability of differences in recording procedures in various jurisdictions as well as within jurisdictions over time. This will become apparent when the state differences in robbery rates are examined.

Until about 1960 the rate of robberies in Australia remained fairly stable and varied between 5 and 11 per 100 000 persons. Since the mid-1960s, however, the rates began to escalate and in 1976 the robbery rate reached a peak of approximately 28 per 100 000 persons. The lowest rates for this offence were obtained during the First World War and the Depression. Data in Table 6.7 and Figures 6.3*a* and 6.3*b* highlight these findings. The increases in robberies since the mid-

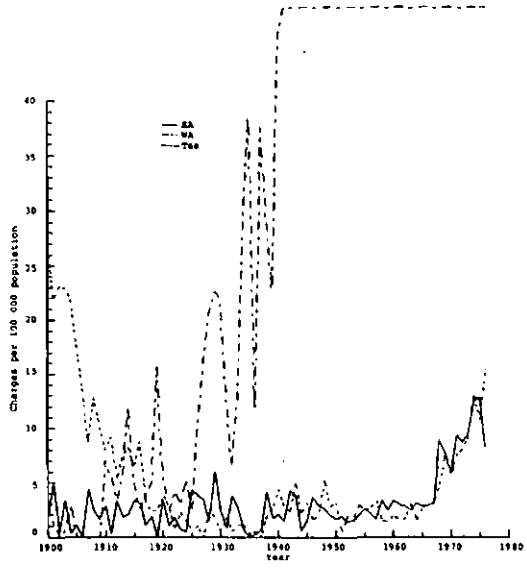


Figure 6.3b *Robberies charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

Table 6.6 *Rapes charged before magistrates' courts per 100 000 males aged 10 years and over, 1900 to 1976*

Year	Australia	New South Wales	Queensland	South Australia	Western Australia	Tasmania
1900	6.22	6.02	9.95	2.48	4.25	8.89
1905	5.58	6.71	6.53	2.07	7.37	0.00
1910	4.25	4.01	5.88	0.61	9.04	2.70
1915	2.60	2.76	4.58	0.56	2.48	1.28
1920	2.70	3.71	2.43	1.03	0.77	1.22
1925	1.51	1.43	2.78	0.95	0.70	1.15
1930	2.82	1.57	7.70	2.16	2.43	1.10
1935	1.12	1.19	1.03	1.24	0.57	2.20
1940	1.65	0.79	3.97	0.82	2.31	5.44
1945	3.01	2.83	2.09	3.51	7.30	1.02
1950	2.61	1.63	3.77	3.86	3.57	4.55
1955	2.45	2.77	3.00	1.23	1.55	1.63
1960	6.42	7.91	6.25	4.25	3.85	1.49
1965	6.33	6.85	7.22	6.06	4.27	2.78
1970	5.88	6.67	7.34	2.74	2.58	5.85
1975	10.63	10.94	7.06	13.89	13.30	6.69
1976	10.28	10.87	7.54	11.82	12.80	4.82

Table 6.7 *Robberies charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

Year	Australia	New South Wales	Queensland	South Australia	Western Australia	Tasmania
1900	11.10	11.86	14.03	1.74	26.79	2.33
1905	7.98	11.12	3.40	1.08	17.56	0.00
1910	7.36	8.81	6.76	2.84	7.98	7.01
1915	7.22	10.29	4.12	3.44	6.39	4.62
1920	11.48	17.74	4.94	3.42	3.92	5.59
1925	9.59	14.95	5.21	4.35	0.71	2.35
1930	8.53	9.34	11.49	2.43	0.62	21.87
1935	5.10	5.79	1.43	0.00	0.29	38.50
1940	4.71	3.75	1.13	2.08	4.37	46.19
1945	10.00	5.55	0.35	1.56	3.14	146.19
1950	10.21	2.30	1.48	1.59	3.15	179.72
1955	10.89	5.00	2.28	2.49	2.35	156.51
1960	10.79	9.88	3.59	3.36	1.94	92.89
1965	12.76	9.91	2.40	2.82	2.65	146.99
1970	24.07	20.52	8.07	5.83	5.70	240.71
1975	27.68	26.62	4.66	12.79	10.77	252.89
1976	27.79	26.41	6.63	8.22	15.47	250.30
Mean 77 years	10.73	9.89	3.70	3.07	5.48	90.08

1960s are quite in tune with increases in property offences in general. What is different in the case of robbery is that during the Depression when property offences increased this offence decreased. Furthermore, during the period 1940 to 1960 the relatively high rate of robberies observed in Figure 6.3*a* is primarily because of unusually high rates recorded in Tasmania.

Generally the pattern of robberies in each of the states is not very similar to the national pattern. Except for a few years, the level of robberies in Queensland, South Australia and Western

Australia has been fairly low. The decline in robberies during the Depression is also manifested in the rates of every state except Tasmania. Up to the 1920s Tasmania exhibited a fairly low robbery rate, but thereafter an exponential growth in robberies is seen. A careful scrutiny of the statistics reveals that offences classified as robberies consist of 'stealing from the person and robbery' but since the 1930s only 'stealing from the person' is classified as robbery. It is possible that whereas other jurisdictions might classify 'stealing from the person' under the heading of 'larceny', Tasmania continued to place these under robbery. However, if this happens to be a valid assumption then larceny should demonstrate a milder increase; as will be seen later this is not the case. In reality, all the three property offences analysed in this chapter show very sharp increases. In any event, the increase in the robbery rate in Tasmania to approximately 100 times the 1900 rate is, to say the least, intriguing.

The doubts relating to the Tasmania robbery rate are confirmed when the disposition of this offence at the magistrates' courts is examined. Because of their nature the magistrates' courts are not empowered to try robberies in most instances and having established the existence of a case commit a majority of these offences for trial at the higher courts. Consequently the committal rate for robberies is fairly high as shown in Table 6.8. However, the Australian and state patterns vary markedly. The one significant fact is that in Australia and every state except Tasmania the committal rates for robberies since the 1950s have been increasing; in the smaller states this rise started much earlier. At least from the legal point of view, trial by higher courts reflects the gravity of an offence. Accordingly, the low committal rate for robberies in Tasmania suggests that a majority of these offences do not present the characteristics necessary for a higher court trial; in essence a contrary picture emerges, that is, a high proportion of the charges are tried and convicted at the magistrates' courts than in any other state.

Burglary

Of all the property offences the offence of burglary showed the most dramatic and sustained increase in this century. Considering 1900 as base (= 100.0) the burglary rate in Australia had increased approximately 15 times by 1976. Furthermore, in terms of rates, whereas burglaries constituted only 3.1 per cent of all the property offences charged in 1900 this proportion increased to 14.6 per cent in 1950 and to 20.0 per cent in 1976. This rise is unmatched by the rise in any of the major crimes in Australia, including the most common property crime of larceny. Consider the increase in the scale of burglaries with that of larceny. In 1900 there were approximately 17.4 larceny charges for every burglary at the magistrates' courts; in 1976 there were only 2.6 larceny charges per burglary. This finding is similar to that observed in Chapter 4, that is, the reported number of burglaries in Australia.

The data on burglaries are presented in Figures 6.4*a* and 6.4*b* and Table 6.9. Except for a brief period of decline between 1945 and 1955, the Australian burglary rate presents a pattern of continuous increase unlike the one observed for robbery. Contrary to the findings with regard to robbery, the rates of burglary in Australia increased during both the First World War and the Depression; on the other hand, this pattern is quite similar to that obtained for property offences in general. Furthermore, the sharp increases in

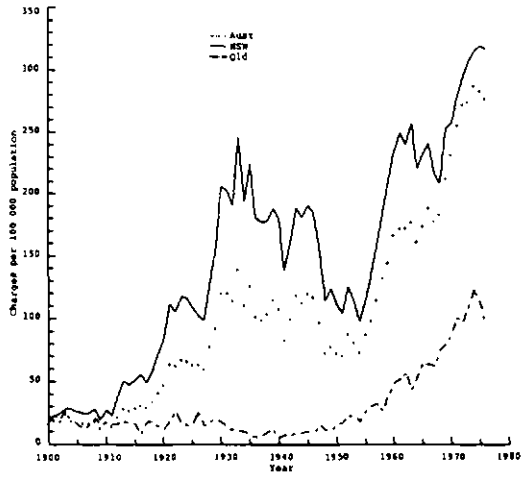


Figure 6.4*a* *Burglaries charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

Table 6.8 *Proportions of robbery charges resulting in convictions and committals at magistrates' courts, 1900 to 1976*

Year	Australia		New South Wales		Queensland		South Australia		Western Australia		Tasmania	
	Convictions	Committals	Convictions	Committals	Convictions	Committals	Convictions	Committals	Convictions	Committals	Convictions	Committals
1900	7.94	42.06	0.00	56.67	33.33	0.00	0.00	0.00	0.00	55.56	0.00	66.67
1905	5.20	57.80	0.00	65.32	64.29	0.00	0.00	66.67	0.00	53.13	0.00	0.00
1910	42.94	20.90	45.45	18.18	64.52	0.00	0.00	77.78	0.00	52.94	60.00	10.00
1915	40.00	26.00	44.14	20.69	33.33	14.29	25.00	58.33	0.00	80.00	85.71	0.00
1920	35.67	37.70	35.11	29.79	42.86	14.29	15.38	69.23	30.00	50.00	66.67	33.33
1925	52.16	8.33	59.18	4.49	33.33	0.00	0.00	55.56	0.00	100.00	0.00	75.00
1930	51.56	9.38	44.62	2.15	60.98	17.07	0.00	72.78	0.00	100.00	82.05	5.13
1935	56.31	11.65	48.00	7.20	0.00	90.91	0.00	0.00	0.00	100.00	81.16	5.80
1940	54.19	24.63	57.65	15.29	0.00	88.89	10.00	90.00	0.00	40.00	71.43	16.67
1945	74.04	15.12	57.14	24.81	0.00	100.00	0.00	100.00	8.33	83.33	87.46	4.53
1950	74.59	15.98	79.66	11.86	0.00	100.00	0.00	100.00	35.71	57.14	79.59	10.20
1955	50.96	35.73	18.71	68.35	0.00	75.00	0.00	87.50	8.33	91.67	69.47	17.37
1960	45.15	47.85	21.38	71.38	0.00	88.10	36.00	56.00	9.09	90.91	84.62	9.31
1965	44.54	40.17	17.12	67.87	0.00	83.87	16.67	75.00	0.00	87.50	72.86	11.19
1970	40.13	45.75	13.48	65.45	0.85	98.31	12.73	78.18	0.00	79.55	78.53	12.50
1975	39.82	48.78	24.37	64.05	2.53	94.94	38.64	46.21	17.00	68.00	66.30	22.71
1976	39.07	43.79	24.37	64.05	7.89	80.70	16.28	50.47	20.41	58.42	68.03	8.93

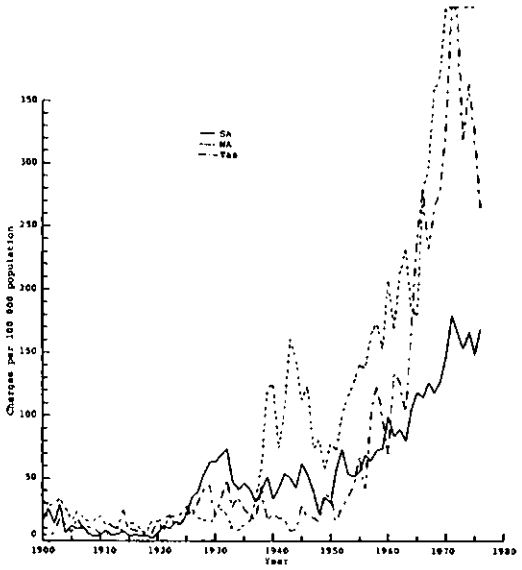


Figure 6.4b *Burglaries charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

burglary charges began in the mid-1950s, at least a decade before robberies started to increase.

Unlike other offences, until well after the Depression the volume of burglaries increased primarily in the largest state (New South Wales). In other states, except Queensland, significant increases began only around the beginning of the Second World War; substantial increases in Queensland occurred only since the 1960s. There are, however, some notable differences between states. First, the magnitude of increases in burglary charges in each of the states has been different. Taking 1900 as base, Queensland exhibited the least increase — a fivefold increase between 1900 and 1976. The rate in Tasmania (as with robbery) increased forty-eight times over the seventy-seven years. The remaining three states of New South Wales, South Australia and Western Australia demonstrate growths of fifteen, ten and eighteen times respectively. Second, burglary charges during the First World War increased significantly only in New South Wales. Queensland and Western Australia did not seem to show any sensitivity to the Depression, whereas in the remaining three states burglaries rose sharply. Third, the sharp decline in burglaries during the period mid-1940s to mid-1950s occurred only in New South Wales, South Australia and Western Australia. And finally, the rate of burglaries charged at the magistrates' courts has always been higher in New South Wales than the rate of all the other states combined. In New South Wales, the first Australian colony established under the British Empire, white settlement took root earlier and the population increased faster than in other states. But as industrial development gained momentum the population of other states increased. In recent years the combined population of the four states is almost identical to that of New South Wales but the aggregate burglary rate of these four states in 1976 was only 242.8 per 100 000 persons aged 10 years and over whereas the rate for New South Wales was 316.2.

The disposition data for burglary charges, presented in Table 6.10, suggest that the nature and gravity of these offences have also changed over the years. During the first few decades of this century magistrates' courts in Australia convicted fewer of these offences and more of them were committed for trial at the higher courts. It may be recalled that the committals to higher courts represent gravity in that a burglary involving theft of and damage to property beyond certain limits prescribed by law must be tried at the higher courts. Along with committals the discharge rate was also high in the early years. Since the Second World War, however, this pattern has changed markedly and the proportion of charges resulting in convictions at the magistrates' courts has increased steadily. Also, since the mid-1950s more than half of the charges have resulted in conviction and those resulting in discharges have declined.

Comparing the states it becomes apparent that the national disposition pattern is manifested in the data of every state except Queensland. Up to the late 1920s a very low proportion of burglary charges in Queensland was committed for trial at the higher courts and a majority of offences were either convicted or discharged. Since that period and until the mid-1970s a significantly large proportion of burglary charges have been tried by the higher courts in that state. These patterns raise several questions. Perhaps an examination of the laws and their amendments might reveal whether the jurisdiction of the magistrates' courts to try burglary charges has expanded over time. Since the jurisdiction factor relates primarily to the

Table 6.9 *Burglaries charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

Year	*Australia*	*New South Wales*	*Queensland*	*South Australia*	*Western Australia*	*Tasmania*
1900	18.33	21.05	17.33	16.09	31.99	5.45
1905	19.37	25.47	16.05	11.85	15.91	5.94
1910	20.51	27.22	18.96	4.73	20.17	5.61
1915	31.36	51.75	15.90	3.44	14.05	9.23
1920	49.78	83.43	11.82	6.05	15.67	16.76
1925	65.90	108.70	14.52	21.77	20.56	27.02
1930	122.83	205.47	17.38	63.07	20.74	20.18
1935	128.67	223.76	7.41	45.70	12.82	25.11
1940	109.94	179.72	4.77	32.81	124.36	21.99
1945	122.64	190.66	10.01	61.79	111.34	27.51
1950	75.18	110.93	16.88	30.05	78.38	34.84
1955	90.09	114.91	27.04	55.62	140.60	68.37
1960	168.82	233.42	48.51	99.04	206.61	69.20
1965	176.66	231.89	65.40	117.78	178.62	241.48
1970	234.24	256.79	86.80	145.91	454.59	325.09
1975	285.97	318.78	111.97	147.48	595.26	324.05
1976	280.10	316.22	96.83	168.56	581.48	262.98
Mean 77 years	105.24	145.83	30.14	53.84	122.99	76.34

value of property stolen and damaged it is logically consistent to argue that with the increase in affluence and the decline in the value of property more and more cases will be tried at the magistrates' courts.

The dramatic increases in burglary charges since the mid-1950s suggest that burglary is a crime of affluence. The mass manufacture of radios, cameras, televisions, stereo sets and other gadgets has made goods easily accessible to individuals. The insurance of household goods and equipment has reduced the anxiety associated with loss or damage to property. Moreover, insurance of the contents of private dwellings or shops has become almost compulsory, especially when one considers that in some jurisdictions the complaint of burglary to the police is not taken seriously unless the premises are adequately insured.

With the increase in affluence the number of retail shops has also increased. Furthermore, other institutions, such as post offices, petrol stations, schools etc., do keep goods of value and sometimes large amounts of negotiable financial documents. Therefore, it is likely that increases in burglaries from different premises represent significantly different amounts of loss or damage to property. The high conviction rate at the magistrates' courts may well relate to burglaries from private dwellings. As the data in Table 6.10 show, especially during the first two decades or so, approximately 30 per cent of the charges are committed for trial at the higher courts. This proportion may seem small when compared to the early years of this century but in terms of actual volume of offences the proportion represents a much larger number.

Larceny

Among all violent and property offences, larceny is the most common. This is not to say that this offence has increased faster than any other offence. At any point in time the offence of larceny has constituted the largest proportion within these two major categories. During this century larceny has always accounted for over 50 per cent of all the property offences and the highest proportion ever reached was about 58 per cent in 1950. In this context the increases in burglary have been very significant. Consider the data in Table 6.11. Whereas the contribution of larceny offences to total property offences has declined in recent years, burglaries as a proportion of property offences have continued to increase and except for a slight drop after the Second World War this in-

Table 6.10 *Proportions of burglary charges resulting in convictions and committals at magistrates' courts, 1900 to 1976*

	Australia		*New South Wales*		*Queensland*		*South Australia*		*Western Australia*		*Tasmania*	
Year	*Convic-tions*	*Com-mittals*	*Convic-tions*	*Com-mittals*	*Convic-tions*	*Com-mittals*	*Convic-tions*	*Com-mittals*	*Convic-tions*	*Com-mittals*	*Convic-tions*	*Com-mittals*
1900	13.50	60.06	4.23	72.71	52.38	0.00	2.70	64.86	11.63	72.09	14.29	85.71
1905	13.81	65.71	1.76	78.17	66.67	4.55	0.00	90.91	17.24	62.07	50.00	37.50
1910	32.45	35.29	21.76	38.82	78.16	0.00	0.00	86.67	41.86	51.16	0.00	87.50
1915	31.53	32.68	26.89	33.88	75.31	4.94	8.33	91.67	42.42	33.33	14.29	78.57
1920	14.09	48.55	10.03	50.60	68.66	4.48	4.35	86.96	35.00	35.00	55.56	44.44
1925	21.33	30.49	16.69	30.86	69.57	4.35	31.11	36.67	68.97	27.59	41.30	58.70
1930	21.10	33.45	20.18	30.41	18.55	61.29	23.78	61.89	53.73	40.30	52.78	44.44
1935	22.68	16.58	21.49	14.60	5.26	89.47	48.62	27.52	52.27	29.55	17.78	71.11
1940	34.20	22.07	28.31	22.12	15.79	63.16	46.20	29.11	85.01	14.05	62.50	35.00
1945	49.10	35.03	46.72	35.73	3.49	83.72	51.27	40.19	85.21	10.33	25.93	62.96
1950	34.88	51.02	32.17	51.95	1.25	91.88	54.12	38.24	68.10	23.28	11.84	85.53
1955	45.70	47.63	42.70	50.74	0.70	77.54	63.13	34.08	72.70	25.35	26.51	62.05
1960	56.97	39.93	57.66	39.22	1.76	94.89	65.81	31.21	80.50	16.85	15.22	79.89
1965	52.82	35.46	52.10	33.01	0.00	98.34	69.46	27.54	73.06	24.17	69.86	15.22
1970	57.30	31.76	57.17	28.83	27.34	71.63	68.97	28.63	67.75	23.50	43.86	42.45
1975	61.95	23.39	57.13	28.44	58.62	37.69	51.38	28.45	76.76	4.99	64.28	25.45
1976	63.91	20.59	57.12	28.43	81.32	15.62	41.92	28.36	79.99	3.00	73.13	10.56

Table 6.11 *Larceny and burglary charges at the magistrates' courts as proportions of all property offences, Australia 1900 to 1976*

Year	Larceny	Burglary
1900	53.07	3.05
1910	55.93	4.59
1920	57.79	9.80
1930	56.26	16.69
1940	51.94	16.16
1950	58.60	14.57
1960	55.12	17.95
1970	54.81	19.15
1976	52.09	19.96

crease has been monotonic.

Unlike burglary, larcenies include a variety of offences ranging from petty shoplifting to theft of motor vehicles (see Appendix A Table A.6, for details). Data for larcenies charged before magistrates' courts in Australia and the states are presented in Figures 6.5*a* and 6.5*b* and Table 6.12. An examination of the national data reveals that the larceny rates peaked during the two world

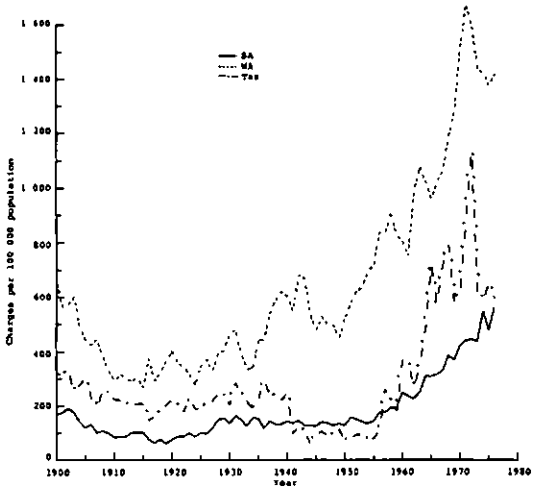


Figure 6.5*a* *Larcenies charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

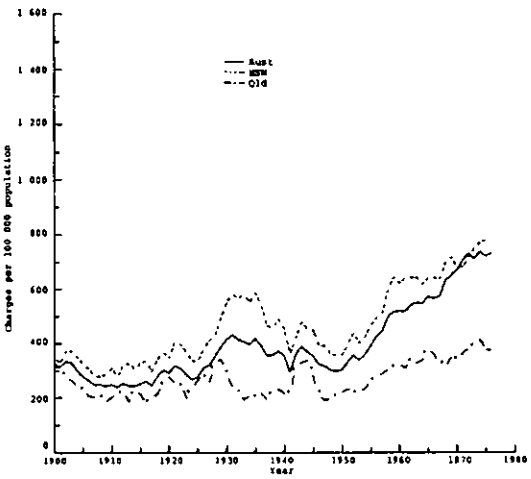


Figure 6.5*b* *Larcenies charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

wars and the Depression and since the 1950s these rates increased very sharply. In this case too, one needs caution to draw conclusions on a comparative basis. In the early part of this century car thefts were almost non-existent and stealing of cattle and horses was very rare indeed. Since the 1950s, however, car thefts have increased significantly and constituted a substantial proportion of all larcenies.

Looking at the state differences, only New South Wales presents a pattern similar to that of Australia. Until the 1950s larceny rates in the other four states have always been lower than at the beginning of this century. Therefore, the escalation in rates leading to the current level began only in the 1950s. The two states which demonstrate interesting patterns are Queensland and South Australia. In the former, the range of fluctuations in larceny rates has been minimal and the net increase over the entire century has also been very low. South Australia, on the other hand, showed relatively small increases up to the 1950s but since then the increase has been faster than in any other state.

An overwhelmingly large proportion of larceny offences is tried at the magistrates' courts and, as

Table 6.12 *Larcenies charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

Year	Australia	New South Wales	Queensland	South Australia	Western Australia	Tasmania
1900	327.95	344.47	317.15	166.51	659.98	321.29
1905	279.86	320.39	231.47	119.59	442.77	301.52
1910	249.70	310.04	203.34	82.38	289.92	223.73
1915	251.67	326.45	212.94	99.91	265.22	209.07
1920	293.53	346.41	278.11	73.13	402.70	221.02
1925	276.78	331.97	267.70	100.13	347.79	196.21
1930	414.04	552.36	284.26	134.95	471.08	202.96
1935	417.31	586.54	197.91	152.62	446.16	227.10
1940	353.31	453.82	215.85	143.91	603.72	247.98
1945	355.14	449.68	272.02	126.70	479.88	94.74
1950	302.45	359.37	219.89	128.85	518.94	65.10
1955	392.04	468.04	262.39	143.71	715.15	79.49
1960	518.28	620.12	321.72	246.04	804.17	368.94
1965	573.69	644.45	380.85	308.32	957.44	721.29
1970	670.22	681.20	333.46	422.77	1514.92	618.46
1975	721.08	779.81	378.18	477.62	1372.35	647.49
1976	731.07	773.49	373.77	561.53	1418.41	593.60
Mean 77 years	396.62	470.71	267.44	181.29	642.66	283.11

revealed by the data in Table 6.13, well over 90 per cent of all charges are either convicted or discharged. Nationally and in New South Wales the lowest proportion of convictions was recorded during the Depression years and the highest conviction rates are observed since the Second World War. In the remaining states these events are not characterised by any unusual increases or decreases in conviction rates. One significant change in the disposition pattern which emerges from the data is that since the Second World War the proportion of offences convicted is higher than in the first four decades of this century; this change is observed in every jurisdiction except Tasmania. Also during the mid-1970s the proportion of larceny charges resulting in conviction has declined slightly with a concomitant rise in discharges. These findings seem to indicate that although the incidence of larceny has increased since the mid-1950s, the nature and gravity of the offence have remained such that a remarkably large proportion has always been tried at the magistrates' courts. Considering the differences in the laws and practices in different states this is an unusual pattern.

Drunkenness

Being drunk and disorderly has been a criminal offence in Australia since the very early days of colonial rule. Like most Western societies, public drunkenness provided a large volume of criminal justice business in this country. Nevertheless, the problem was much more acute in the last century than in the present. Recent research in Stockholm, London and New South Wales points out that arrests for public drunkenness peaked during 1880 to 1910, during the first three decades of the nineteenth century, and during 1880 to 1890 in the above three jurisdictions respectively.[4] Furthermore, public drunkenness has been the single most common non-traffic offence ever since the collection of official statistics began. Although this has been the case and in spite of the fact that alcohol abuse was much subject to regulation, efforts to control public drunkenness did not evoke significant changes in the scope of the criminal law; much of the regulatory activities concerned such issues as granting liquor licences and closing hours of public bars.

Drunkenness is labelled as an offence against good order, which also includes disorderly conduct, public mischief, riotous or indecent behaviour and offensive behaviour, but on average, drunkenness alone constituted approximately two-thirds of all good order offences during the present century; this proportion is higher after

Table 6.13 *Proportions of larceny charges resulting in convictions and discharges at magistrate' courts, 1900 to 1976*

Year	Australia		New South Wales		Queensland		South Australia		Western Australia		Tasmania	
	Convic-tions	Dis-charges	Convic-tions	Dis-charges	Convic-tions	Dis-charges	Convic-tion	Dis-charges	Convic-tions	Dis-charges	Convic-tions	Dis-charges
1900	64.85	29.36	64.06	28.37	64.18	35.82	69.71	18.80	65.39	30.44	67.80	27.12
1905	67.00	25.04	64.45	25.25	70.90	28.05	71.47	16.52	68.53	24.41	73.65	24.38
1910	67.33	26.64	64.15	28.77	71.06	28.62	78.54	10.73	73.62	18.28	73.67	24.14
1915	71.05	22.27	64.73	26.33	83.23	14.93	86.53	10.32	79.94	16.53	86.44	12.93
1920	70.22	21.60	64.13	25.08	84.71	13.45	70.86	17.27	75.29	21.01	85.11	8.99
1925	70.66	25.85	61.59	34.46	90.86	8.37	67.15	25.36	86.14	10.30	88.02	8.08
1930	69.09	27.58	61.61	35.47	90.38	5.92	71.73	15.03	87.71	10.05	94.48	4.14
1935	62.57	35.93	53.98	44.96	94.81	2.63	79.81	16.48	82.85	9.86	83.54	12.04
1940	75.46	22.55	68.39	29.88	89.37	8.43	86.72	10.97	91.51	5.69	92.68	4.43
1945	81.74	15.19	78.35	18.35	88.49	8.81	86.27	9.26	90.90	7.24	87.10	11.29
1950	84.27	10.17	81.63	12.11	88.10	7.39	88.75	6.72	91.02	6.08	66.90	9.15
1955	88.62	5.62	87.34	5.70	92.41	5.13	89.84	6.16	90.61	5.39	76.68	9.33
1960	86.87	4.69	86.88	3.74	81.13	6.48	94.48	4.21	93.69	4.64	63.00	17.43
1965	87.65	6.72	84.70	7.71	91.32	3.35	95.65	2.71	95.08	3.80	78.70	17.56
1970	85.24	8.55	82.71	8.58	90.81	1.97	96.71	2.41	87.28	11.59	68.16	19.30
1975	79.29	13.14	80.31	8.89	91.26	4.42	64.50	32.98	77.63	19.62	72.41	17.17
1976	77.45	15.67	80.31	8.89	91.83	4.62	53.48	44.70	74.76	23.21	74.82	21.62

the Depression than before. Moreover, as shown in Table 6.14, at the turn of the century drunkenness accounted for over 50 per cent of all offences minus petty offences charged before magistrates' courts in Australia; only from the mid-1950s did this proportion begin declining — in 1976 drunkenness accounted for approximately 39 per cent of all offences minus petty offences. This, as may be recalled, was primarily because of the dramatic increase in property offences after the Second World War. Before analysing the data on drunkenness it is interesting to point out that good order offences in general have declined substantially since the mid-1950s, but offences labelled as being drunk and disorderly still account for over two-thirds of these offences. Therefore, although in terms of absolute rate drunkenness offences also declined, it is the reduction in other offences which resulted in a significant drop in offences against good order.

Table 6.14 *Drunkenness charges as proportion of all offences minus petty offences and of offences against good order*

Year	*Good order*	*All offences minus petty offences*
1900	68.14	50.18
1910	62.80	51.94
1920	61.09	45.66
1930	61.87	41.57
1940	70.42	48.34
1950	79.50	64.90
1960	71.15	49.64
1970	74.72	44.14
1976	68.72	38.63

The movement of drunkenness offences is presented in Figures 6.6*a* and 6.6*b* and Table 6.15. Considering 1900 as the base, there has been an overall drop in this offence during this century. In Australia as well as in every state the current level of drunkenness charges is far below the 1900 level. This general finding must be elaborated upon in light of movements unique to this offence. Looking at the Australian aggregate data the pattern obtained is that the drunkenness rate declined during the First World War but during the Depression years there was a much more notice-

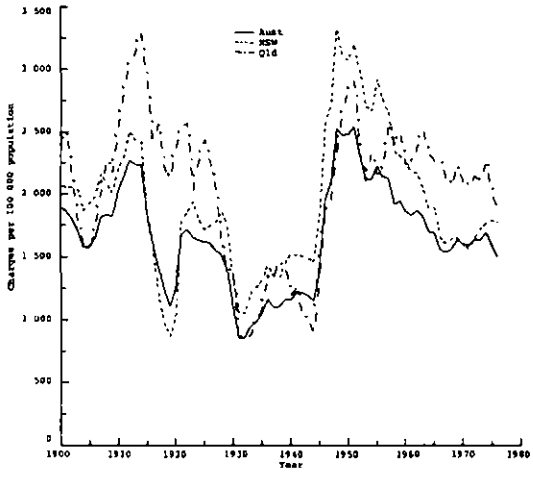


Figure 6.6a *Drunkenness charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

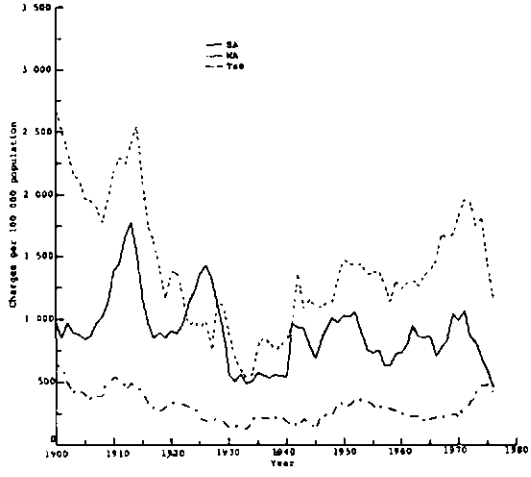


Figure 6.6b *Drunkenness charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

able drop. The average rate for the eight-year period 1929 to 1936 was only 1043.0 per 100 000 persons aged 10 years and over; the corresponding rate for the eight years preceding the Depression was 1622.4. Furthermore, during the Depression years the drunkenness rate was the lowest ever recorded in this century. Between the Depression and the Second World War the pattern was that of a trough. The most remarkable change in rates, however, took place in the immediate post-war years. Drunkenness rates started soaring in 1945 and reached an all-time high in 1951, a rate of 2547.4. Thus, the increase in rate between 1945 and 1951 was of the order of 79 per cent.

Except for property crimes, all other offences declined during the Depression and so did drunkenness. Besides significant economic impact, including high unemployment, the governments' regulatory activities during the Depression might have played a major role in the drop of drunkenness offences. But the sudden and sharp increases in the incidence of these offences after the Second World War seemed plausible mainly because of the return of well over half a million Australian servicemen from the war. Since the early 1950s drunkenness showed a steady decline before reaching a trough in the 1960s. Thus, in the period associated with significant economic growth and almost full employment, drunkenness charges demonstrated a pattern opposite to that exhibited by property offences.

By and large, the patterns which emerge in each of the states are quite similar to that of Australia. The only notable feature of the state data is that Tasmania throughout the century has shown a very low rate of charges for this offence. Also, drunkenness offences as a proportion of good order offences have been low in Tasmania.

In terms of the outcome of charges, virtually all drunkenness offences are tried at the magistrates' courts and as such are either convicted or discharged. As is evident from Table 6.16, most of the charges result in conviction. However, the low conviction rate in Queensland, which also affected the Australian rate, is due to a procedural difference from other states. For some reason, except for the period 1912 to 1927, the outcome of a large volume of drunkenness charges were classified as 'bail estreated', meaning that the alleged offenders did not appear before the courts and forfeited their bail money. Normally in such cases summonses would be issued and cases tried, but obviously this was not the case. Therefore, there were no final outcomes for these charges. The extraordinarily low proportion of charges resulting in conviction in the 1970s stems from the

Table 6.15 *Drunkenness offences charged before magistrates' courts per 100 000 population aged 10 years and over, 1900 to 1976*

Year	*Australia*	*New South Wales*	*Queensland*	*South Australia*	*Western Australia*	*Tasmania*
1900	1895.04	2075.39	2430.63	977.76	2686.03	647.24
1905	1579.78	1925.36	1536.92	846.79	1964.22	400.29
1910	2035.77	2205.31	2521.15	1383.38	2199.25	533.74
1915	1825.38	1846.26	2936.95	1162.25	2091.49	414.18
1920	1250.87	1026.65	2370.12	911.00	1376.95	332.77
1925	1621.00	1717.50	2442.62	1361.70	935.94	213.84
1930	1100.11	1312.32	1328.25	553.48	894.19	134.56
1935	1057.27	1316.63	1090.09	576.10	792.65	233.79
1940	1162.03	1530.06	1198.79	538.68	845.44	184.75
1945	1423.12	1818.99	1358.35	687.26	1107.43	118.17
1950	2482.49	3073.89	2839.79	1035.89	1476.42	300.29
1955	2220.69	2918.47	2157.92	736.24	1368.02	319.61
1960	1864.42	2250.62	2245.00	733.16	1243.72	237.69
1965	1691.57	1893.32	2261.62	864.43	1397.10	207.53
1970	1599.00	1595.22	2081.40	995.16	1836.39	219.78
1975	1587.67	1791.49	1993.38	590.38	1425.46	484.09
1976	1501.85	1776.93	1876.41	465.82	1155.50	381.04
Mean 77 years	1665.89	1923.71	2043.04	901.75	1431.09	297.08

same reason, but this time it was a little more specific. In 1973–74 Queensland introduced what is termed '10¢ bail'. This provision is made under Section 69A of the *Justices Act* and the Law Reform Commission of Queensland in its report of 1978 states:

> The most common form of bail is by deposit of a sum of money — in other words 'cash bail' — and in a majority of cases the person charged does not appear and the court orders that the amount of bail be forfeited. Rarely is a warrant applied for, nor is subsequent action taken by way of complaint and summons. The amount of cash bail becomes a type of penalty in a similar manner to 'on the spot' tickets for traffic and like offences. The accused is generally happy to forfeit his bail and avoid the inconvenience of a court appearance and the risk of a conviction. This practice has existed for many years and there appears to be no persuasive argument against it.[5]

The purpose of this detailed explanation of the Queensland case has some practical ramifications. As pointed out earlier, drunkenness charges form a significant proportion of all good order offences. These are very minor in nature. In this connection an extract from the Queensland Law Reform Commission's report is particularly relevant.

> The system operates satisfactorily, it is not contrary to any principle of justice, it is of advantage to a person charged with a minor type of offence whilst not depriving him of any right to a hearing, and it has an added advantage of reducing time occupied in the Magistrates Court and by the police. An extreme example of the chaos that would result from requiring attendance of all persons charged with any minor offence is the figure of 2 609 persons arrested on a charge of being found drunk in a public place and released on a nominal cash bail during the three month period referred to earlier.[6]

Traffic

Consistent data for traffic offences were available for all six states since 1931 and in that year these offences accounted for slightly over 21 per cent of the total charges before magistrates' courts in Australia. With the exception of the Second World War years these figures continued to rise and by 1960, of all charges before magistrates' courts, about 51 per cent related to traffic offences; the corresponding figure for 1975 was 58.53 per cent. Even if each of these offences took only a few minutes the sheer volume would keep the court calendars congested and would entail an enormous amount of time. Furthermore, it is important to remember there are five to six times as many traffic offences settled outside the courts

Table 6.16 *Proportions of drunkenness charges resulting in convictions at magistrates' courts, 1900 to 1976*

Year	Australia	New South Wales	Queensland	South Australia	Western Australia	Tasmania
1900	85.35	99.51	43.11	97.11	97.98	89.66
1905	89.94	99.39	49.53	98.90	97.51	97.96
1910	88.82	99.41	55.18	98.63	99.04	97.37
1915	98.79	99.43	97.43	99.19	99.39	97.45
1920	98.94	98.55	99.26	99.57	98.95	98.88
1925	98.96	98.34	99.96	99.38	99.28	99.18
1930	86.16	98.12	45.21	99.96	99.07	100.00
1935	88.84	97.80	51.02	99.60	99.45	98.09
1940	88.97	99.61	44.08	99.46	99.04	99.11
1945	83.95	99.95	13.82	99.77	98.84	96.12
1950	80.55	99.68	15.53	99.74	98.95	97.56
1955	83.93	99.09	21.28	99.85	99.41	97.55
1960	85.33	99.04	42.67	99.67	99.06	81.01
1965	84.60	99.26	44.66	99.73	99.34	82.80
1970	83.96	98.65	48.12	99.79	89.02	80.51
1975	73.17	98.31	7.67	99.23	91.41	73.00
1976	73.23	98.31	6.56	97.29	93.23	78.21

each year, especially in the 1970s. Thus, traffic offences and violations create a significant proportion of police business as well. Besides the workload, since the majority of the charges result in convictions, a large number of Australians acquire conviction records each year.

The growth of the volume of traffic offences since 1931 is presented in Figures 6.7*a* and 6.7*b*

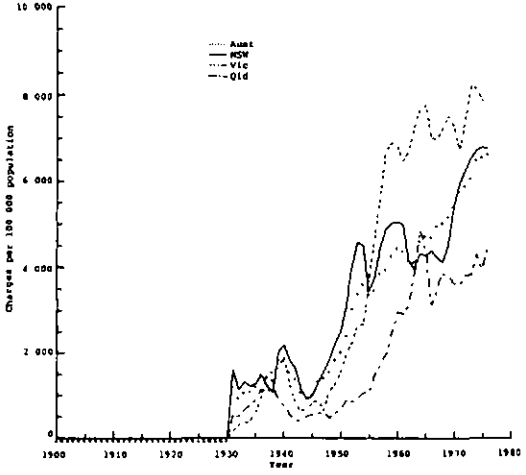


Figure 6.7*a* *Traffic offences charged before magistrates' courts per 100 000 population aged 10 years and over, 1931 to 1976*

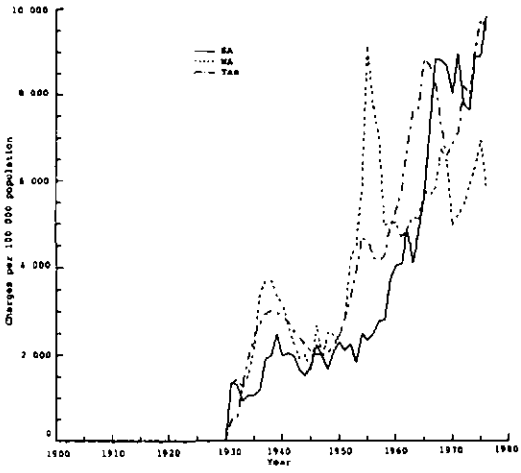


Figure 6.7*b* *Traffic offences charged before magistrates' courts per 100 000 population aged 10 years and over, 1931 to 1976*

and Table 6.17. The pattern is obvious and very little needs to be said. Every state in the federation has experienced similar growth. The impact of the increasing number of traffic offences on the total volume of court cases becomes clear when the above two figures are compared with Figures 5.7*a* and 5.7*b*. Especially since the end of the Second

Table 6.17 *Traffic offences charged before magistrates' courts per 100 000 population aged 10 years and over, 1931 to 1976*

Year	Australia	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania
1931	969.36	1608.43	182.84	546.33	1379.59	1322.82	483.86
1935	1090.94	1280.71	616.93	886.84	1049.26	2176.57	2933.32
1940	1888.99	2194.45	1907.40	809.86	1978.62	3165.67	2896.59
1945	1009.69	998.98	831.38	546.36	1733.70	1651.34	2098.57
1950	1952.20	2515.00	1565.76	663.68	2307.38	2434.11	2477.05
1955	3523.92	3441.72	3732.59	1095.56	2342.80	9130.63	4620.26
1960	5142.38	5039.73	6784.29	2963.32	4033.99	5034.79	5294.57
1965	5613.46	4257.17	7746.37	4456.22	5608.57	5767.28	8862.25
1970	5963.93	5401.26	7248.98	3612.71	8025.00	4968.13	6878.58
1975	6946.23	6785.54	7847.06	3933.22	8891.49	6939.21	9783.49
1976	6680.68*	6730.45	—	4554.61	9818.26	5762.22	9508.73

* For five states.

World War the behaviour of the national as well as state curves for total and traffic offences demonstrate close resemblance.

A large number of traffic offences charged result in convictions, as shown in Table 6.18. The remaining charges are discharged. The only notable feature of this table is that the conviction rate has dropped slightly in every jurisdiction in recent years. Otherwise, the data do not show any particular movements during any major historical event.

Summary

The eight specific offences described in this chapter provide a comprehensive understanding of the pattern of crime in Australia. These represent the most serious and the most frequent offences dealt with by the criminal justice system. Of the numerous types of offences included under the four major categories in the previous chapter, these eight currently constitute 80 per cent of the total offences charged before magistrates' courts. They also provide ample evidence to respond to the growing concern over crime. Some of the most significant findings are: (1) that crimes of violence, that is, homicide, rape and assault, do not show any pattern of increase; (2) that since the 1950s property crimes in general demonstrate a rising trend and burglary in particular exhibits a dramatic growth; and (3) that the criminal justice system is overloaded with very minor offences such as drunkenness and traffic.

These findings have sociological as well as practical significance. That in spite of far-reaching changes over time crimes of direct offender–victim involvement should show such remarkable stability deserves much deeper examination. The very slight increase in rape offences does not dispute these findings. Of all the violent offences, rape is perhaps the most complex offence, both in terms of legal definition and law enforcement. Often the line between an attempted rape and indecent assault is a thin one indeed. Furthermore, the acts considered as rape vary greatly between jurisdictions. South Australia, for example, is the only state in the Federation to incorporate by statute rape in marriage and rape against a man.

Similarly, why acquisitive crimes should show a noticeable increase in times of affluence is an intriguing phenomenon. This is further emphasised by the finding that during the Depression these crimes increased sharply. Therefore, the similarities in pattern of property crimes in two distinctly dissimilar economic conditions is an issue requiring deeper analysis.

From the practical point of view, however, it seems that the criminal justice agencies should be much more responsive to serious crimes than to petty offences. The economic and technological changes of the present century have extended the role of law enforcement to areas which barely fit into the realm of criminal justice. Whether the minor traffic offences should be dealt with in a different manner is a question which is of para-

Table 6.18 *Proportions of traffic charges resulting in convictions at magistrates' courts, 1931 to 1976*

Year	Australia	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania
1931	93.91	95.66	87.72	79.57	96.30	94.18	93.91
1935	94.32	95.15	92.85	89.35	97.34	95.88	93.85
1940	95.77	96.48	96.23	86.08	96.99	96.92	93.85
1945	95.91	97.52	95.33	89.10	96.65	96.39	93.86
1950	96.06	98.60	94.11	88.65	93.47	94.56	93.86
1955	95.18	94.41	94.78	98.74	90.85	98.08	94.54
1960	94.30	94.62	96.06	88.51	88.92	97.17	91.42
1965	91.22	90.75	95.09	84.39	85.86	97.21	81.40
1970	87.33	88.08	89.42	76.23	90.03	91.01	71.45
1975	88.49	87.55	91.91	86.47	88.31	92.91	67.08
1976	86.50*	87.55	—	83.80	88.40	92.99	66.68

* For five states.

mount importance. Undoubtedly, if the police are relieved of this responsibility, a significant proportion of their resources can be directed to controlling serious crimes. Similarly, the procedure for dealing with drunkenness cases in Queensland deserves serious consideration. If this is copied in other jurisdictions, the courts will be better able to exercise their responsibility to the community with much-needed resources.

7 Offenders at the Higher Courts

Relatively few cases are committed by magistrates' courts to the higher courts, and almost all of these cases involve offences against the person or against property. It is also important to recall that cases committed by the lower courts to the higher courts cannot be followed through to their final disposition because in the latter these are counted as distinct persons and not as offences. (A distinct person is defined as a person who has been dealt with by a higher criminal court more than once in a year and is counted only once in respect of the most serious offence. Throughout this chapter 'distinct persons' will be referred to as 'persons'.) Nevertheless, the outcomes at the higher courts do provide some indication as to whether there has been an upward or downward movement in the number of individuals committing serious offences. However, the results of this analysis must be taken with caution. The definition of what is 'serious' undoubtedly changes over time, and although more often these changes are not based on surveys of public perceptions and attitudes, they are found in the laws and legal procedures. Committal requirements for offences such as murder, rape and robbery may not have changed substantially, but for assault, burglary and larceny, significant changes may have taken place over time.

This situation may be explained by examples. Until 1973 in New South Wales, a property offence involving a theft and/or damage of $100 or less was punishable summarily (by a magistrates' court) without consent. In 1973 the Report of the Criminal Law Committee recommended:

> the increase of the property value limitation under Section 501 from $100, fixed in 1955, to $500, and the maximum fine imposable from $100, fixed in 1924, to $500. These recommendations are based principally on changes in the value of money and in the type of property being stolen.[1]

With regard to indictable offences summarily punishable by consent the Committee recommended:

(a) an increase in the maximum penalties from — broadly speaking — 12 months or a fine of $100 to 2 years or a fine of $2000;

(b) an increase in the value limitation in respect of 'property' offences from $500 to $1000.[2]

Both these recommendations, along with others, were accepted by Parliament and were incorporated in the Criminal Law and Procedure of New South Wales in 1974. It is quite apparent that a large range of offences which could be dealt with only on indictment up to 1973 were placed within the jurisdiction of the magistrates' courts. These are examples of changes introduced by one amendment in one state. During the period under study there have been several amendments in the criminal law and procedure in each of the six states.

Theoretically, these changes reflect the values that the members of the community assign to these offences; in reality, especially in the absence of valid data, it is difficult to say whether a burglary involving $1000 worth of goods and dam-

age in 1976 is equivalent to a burglary involving $500 worth of goods and damage in 1972. What these changes mean, however, is that the jurisdiction of the magistrates' courts has changed over time. Besides the clear-cut cases, there are certain marginal cases which may or may not be sent to the higher courts; the magistrates could use their discretion or the accused could opt for trial at either court. Also, the procedure of plea bargaining could determine the outcome of a case at the magistrates' courts.

Persons tried

It has been shown above that charges for property offences at the magistrates' courts have increased significantly since the mid-1950s but the proportion committed for trial to the higher courts has not changed substantially over the years. Even if the proportion committed remained constant, the rate of committal has increased; Figure 7.1 does not clearly demonstrate this because it relates to persons. (The corresponding data are presented in Appendix F.) The interesting point here is that while the rate of offences committed for trial has increased, the number of persons tried at the higher courts has not.

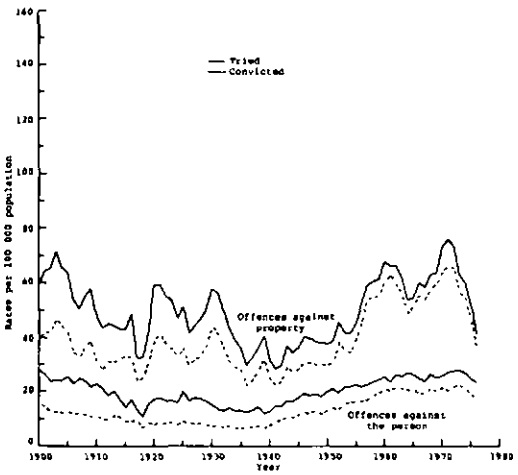


Figure 7.1 *Persons tried and convicted at the higher courts per 100 000 population aged 10 years and over, Australia 1900 to 1976*

The pattern of persons tried for property offences, as shown in Figure 7.1, is substantially different from that observed for offences charged in the magistrates' courts. To begin with, the rate of persons tried was quite high at the turn of the century and only in very recent years has that rate been surpassed. Secondly, during the Depression years the charges at the magistrates' courts increased but the rate of persons tried at the higher courts began declining. And thirdly, although the rate of persons tried has increased since the mid-1950s it is not as sharp an increase as observed for offences at the magistrates' courts. There is, however, some similarity between the declining patterns obtained in both the court systems during the 1970s. One obvious reason for the disparity between the rate of committals and persons tried could be a change in the ratio of offences to offenders. That is, it is likely that, especially since the mid-1950s, the number of offences committed by each offender has increased. While useful, the present data set does not enable this to be verified.

Offences against the person show an altogether different pattern. The graph for persons tried by the higher courts is similar to that for offences at the magistrates' courts, although on a smaller scale. Also, the high rates of persons tried at the beginning of this century were approached and surpassed only in the 1970s. The special feature of persons tried for offences against the person is that the pattern over the years shows minor fluctuations compared to those tried for property offences. This suggests that offences against the person are not so much affected by major socio-economic events. Not unexpectedly, the number of persons tried for personal offences has always been lower than for property offences.

Persons convicted

Convictions of persons at the higher courts for both personal and property offences exhibit a pattern rather different from that observed for charges at the magistrates' courts. Figure 7.1 and Table 7.1 suggest that the conviction rate of persons has been gradually increasing. In other words, the proportion of persons convicted has been rising consistently. While this is true for

both the offence categories, it is important to note that a person tried for a property offence always had a higher probability of being convicted than one tried for offences against the person.

Table 7.1 *Proportion of persons convicted at higher courts by offence category, Australia 1900 to 1976*

Year	Offences against the person	Offences against property
1900	56.3	66.9
1905	49.2	65.7
1910	48.1	65.1
1915	64.3	75.8
1920	46.5	66.3
1925	45.6	70.1
1930	49.7	76.4
1935	52.0	77.6
1940	60.0	78.6
1945	64.7	77.6
1950	65.1	78.8
1955	72.9	86.8
1960	82.0	89.4
1965	78.1	94.2
1970	83.2	87.9
1975	75.8	87.3
1976	75.5	86.5

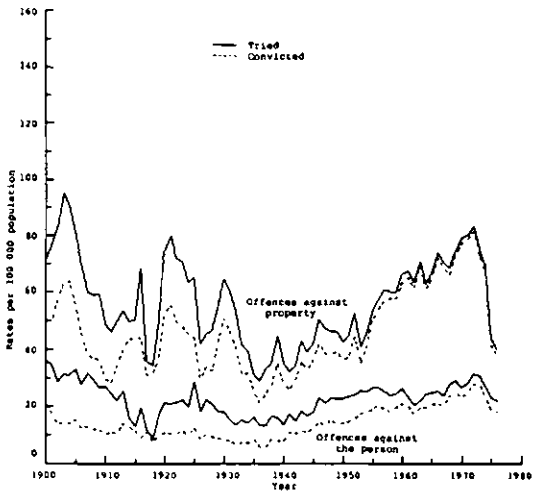


Figure 7.2a *Persons tried and convicted at the higher courts per 100 000 population aged 10 years and over, New South Wales 1900 to 1976*

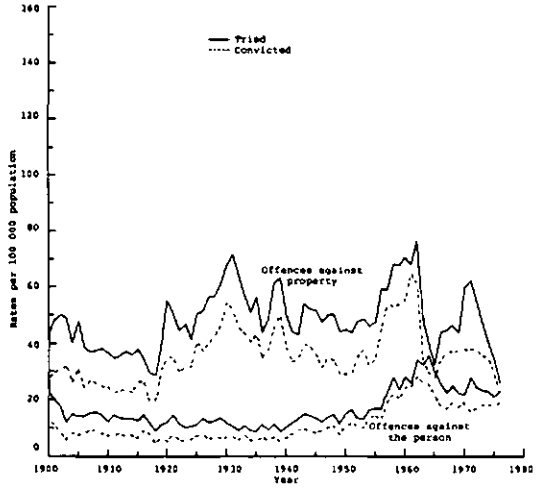


Figure 7.2b *Persons tried and convicted at the higher courts per 100 000 population aged 10 years and over, Victoria 1900 to 1976*

State differences

The higher court data for each state, presented in Figures 7.2*a* to 7.2*f*, introduce a number of variations. The pattern manifested in Figure 7.2*a* for New South Wales for both types of offences resembles the national pattern quite closely. Examining the two offence categories separately, it emerges that the number of persons tried for property offences shows larger fluctuations than the number tried for offences against the person. Also, within states, it is interesting to see that movements are largest in Western Australia and smallest in Victoria; these observations are purely on the basis of range of movements. Between the end of the Depression and the beginning of the Second World War, Queensland, Western Australia and Tasmania show the lowest level of persons tried for property offences. Finally, since the 1950s, all the states demonstrate a rising pattern of persons tried for this offence category. Tasmania presents a pattern which is substantially differ-

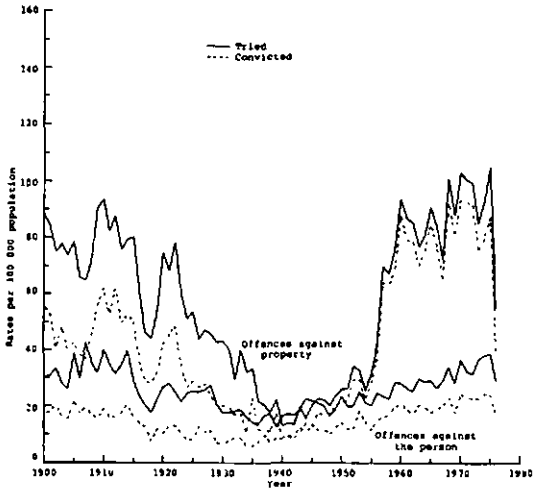


Figure 7.2c *Persons tried and convicted at the higher courts per 100 000 population aged 10 years and over, Queensland 1900 to 1976*

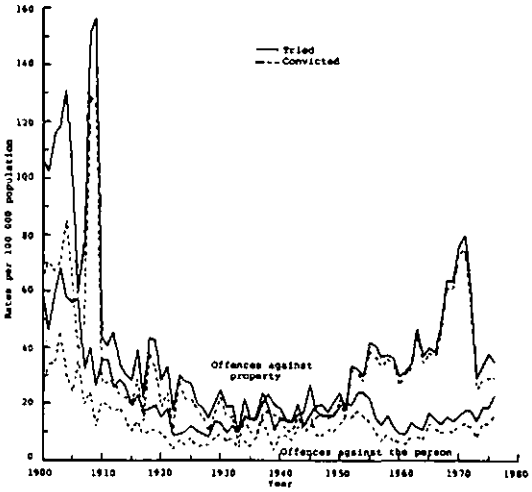


Figure 7.2e *Persons tried and convicted at the higher courts per 100 000 population aged 10 years and over, Western Australia 1900 to 1976*

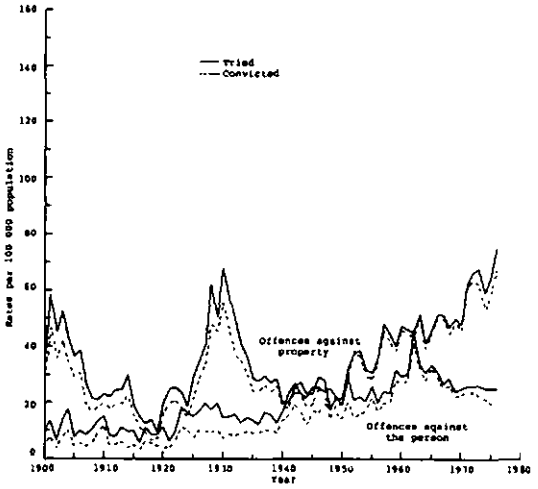


Figure 7.2d *Persons tried and convicted at the higher courts per 100 000 population aged 10 years and over, South Australia 1900 to 1976*

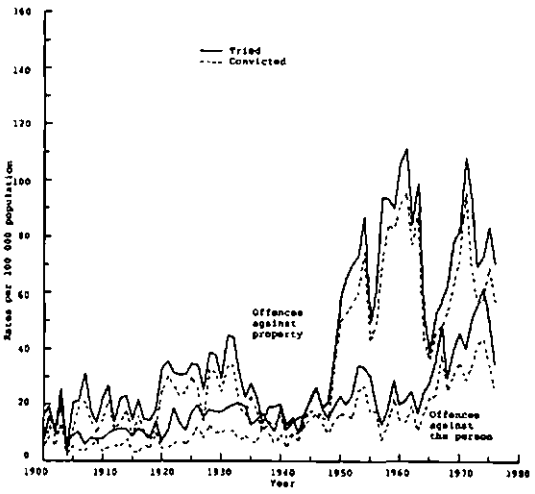


Figure 7.2f *Persons tried and convicted at the higher courts per 100 000 population aged 10 years and over, Tasmania 1900 to 1976*

ent from the other states; the volume of persons tried for property offences in Tasmania is not only the highest among all the states since the 1950s, but within Tasmania, the rates for the past thirty years are higher than any recorded before. Considering that mainly robbery and burglary from among the property offences are tried at the higher courts this increase is to be expected; the magistrates' courts data indicate that these two offences have increased almost exponentially during this period.

If the first few years of the century are ignored, the offences against the person in all states show remarkably similar patterns. Also, the number of persons tried for this offence is similar in every state, varying around a mean of 20 per 100 000 persons. This reaffirms the stability we noticed in the magistrates' courts data. However, examination of the entire period reveals that in Victoria and South Australia the number of persons tried for these offences increased sharply in the 1960s and, as with property offences, Tasmania still

Table 7.2 *Proportion of persons convicted at higher courts by offence category and by state, 1900 to 1976*

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania
			Offences against the person			
1900	59.3	54.1	56.4	56.5	46.8	66.7
1905	46.4	50.7	56.3	57.1	43.1	58.3
1910	37.1	60.3	47.8	77.1	59.2	45.5
1915	87.0	51.1	57.2	50.0	53.3	38.5
1920	50.0	43.4	39.3	34.9	63.2	63.6
1925	42.8	62.6	32.5	50.0	64.7	48.3
1930	47.1	56.5	38.4	50.0	71.4	58.1
1935	50.7	63.2	42.3	65.7	34.7	52.2
1940	56.9	63.3	51.5	82.5	62.7	48.6
1945	67.9	60.4	61.7	67.2	61.4	68.2
1950	62.2	69.6	61.0	75.0	64.7	72.6
1955	71.0	87.1	57.1	85.1	63.1	58.9
1960	79.9	86.9	74.8	91.3	71.7	73.6
1965	83.6	73.3	61.2	96.5	77.2	80.0
1970	88.9	87.5	66.6	91.5	78.3	77.1
1975	80.5	85.4	62.0	78.4	68.6	70.0
1976	82.2	82.5	57.3	76.0	69.6	70.4
			Offences against property			
1900	70.5	63.3	63.0	79.3	61.5	61.9
1905	69.6	64.4	54.2	79.4	63.5	57.1
1910	60.8	67.6	66.2	86.3	61.3	65.6
1915	87.5	69.7	62.6	81.8	68.2	59.1
1920	70.3	63.0	56.1	81.6	66.2	75.5
1925	67.3	80.5	53.4	74.2	79.2	86.4
1930	78.5	79.9	47.6	81.9	88.8	84.6
1935	80.7	77.1	67.8	84.7	68.0	84.0
1940	79.8	76.8	67.3	92.7	81.0	81.1
1945	86.0	69.8	61.5	83.9	75.0	83.3
1950	84.9	64.7	83.0	91.7	89.6	86.5
1955	93.9	72.7	88.6	93.4	91.6	85.1
1960	95.1	78.0	93.8	96.9	90.4	86.5
1965	97.2	84.9	93.5	98.2	95.4	73.8
1970	97.7	62.8	90.6	96.4	96.2	88.0
1975	94.1	85.0	83.4	90.5	77.5	82.1
1976	94.7	87.7	71.5	89.9	83.1	79.4

shows the highest rate among all states in recent years.

With the passage of time the higher courts seem to have been convicting more and more individuals. As shown in Table 7.2 for both offence types, the proportion of persons convicted has been rising steadily since the 1950s. Again it is striking that a person tried for a property offence is more likely to receive a conviction than one tried for an offence against the person. This holds for every state, with very few exceptions. Another curious feature is that the proportion of persons convicted both for personal and property offences seem to harmonise. That is to say, that if the conviction rate of property offenders increases, there is an increase in the conviction rate of violent offenders and vice versa. Why this should happen in every state is an intriguing phenomenon, especially considering the differences in law and the independence of the judiciary. It is tempting to imagine that perhaps these figures cover six samples taken from the same population rather than six different populations and the above finding demonstrates the general climate of punitiveness.

Summary

The conclusion is inescapable that despite the fact that the data from magistrates' courts and higher courts are not really comparable, there are interesting similarities. Such similarities obtain not only in the number of offences and offenders tried but also in the pattern of convictions.

Although the apparent similarities exist between the two data sets, their patterns over the entire century differ. For example, the magistrates' courts data showed a much sharper increase in property offences after the Second World War and the rates of charges since then were much higher than those experienced any time before the war. The higher courts data show that sharp increases in persons tried after the war were not unique; in fact in every state, except Tasmania, in earlier periods the rates of persons tried at the higher courts were equally high, and at times higher. It is likely that the use of 'distinct person' as a unit of measurement masks the magnitude of increases. By this method of counting, the relation between offender and offence is further complicated. Therefore, it is almost impossible to know whether the ratio of offenders to offences in recent years has changed.

8 Imprisonment Trends and Cost

Thus far we have described trials and convictions at various court levels. The purpose of this chapter is to follow through the court dispositions to imprisonment. A large proportion of convictions in any society result in punishments such as conditional release, fines, probation, etc., and a small proportion receive sentences of imprisonment. Sharp increases in crime in the last ten to fifteen years in many societies have led to serious doubts about the functioning and efficacy of the entire criminal justice system. There are those who urge the abandonment of imprisonment as a means of punishment for most offenders and there are those who urge that more offenders be imprisoned. In fact for the latter group it is the leniency of the courts which explains the increases in crime.

One of the major difficulties encountered by scholars and researchers in dealing with such extreme statements has been the inadequacy of data. With regard to imprisonment, most reseachers have been concerned with the current state of affairs, some have evaluated the working of the prisons, but very few studies have involved a long-term analysis of imprisonment patterns and differences over time. In long-term analyses the most common statistics used are those for the daily average prison population and the prison census on a particular day, generally at the end of the year. Such analyses show the extent to which imprisonment is used as a method of punishing or treating convicted offenders. But the figures available in Australia do not permit any examination of the relationship between convictions at various courts and the use of imprisonment. The difficulty resides in the unit used at various stages of the criminal justice system. At the magistrates' court level the unit of count is an 'offence', at the higher court level it is 'distinct person', and at the prison level it is 'person' counted each time received.

Since a major part of this study has been based on the data in magistrates' courts, it might seem that an examination of the disposition by offence would provide the information described above. In other words, since the court data offer information on offences which resulted in convictions, the offences for which individuals are sent to prison could be compared. Unfortunately, data of this kind are available only for two states, New South Wales and Queensland. Therefore, the analysis in this section relies mainly on the daily average prison population and information for prison expenditures; however the greater detail available for New South Wales and Queensland is also considered.

Sentences imposed at magistrates' courts

The magistrates' courts statistics for New South Wales and Queensland provide information on the offences charged and convicted and sentences of imprisonment imposed. During the first fifteen to eighteen years of this century a large number of offences for which fines were imposed resulted in imprisonment because of non-payment of fines. Suddenly for some reason the number of such imprisonments dropped without a concomitant rise in sentences of peremptory imprisonment. To

avoid complications such cases are excluded from this analysis. Therefore, the data examined here are those which relate to sentences of imprisonment only. Furthermore, since imprisonment as a punishment is used predominantly for offences against the person and against property, the analysis has been confined to these offences and their outcome. Finally, offences committed for trial at the higher courts have been excluded Therefore, the 'proportion convicted' used in this section represents the proportion of total offences tried at the magistrates' courts (that is, total charges minus committals).

Figure 8.1 provides information on the proportions of charges for offences against the person resulting in convictions and the proportion of convictions which resulted in imprisonment in both the states. (Data in summary form are also given in Table 8.1.) It will be seen that about 50 per cent of these charges in New South Wales result in conviction and that the conviction proportion has declined slightly since the Second World War. Similarly, the proportion of sentences of imprisonment has not shown any appreciable change over time, except in the mid-1970s. In Queensland, however, the proportion of these offences convicted at the magistrates' courts has increased perceptibly during the last two to three decades, and so have the sentences of imprisonment.

Once again property offences offer a contrasting profile (see Figure 8.2 and Table 8.1). In both states the proportion of property offences resulting in convictions increased steadily over the years. Since 1950 over 85 per cent in New South Wales and well over 90 per cent of these offences in Queensland were convicted by the magistrates' courts. While the proportion sentenced to imprisonment has remained fairly stable in New South Wales (except for the last three to four years), this proportion has declined significantly in Queensland. The pattern thus obtained in Queensland shows that when the proportion convicted was low, the proportion sentenced to imprisonment was high and vice versa. There are some exceptions to this pattern. During the Depression years the magistrates' courts in Queensland convicted approximately 90 to 95 per cent of the property offences and also used imprisonment for a relatively higher proportion of convicted offences. The Queensland pattern is noticeable in

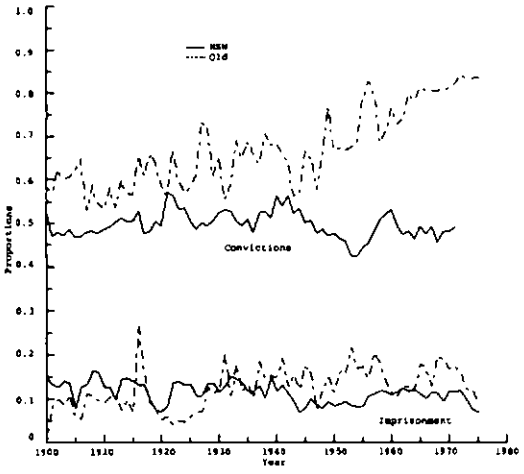


Figure 8.1 *Proportion of offences against the person convicted and proportion of convictions sentenced to imprisonment, New South Wales and Queensland 1900 to 1976*

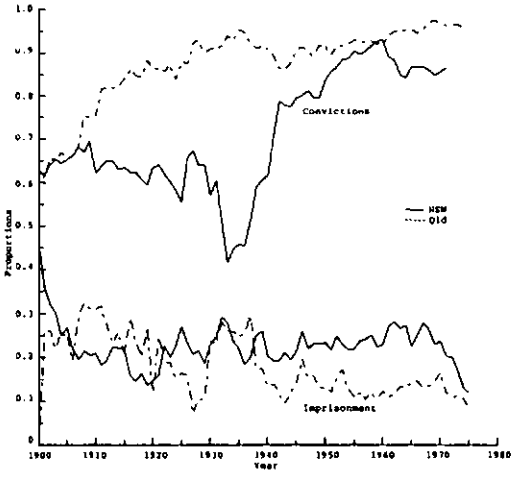


Figure 8.2 *Proportion of offences against property convicted and proportion of convictions sentenced to imprisonment, New South Wales and Queensland 1900 to 1976*

Table 8.1 *Use of imprisonment as proportion of convictions by offence category, New South Wales and Queensland 1900 to 1976*

Year	New South Wales		Queensland	
	Proportion convicted	Proportion imprisoned	Proportion convicted	Proportion imprisoned
		Offences against the person		
1900	0.5229	0.1451	0.5822	n.a.
1905	0.4653	0.0771	0.6218	0.0574
1910	0.4839	0.1252	0.5333	0.0893
1915	0.5041	0.1390	0.5658	0.0700
1920	0.4925	0.0706	0.5833	0.0502
1925	0.5048	0.1328	0.5833	0.0612
1930	0.5231	0.1146	0.6525	0.1232
1935	0.5065	0.1163	0.6923	0.1310
1940	0.5630	0.1152	0.6822	0.1486
1945	0.4989	0.0792	0.6660	0.1793
1950	0.4746	0.0824	0.6688	0.1125
1955	0.4430	0.0817	0.7866	0.1722
1960	0.5294	0.1067	0.7646	0.1137
1965	0.4916	0.1098	0.8124	0.1785
1970	0.4792	0.1152	0.8085	0.1661
1975	0.4884	0.0685	0.8371	0.0922
1976	0.4884	0.0692	0.8164	0.0621
		Offences against property		
1900	0.6273	0.4579	0.6269	n.a.
1905	0.6532	0.2667	0.6560	0.2525
1910	0.6198	0.2079	0.7542	0.3093
1915	0.6346	0.2183	0.8397	0.2082
1920	0.6326	0.1464	0.8635	0.1188
1925	0.5546	0.2704	0.8797	0.1643
1930	0.5707	0.2289	0.9079	0.2374
1935	0.4572	0.2188	0.9544	0.2465
1940	0.6160	0.2019	0.9144	0.1345
1945	0.7963	0.2147	0.9073	0.1429
1950	0.8378	0.2338	0.9202	0.1332
1955	0.9025	0.2188	0.9289	0.1115
1960	0.9305	0.2272	0.9204	0.1225
1965	0.8674	0.2242	0.9551	0.1455
1970	0.8537	0.2378	0.9695	0.1660
1975	0.8639	0.1188	0.9467	0.0861
1976	0.8639	0.1201	0.9462	0.0796

New South Wales only for a brief period. During the Depression, especially between 1932 and 1935, the magistrates' courts in New South Wales convicted fewer property offences but a relatively higher proportion were sentenced to imprisonment; during the mid-1970s the situation was just the opposite. It may be recalled that during the Depression the volume of property offences charged before magistrates' courts increased in every state but Queensland and the same was true for the proportion of these offences convicted. Queensland presents a case of almost monotonic increase in the proportion convicted since the turn of the century. Imprisonment as a sentence was used more frequently in the early years of this century, but since the second decade a higher proportion is observed only during the Depression period. In New South Wales a defendant charged with a property offence had a fifty-fifty chance of getting discharged during this period but once convicted had a higher probability of being sentenced to imprisonment than at

any time during this century, except the first decade and a half.

With regard to proportion of convictions resulting in imprisonment we carried out difference of means tests. Of the four possible sets of means (that is, between states within offence and within state between offences), we found only one set to be significantly different. The means of proportion imprisoned for offences against the person and property within New South Wales were significantly different at the 0.01 level. In terms of direction, the magistrates' courts in New South Wales imposed sentences of imprisonment for property offences more often than for offences against the person.

Daily average prison population

A more frequent use of imprisonment in the early part of this century has also been reflected in the generally higher rate of imprisonment in every state except Tasmania; this rate has never been achieved during the rest of the century. Rates based on daily average prison population show that for every 100 000 persons aged 10 years and over in Australia there were 168 persons in prisons in the year 1900. This figure dropped to the lowest level of 57 in the middle of the Second World War in 1941 and in 1976 the Australian imprisonment rate stood at 78 (for details see Appendix G). Not all the states show exactly similar movements, but Tasmania is the only state with a pattern notably different from the national picture. In Tasmania the imprisonment rate since 1958 has been higher than at any time before.

Data presented in Figures 8.3*a* and 8.3*b* and Table 8.2 show that the imprisonment rate in Western Australia has been higher than in any other state. In 1900 there were 391 prisoners per 100 000 persons, the highest rate recorded for any state at any time this century. Also, with the exception of a few years, the rate has been higher than in the other five states. After Western Australia, New South Wales incarcerated the greatest number of people. For two-thirds of the period under study, imprisonment rates were higher in New South Wales than the other four states. It is difficult to rank the other states but we must note that during the 1970s Victoria has attained a very low level of imprisonment with a rate of only 48 per 100 000 persons aged 10 years

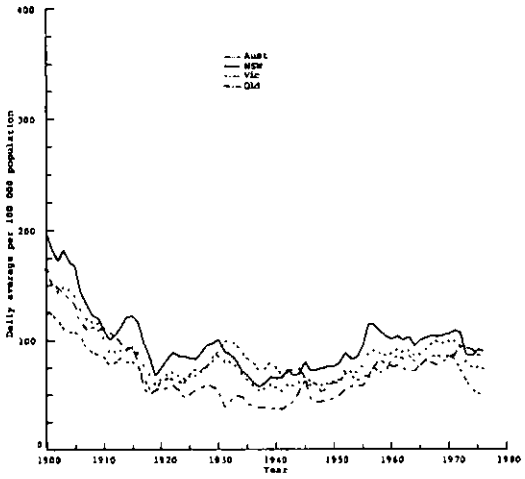


Figure 8.3*a* *Daily average number of prisoners per 100 000 population aged 10 years and over, Australia and states 1900 to 1976*

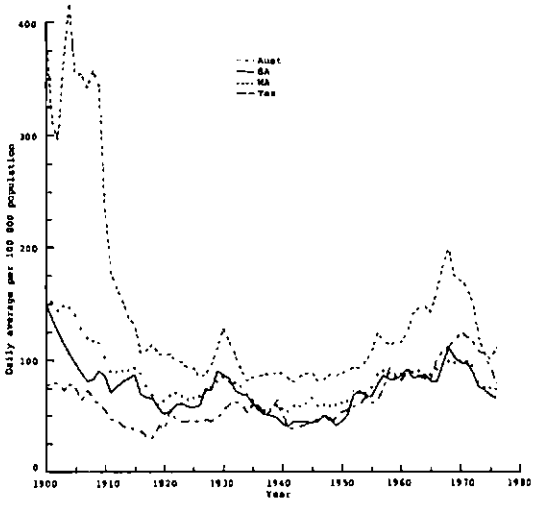


Figure 8.3*b* *Daily average number of prisoners per 100 000 population aged 10 years and over, Australia and states 1900 to 1976*

Table 8.2 *Daily average number of prisoners per 100 000 population aged 10 years and over, 1900 to 1976*

Year	Australia	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania
1900	168.3	197.2	129.0	166.1	150.4	390.6	77.0
1905	143.7	167.0	108.0	131.1	97.3	352.8	75.0
1910	106.0	109.2	85.2	111.4	85.9	235.5	54.7
1915	97.1	122.4	81.0	94.2	87.6	132.0	39.6
1920	67.3	75.0	63.1	56.5	51.8	103.8	39.1
1925	70.1	83.8	68.5	50.8	57.6	93.2	47.0
1930	89.1	101.1	91.0	55.4	87.5	128.1	55.5
1935	67.7	68.2	83.3	43.3	61.4	85.1	62.5
1940	60.5	65.0	75.6	39.8	43.2	88.5	51.1
1945	69.9	80.8	67.2	65.9	44.0	89.9	45.8
1950	65.5	76.6	61.9	48.4	45.1	88.7	54.1
1955	79.1	95.3	66.7	58.3	67.6	105.7	61.4
1960	91.3	101.2	82.6	76.4	85.5	115.9	82.0
1965	90.6	100.3	77.1	79.0	81.9	142.7	83.6
1970	103.0	106.1	85.7	85.0	97.8	170.5	126.2
1975	78.8	91.7	52.9	84.6	69.1	100.9	94.1
1976	77.8	90.3	48.4	88.6	66.2	110.6	79.4

and over in 1976.

In spite of the discrepancies among states it could be said that, especially since 1920, imprisonment rates for Australia as a whole and in each of the states have been relatively stable. The high rates observed during the first decade and a half could reflect the generally high crime rates, particularly for violent and property crimes. Also, detailed data available for the largest three states, New South Wales, Victoria and Queensland, show that a disproportionately large number of sentences involving fines eventually resulted in imprisonment because of non-payment of fines; the sentencing of fines resulting in imprisonment was almost abandoned thereafter. Furthermore, the astonishingly high imprisonment rate in Western Australia during this period could also reflect the severity of sentences imposed on Aborigines. Even in recent years the prison population consists of a disproportionately large number of Aborigines.[1]

Imprisonment is the most serious non-capital punishment awarded to law violators. The Australian imprisonment data for the present century show movements which in many ways are similar to those observed for offences charged before magistrates' courts, excluding petty offences. Such an observation raises the question as to whether the 'level of crime' argued by Durkheim could also be extended to incorporate 'level of punishment' as well. It could be argued that the constancy in the level of punishable behaviour over time is attained mainly in response to the overall shifts in the conforming and non-comforming behaviour of the members of the society; such shifts in behaviour may also determine the level of punishment, that is, the number of people undergoing punishment.

Blumstein et al. have effectively tested a similar notion. They proceeded from the observation that

> if many more individuals engage in behavior defined as punishable, the demarcation between criminal and non-criminal behavior would be adjusted to re-designate at least part of the previously criminal behavior as non-criminal, or the intensity or duration of punishment for those convicted would be reduced. A similar but opposite reassessment would occur when fewer people commit currently punishable acts.[2]

They verified this hypothesis by applying autoregression techniques to time series data on imprisonment rates from the United States, Canada and Norway. The authors found that only a second-order autoregression with no moving average component produced a high level of explanatory power. The parameters of the autoregression revealed an oscillatory pattern with periodicities of

eleven years for the United States, sixteen years for Canada, and twenty-five years for Norway.

Tests of the Australian imprisonment data produce slightly different results. Figure 8.4 has a plot of actual imprisonment rates for Australia as a whole against the values predicted by autoregression and Table 8.3 presents the best-fit autoregression parameters for Australia as well as for each of the six states. In all these tests, first-order autoregression without a moving average component achieved the best results as against the second-order autoregression discovered by Blumstein et al. This process in each case had a high explanatory power ($r^2 > 0.847$), which suggests that an accurate forecast of the imprisonment rate for year t can be obtained as a simple linear function of the imprisonment rate in the preceding year. Without exception the explanatory power for each of the autoregressions is better than those found by Blumstein et al. Furthermore, the difference between the Australian time series and those of the United States, Canada and Norway is that the Australian data approach a constant level without regular oscillatory patterns in contrast to the Blumstein finding.

The Australian imprisonment figures represent the aggregation of data from six autonomous

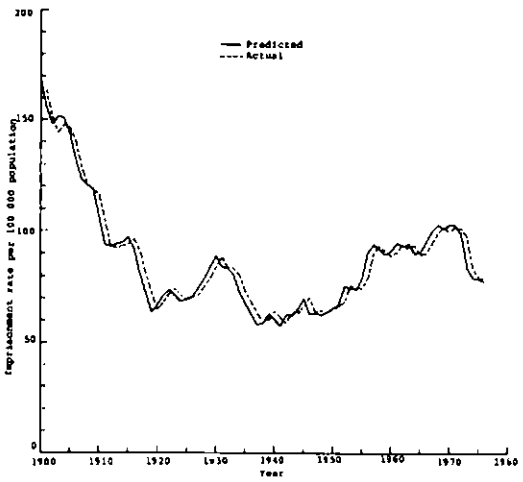


Figure 8.4 *Actual versus predicted imprisonment rate, Australia 1900 to 1976*

units and the finding that imprisonment rates in each of these units follow a first-order autoregression suggests the existence of similar mechanisms which generate each. The significance of this finding can be tested by developing appropriate models to identify such a mechanism. Our findings and those observed by Blumstein et al. may in actuality be not so different except in terms of reaction time to changes in levels of crime. In relatively small-scale administrative units such as in Australia, even quite major fluctuations may not be indicative of substantial changes in the mechanism but merely reflect the randomness inherent in small samples. Also, in such units policy making can be relatively swift and tends to be of an *ad hoc* nature so that systematic long-term changes in policy are not so evident. This may not be so in the United States because of the size of the administrative units and bureaucratic complexities brought about by regional disparities in sentencing policy, and it may be the inertia inherent in such systems which leads to eleven year policy cycles.

Earlier, we have suggested the existence of a discontinuity in the imprisonment rate statistics, hinting at a major change in sentencing policy which effectively resulted in substantially lower rates after about 1920. It was therefore considered appropriate to examine the data from 1921 to 1976 with the help of autoregression techniques. This analysis produced results remarkably similar to those obtained for the entire period under study (see Table 8.3). In all the tests, for Australia and for each of the six states, the first-order autoregression produced a very high correlation which was not significantly improved with the inclusion of higher order variables.

Prison expenditure

We have observed a substantial stability in the daily average number of prisoners in Australia and each of the states, especially since the 1920s. We must however note that in terms of numbers the daily average in 1920 was 2793 but in 1976 this rose to 8675. While it is meaningful to compare rates to show the movements in prison population concomitant with population growth, comparison of prison expenditure data over the years can best be explained with the help of numbers. Accordingly, in the maintenance of 2793 prisoners, that

Table 8.3 *Estimated autoregression parameters for imprisonment rates* (r_t) in Australia and the six states, 1900 to 1976 and 1921 to 1976* $r_t = \varphi_1 r_{t-1} + \delta + \varepsilon_t$

		φ_1	δ	Correlation (r^2)	F-ratio $F^{df_1}_{df_2}$†	Asymptote‡
Australia	1900–1976	0.911	6.666	0.959	1738.0^{1}_{74}	74.89
	1921–1976	0.943	4.634	0.901	489.0^{1}_{54}	81.30
New South Wales	1900–1976	0.892	9.333	0.932	1021.0^{1}_{74}	86.42
	1921–1976	0.906	8.482	0.831	265.6^{1}_{54}	90.23
Victoria	1900–1976	0.901	6.688	0.891	606.4^{1}_{74}	67.56
	1921–1976	0.930	4.930	0.804	221.3^{1}_{54}	70.43
Queensland	1900–1976	0.917	5.100	0.954	1553.7^{1}_{74}	61.45
	1921–1976	0.964	2.769	0.888	429.3^{1}_{54}	76.92
South Australia	1900–1976	0.870	8.597	0.894	621.5^{1}_{74}	66.13
	1921–1976	0.923	5.551	0.866	347.9^{1}_{54}	72.09
Western Australia	1900–1976	0.914	8.953	0.931	1003.8^{1}_{74}	104.10
	1921–1976	0.940	6.789	0.884	409.8^{1}_{54}	113.15
Tasmania	1900–1976	0.955	2.981	0.910	751.8^{1}_{74}	66.24
	1921–1976	0.945	4.452	0.914	570.8^{1}_{54}	80.95

* Imprisonment rates are the annual daily average prison population per 100 000 population 10 years of age and older.

† df_1 and df_2 are the degrees of freedom of the regression and residuals respectively. All the F-ratios are significant at less than 0.001.

‡ It can be shown that a first-order autoregression of the form $r_t = \varphi_1 r_{t-1} + \delta$, $\varphi_1 < 1$, represents an exponential function $r = ce^{[1-1/\varphi_1]t} + \delta/(1-\varphi_1)$ (where c is a constant), which asymptotes to the value $\delta/(1-\varphi_1)$ as t increases.

is, the daily average for 1920, in numerous prisons around Australia, the governments of various states spent a total of about $600 000, that is, a little over $214 per prisoner for that year; in 1976 the expenditure was $88 million, that is, over $10 134 per prisoner. This is not to say that either the daily average number of prisoners or expenditure were the same in every state. On the contrary, we find differences in both between states.

Figures 8.5*a* and 8.5*b* and Table 8.4 present data on expenditure. An examination of the graphs suggests that in terms of yearly cost of maintaining prisoners the period under study can roughly be divided into three segments: 1900 to 1945, 1946 to 1969 and 1970 to 1976. During the first time segment the cost per prisoner demonstrates a very gradual increase in every state but Tasmania; for Australia as a whole the increase was about 166 per cent during the first forty-six years of this century. In 1900 New South Wales spent $137 per prisoner and in 1945 only $218, an increase of 59 per cent. Tasmania on the other hand spent $97 per prisoner in 1900 and $568 in 1945, an increase of 485 per cent. In the remaining four states of Victoria, Queensland, South Australia and Western Australia, the percentage increases in per prisoner cost between 1900 and 1945 were 247, 173, 355 and 184 respectively. Curiously the state which spent the most in 1900, that is, New South Wales, showed the lowest increase during this period. In accord with the economic condition prevailing during the Depression, prison expenditure declined in all the states.

The next time segment, 1946 to 1969, shows a pronounced upward movement in the cost of maintaining prisoners in every state. During this period of two and a half decades the general level of economic well-being meant increases in wages as well as in prices. New jobs and increased facilities were also reflected in prisons during this period. Consequently, the Australian aggregate expenditure per prisoner rose by 660 per cent; Tasmania showed the minimum increase of 350 per cent and in New South Wales the expenditure

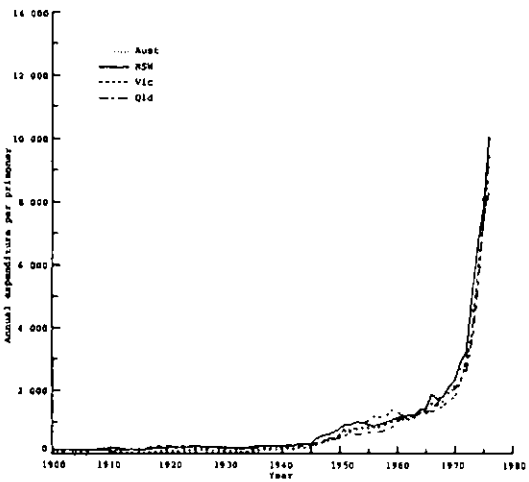


Figure 8.5*a* *Annual expenditure per prisoner, Australia and states 1900 to 1976*

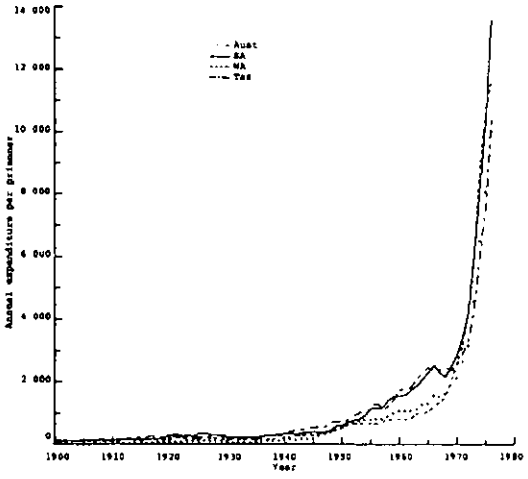


Figure 8.5*b* *Annual expenditure per prisoner, Australia and states 1900 to 1976*

grew by a massive 959 per cent.

During the 1970s prison expenditure in every state skyrocketed. The Australian expenditure per prisoner jumped from $2239 in 1970 to $10 134 in 1976, and in every state the expenditure escalated by an average of 350 per cent during this seven-year period. South Australia spent a staggering $13 590 to maintain a prisoner in 1976; the lowest expenditure in the same year, $8345, was recorded in Queensland.

By any standard the growth in prisoner expenditure during this century, and especially during the 1970s, has been extraordinary. According to available estimates the mean family income (gross) in 1976–77 was approximately $13 600. The reasons for spiralling prison costs are difficult to assess especially because there are several factors on which we do not possess information. We do not know for instance major constructions that took place during this period or even the detailed data on staff to prisoner ratios. We have also reason to believe that the prison expenditure differs according to type of prison and it is well known that costs for maintaining a female prison are much higher than that of male prisons.

Looking at the expenditure data from a different perspective, we obtain quite an interesting picture. In the year 1900 it cost every Australian 14 cents to maintain prisons. The cost increased to only 21 cents in 1946 and it reached a dollar figure only in 1964; in 1976 the per capita cost of maintenance of prisons in Australia was $6.46. As can be seen from Table 8.4 the per capita costs in the states vary a great deal. Western Australian residents paid the maximum to run prisons in 1900 and even in 1976 each resident of the state contributed $10.53. Victoria shows the smallest increase of all the states in per capita costs, and its 1976 cost of $3.74 is approximately one-third of Western Australia, half of New South Wales and South Australia and less than two-thirds of Queensland and Tasmania.

Such an analysis as presented above is meaningful when the interest lies in understanding the current cost of running prisons. But if the emphasis is on long-term comparison, as in the present study, these statistics do not serve a useful purpose in that they do not take inflation into consideration. It is desirable, therefore, to standardise the expenditure data at constant prices. The Reserve Bank of Australia, in developing a preliminary economic data base, carried out an extensive exercise and with the help of a number of deflators it came up with an economic data base at constant 1966–67 prices. Relying upon these calculations and adjusting the prison ex-

Table 8.4 *Annual expenditure on prisons in dollars, 1900 to 1976*

Year	Australia		New South Wales		Victoria		Queensland		South Australia		Western Australia		Tasmania	
	Per prisoner cost	*Per capita cost*	*Per prisoner cost*	*Per capita cost*	*Per prisoner cost*	*Per capita cost*	*Per prisoner cost*	*Per capita cost*	*Per prisoner cost*	*Per capita cost*	*Per prisoner cost*	*Per capita cost*	*Per prisoner cost*	*Per capita cost*
1900	111	0.14	137	0.20	88	0.09	89	0.11	86	0.08	106	0.31	97	0.06
1905	99	0.11	108	0.14	94	0.08	84	0.09	111	0.08	84	0.22	105	0.06
1910	124	0.10	153	0.13	111	0.08	98	0.08	124	0.08	93	0.17	131	0.05
1915	126	0.10	120	0.11	130	0.08	131	0.09	130	0.09	116	0.11	240	0.07
1920	214	0.11	202	0.12	201	0.10	251	0.11	298	0.12	181	0.15	297	0.09
1925	238	0.13	220	0.14	260	0.14	236	0.09	346	0.15	178	0.13	219	0.08
1930	188	0.13	191	0.15	173	0.13	187	0.08	242	0.17	154	0.15	248	0.11
1935	206	0.17	227	0.13	181	0.12	201	0.07	238	0.12	183	0.12	211	0.10
1940	252	0.13	258	0.14	231	0.14	249	0.08	348	0.12	217	0.14	329	0.13
1945	292	0.17	218	0.18	307	0.17	244	0.13	390	0.14	300	0.21	568	0.21
1950	653	0.35	752	0.46	592	0.30	489	0.19	627	0.23	514	0.36	737	0.32
1955	919	0.58	907	0.69	1020	0.54	716	0.33	1154	0.61	683	0.56	1203	0.57
1960	1189	0.86	1129	0.92	1331	0.87	966	0.58	1558	1.05	810	0.74	1788	1.13
1965	1423	1.03	1371	1.11	1285	0.79	1321	0.82	2297	1.50	1065	1.11	2456	1.60
1970	2239	1.86	2307	2.02	1774	1.23	2036	1.41	2848	2.27	2550	3.38	2554	2.54
1975	8184	5.27	7783	5.88	7316	3.16	7612	5.23	10366	5.90	10669	8.72	7551	5.75
1976	10134	6.46	10028	7.47	9438	3.74	8345	6.02	13590	7.45	11722	10.53	10467	6.76

Note: Expenditures before 1966 have been converted into dollars. All expenditure are at current prices for each year.

penditure data at constant 1966–67 prices offers a set of statistics which depicts a relative picture.

In Figures 8.6*a* and 8.6*b* and Table 8.5 the price-adjusted prison expenditures are presented. (Complete data for prison expenditure and daily average for this century are provided in Appendix G.) To begin with, one does not obtain as shocking a growth in prison expenditure as the data in Figures 8.5*a* and 8.5*b* and Table 8.4 would tend to suggest. According to expenditure at current prices each year the per prisoner cost of Australia as a whole increased more than 90 times during the period 1900 to 1976; at constant prices the cost increased only fivefold. Thus, in the year 1900 the maintenance of one prisoner per year cost the prison authorities in Australia on average $833; the figure for 1976 was $4325. At constant prices as well New South Wales spent a much higher amount per prisoner per year in the early part of this century, compared to other states. Increase in expenditure during the period 1900 to 1976 was least in this state. South Australia presents the opposite pattern, that is, the lowest per prisoner cost in the beginning of this century and an eightfold increase in cost during the period under study. Also, during the 1970s, the South Australian prison department spent a much higher amount per prisoner than any other state.

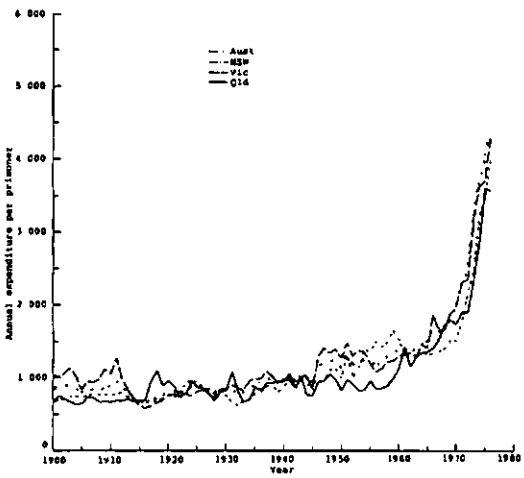


Figure 8.6a *Annual expenditure per prisoner, Australia and states 1900 to 1976 (at constant 1966–67 prices)*

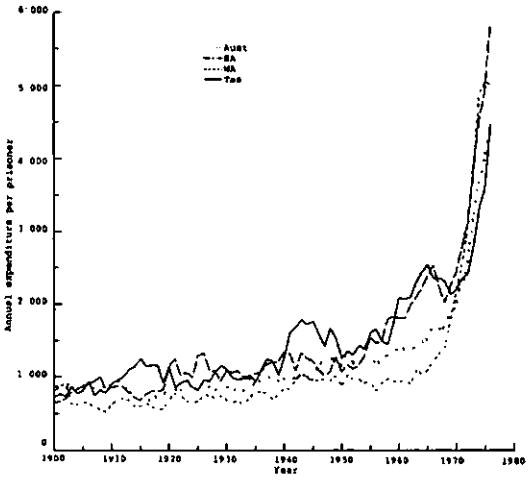


Figure 8.6b *Annual expenditure per prisoner, Australia and states 1900 to 1976 (at constant 1966–67 prices)*

The constant prices expenditure data do not substantially alter the three time segments pointed out earlier. Thus, during the period 1900 to 1945 the Australian expenditure per prisoner remained fairly stable, well below $1000. A similar pattern obtained in every state except South Australia and Tasmania. Between 1946 and 1969 the per prisoner cost in Australia rose by approximately 62 per cent. At the state level Tasmania showed the least increase of 34 per cent and in South Australia the expenditure per prisoner showed the highest increase of 105 per cent. Significant increases in prison expenditure, however, occurred in the 1970s. In the seven-year period 1970 to 1976, the cost per prisoner per year in Australia jumped by 103 per cent; this rapid growth was experienced in every state.

The examination of per capita (constant prices) cost to the community of running prisons presents interesting findings. Prison expenditure at the turn of the century was generally higher in almost every jurisdiction than in the subsequent decade or so. Bearing this in mind, it is submitted that the per capita cost in Australia between 1900 and 1976 increased by only 163 per cent. The lowest increase of 94 per cent and the highest increase of

Table 8.5 *Annual expenditure on prisons in dollars, 1900 to 1976 (at constant 1966–67 prices)*

Year	Australia		New South Wales		Victoria		Queensland		South Australia		Western Australia		Tasmania	
	Per prisoner cost	*Per capita cost*	*Per prisoner cost*	*Per capita cost*	*Per prisoner cost*	*Per capita cost*	*Per prisoner cost*	*Per capita cost*	*Per prisoner cost*	*Per capita cost*	*Per prisoner cost*	*Per capita cost*	*Per prisoner cost*	*Per capita cost*
1900	833	1.05	1030	1.51	662	0.66	672	0.82	645	0.62	796	2.32	729	0.42
1905	766	0.85	841	1.06	731	0.63	653	0.66	864	0.64	655	1.70	814	0.45
1910	850	0.70	1050	0.88	762	0.52	672	0.58	846	0.58	637	1.18	896	0.37
1915	655	0.50	624	0.57	675	0.42	678	0.47	674	0.46	598	0.58	1244	0.38
1920	815	0.42	768	0.44	764	0.38	955	0.41	1133	0.46	689	0.55	1129	0.34
1925	882	0.49	815	0.53	965	0.52	874	0.33	1282	0.57	659	0.46	810	0.30
1930	834	0.60	847	0.67	768	0.56	829	0.36	1076	0.75	684	0.66	1100	0.49
1935	899	0.50	989	0.55	788	0.54	876	0.30	1037	0.52	799	0.52	920	0.45
1940	964	0.49	987	0.52	883	0.55	954	0.29	1334	0.46	833	0.54	1261	0.49
1945	910	0.53	847	0.56	956	0.53	761	0.40	1216	0.44	935	0.66	1769	0.64
1950	1108	0.59	1276	0.78	1005	0.51	830	0.32	1064	0.38	872	0.62	1252	0.54
1955	1226	0.77	1211	0.92	1362	0.72	956	0.44	1540	0.82	912	0.75	1607	0.76
1960	1377	1.00	1308	1.06	1543	1.01	1119	0.67	1805	1.21	939	0.85	2071	1.31
1965	1470	1.06	1416	1.14	1327	0.82	1365	0.85	2373	1.55	1100	1.15	2537	1.65
1970	1915	1.59	1973	1.72	1518	1.05	1742	1.21	2436	1.94	2181	2.89	2185	2.18
1975	3882	2.50	3692	2.79	3470	1.50	3611	2.48	4918	2.80	5061	4.14	3582	2.73
1976	4325	2.76	4280	3.19	4028	1.60	3562	2.57	5800	3.18	5003	4.49	4467	2.88

Note: Expenditures prior to 1966 have been converted into dollars and are at constant 1966–67 prices, as standardised by the Reserve Bank of Australia in M.W. Butlin, A Preliminary Annual Database 1900/01 to 1973/74, Research Discussion Paper No. 7701, Reserve Bank of Australia, Sydney, 1977 (unpublished).

586 per cent were observed in Western Australia and Tasmania respectively. These two states also present two opposite extremes in population growth; in Western Australia the population between 1900 and 1976 increased by about 550 per cent whereas the increase in Tasmania was of the order of only 136 per cent. While this is an important factor in assessing per capita cost there are at least two other important aspects which must be considered: (1) the imprisonment rate; and (2) the introduction of increased services and professional personnel into prisons.

As has been shown earlier the imprisonment rate in Australia and almost all the six states declined sharply during the first two decades and thereafter stabilised. Therefore, it was no surprise to encounter a decline in per capita cost. The marked decline in per capita cost in Western Australia becomes quite obvious when the expenditure data are examined in relation to imprisonment rates (see Figure 8.3*b*). No other state exhibited such a sharp drop in the imprisonment rate as Western Australia. Up to the 1940s the per capita expenditure on prisons in Australia did not show any significant increase, but since the 1950s the increases are steep and they are most rapid during the 1970s. The period since the 1950s is also an era when the concept of rehabilitation became a highly pursued goal in corrections. One of the main factors of this period has been the employment of a large number of professionally qualified personnel in the prison administration.

A large number of new prisons, detention shelters, work camps etc., were also built in all states. This, however, is not responsible for the increase in prison expenditure. The expenditure for the construction of new prisons did not generally come in the votes of the prison departments, as it was part of the budget of the Public Works Departments of the respective state governments. In spite of these changes — new personnel, better salaries and new programs — the per capita cost of administering prisons has not increased substantially. In a period of seventy-seven years an increase of 163 per cent in per capita cost is remarkably low.

Summary

The selection of a statistical series on imprisonment was indeed a problematic one. We wanted to establish continuity from offences charged by the police to court outcomes and to imprisonment, but because of changes in the counting rules at different stages of the criminal justice system this could not be achieved. However, with the help of data from only two states it has been shown that for the two most serious offence categories the proportion of court convictions resulting in imprisonment has not shown any appreciable increase over time. For offences against the person the proportion convicted and the proportion imprisoned declined in New South Wales. For property offences both the states show an increasing rate of convictions yet the proportion imprisoned declined in Queensland and remained stable in New South Wales. The limitation of these data is that they do not inform us how many individuals were sent to prisons, but tell us only the number or proportion of offences for which offenders were imprisoned.

In terms of individuals in the prisons the one set of data which is most commonly used and which was available for all the states in Australia is the one on the daily average number of prisoners for each year. Our analysis revealed that in every state except Tasmania, the daily average number of prisoners was the highest during the first two decades of this century and dropped significantly thereafter. Examination of data from a few states showed that this high rate was achieved mainly because a large number of offenders was sent to prison because of non-payment of fines. The effect of this large number on the imprisonment rate can be better understood with the help of some simple statistics. The mean imprisonment rate for Australia for the seventy-seven year period is 87.8 per 100 000 persons aged 10 years and over with a standard deviation of 23.1. When we consider the imprisonment rate for the years 1920 to 1976 the mean drops to 78.3 and the standard deviation to 13.5. It is obvious that there was a major shift in sentencing policy towards the end of the second decade.

Imprisonment rates in all the states present a remarkably similar pattern, the only exception being Western Australia, where the rates have always been higher than any other state. Despite the minor and major variations the patterns of imprisonment rates in Australia and all the six states can be best explained by the first-order autoregressive process. That is to say that imprisonment rates for year t can be predicted with the

help of the rate for the preceding year.

The most dramatic increase in the cost of maintaining prisons, both in terms of current and constant dollar value, was observed in the 1970s. At constant 1966–67 prices the Australian cost per prisoner rose from $833 in 1900 to $4325 in 1976 and the cost to the community of managing prisons increased from $1.05 in 1900 to $2.76 in 1976 per person. There were some state differences in the expenditure data.

9 Long-term Correlates of Crime

The patterns of offence and offender rates presented in the preceding five chapters and the changes in structural and technological variables illustrated in Chapter 1 demonstrate some interesting parallels. The similarities in the fluctuations in property and petty offences charged before magistrates' courts and in some of the important socio-economic variables, in particular population, urbanisation, gross domestic product per capita and motor vehicles registered, are at times quite striking. In this and the subsequent two chapters we therefore intend to explore these relationships in detail. We also wish to examine the existence or otherwise of any regularity or cyclical patterns in the data. These tasks will be carried out with the help of correlation, partial correlation, lagged relationship and spectral analysis techniques. Numerous research studies have been carried out in several countries in the past few decades attempting to examine the association of crime with such variables as population and its age structure, urbanisation, unemployment, the economy and criminal justice resources. The introductory part of this chapter will also present a brief literature review concerning some of these variables.

In our analysis structural and technological variables have been termed 'exogenous variables' and these have been classified under three broad groups: demographic, developmental and criminal justice. The demographic variables include such distributions as age structure, life expectancy, males per 100 females, marriage and divorce; the developmental variables are urbanisation, unemployment, gross domestic product and motor vehicles registered; and the criminal justice variables are the size of the police force, police expenditure and prison expenditure. Crime variables relate to charges laid at the magistrates' courts by four major categories of offences as presented in Chapter 5.

Literature review

Since the classic study of Shaw and McKay[1] there have been numerous theoretical and empirical works concerning urbanisation, cities and crime.[2] These research studies have addressed the issue of a relationship between urbanisation and crime from two different but related perspectives: (1) a historical, descriptive point of view; and (2) a theoretical and empirical perspective. There are fewer works in the former classification and Christiansen's work stands out as a significant contribution. In the second category the available literature concentrates on the conditions generated by urbanisation and industrialisation and analyses crime in relation to neighbourhoods, social structure, income distribution and similar variables. The present study uses urbanisation, that is, the proportion of the total Australian population living in urban areas, as one of the developmental variables.

Interest in economic conditions, especially unemployment and crime, was evinced much earlier. A scholarly summary of the works in this area up to the 1930s is presented by Sellin. At the end of this summary Sellin writes:

Opinions of the type quoted have been based in

> part on a priori reasoning resting on experience and introspection and in part on the accumulated and, it would appear, not always reliable data analyzed or characterized by Van Kan and others. Whether accurate or not, these opinions have been given publicity and have gained currency because they seemed appropriate and fitted in with preconceived ideas.[3]

Some three decades later, writing on the relationship between unemployment and crime, Mannheim remarks:

> The conclusion was that unemployment seemed to play a widely varying role in different areas and also for different age groups, and that subtle pyschological factors had to be taken into account which did not become so easily visible in statistical investigations.[4]

Fleisher, in a widely quoted study, makes some interesting observations. With the help of time series and cross sectional data from the United States he obtained a positive relationship between unemployment and delinquency. The findings lead him to conclude 'that a 1 per cent increase in unemployment rate is associated, on the average, with an approximate .15 per cent increase in the rate of delinquency (arrest rate)'.[5] Convinced of the validity of his analytic methods and findings Fleisher draws a causal inference in that the 'examination of delinquency rates by age adds further to the hypothesis that increases in unemployment *cause* increases in delinquency'.[6]

Some ten years later, Brenner, testifying before the Crime Subcommittee of the House Judicial Committee of the United States Congress, revealed startling findings of his research:

> every 1 percent increase in the overall unemployment rate results in a 6 percent increase in property crimes, such as robbery and embezzlement, a 9 percent increase in narcotics arrests, a 4 percent increase in homicides, and a 5 percent increase in state prison admissions.[7]

This is a gross oversimplification of Brenner's work. Brenner himself is much more cautious because of certain major pitfalls. The following two paragraphs from his report are rather illuminating:

> We are quite aware, however, that the models offered here are by no means structurally complete. They represent only a first stage research effort and are based on earlier scientific work which itself has represented discoveries in very different disciplines. This translation of theoretical position and discovery into policy-oriented, empirical models was based on extremely simple assumptions of linear relationships between the economic and pathological indices. These assumptions of linearity are probably incorrect since they do not take into account the duration, and rate of change in, economic distress. For example, they assume that a change in the unemployment rate from two to three percent would be similar in pathological impact to a change of from seven to eight percent. There is some reason to believe that increases at higher levels of unemployment have considerably more deleterious effects.
>
> More important, however, is that we have not as yet been able to segregate some of the deleterious effects of the recent period of economic growth (possibly connected with urban problems) from the inherently beneficial effects of long-term growth in income per capita. Nor have we been able to account for the effects of structural unemployment, that are particularly damaging to minorities and youth. This is an especially serious deficiency in our model as it relates to the problems of criminal aggression, youthful suicide, and hospitalization of the mentally ill.[8]

The research findings on the relationship between unemployment and crime are to say the least inconclusive. However, it cannot be denied that a majority of studies have found a positive relationship between unemployment and crime. Generally, current literature suggests that unemployed adult males are far more likely than their employed counterparts to commit major as well as minor offences. What they did not say is whether the proportion of unemployed males who commit crimes at a time of 4 per cent unemployment will be the same as in a situation of 2 per cent unemployment. Braithwaite raises a very fundamental question:

> If the evidence is consistent that unemployed people commit more crime, why is the evidence so conflicting on the question of whether crime rates go up during periods of high unemployment?[9]

It is quite apparent that the conclusion of causal linkage drawn by Fleisher is hazardous. The extensive quote from Brenner, and Braithwaite's question need to be addressed before any conclusion beyond the existence of a relationship between unemployment and crime can be drawn..

During the last two decades a notion which has gained considerable acceptance is one which relates crime to the age of the offender. It is now almost a universally accepted fact that youths in the age range 15 to 24 years commit a majority of offences every year. It should therefore be possible to predict the volume of crime if the population in this age group can be estimated. In a more recent study Fox predicts that

> the annual increases in the property crime rate are expected to diminish during the 1980s because of a projected decline in the proportion of persons, nonwhite, aged 14–17. The violent crime rate is also expected to decline during the 1980s as a result of a projected decline in the proportion nonwhite, aged 18–21. The annual increases in both crime rates are then expected to rise again during the 1990s. This rise is associated with another, yet smaller, swelling of the nonwhite teenage population.[10]

While this is an important area the lack of age-related crime data in Australia preclude a detailed analysis. However, crime rates will be examined in relation to data on the age structure of the Australian population.

Interest in understanding the relationship between economic conditions and crime has persisted for a long time. Examination of such a relationship is based on the ideology that human arrangements are seriously influenced by economic conditions.[11] Research studies carried out in this area, some cited in connection with unemployment, are not definitive and the tendency is to consider economic conditions as one of many environmental circumstances. There have, however, been a few studies in recent years, especially by economists and by those using econometric analyses, which have created renewed interest in the relationship between economic conditions and criminality. Brenner[12] used three economic indicators, namely gross domestic product, unemployment and consumer price index, and Fox[13] used the consumer price index to examine the relationship with selected crimes. While Brenner observed a positive association between economic indicators and homicide and imprisonment rates, Fox found an association between the consumer price index and property crimes, and suggested that the economic factors of crime may be alleviated by reducing the effects of income inequality.[14]

There now exists an extensive body of literature on the issue of crime statistics as a product of the criminal justice system. According to this view fluctuations in the number of crimes, as reported in the official crime statistics, reflect the decisions of the people managing the system. Therefore, increases or decreases in particular types of crimes may depend upon the resources invested in crime control. In the 1970s particularly there have been a number of attempts to examine the relationship between criminal justice, manpower and expenditure, and crime rates. Again, the relationship between police per capita and crime rates was found to be inconclusive. Thus, while the Kansas City Preventive Patrol Experiment[15] suggested that the mere increase in the police force will not have any appreciable effect on crime rates, Pontell[16] found a high positive correlation between police resources and felony crime rates. Wilson and Boland[17] observed that the crime rates may be affected by what the police do rather than how many of them are on patrol.

Findings of high or low correlations in social science research are interpreted with caution; the primary reason for this is the possible interrelationships or multi-collinearity between variables. Therefore it is important to select a set of exogenous variables which are statistically independent. If the variables are highly interrelated each will explain essentially the same variation and the correlations obtained will be misleading. But often the selection of variables is either highly subjective or largely determined by the availability of data. For example, if a research project purports to examine the annual changes in socio-economic conditions and crime, researchers would like to obtain detailed data on a range of potentially explanatory variables on a year-by-year basis, and on a consistent geographic and demographic basis. But, instead, they are often forced to use variables on which information is readily available, and even then they will frequently find inconsistencies of definition which make statistical interpretation very difficult.

Association between exogenous variables

In the present study a number of exogenous variables have been selected to represent socio-economic conditions. The analysis will begin with the correlation between variables, exogenous as

Table 9.1 *Correlation matrix of socio-economic and crime variables, Australia 1900 to 1976 (annual data, n = 77)*

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Pop10											
2. Age 15–24	–.596										
3. Age 25–34	–.807	.408									
4. Age 35–44	–.398	–.303*	185*								
5. Age 45–54	689	–.795	–.556	–.033*							
6. Males	–.607	.625	.317*	.084*	–.811						
7. LEM	*.892*	–.830	–.736	–.088*	*.886*	–.734					
8. LEF	*.952*	–.792	–.777	–.167*	.830	–.687	*.979*				
9. Marriage	.056*	–.119*	.039*	–.271*	.263*	–.162*	.133*	.099*			
10. Divorce	.741	–.415	–.407	–.416	.440	–.474	.649	.689	.082*		
11. Urban	*.973*	–.682	–.789	–.260*	.692	–.578	*.883*	*.959*	.029	.682	
12. Metro. urban	.714	–.341	–.639	–.420	.680	–.678	.739	.682	.261*	.538	–.567
13. Unemployment	–.352	.319*	.156*	.122*	–.224*	.223*	–.257*	–.358	–.414	–.288*	–.450
14. GDPP	*.952*	–.413	–.720	–.550	.515	–.489	.740	.841	.087*	.748	*.923*
15. Cars registered†	*.991*	–.231*	–.723	–.597	.407	–.482	.834	*.930*	–.067*	.639	*.974*
16. Police strength	.674	–.002*	–.521	–.587	.038*	–.014*	.344	491	–.101*	.618	.651
17. Police expenditure	*.902*	–.263*	–.689	–.608	.368	–.351	.655	.753	–.061*	.767	.837
18. Prison expenditure	.750	–.047*	–.521	–.659	.094*	–.150*	.417	550	–.115*	.719	.691
19. Prisoner DA	–.243*	.574	.020*	–.052*	–.733	.696	–.514	–.389	–.365	–.243*	–.188*
20. Total offences	*.902*	–.452	–.743	–.386	.426	–.334*	.677	.807	–.065*	.629	*.932*
21. Person	.351	.253*	–.210*	–.517	–.363	.252*	–.048*	.132*	–.126*	.359	.360
22. Property	*.921*	–.304*	–.815	–.541	449	–.410	699	.786	–.093*	.630	*.866*
23. Good order	–.415	.173*	.390	.209*	–.469	597	–.481	–.393	.094*	–.231*	–.281*
24. Petty	*.949*	–.498	–.787	–.386	.520	–.451	.757	*.862*	–.077*	.647	*.958*

Variable	12	13	14	15	16	17	18	19	20	21	22	23
1 Pop 10												
2. Age 15–24												
3 Age 25–34												
4 Age 35–44												
5. Age 45–54												
6 Males												
7. LEM												
8. LEF												
9 Marriage												
10. Divorce												
11 Urban												
12. Metro. urban												
13. Unemployment	.031*											
14 GDPP	.608	–.486										
15 Cars registered†	.335	–.497	*.961*									
16 Police strength	.246*	–.305*	.793	*.954*								
17 Police expenditure	.591	–.251*	*.941*	*.930*	*.881*							
18 Prison expenditure	.381	–.286*	*.865*	*.909*	*.943*	*.950*						
19. Prisoner DA	–.548	.012*	–.076*	.654	.399	.042*	.270*					
20. Total offences	.388	–.470	*.929*	*.973*	.823	*.888*	.832	.096*				
21. Person	–.107*	–.399	.564	*.906*	.832	.623	.812	.650	618			
22. Property	.646	–.199*	*.919*	*.914*	.778	*.945*	*.850*	027*	*.894*	.521		
23. Good order	–.742	–.370	–.270*	.023*	.023*	–.328*	–.135*	.432	–.101*	.296*	–.463	
24. Petty	.508	–.393	*.940*	*.977*	.772	*.904*	.808	–.011*	*.982*	.516	*.936*	–.282*

† n = 56 (1921 to 1976)
* Not significant at 0.001

Table 9.1a *Definitions of variables used in correlation tables and figures*

Variable	*Definition*
Pop 10	National population aged 10 years and over
Age 15–24	Proportion of pop10 aged 15–24
Age 25–34	Proportion of pop10 aged 25–34
Age 35–44	Proportion of pop10 aged 35–44
Age 45–54	Proportion of pop10 aged 45–54
Males	Ratio of males per 100 females
LEM	Life expectancy of males at age 1
LEF	Life expectancy of females at age 1
Marriage	Number of marriages per 100 000 Pop10
Divorce	Number of divorces per 100 000 Pop10
Urban	Proportion of national population living in urban areas
Metro. Urban	Proportion of urban population living in metropolitan areas
Unemployment	Percentage of work-force unemployed
GDPP	Gross domestic product per capita
Cars registered	Number of motor vehicles registered per 100 000 pop10
Police strength	Number of police per 100 000 persons aged 10 years and over*
Police expenditure	Police expenditure per capita at constant 1966–67 prices*
Prison expenditure	Prison expenditure per capita at constant 1966–67 prices*
Prisoner DA	Daily average number of prisoners per 100 000 persons aged 10 years and over*
Total offences	Total offences charged before magistrates' courts per 100 000 persons aged 10 years and over*
Person	Offences against the person charged before magistrates' courts per 100 000 persons aged 10 years and over*
Property	Offences against property charged before magistrates' courts per 100 000 persons aged 10 years and over*
Good Order	Offences against good order charged before magistrates' courts per 100 000 persons aged 10 years and over*
Petty	Petty offences charged before magistrates' courts per 100 000 persons aged 10 years and over*

* Data relate to the six states

well as dependent. The zero-order correlation matrix is presented in Table 9.1. (The definitions of the variables used in this table and subsequent tables and figures in this and following chapters are given in Table 9.1*a*.) To start with the correlations can be examined from two perspectives: associations between exogenous variables (numbers 1 to 19) and between exogenous and dependent variables (numbers 20 to 24).

Some of the correlations among the exogenous variables are very high indeed and for obvious reasons. Urbanisation, gross domestic product per capita (GDPP), motor vehicles registered and police expenditure all show very high positive correlations with population. Similarly, GDPP and cars registered are highly related to urbanisation. Also, the two expenditure indices and cars registered show strong positive association with GDPP, and finally police and prison expenditures are positively related to motor vehicles registered. Two of the highest positive correlations are obtained between cars registered and population and between urbanisation and population, $r = 0.991$ and 0.973 respectively.

One of the interesting findings is the association between unemployment and the variables cited above. With each of the variables, namely population, urbanisation, GDPP and cars registered, unemployment was found to show weak but statistically significant inverse correlation; and with the criminal justice resources indices the association of unemployment was negative although statistically not significant.

There are a few more obvious correlations which deserve attention. Life expectancy of both males and females shows high positive association with population and these two variables are also strongly related to urbanisation, GDPP and cars

registered. Among the age groups the proportion of the population aged 25 to 34 years shows a moderately high inverse relationship with population and with urbanisation, GDPP and cars registered; the age group 45 to 54 presents a moderately high positive correlation with population and with urbanisation, but its strength substantially reduces in relation to GDPP and cars registered.

Association between exogenous and crime variables

The correlations between exogenous and crime variables demonstrate equally consistent patterns. Three crime variables, namely total, property and petty offences charged before magistrates' courts, show strong positive correlations with population, urbanisation, GDPP, motor vehicles registered and police expenditure; in the case of offences against the person a correlation of this magnitude was found only with cars registered. As regards good order offences, relationships with the above exogenous variables were generally inverse and except for population the associations were not statistically significant. Unemployment again presents a special case; its association with all the crime variables, except property offences, shows weak but statistically significant inverse correlations. With property offences this correlation was not significant. This finding is in contrast to the observed relationships presented in current criminological literature; generally the relationships between unemployment and property crimes were found to be positive. As regards life expectancy and age groups, correlations of almost equal strength and the same direction were obtained with total, property and petty offences.

The association between unemployment and crime has been the subject of intense debate for a long time. The findings of the present chapter only add to the current controversy. The conflicting results of various studies indicate that for a meaningful explanation of this relationship one needs to examine other relevant factors as well. Generally, most of the positive relationships were observed between unemployment and property crimes. The Australian data for this century show a weak inverse correlation ($r = -0.199$) between these two variables. The pattern of the relationship between unemployment and property

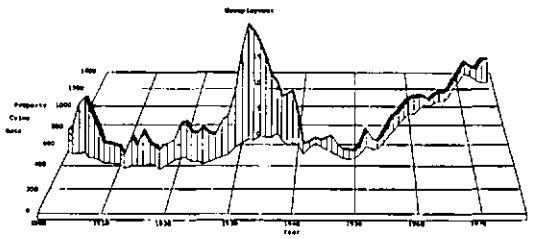


Figure 9.1 *Relationship between unemployment and property crime over time*

crime is presented in Figure 9.1. The lower curve in the figure shows the property crime rate per 100 000 persons aged 10 years and over, and the height of the vertical lines above this curve represents the percentage of the work-force unemployed. For example, in 1935 approximately 11 per cent of the work-force was unemployed whereas the property crime rate was less than 700.

The overall impression one obtains is that when the unemployment rate was high the property crime rate was low and vice versa, but at the same time it cannot be overlooked that during some years property crime and unemployment increased or decreased simultaneously. Furthermore, since the Second World War unemployment rates have been consistently lower and property crime rates consistently higher than in earlier years. This situation would tend to indicate that the explanation of the association under consideration is not a simple one and that the psycho-social environment at the time must be examined carefully. In the next chapter an attempt will be made to examine this relationship in terms of specific periods during this century.

Partial correlations

The strong positive correlations between certain exogenous variables and the consistent pattern of their association with some of the crime variables point to the possible existence of multicollinearity. The question is whether variables such as population, urbanisation, GDPP, cars registered etc., each interact strongly with the crime variables, or whether one variable, through its high correlations with the others, consistently and significantly alters these relationships. An analysis of

the partial correlation coefficients, obtained by statistically controlling for one or more of the exogenous variables, can be used to provide further insight. Partial correlation yields a single measure of association describing the degree of relationship between two variables while adjusting for the effects of one or more additional variables. A careful examination reveals that among these four variables, population and urbanisation produce almost the same levels of interaction with the other variables, and the levels of interaction produced by GDPP and cars registered also show remarkable similarities. Hence, instead of comparing the first-order correlations after controlling for each of the above four variables, only population and cars registered will be controlled separately.

In Table 9.1 a number of high correlations, generally 0.9 or more, have been identified. In Figure 9.2 an attempt is made to demonstrate the strengths of correlations between population and cars registered on the one hand and between these variables and others. In this effort only correlations of ±0.7 have been selected so that those accounting for less than 50 per cent of the variation have been excluded. Within these a correlation of ±0.9 or more is labelled as high and that

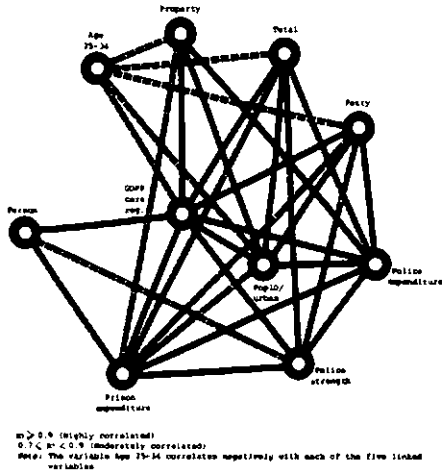


Figure 9.2 *Significant zero-order correlations between variables*

of ±0.7 or more but under ±0.9 as moderate.

Looking at the criminal justice variables and their association with others it becomes quite apparent that while all three of them, namely police strength, police expenditure and prison expenditure, show high positive correlations with

Table 9.2 *Independent variables and crime: first-order correlation coefficients controlling for population aged 10 years and over, n = 56 (1921 to 1976)*

Variable	*Total offences*	*Offences against the person*	*Offences against property*	*Offences against good order*	*Petty offences*
1. Age 15–24	–.463	.161	.744	–.776	–.233
2. Age 25–34	–.068	.434	–.421	.336	–.258
3. Age 35–44	.634	–.062	–.462	.662	.483
4. Age 45–54	–.234	–.779	–.387	.051	–.249
5. Males	.547	.203	.379	–.019	.666
6. LEM	–.180	–.675	–.594	.260	–.284
7. LEF	.142	–.476	–.691	.537	–.032
8. Marriage	–.338	–.140	–.376	.103	–.447
9. Divorce	–.308	.165	–.336	.114	–.433
10. Urban	.697	–.034	–.517	.731	.530
11. Metro. Urban	–.815	–.197	.390	–.723	–.661
12. Unemployment	–.284	–.224	.641	–.657	–.043
13. GDPP	–.075	.605	–.083	.105	–.177
14. Cars registered	.779	.187	–.285	.631	.658
15. Police strength	.041	.237	.069	–.012	.041
16. Police expenditure	–.299	.322	.453	–.448	–.189
17. Prison expenditure	–.137	.604	.282	–.185	–.130
18. Prisoner DA	.529	.151	.421	.004	.622

cars registered, only police expenditure was found to be highly correlated with population. Furthermore, none of these three variables is highly associated with any of the crime variables. Among the crime variables, total, petty and property offences show high positive correlations with both population and cars registered; offences against the person are strongly related only to cars registered. Proportion of population in the age group 25 to 34 shows only moderate but *inverse* association with most variables.

The first-order correlations, controlling for population and motor vehicles registered, are presented in Tables 9.2 and 9.3 respectively. Since car registration data were available only for the period 1921 to 1976 (fifty-six years), partial correlations controlling for population were also computed for these years. The levels of interaction produced by these controls in terms of the association between exogenous and crime vari-

Table 9.3 *Independent variables and crime: first-order correlation coefficients controlling for number of motor vehicles registered, n = 56 (1921 to 1976)*

Variable	*Total offences*	*Offences against the person*	*Offences against property*	*Offences against good order*	*Petty offences*
1. Pop10	-.512	.096	.552	-.632	-.242
	(.948)	(.903)	(.935)	(-.062)	(.961)
2. Age 15-24	-.328	.318	.806	-.771	.030
	(-.299)	(-.079)	(.107)	(-.755)	(-.220)
3. Age 25-34	-.003	.433	-.432	.423	-.277
	(-.704)	(-.529)	(-.782)	(.275)	(-.748)
4. Age 35-44	.463	-.267	-.639	.675	.174
	(-.495)	(-.631)	(-.754)	(.528)	(-.553)
5. Age 45-54	-.261	-.730	-.251	.011	-.237
	(.341)	(.086)	(.278)	(.020)	(.351)
6. Males	.490	.052	.126	.033	.549
	(-.369)	(-.417)	(-.395)	(.018)	(-.367)
7. LEM	-.369	-.667	-.410	.128	-.434
	(.764)	(.599)	(.670)	(.090)	(.763)
8. LEF	-.138	-.558	-.534	.347	-.308
	(.893)	(.755)	(.770)	(.149)	(.884)
9. Marriage	-.223	-.020	-.199	.105	-.316
	(-.117)	(-.069)	(-.142)	(.103)	(-.133)
10. Divorce	-.395	.214	-.182	.040	-.491
	(.551)	(.648)	(.526)	(.045)	(.543)
11. Urban	.454	-.250	-.551	.598	.206
	(.971)	(.858)	(.839)	(.159)	(.961)
12. Metro. Urban	-.707	.015	.570	-.728	-.404
	(.171)	(.309)	(.524)	(-.678)	(.245)
13. Unemployment	-.257	-.186	.576	-.615	.069
	(-.535)	(-.519)	(-.251)	(-.545)	(-.473)
14. GDPP	-.204	.573	.267	-.217	-.163
	(.922)	(.938)	(.908)	(-.038)	(.929)
15. Police strength	-.271	.223	.234	-.280	-.169
	(.909)	(.892)	(.900)	(-.062)	(.921)
16. Police expenditure	-.381	.380	.598	-.594	-.137
	(.872)	(.901)	(.939)	(-.198)	(.897)
17. Prison expenditure	-.231	.628	.434	-.353	-.126
	(.862)	(.934)	(.904)	(-.127)	(.876)
18. Prisoner DA	.447	.040	.306	-.066	.534
	(.714)	(.605)	(.691)	(-.035)	(.725)

Note: Figures in parentheses represent zero-order partial correlation coefficients, $n = 56$ (1921 to 1976)

ables are remarkably similar. In most instances the changes of correlation produced by the two controls are almost identical. Some of the larger statistical effects on the association between certain variables are the ones which would be expected logically. Considering the relationship between age groups and types of crime it was found that none, except the proportion of population in the 35 to 44 year age group, showed any substantial changes when controlling for either population or cars registered. The statistical effect on the association between proportion of population in the 35 to 44 age group and petty offences shows that the weak but significant zero-order negative correlation ($r = -0.553$) would change to a weak ($r = 0.483$) but significant positive association as the effects of total population growth were removed. In the absence of age-specific offence data it is difficult to interpret this positive correlation and without any strong theoretical relationship between the variables it is tempting to think that this too is a spurious correlation.

Among other associations, controlling for cars registered produced a much larger interaction between urbanisation and petty offences than controlling for population; this association drops from a very high positive relationship ($r = 0.961$) to an insignificant 0.206 when controlling for cars and to only 0.530 when controlling for population. This again is what one would expect logically, because of the high proportion of petty offences which are car-related. The substantial reductions in the initial correlation indicate that the relationship between urbanisation and petty offences is spurious and that the number of cars, more than population growth, is acting to create this effect.

The statistical effects of the two controls on the association between unemployment and all types of crime are similar. The only important change occurs in the correlation between unemployment and property crimes; here a weak inverse correlation changes into a significant positive correlation, higher when controlled for population than controlling for motor vehicles. It may be recalled that unemployment showed a weak inverse zero-order association with all the crime variables and most of the exogenous variables.

Finally, both the controls produced significant statistical effects on the association between criminal justice variables and total and petty offences; all the high correlations drop to near zero, in most instances weakly negative. These findings show that when the effects of cars registered and population growth are controlled, these offences are similar irrespective of the size of the police force and expenditure.

Current criminological literature tends to suggest a positive correlation between the size of the police force and crime. In the present study criminal justice variables were considered to be the by-product of development and population growth. Because the total volume of crime, especially property and petty offences which currently make up well over 80 per cent of total offences, have demonstrated growths similar to those observed for developmental and demographic variables, it would be necessary to recruit more police and thereby incur greater expenditure to deal with law and order problems. Nonetheless, it was considered appropriate to examine the various correlations after controlling for police force size. The partial correlation coefficients resulting from this examination indicate that generally holding police force size constant did not significantly alter the initial correlations between other variables.

The only correlations that are affected by this control are those between exogenous variables and offences against the person. For example, the relationship between this offence and population yields a correlation of 0.351; when police force size is held constant this correlation changes to -0.511. An almost equal change takes place in the correlation between offences against the person and urbanisation. Furthermore, a high positive correlation ($r = 0.906$) between this offence and cars registered changes to a weak inverse relationship ($r = -0.490$).

Offences against the person include some of the most serious crimes such as homicide, rape and grievous injury; these also include manslaughter by driving and injuries resulting from culpable driving. In addition, there are a large number of relatively minor offences such as simple assault, assaulting police, indecent assault etc., which constitute the majority of offences in this category. In the earlier chapters statements have been made to the effect that offences against the person seem less sensitive to socio-economic and other major changes. The findings on the basis of partial correlation, however, raise a few questions. The partial correlation coefficients, holding police force size constant, in a sense indicate that the rate of

offences against the person would decline if population grows or if the number of cars on the road increases. One may even say that the positive zero-order correlation between this offence and population could be an effect of increasing police force size. Can it be inferred therefore that the police, in the process of their criminal justice efforts, or in order to justify them, create more crimes of this type? Or is it possible that the population is becoming more civilised so that attacks on the person are becoming socially less acceptable and therefore relatively less frequent?

Lagged relationships

A further aspect of correlations between time series data which should be considered is the possibility of lags between variables. Lagged correlations are particularly important in scientific analysis, because if they do show a relationship which can reasonably be described as causal, then the direction of causality is usually clear from the nature of the lag.

For example, to test the hypothesis that population and total crime are causally connected, these two variables were entered into an analysis which systematically calculates lagged correlations for lags up to 20 years either way. The results were plotted in Figure 9.3 which shows the cross-correlation function between these two variables. The vertical axis is the correlation while the horizontal axis shows the lag in years. Figure 9.3 shows that correlation between the variables is maximised when the lag is zero, and hence does not support the idea of a lagged causal relationship.

The preceding paragraphs suggest that there may still be significant relationships between variables after controlling for population. When this is done, by taking the residuals of a regression of total crime on population, we can again look for lagged relationships between these residuals and other variables. The most interesting results we found were in relation to the proportion of population in certain age groups and indeed lags were found to be significant. The cross-correlation functions between the total crime residuals (after controlling for population) and the percentages aged 0 to 9, 15 to 24, 25 to 34 and 35 to 44 are shown in Figure 9.4. Correlations are maximised at zero lag for percentage 0 to 9, around fifteen years for percentage 15 to 24, and around 20 years (or more) for percentage 25 to 34. A little thought, however, shows that these results are equivalent because the percentage 0 to 9 now is very highly related to the percentage who will be 15 to 24 in fifteen years' time and the percentage who will be 25 to 34 in twenty-five years' time — they are basically the same people minus deaths!

Thus we can use any of these variables to explain the residual crime after controlling for population, and the most logical variable to select is the percentage under 10 years, since its correlation is very high and there is no lag to confuse the issue. Regression of total crime against both population *and* percentage under 10 actually

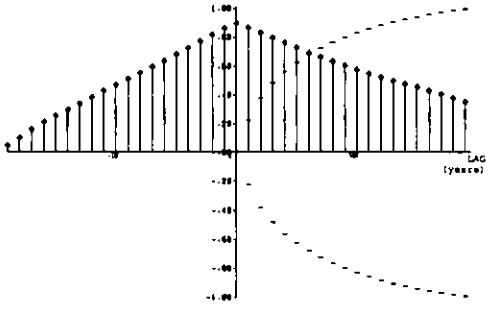


Figure 9.3 *Cross-correlation function between total offences and population aged 10 years and over*

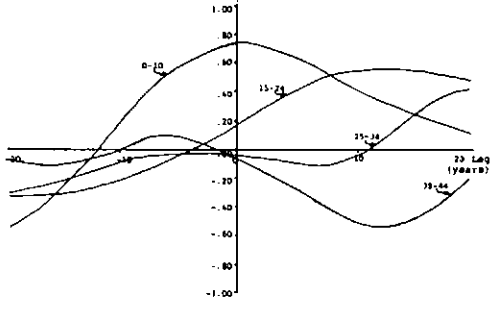


Figure 9.4 *Cross-correlation function between total offences, controlled for population aged 10 years and over, and the proportion in age groups 0 to 9, 15 to 24, 25 to 34 and 35 to 44*

achieves a correlation of 0.97 — i.e. over 94 per cent of the variance in total crime rates is explained by these two variables alone. Figure 9.5 shows both the actual crime rates and the estimates based on the regression line (all three coefficients are significant at the 0.0005 level):

Total crime rate = 0.0011158 × (pop10) + 4689.9 × (% under 10) − 9417.9

Thus, if we could only think of a theoretical reason why these variables should be so closely related, the problem of forecasting crime would be reduced almost entirely to a simple demographic forecasting problem.

In recent years certain additional techniques such as spectral analysis and 'ARIMA', especially applicable to time series data, have been used to understand periodicity or cyclical movements. In relation to time series data on crime, however, such techniques have been used only on few occasions indeed.[18] Visual inspection of the data for the present study does not indicate the existence of any cyclical movements. Nevertheless, the total crime (see Figures 9.6*a* and 9.6*b*), homicide and assault data were subjected to analysis in order to confirm these indications.

In each case, lags of up to twenty-five years showed a monotonic decline in the autocorrelation coefficients and a single significant

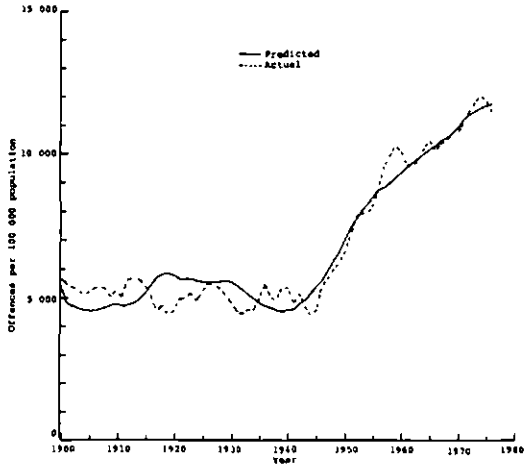


Figure 9.5 *Total offences: actual and predicted rates*

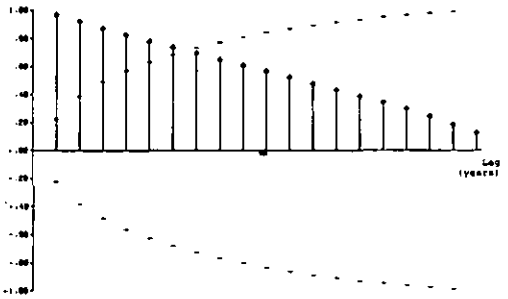


Figure 9.6*a* *Autocorrelation function: total offences*

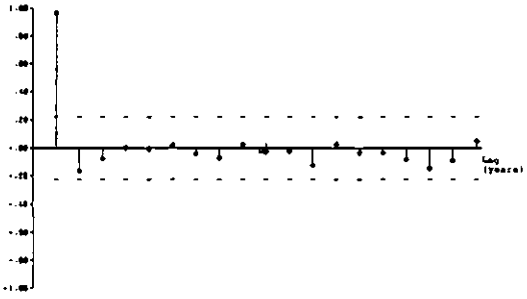


Figure 9.6*b* *Partial autocorrelation function: total offences*

partial autocorrelation with a lag of one year, thus suggesting that the trends are not influenced significantly by previous years other than the immediately preceding year, and hence that we can only predict the occurrences from year to year. In fact, in the case of homicide even the one-year lag was not a good predictor, with a correlation less than 0.6 confirming that homicide is a rather less predictable occurrence than other types of crime. The analysis in this chapter therefore strongly suggests that the crime data of this century did not present any regularities in fluctuations. We can conclude that, if they exist, they are likely to have a period too long to be detectable from a seventy-seven-year analysis, or too short to be detectable from any annual data.

Summary

One of the major conclusions to be drawn from the above analysis is that the three broad groups

of variables, namely demographic, developmental (excluding unemployment) and criminal justice, have significant effects on crime, particularly on petty and property crimes. The long-term correlations and the partials reveal that criminal justice variables are largely a by-product of the effects of demographic and developmental factors. The demographic and developmental variables are intricately interrelated. While population growth and its concentration in urban areas provide a rationale for increasing investments in criminal justice, economic growth (and the number of cars on the road) provide the means and the necessity for this high investment. For a country with a small population and high resource potential, these relationships confirm the commonly held belief that the developmental and population growth processes advance together.

Among the crime variables, petty and property offences have increased significantly during this century and these increases parallelled the growth in demographic and developmental factors. Offences against the person, on the other hand, show a distinct affinity with developmental factors only. And finally, good order offences do not seem to be affected significantly by either demographic or developmental variables.

The analysis revealed that demographic and developmental variables consistently explain a significant part of the variance. A search for lagged or periodic relationships between the residuals and other variables produced significant results only in relation to proportion of population in certain age groups. Few clear relationships of potential theoretical significance were discovered from this long-term analysis. This leads us to the conclusion that major socio-economic events such as the two world wars, the Depression, and the large-scale impact of cars have such a disruptive effect upon relationships between variables that an approach based on shorter term and socio-economically homogeneous time periods might be more productive. The following chapter will address itself to this exercise.

10 Environmental Sets and Crime: Short-term Correlates

The basic relationships that exist between crime itself and other socio-economic variables have been identified in the preceding chapter. This chapter seeks to examine whether these long-term relationships maintain their strengths if the twentieth century is divided into several time segments. In so doing, it is not our intention to use any arbitrary selection procedure or standard to pinpoint specific time periods but rather to identify these time segments with the help of available information.

The pattern of movements in crime and in the exogenous variables has been described in several previous chapters. Although generally there have been growths in most sectors, these have not been uniform throughout the century; on the contrary most variables demonstrate different degrees of accentuation at different points in time. Considering these movements, it was not surprising to observe high positive correlations between certain variables at certain times. For example, if the plots of total crime rate (Figure 5.1) and gross domestic product (Figure 1.6) are compared the relationship between these two could not have been otherwise. Clearly, many of the graphs presented seem to suggest that the rate of growth, whether of gross domestic product per capita, unemployment, urbanisation or crime, showed acceleration or deceleration after the Second World War; movements of this magnitude were never observed before this period. On the other hand, the period 1900 to 1946 was tainted by at least three major catastrophes, namely the two world wars and the Depression; the period since 1946, compared to the earlier one, was of relative calm.

The general hypothesis of the present chapter is that for a definable historic period there are groups of political, economic and social characteristics which give the period its distinct flavour. Each definable period then constitutes a distinct environment within which certain types of crime may flourish while others become rarer. Therefore, if the level and nature of criminality in each period is compared with variables which define the political, economic and social environment, the relevant relationships which have fashioned criminal behaviour in each unique environmental set can be assessed. The statistical procedure which has been used as a basis for this analysis is known as discriminant analysis.

Discriminant analysis is a statistical technique which allows the user to test the null hypothesis that groups of individuals are similar enough, in terms of a number of variables, to be indistinguishable and therefore should be thought of as a single group. In testing this hypothesis a set of 'discriminant variables' is used upon which the groups are expected to differ. If we select variables which describe the political, economic and social changes which have taken place in twentieth-century Australia, and if we group together various individual years into periods, we can therefore test the hypothesis that these years do not differ substantially. If this is found not proven we may then assume that the periods are distinctly different from one another.

Discriminant analysis has two general phases, those of discriminant function generation and classification. The function generation phase is primarily oriented towards developing the optimal set of variables, combined into 'discriminant

functions', which most successfully discriminate between pre-set groups. Classification follows on from function generation by using the derived functions to classify any new or unknown cases. It can also be used as a test of how well the original set of data is classified into its original groups, hence can reclassify cases from their pre-set groups into more appropriate groups.

Generation of the discriminant functions

Discriminant analysis therefore begins with a preliminary definition of groups, and in this analysis the seventy-seven-year period was initially divided into six different historical periods:

Period 1	1900 to 1913
Period 2	1914 to 1926
Period 3	1927 to 1936
Period 4	1937 to 1949
Period 5	1950 to 1964
Period 6	1965 to 1976

It must be stressed that these six periods were chosen as initial sets based on a superficial assessment of the historical discontinuities in social, political and economic trends in Australia. The assumption in delineating these sets was that they were historically distinct so that they would provide a good intuitive estimate of the environmental set boundaries. These initial sets were then refined using the procedures described below.

Data on a number of variables besides those listed in the preceding chapter (see Table 9.1) were collected. For example, in the area of economy, in addition to GDPP, cars registered and unemployment, data on exports, imports, exchange rates and standard hours of work were also collected; similarly sex-specific population statistics and information on education were also collected. In all, some twenty-five discriminating variables that were presumed to measure the characteristics on which these sets were expected to differ were utilised. When combined into discriminant functions only fourteen of these variables actually discriminated between the periods.

In the discriminant analysis it was found that some of the variables initially thought to be important were excluded from the equations because of very high levels of intercorrelation. More specifically, when combined into discriminant functions, of the four crucial variables, namely population, urbanisation, GDPP and cars registered, only the first remained in the equation. Population was, however, the most important variable on the first function. This is quite consistent with the findings described in the preceding chapters, that is, these four variables generally produce similar effects.

The number of discriminant functions that could be derived in the present situation was five, that is, one fewer than the number of sets. However, the first three functions were considered adequate for describing the sets. This decision was made on the basis of eigenvalues, canonical correlations, and Wilks' lambda. The important statistics relating to these three functions are presented in Table 10.1. Approximately 93 per cent of the total variance existing in the discriminating variables was explained by these three functions. The remaining 7 per cent of the total variance was associated with the fourth and fifth functions, which were not considered significant.

Standardised discriminant function coefficients for the first three functions are also presented in Table 10.1. Ignoring the signs, it is evident that population makes the greatest contribution to the first function. In the second function urbanisation makes the maximum contribution, marginally higher than population. While the coefficient of population in the second function is less than that of urbanisation, it is still substantial. In the third function population is again the dominating characteristic. Therefore, whereas the first and third functions are predominantly population continua, the second is an urbanisation and population continuum.

Generation of the environmental sets

The second phase of the discriminant analysis, when applied to the six periods defined above, showed up an unsuspected dichotomy in our first period, 1900 to 1913, yielding *seven* distinct periods, instead of the six original sets. The scores of these groups in the three dimensions of discriminant functions are also presented in Table 10.1, showing that the steady increase in scores on the first discriminant function is the main discriminating feature of the data. The final time periods derived are as follows:

Table 10.1 *Standardised discriminant function coefficients and associated statistics*

Variable	*Discriminant function* 1	2	3
Age 15–24	−1.71772	3.93145	−0.92513
Age 25–34	3.85320	0.86309	0.44077
Age 35–44	0.53517	1.00147	−0.42961
Age 45–54	3.19868	−0.16820	1.75458
Marriage	−0.33582	0.53306	0.04897
Police Strength	2.74648	−0.30065	−0.37411
Police Expenditure	−2.68511	−0.71455	2.90596
Prison Expenditure	−3.25082	4.13982	2.89467
Males	1.64713	1.26835	0.35018
Unemployment	−0.31545	0.25309	−0.33334
Prison DA	2.79016	−0.42003	1.70115
Pop 10	9.83702	−12.84627	−15.60240
Urban	1.49565	15.32655	5.78023
Metro. Urban	3.59513	1.09421	6.63663
Eigenvalue	100.81563	17.93125	8.19949
Canonical correlation	0.99508	0.97323	0.94409
Per cent of trace	74.3	13.2	6.0
Wilks' lambda	0.00000	0.00011	0.00215
Centroids of periods in reduced space			
Period 1	−15.75735	6.11885	0.59731
Period 2	−12.45287	5.20122	0.65586
Period 3	−8.36431	−1.90503	−1.70142
Period 4	−2.53372	−4.41749	1.71605
Period 5	2.62822	−5.06442	2.62619
Period 6	9.27706	0.59338	−4.20646
Period 7	13.03602	5.01740	3.33540

Period 1	1900 to 1907
Period 2	1908 to 1912
Period 3	1913 to 1927
Period 4	1928 to 1937
Period 5	1938 to 1949
Period 6	1950 to 1965
Period 7	1966 to 1976

The effort to fine-tune the original periods has made only one major change, that is, the discriminant analysis divided the first period into two; the rest of the derived periods redefined the boundaries of the original ones. In retrospect, the division of the first hypothetical period into two, that is 1900 to 1907 and 1908 to 1912, makes sense. At least in terms of population and the economy these two periods present distinct characteristics. Assisted migration on a large scale was resumed only after 1907 and Australia became a major exporter at about that time. The economy grew much faster in the period 1908 to 1912, and the unemployment rate declined as compared with the first period. The notable features of the seven derived time periods are as follows:[1]

1. *1900 to 1907.* The early 1890s encountered a financial crisis which affected the colonies well into their statehood. The confidence of investors was waning, both metal and wool prices were falling, and the growth of trade unions provided a threat to profitability. In addition, there was a severe drought for eight long years and when it ended in 1902 approximately two-thirds of the livestock were decimated. Between 1891 and 1901, although the absolute number of employees in factories increased, relatively this fell from 31 per cent of the work-force in 1891 to 26 per cent in 1901. On the social front, soon after the Commonwealth was established in 1901, universal suffrage was

adopted, the principle of a basic wage was established, and a national immigration policy was developed.

2. *1908 to 1912.* Improvements in the economy started with the discovery of a strain of wheat resulting in increased yield per hectare. The years immediately preceding the First World War saw great progress and for the first time Australia became a major wheat exporter. Assisted migration was resumed on a large scale after 1907 and between 1911 and 1914 over 50 000 assisted migrants and three times as many unassisted migrants arrived in Australia each year.
3. *1913 to 1927.* The First World War interrupted the development process. The exports of primary produce caused considerable concern and was partly resolved only in 1916. The world-wide increase in the cost of manufactured goods and the rise in the prices of raw materials and freight rates were of some help to Australia. After the war manufacturing production was up by a third and population, primarily through assisted migration, increased by 10 per cent. Politically Australia obtained a new international status and acquired administrative responsibility for New Guinea.
4. *1928 to 1937.* Starting in 1927 the Australian economy showed signs of strain; unemployment figures were mounting and the currency was devalued by 25 per cent. Assisted immigration was stopped. On the positive side, the Depression induced more efficiency. The recovery of the Australian economy began in 1933 and manufacturing industry expanded significantly.
5. *1938 to 1949.* During the war years the government exercised almost complete control over the life of the Australian community. It took important steps to control inflation, introduced a system of uniform taxation and new taxation rates, directed the employment of labour, and guided industrial production. In the immediate post-war years, three important policies were introduced: reconstruction, full employment and increased immigration.
6. *1950 to 1965.* The major developments during this period were the baby boom, the acceleration of industrialisation, bringing with it a substantial rural-to-metropolitan population drift, large-scale immigration still mostly from the United Kingdom, reduced taxation and extensive development of social services.
7. *1966 to 1976.* This period was marked by high inflation, social discontent resulting from Australia's participation in the Vietnam war, mini-recessions, the energy crisis and the introduction of further significant social services. With the entry of the United Kingdom into the European Economic Community, there was a significant shift in Australian trade, particularly towards Japan. Another feature of the loosening ties with the United Kingdom was the increasing percentage of non-British migrants, in particular Italians, Greeks and Yugoslavs.

As may be observed, the length of each period is not equal, nor was it expected to be — unless history is totally governed by some as yet unknown cyclic phenomenon, there is no reason to expect periods of equal length. The spans of the first two periods are particularly short, eight and five years respectively, but if one considers the effects of dislocation on the relatively small Australian population during the early periods compared with the later periods of this century, it would probably emerge that what was a major disturbance in say 1910 could be a minor one in the 1970s. Everything being on a smaller scale in the early part of this century meant that any crisis could arise and be overcome in a much shorter period of time. In any case, what is important to our work is that having periods of unequal length does not affect our methodology or bias our results.

Having identified the periods we will now present in detail some of the important characteristics of each.

Socio-economic and criminal justice variables

Consider the data in Table 10.2. The information in the table makes two interesting points: (1) no characteristic presents a simple linear trend during the entire century — fluctuations from set to set have at times been extraordinary; and (2) apart from the unemployment rate, some of the largest movements occurred after period 5, that is, after the Second World War. Thus, the number of persons aged 10 years and over, which

Table 10.2 *Characteristics of environmental sets : average values of selected variables*

Variable	*Periods* 1	2	3	4	5	6	7
1. Pop10 % growth	1.75	1.99	2.02	1.41	1.29	2.09	2.06
2. Age 15–24	25.7	25.9	22.3	22.0	20.2	17.8	21.3
3. Urban	57.12	58.80	61.57	63.97	67.75	79.47	84.93
4. Unemployment	6.71	3.06	4.56	12.75	3.63	1.97	2.13
5. GDPP*	789	981	991	965	1228	1525	2200
6. Cars registered	—	—	—	126	158	334	508
7. Police Strength†	146.8	142.8	127.9	132.1	131.4	144.1	164.9
8. Police Expenditure*	4.42	3.97	3.38	4.74	4.70	6.17	10.42
9. Prison DA‡	1.46	1.06	0.78	0.76	0.63	0.84	0.91
10. Prison expenditure*	0.94	0.72	0.46	0.52	0.54	0.87	1.86
11. Total	5360.9	5246.9	5084.7	4910.5	5209.7	8994.5	11 112.5
12. Person	271.6	213.7	170.7	127.0	137.8	191.6	271.1
13. Property	490.1	408.7	434.1	641.8	550.4	770.4	1238.4
14. Good order	2626.9	2981.4	2234.1	1555.1	1888.7	2348.0	1717.1
15. Petty	1972.3	1643.7	2245.8	2586.6	2632.8	5684.4	7881.8

* In dollars.
† Per 100 000 population.
‡ Per 1000 population aged 10 years and over.

showed an annual growth rate of 2.02 per cent during the third period, changed dramatically after the Second World War; average annual growth leaped from 1.29 per cent in the fifth period to 2.09 per cent in the sixth. Similarly, the proportion of the population living in urban areas increased by only 10.63 per cent between 1900 and 1949, the corresponding increase between 1950 and 1965 being 11.72 per cent. The largest decline in the ratio of police to population between periods 2 and 3 coincides with the largest decline in the proportion of the population in the 15 to 24 age group. Finally, the largest increase in the ratio of police to population from period 6 to 7 matches with the largest increases in police cost, GDPP, cars registered, and proportion of population in the 15 to 24 age group.

Further examination of the differences between environmental sets with the help of *t*-tests reveals that up to the fifth period the sets differed on fewer characteristics than in the sixth and seventh periods. At the 0.001 significance level the proportion of population living in urban areas, unemployment, police and prison expenditure per capita, and average daily prison population were different in periods 1 and 2. Periods 2 and 3 were

Table 10.3 *Significant changes in variables between periods*

Periods	*Socio-economic variables*		*Crime variables*	
1 → 2	Urbanisation	*up*	Good order offences	*up*
	Unemployment		Property offences	*down*
	Prison expenditure	*down*		
	Police expenditure			
2 → 3	Urbanisation	*up*	Petty offences	*up*
	Prison expenditure		Person offences	*down*
	Police expenditure	*down*	Good order offences	
	Police strength			
	% age group 15–24			
3 → 4	Urbanisation		Property offences	*up*
	Unemployment	*up*	Person offences	*down*
	Police expenditure		Good order offences	
4 → 5	Urbanisation	*up*	Property offences	*down*
	GDPP			
	Unemployment	*down*		
	% age group 15–24			
5 → 6	Urbanisation		Total offences	
	Prison expenditure		Person offences	
	Police expenditure		Property offences	*up*
	Police strength	*up*	Petty offences	
	GDPP			
	Population 10+			
	Cars Registered			
	% age group 15–24	*down*		
6 → 7	Urbanisation		Total offences	
	Prison expenditure		Person offences	*up*
	Police expenditure		Property offences	
	Police strength	*up*	Petty offences	
	GDPP		Good order offences	*down*
	Cars Registered			
	% age group 15–24			

Note: The variables included in this table are those for which the *t* values between periods are significant at ≤ 0.001 level.

significantly different from each other in terms of urbanisation, police force size, police and prison expenditure, and prison daily average. Periods 3 and 4 differed on urbanisation, unemployment and police expenditure, and periods 4 and 5 differed on urbanisation, unemployment, GDPP and proportion of population in the 15 to 24 age group. Periods 5, 6 and 7 were different in almost every aspect. Table 10.3 summarises these changes from period to period.

Crime variables

The lower part of Table 10.2 presents the average crime rates for each time span. In order to determine whether offence-specific crime rates differed from set to set, *t*-tests were calculated for all possible combinations, the results of which are produced in Table 10.4. In this table only the *t*-tests which were significant at the 0.001 level have been shown. Certain distinct patterns emerge from this table. For example, property and good order offences show significant and opposite directional changes between environmental sets, while offences against the person and good order differences are generally in the same direction. The information in Table 10.4 offers interesting results when read in conjunction with Table 10.2.

The rate of property crime in period 2 was sig-

Table 10.4 *Principal differences in crime variables between periods*

Periods	2		3		4		5		6		7	
1	Good order	(+)	Person	(–)	Property	(+)	Petty	(+)	Total	(+)	Total	(+)
	Property	(–)			Petty	(+)	Person	(–)	Property	(+)	Property	(+)
					Person	(–)	Good order	(–)	Petty	(+)	Petty	(+)
					Good order	(–)			Person	(–)	Good order	(–)
2			Petty	(+)	Property	(+)	Property	(+)	Total	(+)	Total	(+)
			Person	(–)	Petty	(+)	Petty	(+)	Property	(+)	Property	(+)
			Good order	(–)	Person	(–)	Person	(–)	Petty	(+)	Petty	(+)
					Good order	(–)	Good order	(–)	Good order	(–)	Good order	(–)
3					Property	(+)	Property	(+)	Total	(+)	Total	(+)
					Person	(–)	Person	(–)	Property	(+)	Person	(+)
					Good order	(–)			Petty	(+)	Property	(+)
											Petty	(+)
											Good order	(–)
4							Property	(–)	Total	(+)	Total	(+)
									Person	(+)	Person	(+)
									Good order	(+)	Property	(+)
									Petty	(+)	Petty	(+)
5									Total	(+)	Total	(+)
									Person	(+)	Person	(+)
									Property	(+)	Property	(+)
									Petty	(+)	Petty	(+)
6											Total	(+)
											Person	(+)
											Property	(+)
											Petty	(+)
											Good order	(–)

Note: The variables included in this table are those for which the *t* values between periods are significant at ≤0.001 level; (+) denotes increase; (–) denotes decline.

nificantly lower than in period 1. This change was associated with a rapidly increasing level of urbanisation and a booming economy in that the unemployment rate was low and GDPP was high. Neither the economy nor property crime rates differed markedly between periods 1 and 3 or between 2 and 3. It could be argued that the economy had slowed down in period 3 and the property crime rate was almost static. However, in period 4 dramatic changes can be seen in each of these variables. Considering that period 4 included the Depression it is easy to observe that the economy was on a downturn, the unemployment rate was unusually high and there was negative growth in GDPP; the property crime rate was significantly higher than in any of the three preceding periods. In period 5 the economy improved and property crime rate declined. It is important to remember that this period overlapped the Second World War, yet in terms of the economy and property crimes it closely resembles period 2.

The negative association between property crime and the state of the economy seems to be negated when periods 6 and 7 are examined since, in spite of the significant boost in the economy, property crimes increased. One major explanation for this incongruence is that the very nature of property crimes changed after the Second World War. The large-scale production of luxury goods and cars after the war had no parallel before that time. The presence of these goods in the shops and in private homes provided sufficient opportunities for the fulfilment of felt needs of those who could not possess these goods by legal means. It is relevant to point out that substantial increases in property crimes after the Second World War were mainly a result of rapid growth in burglaries, car thefts and white-collar crimes such as fraud and forgery, and not so much an increase in simple larceny. In this context the Second World War period was the watershed up to which time everything fluctuated gradually.

Association between two variables, especially of the types included here, can continue to exist only if no dramatic changes intervene. Data in Table 10.2 show that the changes in some aspects between periods 5 and 6 have been of the highest magnitude. Between these two periods population growth was found to be significantly different, proportion of population living in urban areas showed the sharpest increase, population in the age group 15 to 24 reached the lowest proportion, unemployment rate reached below the 2 per cent mark and finally car registration increased by over 100 per cent. Between these two periods all types of crimes increased with the sharpest increase of well over 100 per cent in petty offences.

To some of the movements in property crimes it is quite evident that the economy has a great role to play. In a condition of a gradually growing economy the level of property crimes is damped and a major economic setback would produce a sharp increase in such crime. The two world wars also had damping effects on property crimes. The euphoria and socio-economic upheavals of the 1950s and 1960s are over. In the late 1970s economic growth slowed down, the unemployment rate jumped over 6 per cent and the overall crime rate reached a plateau. Persistent industrial trouble and high inflation in Australia as well as elsewhere do not present a very encouraging prospect. The lessons of the Depression years portend a high property crime rate if the economy faces major dislocations.

Crimes against the person, on the other hand, show an altogether different set of relationships. The distribution of this offence, as described elsewhere, presents a dish-shaped pattern. An examination of the data in Table 10.2 shows that the level of this crime reached the lowest point in the fourth time period and in period 7 the level of crimes against the person was almost the same as in period 1. Except for the size of the police force, no other variable shows a pattern similar to that exhibited by this offence. No matter what analytic method is used one is lured into concluding that there is a strong positive association between police strength and offences against the person. The evidence is compelling. It is worth noting that offences against the person also include a sizable number of minor offences, including assaulting the police. Furthermore, it is highly likely that some of the good order offences may be classified into offences against the person, especially when a police officer attempts to arrest people under the influence of alcohol. The picture that emerges then is that the volume of this offence depends upon the level of police presence. To put it in plain language, offences against the person would increase if there were more police on the beat. In this context, statements made earlier that these offences are not sensitive to major socio-economic

changes are reinforced.

Considering that good order offences consist of drunkenness, being drunk and disorderly, disorderly conduct including protest marches, public brawls etc., they have serious behavioural connotations; they are also conditioned by prevailing economic conditions and availability of outlets for constructive entertainment and leisure activities. Generally, the level of good order offences was higher before time period 4 than after. These offences increased significantly in the second period and declined markedly in the subsequent two periods. While the economy improved during the second period, there were few changes in behaviour, attitudes and social relations. Women still remained at home, cinemas had not become a popular source of entertainment and the invention of television was far off. From the establishment of the colonies in the late eighteenth century until the early part of this century the male-to-female ratio in the population was very high. Sitting in the pubs and getting drunk were major pastimes for males. The onset of the Depression placed severe restrictions on these activities.

The increase in good order offences between periods 4 and 5 was not significant; the increase could have been damped because of the absence of a very high proportion of young Australians during the war. Moreover, laws relating to business hours of public bars were enforced strictly in this period. The post-Second World War years not only signified a return of young Australians but were also characterised by thousands of soldiers from allied forces remaining in Australia. Women who left their homes to work during the war continued to do so on a much larger scale. Significant changes took place in sex roles and the invention of television enticed people to spend their evenings at home. While social drinking became acceptable social behaviour, public drinking and intoxication was behaviour ascribed to the lower class.

The significant decline in the rate of good order offences between periods 6 and 7 can be attributed to changes in these areas. It may be mentioned in passing that the rate of good order offences could have been much lower but for the protest marches of the late 1960s and early 1970s as a result of disenchantment with the Australian participation in the Vietnam war.

Petty offences show a gradual increase up to period 5. While violations of traffic laws constituted a substantial proportion of these offences in later years, in the early part of this century violations of state and local laws, offences against public welfare, and those relating to revenue formed a major part of this category. The significance of the motor vehicles becomes obvious in the sixth period, and it is evident that the use (and misuse) of cars by an ever-increasing percentage of the population from this period onwards was responsible for the sharp increase in petty offences.

Changing relationships between the variables over time

So far each period has been examined in terms of various characteristics. In the following sections each of the four types of crimes and its association with some of the important explanatory variables for all the seven periods will be analysed. This analysis is in a sense an extension of the analysis carried out in Chapter 9 which described the long-term relationships between variables.

Crime and demographic variables

Figure 10.1 presents plots of correlations between the four crime variables and population and urbanisation. It may be recalled that all the crime types except good order showed a positive association with population and urbanisation for the twentieth century as a whole (see Table 9.1). Data in Figure 10.1 indicate that the relationships were not consistent for the seven periods. Examination of the plots reveals that offences against the person were inversely related with both population and urbanisation during the first four periods and the direction of this relationship changed to a strong positive one during the latter three periods. Therefore, the common belief that the increases in population and concentration of this population in urban centres would necessarily lead to increases in violent offences is not borne out. In fact, the dominance of economic condition on these crimes is also significant. Although population and urbanisation continued to grow, their correlations of -0.972 and -0.931 with offences against the person during the fourth period suggest that other characteristics had a much greater effect which accounted for a significant decline in these offences.

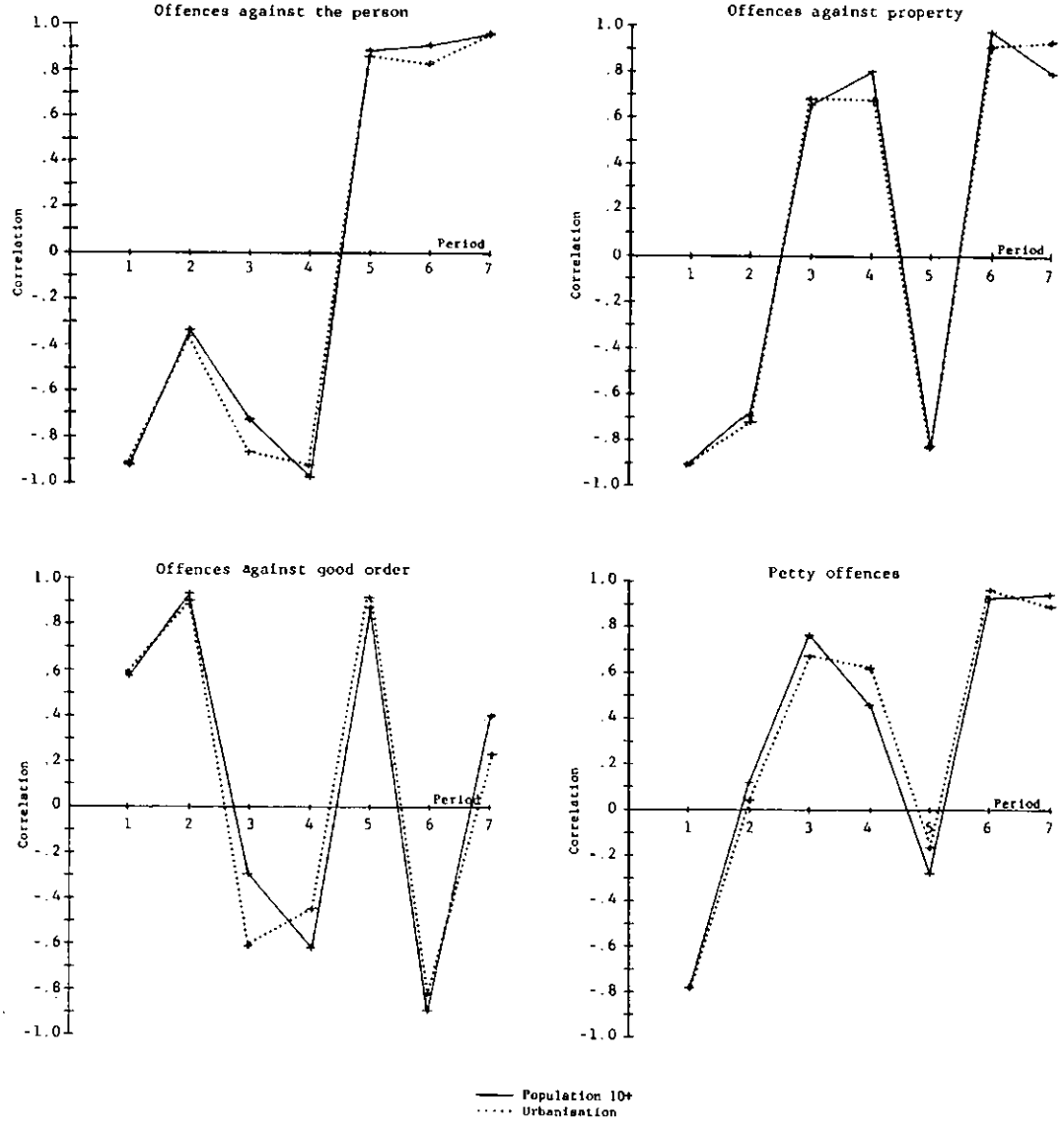


Figure 10.1 *Changes over periods in the correlation between crime rates and demographic explaining variables*

Property and petty offences show more or less similar patterns. Again the high positive correlation between these offences and population and urbanisation, obtained for the entire period, shows significant differences when examined for periods separately. Not until the sixth period do these relationships become highly positive. Good order offences, on the other hand, show sets of relationships almost opposite to those obtained for property and petty offences.

In passing it is worth noting that in all these plots the high intercorrelation between population and urbanisation becomes very clear. This suggests that in a gross analysis of aggregate data either one of these variables is as good an indicator as the other.

Crime and the economy

Figure 10.2 presents changes in correlations between types of offences and the three developmental variables, namely unemployment, GDPP and motor vehicles registered. The first plot, concerning the relationships between offences against the person and these variables, offers some interesting findings. While for the entire period the relationship between unemployment and offences against the person was found to be weak and negative, this relationship changes from period to period. The general pattern which emerges, however, is that the relationship between the two variables fluctuates in a systematic fashion. That is to say, when the unemployment rate is high the association is negative and vice versa. This pattern seems to suggest that there is a segment in the population which is 'unemployable' and in each period this segment, whether because of built-in frustrations or otherwise, will come in conflict with the law. During low unemployment this segment would form a substantial portion of the unemployed and during high unemployment those who are 'employable' will form a majority. Their predicament is temporary and perhaps would not drive them towards crime, especially crimes against the person. It is quite conceivable that a personal history of crimes of violence, no matter how serious the offences, might invite greater resistance on the part of the employers and this may lead to recidivism and consequently strengthen the 'unemployable' status. A slight deviation in the pattern occurs in period 5 when the unemployment rate was relatively low but its relationship with offences against the person was negative. This can be explained by the facts that during the Second World War, which forms a large part of this period, many 'unemployables' were enlisted in the army, and that quite a few prisons in Australia were closed or their population drastically reduced during the war years.

The relationship between offences against the person and GDPP changed gradually from a moderately negative to a highly positive one and a similar change takes place in the association with cars registered. That is to say, these offences and the two economic factors moved in similar directions in the last three periods. This is consistent with the observations made in Chapters 5 and 6. The number of cars on the road has increased significantly with rapid economic growth. The data also indicate that the offences involving death and injury resulting from driving have been increasing as a proportion of the total offences against the person during this period.

The changes in the relationship between property offences and the unemployment rate present a very interesting pattern indeed. While the overall relationship between these two was a weak but negative one, during each time period except the first, when no relationship existed, this association was *positive*. Doubts in this relationship arise in periods 6 and 7 when unemployment was very low and the property crime rate was very high. What this indicates is that the unemployment rate and property crimes fluctuate in similar directions, but that during high unemployment these fluctuations show much more synchronicity than during low unemployment.

The relationship between property crime and GDPP is similar to that obtained for offences against the person, that is, a gradual change from high inverse to strong positive. Up to period 5 this association was always negative. A similar pattern emerges in the relationship between property offences and cars registered.

Only during periods 3 and 7 were the relationships between good order offences and unemployment rates positive, albeit very weak. Generally, the association between these offences and all the developmental variables indicates that during economic prosperity these offences show a tendency to decline. Petty offences, on the other

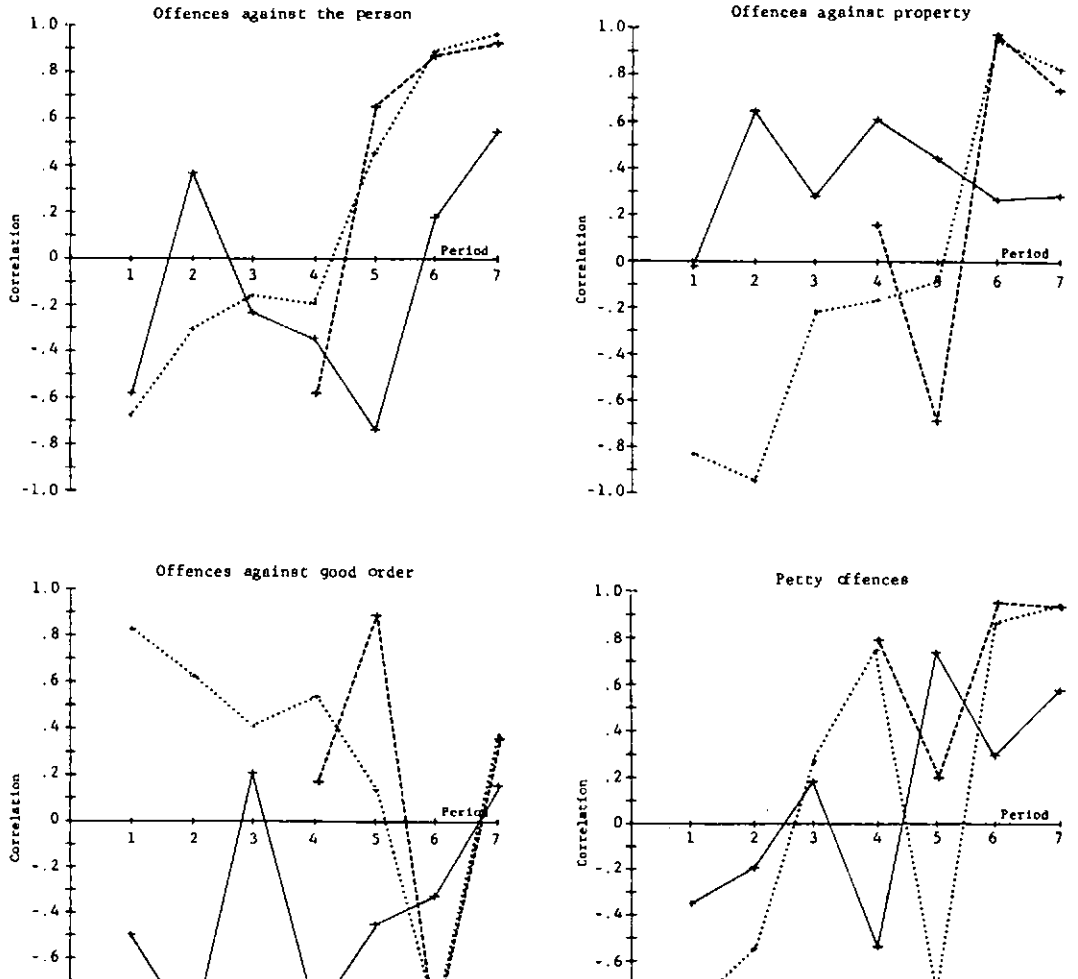


Figure 10.2 *Changes over periods in the correlation between crime rates and developmental explaining variables*

hand, show a pattern of gradual change from a negative to positive association with the developmental variables. The two exceptions in this pattern were the associations with unemployment during period 4 and with GDPP during period 5. Considering the nature of the majority of these offences (mainly traffic-related since 1921) these deviations are not surprising.

Crime and the criminal justice system

The last set of graphs presented in Figure 10.3 shows the changes in correlations between crime and criminal justice system variables. One of the most interesting features of this figure is the association between offences against the person and the size of the police force. Except during the fifth period, this association was always positive, indicating that these crimes demonstrated a pattern of movement similar to that of police strength. The consistency of this finding seems to make it an important area for more detailed research. Such an effort might provide a valuable clue to the question of rising violent offences. Approximately three-quarters of the offences against the person are simple assaults which may involve physical assault, verbal assault or just intimidation. Could it be that current increases in assault reflect more of verbal assault than physical? The assault data in the present study do not include hindering or resisting arrest. At the same time some of the offences involving police could be just that. Thus, it is possible that the classification of offences has changed over time. Unlike police strength the relationship between police expenditure and offences against the person was inconsistent.

The correlations of property offences with police strength and police expenditure show a reverse pattern; the associations with police strength were inconsistent whereas the correlations with police expenditure were positive during each period. The association of good order offences with these explanatory variables presents an erratic pattern. As regards petty offences, the relationships changed from a high positive to a low negative up to period 4 and thereafter both the criminal justice variables showed strong positive associations with petty offences.

Of the two prison variables, consistent relationships were found between these and offences against the person. Thus prison expenditure per capita was found to be positively correlated with these offences in all the periods and the daily average number of prisoners also showed a similar association in all but the last time period. The relationship of the two prison variables with property, good order and petty offences does not show any systematic pattern. Here again a much deeper analysis is necessary to examine these relationships and in this regard characteristics of prisoners by types of offences committed could be highly relevant.

Summary

This analysis of crime and exogenous variables during various periods in the twentieth century presents results which may have important implications. Some of the findings seem clear, yet to draw meaningful conclusions additional work is warranted.

The methods adopted for identifying various historical periods or environmental sets have been reasonably successful in that each period presents certain unique characteristics both in terms of exogenous and crime variables. The analysis suggests that economic or developmental variables affect crime in various ways. In this context the seven periods need to be examined in terms of gradual and accelerated growth. Periods 1 to 5 and 6 to 7 can be separated on these lines. As an example it may be recalled that period 2 (1908 to 1912) showed reasonable growth in the economy, yet the effects on crime were quite different from those observed in periods 6 or 7. Also, extreme economic conditions, namely depression and accelerated growth, seem to produce similar effects on property crimes; a case in point is period 4 compared with period 6 or 7.

It is difficult to assign an *ideal* value to any of the variables, or for that matter, to say what is high and what is low. For example, what is a high economic growth rate or high population growth rate? Probably economists or demographers may, with the help of extensive systematic study, come up with some answers. In this study, where a number of variables have been used from different fields, it is not possible to assign such values. What can be done, however, is to offer information on the differences, and the directions of such differences, between environmental sets in terms of characteristics which discriminate these sets. In

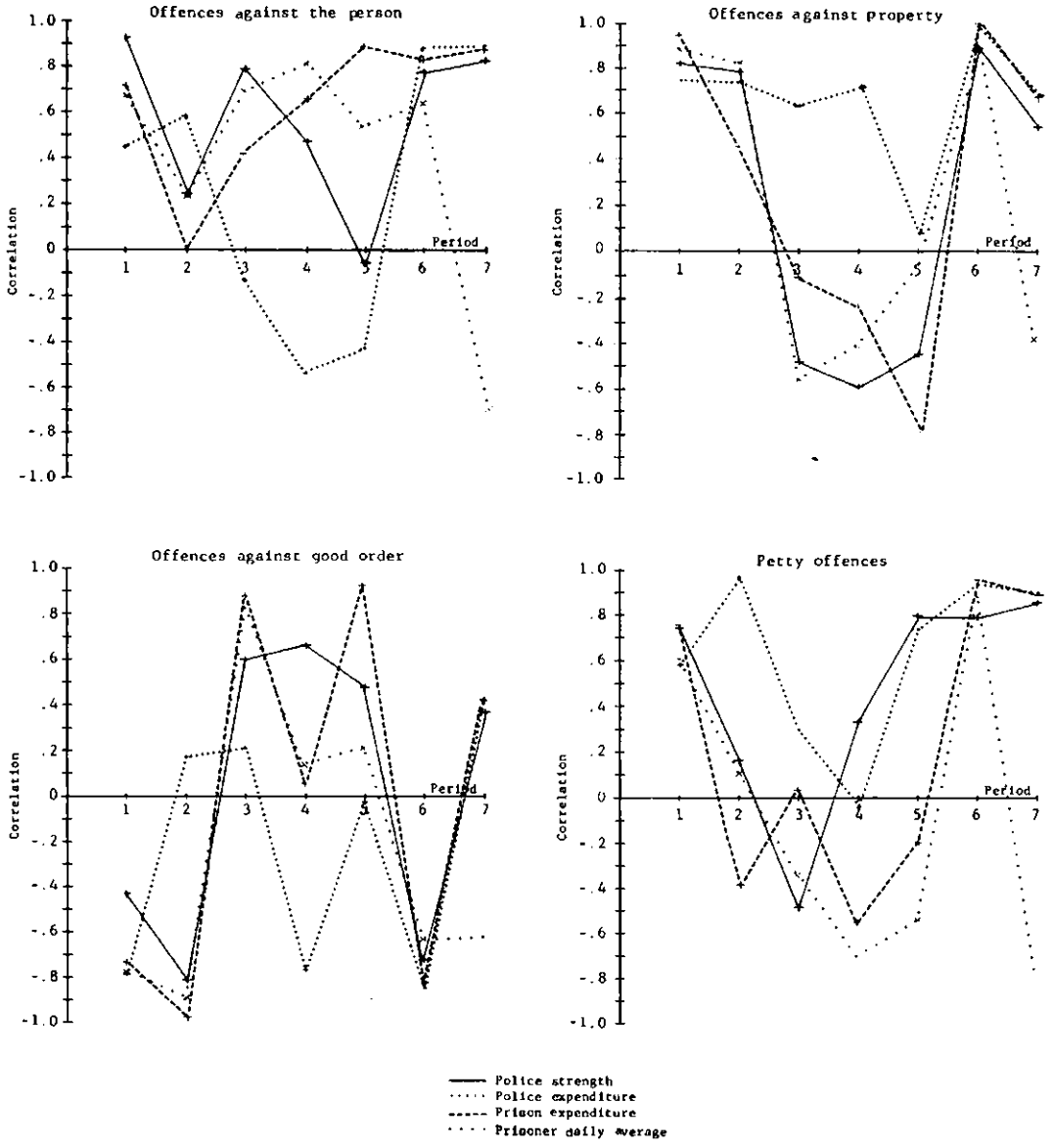


Figure 10.3 *Changes over periods in the correlation between crime rates and criminal justice explaining variables*

Table 10.5 *Principal differences in exogenous variables between periods*

Periods	2		3		4		5		6		7	
1	Urban	(+)	Urban	(+)	Urban	(+)	Urban	(+)	Urban	(+)	Urban	(+)
	Unemp	(–)	Pol exp	(–)	Pri exp	(–)	GDPP	(+)	Pol exp	(+)	Pol exp	(+)
	Pol exp	(–)	Pri exp	(–)	Pol str	(–)	Pri exp	(–)	GDPP	(+)	Pri exp	(+)
	Pri exp	(–)	Pol str	(–)	% 15–24	(–)	Pol str	(–)	Unemp	(–)	Pol str	(+)
			% 15–24	(–)			% 15–24	(–)	% 15–24	(–)	GDPP	(+)
											Unemp	(–)
											% 15–24	(–)
2			Urban	(+)	Urban	(+)	Urban	(+)	Urban	(+)	Urban	(+)
			Pol exp	(–)	Unemp	(+)	Pol exp	(+)	Pol exp	(+)	Pol exp	(+)
			Pri exp	(–)	Pol exp	(+)	GDPP	(+)	GDPP	(+)	Pri exp	(+)
			Pol str	(–)	Pri exp	(–)	Pri exp	(–)	Unemp	(–)	Pol str	(+)
			% 15–24	(–)	Pol str	(–)	Pol str	(–)	% 15–24	(–)	GDPP	(+)
					% 15–24	(–)	% 15–24	(–)			% 15–24	(–)
3					Urban	(+)	Urban	(+)	Urban	(+)	Urban	(+)
					Unemp	(+)	Pol exp	(+)	Pol exp	(+)	Pol exp	(+)
					Pol exp	(+)	GDPP	(+)	Pri exp	(+)	Pri exp	(+)
							% 15–24	(–)	Pol str	(+)	Pol str	(+)
									GDPP	(+)	GDPP	(+)
									Unemp	(–)	Unemp	(–)
									% 15–24	(–)		
4							Urban	(+)	Urban	(+)	Urban	(+)
							GDPP	(+)	Pol exp	(+)	Pol exp	(+)
							Unemp	(–)	Pri exp	(+)	Pri exp	(+)
							% 15–24	(–)	Pol str	(+)	Pol str	(+)
									GDPP	(+)	GDPP	(+)
									Pop10	(+)	Cars	(+)
									Cars	(+)	Unemp	(–)
									Unemp	(–)	% 15–24	(–)
									% 15–24	(–)		
5									Urban	(+)	Urban	(+)
									Pol exp	(+)	Pol exp	(+)
									Pri exp	(+)	Pri exp	(+)
									Pol str	(+)	Pol str	(+)
									GDPP	(+)	% 15–24	(+)
									Pop10	(+)	GDPP	(+)
									Cars	(+)	Pop10	(+)
									% 15–24	(–)	Cars	(+)
6											Urban	(+)
											Pol exp	(+)
											Pri exp	(+)
											Pol str	(+)
											% 15–24	(+)
											GDPP	(+)
											Cars	(+)

Note: The variables included in this table are those for which the *t* values between periods are significant at ≤ 0.001 level; (+) denotes increase; (–) denotes decline.

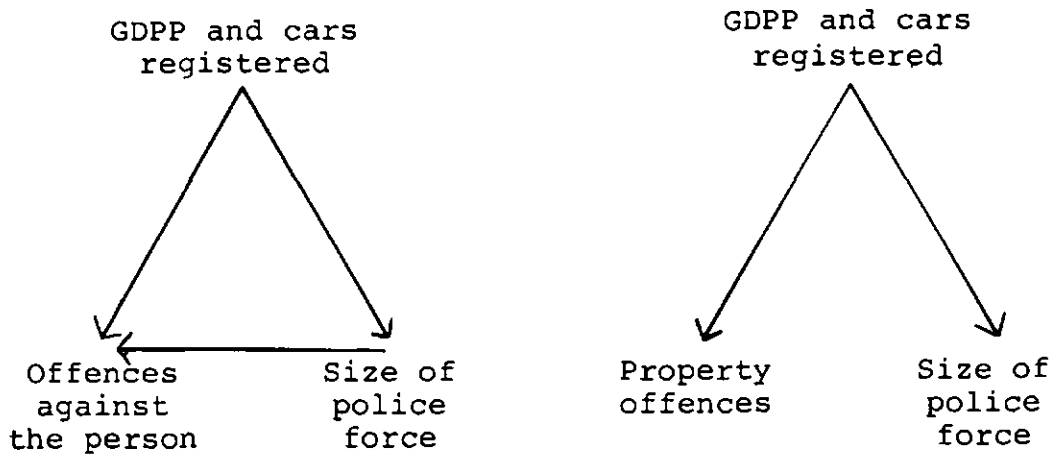


Figure 10.4 *Effects of exogenous variables on crime*

this sense the differences reflect change in characteristics between environmental sets. The information presented in Table 10.5 attempts to summarise these differences.

The data in Table 10.5 allow us to compare each environmental set against the others. Note that urbanisation has always shown a significant positive change and this is the only variable in the entire data set which has increased monotonically. Now, the examination of the data reveals that period 2 differed significantly from period 1 on urbanisation, unemployment rate and police and prison expenditure per capita; also, except for urbanisation, all the other three showed lower values, so that there was an improvement in the economy, the unemployment rate declined, and the cost of maintaining police and prison services also declined. Similarly, period 7 differed significantly from period 1 on a number of characteristics. What effects do these changes have on crime? Examining Table 10.5 in conjunction with Table 10.4 provides some clues. Differences between periods 1 and 2 were in terms of a decline in property offences and an increase in good order offences. Could it therefore be assumed that a reduction in the unemployment rate resulted in the reduction in property crime and increase in good order offences? This can be tested by comparing each set with the others.

Following this line of analysis reveals some interesting insights. The information in Tables 10.4 and 10.5 indicates that the unemployment rate was one of the determining factors in differentiating periods 1 and 2, 3 and 4, and 4 and 5, and on all these three occasions property crimes were positively associated with unemployment. The rate of unemployment did not change significantly between sets 2 and 3, 5 and 6, and 6 and 7, but property crimes did. What this demonstrates is that when the unemployment rate changes significantly between adjacent periods, its effect on property crime is positive. In reality it is absurd to compare period 7 with period 1 because there is no link between the two. The level of unemployment in period 7 is a level reached after several changes in periods 2 to 6. Furthermore, it is dif-

ficult to speak of high or low unemployment without a proper baseline. Nevertheless, it is important to ascertain significant changes, either positive or negative, in relation to an adjacent period.

With regard to offences against the person, we obtain a very interesting relationship with the size of the police force. With the exception of one pair, that is, between sets 3 and 4, these two variables have moved in the same direction. In other words, whenever the size of the police force became one of the determining characteristics of a period, offences against the person showed a positive association (see also Figure 10.3).

That the effects of exogenous variables on offences against the person and property offences are somewhat different is also demonstrated by Figure 10.4. During periods 6 and 7 these effects are prominent. During these periods with rapid economic growth and increase in GDPP and cars registered, the increase in the size of the police force coincided with the increase in offences against the person. Property crimes, on the other hand, do not show a positive association with the size of the police force. While these patterns are more prominent in these two periods, similar relationships were observed for the entire period under study; see Figure 9.2.

From Table 10.5 it can also be observed that periods 6 and 7 differed from the rest on a large number of variables in that there was growth or increase in almost every variable. The sharp and sustained growth in the economy, population and criminal justice variables may possibly have produced some unsettling effects on crime. With the exception of good order offences all other offences showed an upward trend.

It is evident from the analysis that a historical analysis must take into consideration the existence of various settings. A long-term analysis tends to mask the importance of particular characteristics at given points in time. A clear example of this situation is the relationship between the unemployment rate and property crimes. Having demonstrated the differences between periods, we propose that a study of psycho-social settings of these periods might produce important clues and thus make the findings of this study more credible.

11 Environmental Sets and Convictions

Virtually all of the cases heard and determined at the magistrates' courts originate from police action. In a sense, a magistrate's function, albeit with the help of evidence, has two interrelated dimensions: (1) to test the accuracy of police action; and (2) to decide on an appropriate response based on the merits of the case. There is a large volume of literature which deals with attitudes of judges and magistrates in sentencing. There are disparities in sentencing practices and also judges and magistrates seem to be guided by different sets of norms. Although it would not be possible to examine these aspects in the present study, we can examine the pattern of offences receiving convictions at the magistrates' courts *vis-á-vis* selected exogenous and crime variables during different periods in this century.

In Chapter 5 we demonstrated the consistency in the proportion of offences charged resulting in convictions over time. It was also shown that such consistency was obtained primarily because of high conviction rates for two types of offences — those against good order and petty offences. Does the analysis of conviction data in various environmental sets produce similar results?

Before an attempt is made to answer this question it may be useful to bear in mind that the most serious offences, homicide, rape, robbery and so forth, cannot be tried at the magistrates' courts. After a prima facie case has been established, such offences are committed for trial at the higher courts. Total numbers of convictions at all the courts could not be obtained because counting rules are different at the higher courts. Since we are concerned with convictions at the magistrates' courts it is appropriate that conviction rates be calculated on the basis of cases triable at these courts; in other words, committal cases be excluded from this analysis. Therefore, proportion of offences convicted equals number of offences convicted divided by (number of offences charged − number of offences committed for trial at higher courts).

Long-term pattern

Overall, of all the offences charged and triable at the magistrates' courts, 85 per cent result in convictions. These proportions for each time period and for each offence type are presented in Table 11.1. It is quite remarkable that except for property offences, the conviction rates for all the offence categories have remained fairly constant over these periods. Thus for the total offences the mean proportion of those resulting in conviction has varied between 81 per cent and 90 per cent during the seven periods; for offences against the person the mean proportion of convictions has varied between 52 and 59 per cent. It seems, therefore, that the changes in population, urbanisation, the economy and crime rates have had little effect on the sentencing behaviour of magistrates. Such an assumption would imply that the nature of offences has not changed over time, but this seems unlikely. We return to the same question, what keeps the conviction rate constant?

Leaving aside property offences for the moment, it can be said that good order and petty

Table 11.1 *Means and standard deviations of proportion of offences convicted at magistrates' courts in Australia for each period by major offence category*

Period		Total	Person	Property	Good Order	Petty
1 (1900 to 1907)	Mean	81.25	52.54	66.52	84.60	83.55
	SD	1.03	1.24	2.03	0.68	1.08
2 (1908 to 1912)	Mean	82.31	52.11	69.34	85.53	82.80
	SD	0.26	0.90	1.44	0.28	0.84
3 (1913 to 1927)	Mean	81.29	53.37	69.38	82.02	84.15
	SD	1.38	1.56	2.41	1.69	2.60
4 (1928 to 1937)	Mean	83.50	54.26	63.02	85.60	88.34
	SD	1.10	0.96	6.38	1.59	1.15
5 (1938 to 1949)	Mean	87.44	55.70	79.03	87.15	90.80
	SD	0.78	2.38	5.36	1.47	1.00
6 (1950 to 1965)	Mean	89.72	55.51	88.10	86.56	92.39
	SD	1.03	3.69	1.28	1.40	1.09
7 (1966 to 1976)	Mean	86.07	59.24	87.37	83.00	87.33
	SD	1.41	1.10	2.24	3.72	1.31
8 (1900 to 1976)	Mean	85.03	54.96	76.22	84.86	87.75
	SD	3.45	2.99	10.28	2.65	3.77

offences are largely police-generated. That is to say, a great majority of these offences are detected by the police rather than being reported to the police. There is therefore some degree of certainty in the outcome of these offences. In both traffic and drunkenness cases, which form the bulk of the two major offence categories, there is very little that the accused can do besides pleading guilty. The reason why all of these cases do not result in conviction is because both these offence categories also include some other offences.

Offences against the person, on the other hand, a substantial number of which are detected by the police, do not show as high a conviction rate as the above two offence categories. An examination of the data in Table 11.1 reveals a slow but increasing trend in the conviction rates in offences against the person, and the largest increase in these rates has taken place between period 6 and 7. These two periods differed significantly in almost every characteristic (see Table 10.4). The two characteristics which need special mention, however, are the proportion of population in the 15 to 24 age group and the size of the police force, which increased by 20 per cent and 21 police officers per 100 000 persons between periods 6 and 7. Between these two periods there was also the sharpest increase in the rate of offences against the person charged before magistrates' courts, an increase of over 41 per cent. Increases or decreases in the volume of these charges have not necessarily affected the conviction rate in the earlier periods. For example, between periods 3 and 5, the rate of charges for these offences dropped by over 25 per cent, yet the conviction rate remained almost the same. Could it be that the conviction rate of offences committed by persons in the age group 15 to 24 increased? Finally, it is interesting to point out that the conviction rates for these offences are lower than for any other offence category and therefore these offences have a high discharge rate as well; for every five offences tried at least two result in discharges.

The conviction rates for property offences show a pattern different from those for the other offence categories. The real increase in conviction rate started in period 5 and in the last two periods the conviction rate for property offences exceeded that for good order offences. Leaving aside petty offences, property offences showed the sharpest increases after the Second World War, both in terms of offences reported to police and offences charged at the courts. The rate of offences charged increased significantly between periods 3 and 4 and yet the conviction rate declined. One could speculate that the economic depression drove many to the level of desperation

resulting in a high rate of charges, while the courts probably adopted a more lenient approach because of the general socio-economic climate. But the conviction rate showed the sharpest increase between periods 4 and 5 yet the rate of charges declined substantially between these periods. Thus, we obtain the situation of increases in charges and decline in convictions and vice versa, but such patterns are not observed systematically. One important point, however, must be made. Various statistics in Australia indicate that the clearance rate for property offences reported to police has declined significantly over the years. The majority of property offences are reported to police and relatively few are detected, yet the conviction rate has increased. Does it mean that the police are doing a better job in screening offences to be referred to the courts so that the probability of conviction is increased? Or is it because courts are taking a stricter attitude in the light of rapid increases in these offences or in the light of the general high level of prosperity? The latter interpretation presents the opposite of the 'leniency' argument given to explain the data from the Depression.

Short-term correlates

The above analysis does not enable us to make any conclusive statements. An examination of the relationship between conviction and other variables may offer some insights and this is the aim of this section.

Table 11.2 shows the correlation between the proportion of offences against the person convicted and the listed variables. Apart from columns 6 and 7, representing the last two periods, the data do not show evidence of very strong relationships. The associations in periods 6 and 7 present interesting contrasts. It may be noted that during period 6, with the exception of the rate of good order offences charged, the proportion of offences against the person convicted was positively correlated with every other variable, and some of the correlation coefficients were very high indeed; in period 7 these relationships were always negative. In period 6 the mean proportion of convictions did not show any noticeable change from the mean of period 5, though it was true that the values in period 6 showed large variations in that the standard deviation in this period was quite high. Yet changes in all the variables were positive and significant. During the sixth period, which represents the post-Second World War development era, the rate of offences against the person increased, but this increase mainly resulted in a larger volume of cases triable at the magistrates' courts. In other words, serious offences such as homicide, rape and grievous bodily injury did not show substantial increases. At the same time the conviction rate by the magistrates, at least during the entire 1950s, remained low but still increasing. During 1960 to 1965 the proportion of offences convicted increased sharply, reaching a level of over 60 per cent. The positive relationships between the proportion of offences convicted and other variables (Table 11.2) is therefore to be expected.

The situation in period 7 is quite striking. During this period the mean proportion convicted for offences against the person was the highest, that is, 59.2 per cent; in actuality the conviction pattern showed a declining trend. Period 7 began with a high conviction rate of approximately 61 per cent but since the late 1960s there was a systematic gradual decline in conviction rate. Considering that every other variable showed patterns of increase the inverse relationships between these and proportion of offences convicted are logical.

Similar sets of relationships are obtained when conviction data for property and good order offences are examined (see Tables 11.3 and 11.4). The positive correlation coefficients in period 6, however, are not as high as those observed for offences against the person. Convictions of petty offences, on the other hand, show a slightly different pattern. As the data in Table 11.5 indicate, in this case the relationships in both periods 6 and 7 were generally negative.

At the beginning of this chapter the concept of the 'accuracy' of police action was raised. By this was meant the probability that the police, having brought an alleged offender to court, would be able to assemble enough evidence to obtain a conviction. In terms of operational policy the police force is caught in an eternal dilemma because it has to balance the amount of evidence required to convince the court against the limited amount of time and resources available to assemble that evidence. The more crime occurs, the less time and resources can be devoted to each crime (unless the police force grows correspondingly)

Table 11.2 *Correlations between proportion of offences convicted and crime and explanatory variables, by period: offences against the person*

Variable	Periods							Total 77 years
	1	2	3	4	5	6	7	
1. Pop10	−.562	.829	−.053	.108	−.568	.929	−.791	.729
2. Urban	−.536	.872	−.027	.009	−.639	.793	−.807	.669
3. Unemployment	.081	−.664	.488	.392	.249	.195	−.471	−.186
4. GDPP	−.750	.821	.199	−.331	.028	.904	−.745	.677
5. Cars registered				−.246	−.780	.902	−.737	.693
6. Police strength	.386	−.976	−.010	−.146	−.247	.883	−.660	.460
7. Police expenditure	−.103	−.123	.211	.573	.070	.921	−.734	.668
8. Total effences	.444	.253	.135	−.619	−.475	.845	−.769	.643
9. Person	.644	−.069	.100	−.119	−.673	.791	−.781	.195
10. Property	.421	−.659	.113	.169	.543	.957	−.794	.777
11. Good order	−.198	.784	.337	−.472	−.698	−.723	−.215	−.505
12. Petty	.540	−.089	−.359	−.506	.154	.840	−.751	.708

Table 11.3 *Correlations between proportion of offences convicted and crime and explanatory variables, by period: offences against property*

Variable	Periods							Total 77 years
	1	2	3	4	5	6	7	
1. Pop10	.939	.014	.143	-.757	.848	.626	-.854	.781
2. Urban	.953	-.066	.026	-.605	.749	.818	-.651	.863
3. Unemployment	.372	-.256	-.070	-.666	-.952	.264	-.882	-.744
4. GDPP	.470	-.325	-.079	.090	.766	.563	-.831	.772
5. Cars registered				-.154	.335	.712	-.884	.797
6. Police strength	-.946	.376	.113	.838	-.238	.377	-.945	.492
7. Police expenditure	-.388	.019	.385	-.439	-.417	.669	-.930	.601
8. Total offences	-.569	.130	.376	.306	.143	.828	-.695	.788
9. Person	-.891	-.463	.077	.747	.859	.465	-.694	.295
10. Property	-.841	.061	.339	-.845	-.581	.637	-.442	.594
11. Good order	.405	-.039	.192	.685	.628	-.449	-.328	.019
12. Petty	-.742	.214	.229	-.051	.612	.815	-.726	.769

Table 11.4 *Correlations between proportion of offences convicted and crime and explanatory variables, by period: offences against good order*

Variable	Periods							Total 77 years
	1	2	3	4	5	6	7	
1. Pop10	.899	-.458	-.173	.861	-.345	.560	-.856	.033
2. Urban	.913	-.425	-.418	.789	-.471	.665	-.647	.098
3. Unemployment	.163	.528	.184	.469	.210	.451	-.763	.037
4. GDPP.	.481	-.717	.503	.061	.000	.485	-.847	-.077
5. Cars registered				.451	-.668	.576	-.895	.032
6. Police strength	-.858	.434	.440	-.633	-.214	.397	-.934	-.179
7. Police expenditure	-.480	.582	.232	.326	-.133	.535	-.905	-.164
8. Total offences	-.524	.149	.688	.012	-.332	.558	-.808	-.037
9. Person	-.771	.163	.425	-.819	-.427	.498	-.782	-.350
10. Property	-.938	.815	-.312	.779	.390	.579	-.429	-.029
11. Good order	.522	-.479	.860	-.542	-.497	-.652	-.512	-.008
12. Petty	-.793	.430	-.304	.414	.116	.604	-.851	-.026

Table 11.5 *Correlations between proportion of offences convicted and crime and explanatory variables, by period: petty offences*

Variable	Periods							Total 77 years
	1	2	3	4	5	6	7	
1. Pop10	.854	-.546	.910	.465	.285	-.641	-.626	.542
2. Urban	.843	-.595	.848	.619	.390	-.389	-.851	.597
3. Unemployment	.803	.532	.277	-.567	.223	.075	-.034	-.164
4. GDPP.	.724	-.592	.280	.853	-.412	-.701	-.684	.358
5. Cars registered				.880	.542	-.563	-.582	.543
6. Police strength	-.825	.531	-.587	.187	.885	-.643	-.339	.007
7. Police expenditure	.116	.660	.589	-.214	.556	-.577	-.477	.247
8. Total offences	-.935	.343	.078	.658	.784	-.285	-.732	.353
9. Person	-.961	.946	-.664	-.481	.015	-.772	-.777	-.372
10. Property	-.711	.719	.602	-.006	-.581	-.549	-.918	.277
11. Good order	.013	-.223	-.400	.303	.500	.768	-.126	-.255
12. Petty	-.892	.520	.741	.729	.691	-.363	-.684	.415

and consequently the harder it is for the police to gain an acceptable rate of conviction. Furthermore, the effectiveness of the police and the resources allocated to the police are intricately connected.

The various measures used to assess the effectiveness of a police force each imply a different operational policy. If conviction rate as a proportion of charges is used as a measure of police effectiveness, then the policy of laying charges only when a conviction is almost certain would improve the apparent effectiveness but at the expense of allowing many offenders to go free due to insufficient evidence. If total number of charges laid is used as a measure of effectiveness, then the policy of concentrating on police-generated 'petty offences', such as traffic offences, will show rewarding results, but at the expense of allowing more serious offences to go unpunished. This latter measure has the more serious drawback that if the real rate of total offences were to reduce, as a result of police effectiveness, then the effectiveness of the police as measured by this criterion would appear to be reduced — an illogical conclusion if it can be assumed that the prime function of a police force is to reduce crime.

The associated issue of police resources can make the adoption of the total number of charges laid as a measure of effectiveness quite attractive to the police because of the ease with which it can be manipulated. A plan to increase police resources can be justified by reference to an increasing rate of charges laid, with the inference that this is evidence of a crime wave even though it may simply be the result of a policy of maximising the number of charges. Hence it is important that government decision makers, when faced with demands for more police resources, look carefully at the figures in relation to the policy being pursued.

The issue of effectiveness of a branch of government administrative services is a comparatively recent one, emanating in particular from the United States and reaching Australia in the 1950s. Wartime notions of cost-effectiveness such as PPBS (Planning-Programming Budgetry System) spread into industrial and government management practices and spawned a whole series of measures and targets of effectiveness. As if in retaliation, the managers meeting these targets, or maximising the chosen measure of effectiveness, adopted methods which were more directly aimed at satisfying the measured criterion than at satisfying their real *raison d'être*. The police force was no exception, and effectiveness targets in the form of arrest quotas could very well have been adopted in various police departments.

However, the almost inevitable long-term result of this policy is to reduce the ratio of convictions to charges, since the most important thing is to get the case to court whether sufficient evidence is available or not. This may explain the phenomenon of Table 11.1 where, with the total number of crimes of all types except good order rising rapidly in the post-Second World War years, there was firstly an increase in their conviction rate, and positive correlation with all explanatory variables, followed by a complete reversal after 1965. In passing, it may be mentioned that the change in the conviction rate between periods 6 and 7 was not significant. A conviction rate of 80 per cent or more is a fairly high rate. To increase that rate any further would require enormous effort. Moreover, having reached an 80 per cent conviction rate it is likely that the system inertia would start functioning so that no undue extra effort should be invested to increase this rate.

Summary

The major conclusion to be drawn from this chapter is that with the exception of property offences the conviction rate for all offence categories has remained fairly stable; the proportion of property offences convicted shows an increasing pattern especially after the Second World War. These patterns are shown in Figure 11.1. The conviction rate for good order and petty offences has always been 80 per cent or more of the total charges and there is very little likelihood of this rate being improved. What seems to emerge clearly is that the offences which are contested in the courts have a lower conviction rate than those which are not. Traffic and drunkenness offences are seldom contested and as has been shown in Chapter 6 (Tables 6.16 and 6.18) almost 100 per cent of these charges result in convictions.

The rise in the conviction rate for property offences in the last two to three decades could be because of the change in the nature and frequency of these offences. Cases of shoplifting have in-

creased and usually the alleged offender is detected while the stolen goods are still in his or her possession. There is, therefore, not much scope for contest in the court and a conviction is almost certain. Similarly, larceny or illegal use of motor vehicles has increased and in this case too the alleged offender is apprehended while using the vehicle.

The pattern of convictions for offences against the person is somewhat intriguing. The consistency in this pattern does not leave much room for speculation. One would think that the quality of forensic evidence might have improved over the years and thus the conviction rate might also increase, and it does, but rather slowly. But the reason the rate does not increase much faster may be that the training of lawyers has also improved and acquittals are relatively easier. Therefore, the improvement in the quality of forensic evidence seems to counterbalance the improvement in legal training.

We observe no systematic relationship between conviction rates and other variables, including crime rates. The only exception is period 4, when the rate of property offences charged increased, significant changes occurred in the exogenous variables and the conviction rate declined sharply. This is the only occasion when it seems the magistrates acted with restraint and handed out proportionately fewer convictions.

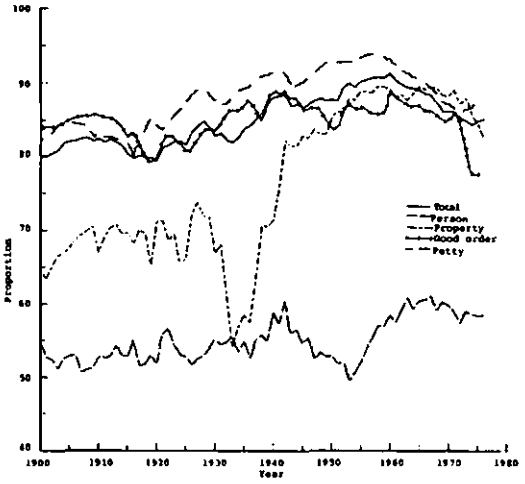


Figure 11.1 *Convictions as proportion of offences triable at magistrates' courts by major offence category, Australia 1900 to 1976*

12 Conclusion: Crime and Socio-economic Change

The nature of 'change'

Throughout this volume we have spoken of change — change in the rate of growth, change in the crime rate and so forth. Change is a process — we have suggested that at certain times change is stimulated by major political events or economic conditions or technological discovery, but short of natural or man-made calamities change is rarely sudden. Furthermore, an era of relatively rapid change can often be seen as a direct consequence of the time immediately preceding the change. What then emerges is that change is continuous and occurs in sequential chains.

Because of its continuous and sequential nature, historical change is difficult to perceive on a day-to-day basis. Consider for a moment the development of individuals. Just to take one aspect of their life, they start to go to school, they first learns numbers and then do sums and move on to solve more difficult numeric problems. To reach this stage will take several years. We could not see these changes from one day to the next. To take another example, contemporary literature is saturated with the topics of technological change. Yet seldom has a technology developed overnight and rarely has its effects been felt immediately. It took decades between the time the first aeroplanes left the ground and the production of the first passenger plane, and only several decades later were the supersonic planes developed. In both these examples, and for that matter virtually all others, it is difficult to say how one day was different from the day before, and in real life it is often difficult to say how this year was different from last year.

This leads us to the proposition that in order to observe change we need to look at the additive or cumulative effects of events over time. Furthermore, depending upon the type of change we are talking about, we require appropriate methods to measure this change. Thus, for example, if the cost of a kilogram of sugar increased from 40¢ in 1970 to 80¢ in 1978 we cannot say that the price of sugar doubled between 1970 and 1978, because the value of our 'measuring stick' — in this case the dollar — has changed too. An appropriate method to measure the price would be to compare the prices at constant dollar value. We must be careful, when considering change, that the changes we discover are real ones, and not simply due to changes in our system of values or recording techniques.

It is of course true that a rate of change is not necessarily uniform over time and that it varies according to aspects under investigation. The change in the institution of the family, from an extended family to a nuclear family system, in the Western world took a much longer time than many of the most dramatic changes in technology. In the technological field one may also say that once the basic principles are developed the time between major breakthroughs will, up to a limit, progressively decline. A good example in this sphere is medical technology. The present century and especially the last three decades has seen great advances in medical technology and in the standards of sanitation and nutrition. Infant mor-

tality has reduced significantly and life expectancy has increased. But to reduce the infant mortality rate further and to increase longevity may require some major discoveries. Therefore, if it took fifty years to reduce the infant mortality rate from 60 per 1000 live births to 16 per 1000, it may take another fifty years or even a hundred to reduce this rate to 10 per 1000 live births.

The present study is based on these formulations. It proceeds from the idea that change is continuous and examines the cumulative aspects as well as the pace of change. These are central to the entire study and especially to the development of the concept of environmental sets.

Observed changes in Australia

In Chapters 1 and 4 to 11 we have attempted to demonstrate changes in structural, technological and crime-related variables. On the basis of annual data we have observed different sorts of changes in all the variables. A significant feature of the data is that, for all selected variables, values for two adjacent years were never the same. What is interesting also is the pattern which shows that the rate of population increase tends to remain steady for a number of years followed by a sharper or slower rate of increase for another period of years. In fact such patterns have emerged very clearly in our study.

In Chapter 5 we used the concept of 'turning points' to identify shifts in the rate of various crimes in this century. In Figure 5.6 and Table 5.5 the results of this effort were depicted. In view of the objectives of this study these results were particularly encouraging. Ours is an attempt to identify trends and Figure 5.6 indicated that a relatively small number of turning points can be identified for each offence. For example, good order offences showed an overall increasing trend up to 1908 followed by a declining trend in the rate of these offences for about twenty-four years and so forth. Similarly, offences against the person show only one turning point in the seventy-seven-year period, that is, 1937. Before 1937 the rate of these offences presented a declining trend and after this point a rising trend. The utility of the concept of turning points to discern trends becomes clear when we compare Figure 5.6 with Figures 5.1 and 5.3.

Although the turning points in the rate of various crime categories were different, the convergence of these points at three specific periods was particularly interesting. The intriguing question is why the turning points for all the offences were located in the periods 1907 to 1913, 1930 to 1937, and 1973 to 1976. These findings led us to examine the movements in exogenous variables and to try to explain the patterns of crime.

After describing the patterns in crime, with the help of various criminal justice statistics, we examined in Chapter 9 the relationships between crime and exogenous variables. Some of the most interesting findings of the correlational analysis for the entire period were the inverse relationship between various types of crime and unemployment; weak but positive relationships between offences against the person and population and urbanisation, and strong positive association between these offences and the size of the police force; very strong positive association between all offence types except good order and cars on the road; and weak relationships between offence types and proportion of population in various age groups.

For the entire seventy-seven years these associations are extremely interesting. They tend to dispel some of the existing myths. Irrespective of their direction and strength the associations between crime and unemployment, crime and the age structure of the population, and violent crime and population found in this study seem to challenge the findings of research carried out elsewhere. But these are not particularly helpful in understanding the trends in crime rates as described by the turning points mentioned above.

In Chapter 10 we attempted to delineate environmental sets, which produced some encouraging results. It may be recalled that discriminant analysis, using a number of variables, divided the seventy-seven years into seven periods or environmental sets. These were 1900 to 1907, 1908 to 1912, 1913 to 1927, 1928 to 1937, 1938 to 1949, 1950 to 1965 and 1966 to 1976. A comparison of these results with the ones obtained in Chapter 5 (Figure 5.6 and Table 5.5) aids in our explanation of at least some of the trends in crime. The analysis with the help of polynomial curves revealed the points at which the trends in the crime rates changed direction. The environmental sets on the other hand seemed to identify points at which trends, whether rising or declining, showed a significant acceleration or deceleration. Consider for

example the turning points in the rates of property offences: 1913, 1936, 1948 and 1973. Between 1950 and 1976 we identified the existence of two periods — 1950 to 1965 and 1966 to 1976. Figure 5.6 shows that whereas the rate of property offences increased between 1948 and 1973 the rate of increase started declining significantly in 1966, which coincides with the beginning of period 7. Similar patterns can be observed in the case of petty and good order offences as well. What seems extremely interesting in such a pattern is the dominance of economic factors in explaining crime. The three times at which curves for all the offence categories converge, that is, 1907 to 1913, 1930 to 1937, and 1973 to 1976, are characterised by major changes in the national economy. The first time (incorporated mostly in period 2) was marked by a significant drop in the unemployment rate, and the gross domestic product increased substantially; the second time (encapsulated by period 4) represents the Depression; and the third time (which forms the last part of period 7) is, as we now know, characterised by high inflation, an increasing unemployment rate and the energy crisis. The last time of convergence also coincides with the time when the rate of all offences troughed, and actually showed signs of decline.

We must state, however, that offences against the person do not seem to demonstrate susceptibility to economic factors as much as the other offences do. For the entire seventy-seven years these offences were found to be highly correlated with the size of the police force. It emerged that except for period 5 (1938 to 1949), when no association between these two variables existed, offences against the person increased when the size of the police force increased and vice versa. We have shown elsewhere that the homicide rates during this century were fairly stable and the rates of rape showed some increases. Even if the rates of these two offences had doubled these would still constitute a very small proportion of all offences against the person. Assault, mainly minor and common, makes up about three-quarters of all personal offences, a substantial portion of which is detected by police. Therefore, the observed association is predominantly between assault and the size of the police force.

Today as ever citizens are more fearful of being attacked than being victims of burglary or other property offences. Is it likely that the police take cognizance of this fear and therefore pay greater attention to violent offences? Or is it that the police by their very presence create offences of this nature? The analysis of the data also revealed that except in period 3 (1913 to 1927) the rates of petty offences fluctuated in a similar manner to the size of the police force. (Petty offences consist primarily of traffic offences.) Here is a type of offence which is very minor in nature but which has a very high clearance rate. Thus, the scenario obtained is that the police attach greater importance to offences which concern the community most and those which satisfy the efficiency criteria of the police department.

The analysis of crime in each period reveals some other interesting results, one of which is the association between property crimes and unemployment. Whereas for the entire time since 1900 this association was found to be weak but negative, in each period but the first this association was found to be positive. Although moderate to weak in strength, the correlation between property offences and unemployment in each of the periods seems to support the findings of existing research. Our data cannot demonstrate the link between property crimes and offenders who were unemployed since the relationship obtained relates to the general level of unemployment. Furthermore, it was also found that when the rate of economic growth, measured in terms of gross domestic product, was rapid the association between property offences and unemployment was the weakest.

The analysis of short-term correlates of crime, that is, in each period, clearly demonstrates some of the limitations of associations based on a long-term data set. The important point is that peoples' attitudes and behaviour change over time and these changes are influenced by various factors. A long-term study of crime must therefore take these changes into account.

Comparison of Australia and the United States

Our first stance was to observe the existence of any cyclical pattern in crime rates. With the help of various statistical techniques we could not identify any regularity or periodicity in the seventy-seven years' data. The fluctuations in crime rates, on the other hand, were found to be associ-

ated with various socio-economic environments. Admittedly our findings are tentative and need to be tested. One way to test them would be to apply the same techniques to data from countries with similar backgrounds. Unfortunately, comparative data from such countries are difficult to obtain. In Chapter 1 we provided information of similar variables from the United Kingdom and the United States of America. We were able to collect or estimate arrest data on crimes against the person and property from the United States for the period 1933 to 1976. This covers the last three periods delineated for Australia (1938 to 1949, 1950 to 1965, and 1966 to 1976).

Some of the characteristics of the three periods are presented in Table 12.1. The important issue here is not the similarity between the Australian and American values for each variable, but the similarity in the pattern of changes from one period to another. In this respect the similarities between the two countries are quite apparent. For Australia period 6 was found to be significantly different from period 5 in every characteristic except the unemployment rate; the United States data present similar differences. Again for Australia period 7 was found to be significantly different from period 6 in all the characteristics but population growth and unemployment rate; for the United States these two periods were not different in unemployment rate only.

In Table 12.2 correlations between variables for the two countries for each of the environmental sets are presented. Except for one major difference between the two countries, which occurred in the period 1938 to 1949, the results are remarkably similar. The difference lies in the relationship between property crimes and other variables. The United States coefficients are almost exactly opposite to those of Australia. In the absence of sufficient information it is difficult to speculate on the reasons for this. Two comments may be made: (1) the property crime rate for the United States for this period looks suspicious: the average value is too low compared to the values of the subsequent periods; and (2) these crimes, at least in Australia, showed a relatively strong association with population and also with the proportion of population in the 25 to 34 age group. This particular period incorporates the entire Second World War. It is likely that, in proportion to population, a larger number of Australians were overseas during the war than Americans, but this difference needs to be verified.

The results of this comparison are encouraging. However, the environmental set boundaries obtained in Australia may not be the same in the United States. Especially if the time series data show that one country lags the other by a few years in all or some of the major characteristics, the boundaries may indeed differ. But this does not present serious problems. The major problem would arise, however, if the variables making substantial contribution to discriminant functions differed significantly between countries. Both conceptually and methodologically the notion of environmental sets holds promise. The nature and frequency of crimes differ from setting to

Table 12.1 *Characteristics of environmental sets (periods) for Australia and the United States: average values of selected variables*

Variable	Australia Periods			United States Periods		
	5	6	7	5	6	7
1. Population % growth*	1.29	2.09	2.06	1.26	1.64	0.83
2. Age 15–24	20.2	17.8	21.3	17.1	13.9	17.5
3. Urbanisation	67.75	79.47	84.93	59.27	68.20	73.33
4. Unemployment	3.63	1.97	2.13	7.33	4.89	4.51
5 GDPPt	1228	1525	2200	2297	2921	3847
6. Person	137.8	191.6	271.1	108.9	165.0	334.0
7. Property	550.4	770.4	1238.4	476.0	1949.0	3280.3

* Australian data relate to population aged 10 years and over, whereas the United States data relate to total population.
† In Australian dollars per capita.

Table 12.2 *Correlations between selected variables for the United States and Australia (United States above the diagonal, Australia below the diagonal)*

Variable	1	2	3	4	5	6
			Period 5 (1938 to 1949)			
1. Population*		*.993*	*−.693*	*.647*	*.717*	*.825*
2. Urbanisation	.976		*−.700*	*.638*	*.757*	*.863*
3. Unemployment	−.742	−.648		*−.980*	*−.264*	*−.499*
4. GDPP	.504	.408	−.900		*.123*	*.378*
5. Person	.880	.846	−.737	.452		*.949*
6. Property	−.814	−.825	.446	−.093	−.680	
			Period 6 (1950 to 1965)			
1. Population*		*.996*	*.523*	*.918*	*.889*	*.974*
2. Urbanisation	.921		*.547*	*.885*	*.854*	*.955*
3. Unemployment	.215	.315		*.291*	*.321*	*.458*
4. GDPP	.971	.849	−.002		*.965*	*.953*
5. Person	.905	.812	.180	.884		*.939*
6. Property	.984	.915	.267	.940	.852	
			Period 7 (1966 to 1976)			
1. Population*		*.998*	*.780*	*.947*	*.987*	*.931*
2. Urbanisation	.927		*.769*	*.949*	*.977*	*.913*
3. Unemployment	.725	.498		*.668*	*.778*	*.723*
4. GDPP	.986	.948	.667		*.909*	*.814*
5. Person	.955	.944	.548	.958		*.976*
6. Property	.800	.935	.283	.815	.877	

* Australian data relate to population aged 10 years and over, whereas the United States data relate to total population.

setting and if the setting can be classified in a temporal framework comparisons are possible.

Leading agents of the process of change

The idea of environmental sets is not entirely alien from those found in some social and cultural histories. Social thinkers would argue that a society follows paths dictated by a dominating principle and this principle reflects the culture of that society. Perhaps it is difficult to disagree with this argument. At the same time the application of this dominating principle may depend upon numerous external factors. We believe that modern societies, especially those in twentieth-century industrialised nations, show the strengths not of a single dominating principle but rather of a set of principles considered expedient in the light of current social structure, technology and the polity. Since the principles are related to these three they are likely to change according to changes in social structure, technology and the polity. It is changes in these principles which dictate the time span of an environmental set. When the pace of these changes is slow, the boundaries of an environmental set might encompass a period of decades, and when it is fast, the boundaries may cover only a few years.

Structural and technological changes influence thinking, attitudes and behaviour of the populace and these are crystallised through different mechanisms. For example, modern transport developments make it easier to travel between countries whose cultures are totally different from each other, and as a result, peoples' attitudes to foreigners and foreign customs are probably more tolerant than they once were.

Similarly the increasing tendency for women to participate in the labour force has far-reaching effects on our attitudes, for example, towards the division of labour in the home and in respect of the care of children. Furthermore, in both these examples it is easy to think of changes in the patterns of crime which have resulted from what we would regard as positive structural and technological changes. In the case of transportation our thoughts will encompass both the whole range of

traffic offences and the less frequent crime of hijacking aircraft. In relation to working women we can include the increasing numbers of houses left empty during the day as tempting targets for would-be burglars.

Some of these changes in attitudes occur by the slow process of diffusion of ideas, while others are deliberately provoked by the mechanism of pressure groups. We have seen in the recent past the emergence of numerous pressure groups such as trade unions, the Right to Life movement, environmental protection societies, various women's groups, business organisations etc. All are promoters of changes in attitudes. Some of them influence crime trends directly, especially through their impact on the law — good examples being changes in family law for which women's groups are responsible and changes in the laws and attitudes relating to unemployment, for which trade unions would claim responsibility. In the third quarter of the twentieth century marital strife and unemployment were less often the causes of bitterness and violence as they were in earlier decades, and it can be hypothesised that there is a corresponding effect on the relevant crime statistics although our data are not sufficiently detailed to confirm this.

The interplay of political organisations, which are in effect grand coalitions of pressure groups, exercises control and governs much of our day-to-day life. The government establishes the norms of justice and enforces claims. It provides for the security of its citizens and in recent decades has exercised a profound influence over the direction of the national economy. In democratic countries such as Australia the governing political organisation does not represent the entire population. At any point in time other than election day itself it may not even represent a majority. Changes in political organisations in power will therefore have different effects on the various segments of the population. In the field of law and justice such changes are indeed very apparent. A political organisation representing liberal traditions may pass laws which define rape to include rape in marriage and allow abortions on demand, yet another organisation may regard abortion as a crime and rape in marriage as a contradiction in terms. Similarly, protest marches may be allowed under one setting and banned in another.

Direction and control of the economy by the government in recent times is a fact of life. With economic growth slowing down and the inflation rate increasing in most societies, governments have relied upon policies of reduced expenditure at the cost of high unemployment rates. Thus the expectations of the population, raised to a new height by the post-Second World War economic boom, now seem to be unattainable. The prospects of zero growth raised in several quarters may become a reality and even the spectre of 1930s-style unemployment levels is taken seriously. The importance of these factors in influencing crime rates is clearly visible throughout the period we have studied and we see no reason to think that their importance will decline in the future.

Finally, the media in recent years have become a major catalyst for change. From the weather of the day to what we eat and wear depends upon what we are told by the electronic as well as printed media. The role of the media in moulding our attitudes and behaviour towards law and justice has been a subject of intense debate for the past several years. From our perspective, based on statistics for a long period of time, the media's portrayal of ever-increasing crime trends, however, is untrue. The continuous onslaught of information, based on rare events and sensationalised to the most vivid and gruesome extent, seems to produce many fears in the community.

Coupled with this are the irresponsible statements by so-called responsible and respected national figures and magazines and journals. Consider the following:

> Today — as never before in Australia — the desire to steal, maim, murder and destroy is with us, and under our open democratic system we cannot hope to control it unless drastic deterrent measures are adopted to protect society. . . . The alternative is the law of the jungle.[1]

The page facing this comment carries a full-page advertisement of anti-shoplifting systems. The motive behind such comments therefore is quite obvious. Both the comment on crime and the advertisement can be regarded as logical consequences of the present nature of competitive capitalism rather than as serious statements of truth or need. The unfortunate tendency of the advertising industry to exaggerate the value of the products they are trying to sell is evident across much of their activity.

Paradoxically the types of crime which seem to affect a much larger segment of the community

than previously, that is, crimes by corporations, consumer fraud and so forth, receive virtually no attention. Yet they may very well be among the most frequent crimes of tommorrow.

The future

Forecasting the extent of crime in Australia was not one of the objectives of this study and we have not made any conscious effort to attempt that. The examination of data revealed many difficulties and these difficulties are intrinsic to the actions and social events under consideration. In forecasting crime we necessarily deal with patterns and alterations which rarely show standardised interrelations and regularities. These limit our capacity to predict. This is not to say that attempts to forecast should be abandoned, but only continuous efforts and refinements will produce approximations closer to the actual. Also, in the meantime, efforts to forecast can at least offer the directions of change if not the extent of change.

On the basis of patterns and interrelations observed in the study we offer, with utmost caution, a few comments on the expected crime rate in the near future.

Perhaps the most significant process of change occurring at the moment in the developed world is the conversion from high energy-consuming economies to less wasteful forms as a result of high energy prices. At the level of an individual's life-style this is likely to reverse many of the trends towards increasing car usage in favour of electronic means of communication which are rapidly becoming more sophisticated and cheaper to manufacture and to operate. This could have an immediate and continuing impact on the level of traffic offences which today constitute the majority of crimes reported. This would in turn affect the operational characteristics of our police forces, who have become used (if not resigned) to devoting much of their time to traffic offences. We cannot predict with certainty what use may be made of the time and police staff thus freed, since this would be largely a political decision. However, two possibilities emerge from our analyses: firstly, the unlikely possibility of a relative cutback in the size of the police force and a concomitant reduction in the rate of crimes reported against the person; or secondly, increased police attention to property crimes in an attempt to increase the clearance rate.

Another technological trend which may continue to affect crime is the micro-processing revolution, and its increasing inroads into our daily lives in the form of automated credit card systems, computerised stock control and so on. Many of these innovations lend themselves readily to white-collar crimes and offer, to those so inclined, opportunities and ideas for easy profit. Technological developments of the future which have already begun relate to extensive use of computers both at home and at work, and an information explosion. An enterprising individual would therefore be able to achieve his or her goal without appearing at the scene of the violation. The misuse of computers would facilitate transfers and acts such as fraud and forgery, at individual and corporate levels. Also, petty pilfering of pencils and notepads, the non-work-related use of photocopying equipment and the like which goes on unreported in almost all offices may well be accompanied by much more serious offences, facilitated by the availability of computers and the inability of office managers to detect the computerised misdeeds of their expert staff.

Offences against the person were found to be positively correlated with the size of the police force. Police resources including staff levels and expenditure were also highly correlated with economic growth. The level of economic growth forecast for the near future will not enable substantial increases in police resources beyond the inflation component. Furthermore, a greater part of the increase will probably be devoted to the improvements in communication systems rather than increasing the number of police personnel. The face-to-face presence of a police officer will not increase much beyond the present level, which may contain the growth in violent offences. Therefore, the level of personal crimes will not demonstrate a marked change.

A more significant change may be expected in the frequency of interpersonal violence of a serious nature such as homicide and serious assault. A decline in these offences may occur through major social structural changes in the area of family and friendship ties. Firstly, the tendency for divorce to become gradually easier than at present is likely to remain with us and cohabiting in the face of continued conflict over a long period will be minimised. At present a sub-

stantial proportion of all criminal homicides (excluding death resulting from dangerous driving) occurs in a domestic setting, and the substantial backlog of divorce cases heard after the January 1976 changes to divorce law in Australia can be seen as evidence of the frustration and misery caused by the previous system.

Furthermore, changes in the areas of sex, marriage and love will reduce continuous conflict. The tendency towards later, and more deliberate, parenthood and a greater percentage of childless couples will further reduce the possibilities and consequences of marital conflict.

Our reluctance to forecast future trends in crime, even after detailed analyses covering data for over three-quarters of a century, is due to the great complexity of the problem. The phenomenon of crime will never disappear even though through research we may identify conditions which generate certain types of crime and devise social policies to alleviate the effects or deter the perpetrators. In this work we have tried to describe and analyse the principal parts of the total problem and the forces at work which bring about change. The use of aggregate data can never be expected to lead to a complete understanding of the processes involved. However, we believe numerous areas of potential for future research at a more detailed level have been identified. To this end the inclusion of a substantial portion of the raw data in the appendices are our forthcoming *Source Book of Criminal Justice and Related Statistics* are an attempt to promote research of this kind in Australia.

Appendix A Data Availability and Sources

Prepared by
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This appendix describes the availability and sources of data used in the book. It also includes the estimation procedures used for missing or incomplete data. The criminal justice data have been placed in four categories: police, magistrates' courts, higher courts and prisons; and the socio-economic and demographic data are grouped in one separate category.

Since criminal justice data are produced at the state level it was necessary to examine the annual reports of each of the departments in each state. These data were not available at one place for the entire period. The first search began at the Australian National Library in Canberra and the data sets were completed by visiting the various departments, libraries and the Australian Bureau of Statistics offices in each of the states.

Police data

Police statistics from 1900 to 1976 were required for this study with our search showing that although expenditure and strength data were available in the majority of jurisdictions from the early 1900s, statistics on crimes reported and cleared by police were not available for the entire period.

Table A.1 sets out the types of data on crimes known and cleared by sources. Although the Australian Bureau of Statistics introduced the series on Selected Crime Index in 1964, we have used the statistics published in the annual reports of the various police departments. This choice was dictated by the classification system used and the consistency over time. Only four crimes, homicide, rape, robbery and break and enter, have been selected for analysis, mainly to maintain comparability with court data.

Crimes included under each of these four are as follows:

1. Homicide: murder; attempted murder; accessory to murder; wounding with intent to murder; shooting at with intent to murder; infanticide; manslaughter; manslaughter by driving; homicide; unlawfully killing; negligence causing death; negligent driving causing death.
2. Rape: rape; attempted rape; assault with intent to rape; aiding and abetting rape.
3. Robbery: robbery with violence; assault and robbery; robbery in company; robbery under arms; robbery and stealing from the person; stealing with violence.
4. Break and enter: burglary; break, enter and steal; housebreaking; break and enter.

Table A.2 sets out the availability of data on police expenditure and strength and the sources. Expenditure figures prior to the introduction of decimal currency in 1966 have been converted to dollars by simply multiplying by two.

In all but a few cases the police strength figures relate to actual strength and not authorised or established strength. The figures include all police personnel except native trackers, public service officers, cadets, matrons, a bandmaster, a choirmaster, rescue instructors, parking police, special constables and female searchers.

Table A.1 *Crimes known to police: availability of data and sources*

State	Availability: Total offences by offence	Availability: Serious/ selected/ major crime	Sources
New South Wales		1953 to 1976	Report of the Police Department of New South Wales
Victoria	1945 to 1958 1970 to 1975	1959 to 1969	Annual Report of the Chief Commissioner of Police Victoria Police Statistical Review of Crime
Queensland		1935–36 to 1970–71 1971–72 to 1976–77	Unpublished data provided by the Queensland Police Department Report of the Commissioner of Police
South Australia	1921–22 to 1976–77		Report of the Commissioner of Police
Western Australia		1963–64 to 1976–77	Annual Report of the Commissioner of Police
Tasmania	1973–74 to 1976–77	1900 to 1904 1905–06 to 1972–73	Tasmania Police Department Annual Report of the Commissioner of Police

Table A.2 *Police expenditure and strength: availability of data and sources*

State	Availability: Expenditure	Availability: Strength	Sources
New South Wales	1900–01 to 1976–77	1900 to 1976	New South Wales Statistical Register; Report of the Police Department of New South Wales; Year Book; Parliamentary Papers
Victoria	1900–01 to 1976–77	1900 to 1976	Victorian Year Book; Annual Report of the Chief Commissioner of Police; Parliamentary Papers
Queensland	1900–01 to 1976–77	1900 to 1914 1915–16 to 1976–77	Queensland Year Book; Statistics of the State of Queensland; Report of the Commissioner of Police; Parliamentary Papers
South Australia	1900–01 to 1976–77	1900 to 1905 1906–07 to 1976–77	Statistical Register of the State of South Australia; Parliamentary Papers
Western Australia	1900–01 to 1976–77	1900–01 to 1928–29 1930–31 1939–40 to 1948–49 1951–52 to 1976–77	Annual Report of the Commissioner of Police; Statistical Register
Tasmania	1900 to 1903 1904–05 to 1976–77	1900 to 1904 1905–06 to 1976–77	Tasmania Police Department Annual Report of the Commissioner of Police; Statistics of the State of Tasmania

Magistrates' court data

All minor criminal offences are heard and determined in the magistrates' courts with the more serious offences such as murder, rape and robbery, being committed from the magistrates' courts to the higher courts. Recently in some states the jurisdiction of the magistrates' courts has been widened so that many cases which might be remanded for trial by the higher courts are now finalised in the magistrates' courts. Magistrates' courts are also known as Courts of Summary Jurisdiction, Courts of Petty Sessions and Children's Courts.

Data were collected for total charges before the courts (including criminal charges, for example fraud, brought against companies) for major offence categories and for specific offences, and the outcome of these charges. These data relate to all charges by arrests as well as summonses. Three disposition types were tabulated: convictions, discharges and committals. Discharges in this context include acquittals, dismissals, withdrawals, remands and bails estreated. In all but two states disposition data were available for all offences. Western Australian committal figures were missing for the period 1914 to 1937 and to complete the data higher court charges were used. Discharges were missing in Western Australia (1914 to 1969) and Tasmania (1921 to 1963) and these were obtained by subtracting the known dispositions, that is, convictions and committals, from the total charges.

Table A.3 sets out the types of appearances before the courts, the period available by financial and/or calendar year, and the sources of the data. There are several different appearance types which are defined as follows:

1. Total offences/charges. All offences against all persons are counted.
2. Cases. Can include more than one offender and/or multiple offences (unless specified by most serious or principal offence).
3. Persons. All offences against all persons are counted unless specified by most serious or principal offence. One person can appear more than once each year and is counted each time.

As can be seen from Table A.3 the majority of the data are by calendar year with two states, South Australia and Queensland, changing over to financial year part-way through the time span. Our examination of the data showed that there was very little difference in the figures for twelve months ending on 31 December and twelve months ending on 30 June. On this basis the data were standardised so that, for example, data for 30 June 1977 are tabulated as data for 1976.

Table A.4 sets out the availability of data for the three data sets, total offences, major offence categories and specific offences.

The data were tabulated into four major offence categories which include the following offences:

1. Offences against the person: murder, manslaughter (including by driving), assault, sexual offences (natural and unnatural).
2. Offences against property: robbery, break and enter, larceny, unlawful use of motor vehicles, wilful or malicious damage, fraud, false pretences, forgery, uttering, other currency offences.
3. Offences against good order: drunkenness, disorderly conduct, public mischief, riotous or indecent behaviour, offensive behaviour.
4. Petty offences: traffic violations, gaming and betting, perjury, conspiracy, other state or local government laws.

Each jurisdiction had its data divided into major categories which were standardised to the four above categories. Table A.5 sets out the major categories of each state appearing throughout the entire period and how they correspond with the four major offence categories.

Apart from the variations in category names some offences appeared under different categories within and across the jurisdictions during the period. These were amended accordingly: robbery offences were transferred from offences against the person to offences against property; gaming and betting offences from offences against good order to petty offences; traffic offences from offences against good order to petty offences; police assault from offences against good order to offences against the person. In particular, in 1930, Queensland's figures for offences against the person increased by 200 per cent. On examining the tables we found that 'desertion of wives and children' appeared in offences against the person

Table A.3 *Magistrates' courts: availability of data and sources*

State	*Type of appearance*	*Availability*	*Sources*
New South Wales	Persons by most serious offence	1900 to 1909	New South Wales Statistical Register; Report of the Police Department of New South Wales (1957, 1960, 1963)
	Total offences	1910 to 1971	
Victoria	*	1900 to 1907	Year Book of Victoria
	Total offences	1908 to 1915	
	*	1916 to 1932	
	Total offences	1933 to 1954	
		1958 to 1961	
		1966 to 1975	
Queensland	Cases	1900 to 1923	Statistics of the State of Queensland
		1924–25 to 1976–77	
South Australia	Total cases	1900 to 1906	Statistical Register; Report of the Commissioner of Police
	Cases by most serious offence	1907 to 1930	
	Total cases	1931 to 1940	
		1941–42 to 1976–77	
Western Australia	Total charges	1900 to 1903	Statistical Register; ABS publication: Statistics of Western Australia; computer printouts supplied by ABS, Perth
	Cases by most serious offence	1904 to 1934	
	Total charges	1935 to 1976	
Tasmania	Persons	1900 to 1926	Statistics of the State of Tasmania; Commonwealth Bureau of Census & Statistics. Tasmania Branch — Social Statistics; ABS — Public Justice
		1929 to 1976	

* For persons arrested included in these figures, minor charges are excluded, and only that charge which throughout the hearing of the case has been most prominent is taken account of; but for summons cases, the unit is each separate charge or case.

Table A.4 *Magistrates' courts: availability of data by offence classifications*

State	*Total offences*	*Major offence categories*	*Specific offences*
New South Wales	1900 to 1976	1900 to 1971	1900 to 1971
Victoria	1900 to 1954	1908 to 1954	n.a.
	1958 to 1961	1958 to 1961	
	1966 to 1975	1966 to 1975	
Queensland	1900 to 1976	1900 to 1976	1900 to 1976
South Australia	1900 to 1976	1900 to 1976	1900 to 1976
Western Australia	1900 to 1976	1900 to 1976	1903 to 1976
Tasmania	1900 to 1926	1900 to 1926	1900 to 1926
	1929 to 1976	1929 to 1976	1929 to 1976

Table A.5 *Magistrates' courts: standardisation of major offence categories*

State	*Offences against the person*	*Offences against property*	*Offences against good order*	*Petty offences*
New South Wales	Offences against the person	Offences against property with violence Offences against property without violence Forgery and offences against currency Offences against person and property Offences against property	Offences against good order	Offences not included in preceding Offences against traffic laws Breaches of acts not elsewhere included
Victoria	Offences against the person	Offences against property Forgery and offences against currency Fraud, forgery and false pretences	Offences against good order	Breaches of Acts Other offences Driving offences Miscellaneous
Queensland	Offences against the person	Offences against property	Drunkenness Offences against good order	Other offences
South Australia	Offences against the person Offences against morality	Offences against property	Offences against good order	Miscellaneous Offences not included in preceding classes Other offences
Western Australia	Offences against the person	Offences against property Offences against currency Offences against person and property Forgery, uttering and offences against currency	Drunkenness Offences against good order	Other offences Offences relating to carrying out of laws Offences against public welfare Offences relating to revenue
Tasmania	Offences against the person	Offences against person and property Offences against property Forgery and offences against currency	Offences against good order	Offences relating to carrying out laws Offences relating to revenue Offences against public welfare Offences not included in preceding classes Offences against traffic regulations All other offences

whereas it normally appeared under petty offences. To maintain consistency in the data these offences were transferred to the petty offence category. Also, offences against property increased dramatically in that year due to the inclusion in fraud and false pretences of 'offences against the Railway Acts — travelling in trains without previously paying fare' which usually appeared under petty offences. Since these offences were not recorded separately for this year an estimate had to be obtained by interpolation and the result was transferred to petty offences.

Eight specific offences were selected because of their seriousness and volume. Table A.6 sets out the offences included under the specific offence headings.

Table A.6 *Magistrates' courts: composition of specific offences*

Specific offence	*Offences included*
Homicide	Murder; attempted murder; accessory to murder; wounding with intent to murder; shooting at with intent to murder; infanticide; manslaughter; manslaughter by driving; homicide; unlawfully killing; negligence causing death; negligent driving causing death.
Assault	Common assault; aggravated assault; assaulting police; inflicting grievous bodily harm; shooting with intent; stabbing; wounding; assault occasioning bodily harm; unlawfully wounding; major assault; minor assault; felonious assault; assault and battery; assaulting females; assaulting children; administering poison; assault in company.
Rape	Rape; attempted rape, assault with intent to rape; aiding and abetting rape.
Robbery	Robbery with violence; assault and robbery; robbery in company; robbery under arms; robbery and stealing from the person; stealing with violence; highway robbery.
Burglary	Burglary; break, enter and steal; housebreaking; break and enter.
Larceny	Larceny; stealing in company; attempt to steal; stealing from the person; stealing from dwelling/shop; stealing from a vessel/wharf; larceny as bailee/agent/co-partner/servant/public servant; larceny of motor vehicles, boats etc.; simple larceny; stealing; shoplifting; unlawful use motor vehicles; larceny of postal articles. (Excludes larceny of growing crops/stock.)
Drunkenness	Drunkenness; habitual drunkenness; drunk and disorderly.
Traffic	Offences against traffic laws including: drunken driving; unlicensed driving; driving without due care; exceeding speed limit; unregistered motor vehicle; driving under the influence of liquor or drug; driving with prescribed concentration of alcohol in blood. (Excludes negligent driving causing death or injury.)

Higher court data

Cases appearing in the higher courts originate mainly at the magistrates' courts, and a few can also be committed directly from coroners' courts and criminal summonses issued by Attorneys-General. A comparison between magistrates' court data and higher court data is not possible for at least two reasons: (1) between the appearances in the two levels of courts the charge can be changed, for example, from murder to manslaughter, from attempted rape to indecent assault; and (2) the recording methods can also change, for example from *offences* committed to *distinct persons* tried. Distinct persons are those who if they have been dealt with more than once during the year are counted only once, by their most serious offence.

Although the higher courts are known in recent years as Supreme Courts, District Courts and/or County Courts, during the entire period under study they have also been known as Judges' Courts, Courts of General Sessions, Courts of Quarter Sessions, and Circuit Courts. Offences of juveniles are included in these higher courts but in the majority of states their cases are finalised in the magistrates' courts unless the charge is extremely serious, such as murder.

Table A.7 sets out the types of appearances, the period for which the data were available and the sources of the data.

Table A.7 *Higher courts: availability of data and sources*

State	Type of appearance	Availability	Sources
New South Wales	Persons charged by most serious offence	1900 to 1906	New South Wales Statistical Register; ABS handwritten and typed data; Statistics of Higher Criminal Courts
	Offences of distinct persons charged	1907 to 1976	
Victoria	Persons tried	1900 to 1976	Statistical Register of the State of Victoria; Year Book of Victoria; Registers of the Victorian Law Department
Queensland	Persons tried	1901 to 1923 1924–25 to 1976–77	Statistics of the State of Queensland
South Australia	Total cases	1900 to 1906	Statistical Register
	Distinct persons	1907 to 1976	
Western Australia	Cases tried	1900 to 1906	Statistical Register; ABS publication: Statistics of Western Australia; computer printouts supplied by ABS, Perth
	Distinct persons	1907 to 1968	
	Charges according to offence	1969 to 1976	
Tasmania	Persons tried	1900 to 1909	Statistics of the State of Tasmania; Commonwealth Bureau of Census & Statistics, Tasmania Branch; ABS — Public Justice; Original Registers at Solicitor General's Office
	Distinct persons	1910 to 1926	
	Persons tried	1927 to 1929	
	Distinct persons	1930 to 1976	

The data were tabulated into three major offence categories: offences against the person, offences against property and petty offences (including offences against good order). The methods of standardising and grouping of higher court data were those used for the magistrates' court data.

Prison data

Three types of data for the prison services were selected from 1900 to 1976; these were accommodation, daily average, and expenditure. Accommodation data for the entire period were not available in all the six states and were therefore not considered. Data on the daily average number of prisoners and expenditure were consistently available and information on these and their sources are set out in Table A.8. Data for expenditure were complete for the seventy-seven years and were standardised to dollars by multiplying the pre-1966 figures by two.

Demographic, social and economic variables

All the demographic data were collected at Canberra with the help of the Australian Bureau of Statistics. The economic data from 1900–01 to 1973–74 were made available by the Reserve Bank of Australia. The techniques used by the Reserve Bank in calculating specific indices were maintained and no adjustments have been made. For the years 1974–75 to 1976–77, these data were calculated from the OECD publication after ascertaining from the Reserve Bank the accuracy of the data. Table A.9 sets out the availability of data and sources for these variables.

Estimation procedures for missing data

The description of the availability of criminal justice data in the previous sections reveals that for a few years, not necessarily the same years in every state and in every data set, desired information

Table A.8 *Prisons: availability of data and sources*

State	Availability: Daily average	Availability: Expenditure	Sources
New South Wales	1900 to 1924 1925–26 to 1940–41 1942–43 1945–46 1947–48 1950–51 to 1976–77	1900 to 1924 1925–26 to 1976–77	New South Wales Statistical Register; Annual Report of the Comptroller of Prisons (Parliamentary Papers); Annual Report of the Department of Corrective Services; New South Wales Year Book
Victoria	1900 to 1959 1960–61 to 1976–77	1900–01 to 1976–77	Victorian Year Book; Annual Report of the Social Welfare Department
Queensland	1900 to 1947 1948–49 to 1976–77	1900–01 to 1922–23 1924 to 1947 1948–49 to 1976–77	Statistics of the State of Queensland; Annual Report of the Prisons Department; Parliamentary Papers
South Australia	1907 to 1954 1955–56 to 1976–77	1900 to 1954 1955–56 to 1976–77	Statistical Register of South Australia; Annual Report of the Prisons Department
Western Australia	1900 to 1920 1921–22 to 1976–77	1900 to 1920 1921–22 to 1976–77	Statistical Register of Western Australia; Year Book; Parliamentary Papers
Tasmania	1900 to 1903 1904–05 to 1941–42 1947–48 to 1976–77	1900 to 1903 1904–05 to 1976–77	Statistical Register of Tasmania; Annual Report of the Controller of Prisons; Parliamentary Papers

was missing. Rather than leaving the data as a discontinuous series, it was decided to estimate the data from years before and after. A similar decision was made for the demographic and social data. This section explains the methods used for such estimations.

Crime data. Two methods were used to produce the estimates of the missing data for each section of the criminal justice data. These methods were Lagrange interpolating polynomials and a mixture of regression, curve fitting and moving average ratios.

Urbanisation data. The major problem to be overcome in the development of an Australian set of data on total urban population, 1900 to 1976, was that there were two inconsistent sets of data available. The first set was based on metropolitan population and was available from 1911 through to 1976. However, this data set suffered a number of very serious discontinuities caused by changes in the definition of the boundaries of the metropolitan area. Also because the metropolitan areas went through a very rapid expansion, especially after the Second World War, these discontinuities became more serious. In this respect the most desirable measure is urban density which was not available. The second Australian data set was that of total urban population for census years which was available for every census from 1921 to the present day.

A number of estimation procedures were considered including the use of least-squares curve-fitting to the known census points of total urban

Table A.9 *Demographic, social and economic data: availability and sources*

Variable	*Jurisdiction*	*Availability*	*Sources*
Population			
Total	Australia* States	1900 to 1976	*Demography*; unpublished statistics from Australian Bureau of Statistics (census years and estimates for intercensal years)
10+	Australia	1921 to 1976	As above
15–24	Australia	1921 to 1976	
15–34	Australia	1921 to 1976	
15–44	Australia	1921 to 1976	
15–54	Australia	1921 to 1976	
Life expectancy	Australia	Census years	*Demography*
Males per 100 females	Australia	1900 to 1976	*Demography*; unpublished statistics from Australian Bureau of Statistics (census years and estimates for intercensal years)
Marriage	Australia States	1900 to 1976	*Demography*; Australian Bureau of Statistics publications
Divorce	Australia States	1900 to 1976	*Demography*; Australian Bureau of Statistics publications
Urbanisation			
Total urban	Australia	Census years	*Demography*
Metropolitan Urban	Australia	1911 to 1976	*Demography*; unpublished statistics from Australian Bureau of Statistics
Number of motor vehicles registered	Australia States	1921 to 1976	'Transport and Communications', *Year Book of Australia*
Unemployment and gross domestic product	Australia	1900 to 1976	M.W. Butlin, A Preliminary Annual Database 1900/01 to 1973/74, Research Discussion Paper no. 7701, Reserve Bank of Australia; OECD Economic and Development Review Committee, *Economic Surveys — Australia*, OECD, Paris.

* Population for the Northern Territory from 1911 and the Australian Capital Territory from 1927 has been subtracted.

population and a curve-matching approach based on the metropolitan data. Both procedures proved to be unsatisfactory. The method used, which was later confirmed through discussions with Professor Max Neutze, Director of the Urban Studies Centre, Australian National University, was to assume that Australia's total urban population grew monotonically during the period 1900 to 1976 and that by using a simple averaging procedure for the estimation of the intercensal points based on their immediate censal neighbours, would be more than sufficient. The census points 1901 and 1911 were estimated using a simple linear extrapolation based on the known points 1921, 1933 and 1947.

Age distribution. The essential estimating problem was to construct from the known data (census years 1901, 1911 and 1921) an age distribution table (ages 0 to 54) for the intercensal points 1900

to 1920. Two estimating procedures were reviewed. If it could be shown that for each age group there was a fairly linear relationship over time then a simple linear estimating technique could be used with the comforting knowledge that there were no non-linear interchanges between these groups. This proved not to be the case and in fact the groups were sufficiently dissimilar to negate the usage of this method. The second approach, which proved more successful, was that of age cohort movement. By taking the census points 1901 to 1933 it could be shown that for each age group concerned there was a linear movement in each group's respective cohort across the four censal points and consequently we felt very confident in then using a Lagrange interpolating polynomial to produce the intercensal estimates for each age group along its cohort. This procedure was further supplemented in the age ranges 0 to 9 for the years 1902 to 1910 and 1912 to 1920, which required backward interpolation from the known points 1911 and 1921.

Population of persons aged 10 years and over in all six states. Two approaches were reviewed. A simple method was to assume that the distribution of persons aged 10 years and over was uniform across each of the states and across time. If this was so then it was just a simple arithmetical process to produce estimates of the state population aged 10 and over from the known Australian data based on the proportion of the state's total population. We tested this assumption using censal year data for each of the states and found that they were decidedly not uniform. Consequently, the estimation procedure used for each state was based on its population aged 10 years and over (censal data) using the Lagrange interpolating polynomial.

Life expectancy. After extensive inquiries at the Australian Bureau of Statistics, the Department of Demography at the Australian National University, and the Australian Actuary's Office, it was found that the only data available were life expectancy figures for censal points. Since this series has monotonically increased it was decided again to use the Lagrange interpolating polynomial to estimate the intercensal points. All life expectancy data were based on age 1 year.

Appendix B Police Data

Table B.1 *Annual police data, Australia 1900 to 1976*

Year	Police strength		
	Number	*Rate per 100 000 population*	*Per capita expenditure $**
1900	5588	148.4	4.31
1	5638	148.8	4.53
2	5721	148.8	4.39
3	5711	146.8	4.60
4	5740	145.6	4.53
5	5853	146.4	4.39
6	5876	144.8	4.41
7	5970	144.8	4.22
8	6112	145.8	4.07
9	6183	144.7	3.91
1910	6197	141.9	4.02
11	6320	140.9	3.78
12	6550	140.8	4.08
13	6722	139.6	3.72
14	6738	136.2	3.32
15	6582	132.1	3.09
16	6460	130.8	2.96
17	6476	131.2	2.96
18	6303	125.5	2.79
19	6653	128.2	3.06
1920	6795	126.9	3.42
21	6921	127.0	3.72
22	6984	125.5	3.46
23	6561	115.3	3.44
24	7232	124.5	3.50
25	7380	124.3	3.63
26	7511	124.1	3.71
27	7814	126.6	3.83
28	8396	133.5	4.00

Table B.1 *Annual police data, Australia 1900 to 1976 (con't)*

Year	Police strength		
	Number	*Rate per 100 000 population*	*Per capita expenditure $**
29	8607	134.9	4.57
1930	8649	134.1	5.02
31	8624	132.4	4.83
32	8581	130.7	4.86
33	8567	129.5	4.73
34	8631	129.5	4.76
35	8774	130.7	4.82
36	8951	132.4	4.79
37	9118	133.7	5.00
38	9118	132.5	4.86
39	9289	133.7	4.84
1940	9413	134.1	4.80
41	9420	133.0	4.69
42	9366	130.9	4.78
43	9200	127.6	4.76
44	9036	124.0	4.55
45	9143	124.1	4.38
46	9524	128.0	4.40
47	10024	132.7	4.59
48	10488	136.6	4.66
49	10949	139.1	5.05
1950	11382	139.8	4.56
51	11972	142.8	5.36
52	12342	143.6	5.09
53	12421	141.6	5.22
54	12358	138.2	5.36
55	12697	138.8	5.76
56	13163	140.5	5.81
57	13837	144.4	6.09

Table B.1 *Annual police data, Australia 1900 to 1976 (con't)*

	Police strength		
Year	*Number*	*Rate per 100 000 population*	*Per capita expenditure $**
1958	14184	145.0	6.39
59	14484	145.0	6.47
1960	14905	146.2	6.70
61	15281	146.3	6.86
62	15622	147.0	7.05
63	15996	147.7	7.17
64	16382	148.5	7.41
65	16944	150.7	7.47
66	17533	153.2	7.94
67	18246	156.8	8.22
68	18786	158.8	8.42
69	19075	158.1	8.99
1970	19372	157.5	9.52
71	20367	160.4	10.36
72	21254	164.5	10.85
73	22160	169.0	10.83
74	23115	173.6	12.58
75	24032	178.1	13.16
76	24976	183.5	13.75

* At constant 1966–67 prices.

Appendix C Offences Charged Before Magistrates' Courts

Table C.1 *All offences charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976*

Year	Total charges	Convictions	Discharges etc.	Committals
1900	5728.105	4495.944	1126.960	105.193
1	5522.950	4340.228	1078.481	104.241
2	5390.524	4252.464	1033.896	104.164
3	5304.030	4203.368	994.264	106.398
4	5121.595	4107.795	910.775	103.025
5	5147.293	4143.047	904.440	99.806
6	5305.546	4288.449	928.446	88.651
7	5367.402	4361.075	923.440	82.880
8	5330.604	4336.458	911.590	82.549
9	5017.650	4055.602	879.375	82.673
1910	5253.442	4264.607	910.056	78.780
11	5009.236	4039.583	889.609	80.044
12	5623.544	4566.043	976.165	81.336
13	5670.626	4580.839	1009.274	80.513
14	5649.744	4540.042	1029.104	80.598
15	5458.037	4322.669	1058.216	77.152
16	5133.558	4039.531	1020.950	73.077
17	4507.286	3560.994	882.178	64.115
18	4742.545	3743.598	941.886	57.061
19	4437.820	3486.036	881.188	70.596
1920	4528.491	3532.113	908.315	88.063
21	4947.744	3943.009	909.585	95.150
22	4958.287	3975.172	894.547	88.568
23	5167.145	4168.700	908.711	89.733
24	4916.970	3967.261	873.290	76.419
25	5179.732	4174.593	935.743	69.396
26	5516.568	4542.267	903.452	70.849
27	5456.319	4536.721	848.497	71.101
28	5367.294	4492.007	802.594	72.694
29	5141.716	4244.192	813.898	83.627
1930	4868.602	3956.083	821.406	91.113
31	4582.390	3736.856	752.259	93.275
32	4446.450	3587.509	778.778	80.171

Table C.1 *All offences charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	*Total charges*	*Convictions*	*Discharges etc.*	*Committals*
1933	4593.217	3697.937	812.687	82.593
34	4585.361	3730.180	781.287	73.894
35	4993.919	4128.251	793.837	71.830
36	5507.265	4585.744	854.909	66.612
37	5018.806	4213.853	734.008	70.944
38	4932.737	4173.786	675.192	83.759
39	5414.975	4652.056	679.212	83.707
1940	5342.511	4637.461	629.208	75.841
41	4804.310	4180.670	558.824	64.816
42	5139.039	4507.529	559.678	71.832
43	4699.193	4005.691	606.456	87.045
44	4388.771	3750.239	554.793	83.740
45	4572.083	3877.775	600.990	93.319
46	5419.754	4635.117	684.649	99.988
47	5643.764	4855.161	690.383	98.220
48	5966.221	5160.043	709.793	96.306
49	6192.938	5334.093	753.861	104.984
1950	6571.221	5679.733	792.615	98.873
51	7152.408	6175.394	877.430	99.583
52	7815.704	6881.538	818.417	115.748
53	7932.446	7029.779	786.438	116.230
54	7923.071	6981.990	828.931	112.142
55	8243.663	7318.070	797.909	127.684
56	8771.463	7795.819	826.073	149.571
57	9546.724	8498.402	874.841	173.402
58	9926.354	8838.982	905.092	182.279
59	10294.695	9163.733	944.182	186.777
1960	10099.643	9032.896	862.515	204.232
61	9612.099	8504.187	916.059	191.851
62	7557.642	8414.210	960.700	182.732
63	9771.915	8551.954	1021.765	198.196
64	10200.685	8933.892	1079.315	187.478
65	10491.705	9168.669	1135.391	187.646
66	10089.675	8763.007	1137.130	189.538
67	10368.040	8997.311	1189.310	181.419
68	10430.502	8931.997	1303.822	194.683
69	10743.092	9078.058	1464.657	200.378
1970	10756.353	9084.005	1461.230	211.119
71	11123.315	9368.085	1524.826	230.403
72	11509.938	9611.354	1666.984	231.600
73	11804.883	9823.685	1752.256	228.942
74	12069.547	9985.269	1853.759	230.520
75	11867.447	9887.369	1759.706	220.372
76	11474.230	9590.779	1679.776	203.675

Table C.2 *Total offences against the person charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976*

Year	Total charges	Convictions	Discharges etc.	Committals
1900	328.534	165.081	136.517	26.935
1	309.997	149.320	134.167	26.509
2	289.664	138.085	125.437	26.142
3	262.265	121.378	116.019	24.868
4	248.748	118.951	107.154	22.643
5	249.129	118.814	105.766	24.549
6	251.786	121.488	106.971	23.328
7	232.868	105.832	102.990	24.046
8	220.242	100.920	96.834	22.488
9	207.226	95.970	91.387	19.869
1910	217.541	103.726	92.841	20.975
11	211.427	100.255	89.936	21.237
12	212.021	101.526	90.800	19.676
13	208.376	101.836	85.110	21.429
14	208.412	99.145	87.940	21.328
15	188.276	90.216	80.624	17.436
16	173.832	86.182	70.587	17.063
17	165.319	76.002	71.300	18.017
18	160.769	76.359	71.190	13.220
19	177.705	85.321	75.705	16.679
1920	181.090	85.437	79.124	16.528
21	169.883	85.012	67.276	17.595
22	159.147	80.366	61.481	17.300
23	161.283	78.380	65.705	17.179
24	152.817	72.861	64.327	15.629
25	149.784	70.013	62.635	17.136
26	155.086	70.891	66.380	17.816
27	149.170	68.277	61.594	19.299
28	146.501	67.446	59.793	19.262
29	144.729	67.730	57.856	19.142
1930	141.114	67.819	55.131	18.165
31	127.190	59.968	50.208	17.014
32	133.163	64.110	53.085	15.967
33	120.339	57.282	45.992	17.065
34	118.500	54.988	47.812	15.700
35	117.740	56.158	46.377	15.207
36	113.352	51.677	46.509	15.166
37	107.039	49.975	40.833	16.231
38	105.516	49.210	39.084	17.223
39	108.617	51.035	41.836	15.746
1940	103.698	52.280	36.432	14.986
41	107.620	51.351	38.288	17.981
42	122.751	62.257	40.812	19.683
43	132.892	63.163	49.799	19.930
44	144.257	69.783	53.522	20.951
45	153.370	70.791	58.922	23.657
46	171.166	81.319	65.416	24.431
47	170.973	77.323	70.023	23.626
48	169.419	77.768	67.899	23.753
49	163.660	73.094	65.392	25.174
1950	171.443	77.507	68.867	25.069
51	175.626	78.216	72.499	24.911

Table C.2 *Total offences against the person charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	*Total charges*	*Convictions*	*Discharges etc.*	*Committals*
1952	180.985	80.966	74.697	25.322
53	185.057	76.883	78.334	29.840
54	187.294	79.686	77.737	29.872
55	184.483	80.395	74.009	30.079
56	185.694	82.702	70.625	32.367
57	188.488	86.464	69.903	32.121
58	190.683	89.393	67.338	33.953
59	183.470	84.971	64.148	34.352
1960	191.205	88.657	62.912	39.636
61	189.155	88.518	65.194	35.443
62	206.471	100.274	69.218	36.979
63	214.840	106.597	68.511	39.732
64	214.647	104.176	71.462	39.009
65	215.311	107.656	70.476	37.180
66	216.372	109.069	71.037	36.266
67	228.827	116.861	74.455	37.512
68	240.482	119.136	82.315	39.031
69	259.250	132.640	87.258	39.344
1970	260.043	130.476	87.717	41.850
71	279.232	138.988	96.781	43.463
72	295.240	142.432	105.936	46.872
73	318.421	158.619	110.194	49.608
74	315.822	155.547	109.888	50.387
75	310.837	154.012	110.063	46.762
76	301.305	149.993	106.503	44.808

Table C.3 *Total offences against property charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976*

Year	*Total charges*	*Convictions*	*Discharges etc.*	*Committals*
1900	535.911	301.811	164.090	70.011
1	507.364	276.653	159.710	71.001
2	519.670	291.321	156.517	71.833
3	524.464	299.518	150.907	74.039
4	478.293	271.194	134.581	72.517
5	471.904	273.194	130.991	67.719
6	456.567	274.385	125.323	56.861
7	426.983	259.850	114.795	52.338
8	429.425	261.870	112.717	54.838
9	415.839	253.658	106.010	56.171
1910	416.373	243.370	119.964	53.040
11	376.504	223.998	100.625	51.881
12	402.234	242.965	102.815	56.455
13	404.175	247.800	102.312	54.063
14	400.056	240.018	105.404	54.634
15	419.527	255.193	111.279	53.055
16	405.015	241.064	112.577	51.374
17	364.928	226.792	97.453	40.683
18	410.337	258.061	112.642	39.634
19	452.427	264.730	140.541	47.156

Table C.3 *Total offences against property charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	Total charges	Convictions	Discharges etc.	Committals
1920	479.299	292.765	119.216	67.318
21	478.809	289.661	116.509	72.639
22	442.656	258.007	118.114	66.535
23	446.562	262.841	115.912	67.810
24	417.524	235.828	124.943	56.752
25	437.298	257.302	131.885	48.114
26	465.384	300.756	115.837	48.792
27	487.224	324.321	115.305	47.597
28	509.214	330.867	129.247	49.099
29	579.520	372.360	146.879	60.281
1930	617.814	367.518	181.686	68.610
31	658.414	399.610	187.575	71.210
32	642.621	357.165	226.492	58.963
33	687.976	339.671	286.909	61.396
34	677.450	353.278	269.639	54.533
35	674.641	363.987	257.338	53.316
36	721.614	387.507	286.426	47.681
37	648.851	378.533	218.307	52.011
38	599.274	377.909	157.720	63.645
39	617.851	390.119	163.071	64.661
1940	600.252	388.255	156.486	55.511
41	505.131	349.573	111.133	44.426
42	573.359	430.360	93.161	49.839
43	617.240	450.906	103.171	63.163
44	577.012	421.530	95.705	59.777
45	551.490	401.206	83.250	67.042
46	528.360	375.863	79.545	72.952
47	501.501	360.243	70.217	71.041
48	471.900	334.039	68.187	69.674
49	461.578	319.977	65.423	76.178
1950	472.802	342.901	58.367	71.534
51	520.044	386.467	62.359	71.218
52	588.116	430.893	70.732	86.491
53	559.235	419.038	57.971	82.225
54	557.842	420.306	58.910	78.626
55	623.642	472.279	59.301	92.062
56	689.322	514.097	64.911	110.314
57	745.803	543.624	69.403	132.776
58	818.432	609.457	71.437	137.538
59	867.692	646.197	75.947	145.547
1960	934.095	694.153	84.841	155.100
61	918.936	678.752	91.563	148.621
62	970.004	736.473	96.113	137.418
63	1016.897	759.624	107.292	149.980
64	999.399	761.560	98.779	139.060
65	1044.561	806.804	95.214	142.543
66	1061.688	820.336	100.357	140.995
67	1066.267	836.195	99.237	130.835
68	1104.497	857.394	102.588	144.536
69	1198.702	925.929	121.988	150.785
1970	1253.855	964.869	129.709	159.277
71	1336.123	1034.025	127.146	174.952

Table C.3 *Total offences against property charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	*Total charges*	*Convictions*	*Discharges etc.*	*Committals*
1972	1389.181	1064.915	157.957	166.308
73	1361.699	1051.354	144.045	166.300
74	1294.572	966.144	161.712	166.716
75	1279.451	946.974	174.907	157.567
76	1276.396	934.246	196.791	145.359

Table C.4 *Total offences against good order charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976*

Year	*Total charges*	*Convictions*	*Discharges etc.*	*Committals*
1900	2657.790	2231.637	425.126	1.026
1	2649.382	2223.166	424.800	1.415
2	2550.058	2145.306	403.771	0.981
3	2457.730	2060.570	396.228	0.932
4	2572.775	2180.205	391.718	0.852
5	2558.843	2177.531	380.635	0.677
6	2650.919	2265.791	384.494	0.634
7	2917.585	2491.289	425.359	0.937
8	2913.992	2492.586	421.068	0.338
9	2839.865	2433.855	404.904	1.025
1910	2966.595	2545.073	420.845	0.677
11	3031.305	2577.179	451.361	2.765
12	3155.384	2696.860	457.976	0.549
13	3134.863	2656.148	478.081	0.634
14	3071.652	2589.993	481.015	0.644
15	2629.775	2165.269	463.195	1.312
16	2315.859	1937.816	377.860	0.183
17	1963.859	1603.105	359.909	0.845
18	1806.037	1447.697	357.925	0.416
19	1656.745	1306.994	349.074	0.676
1920	1814.413	1445.006	368.227	1.181
21	2204.499	1825.850	377.190	1.458
22	2244.180	1861.764	380.968	1.447
23	2334.280	1927.960	405.223	1.097
24	2091.569	1716.916	373.824	0.829
25	2060.709	1655.388	404.513	0.808
26	2101.152	1705.265	395.013	0.873
27	2082.340	1717.878	363.549	0.914
28	2036.241	1708.433	326.675	1.133
29	1903.859	1593.109	310.163	0.587
1930	1605.326	1337.078	267.149	1.099
31	1345.274	1137.798	206.109	1.367
32	1336.829	1153.782	181.643	1.404
33	1408.256	1216.651	190.959	0.646
34	1379.433	1185.163	193.396	0.874
35	1500.672	1311.264	188.869	0.539
36	1570.912	1380.879	189.465	0.568
37	1464.367	1261.729	201.883	0.755
38	1478.852	1252.380	226.056	0.415
39	1538.797	1353.620	184.032	1.145

Table C.4 *Total offences against good order charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	Total charges	Convictions	Discharges etc.	Committals
1940	1527.159	1361.337	165.366	0.457
41	1565.876	1384.675	180.816	0.385
42	1651.621	1460.928	190.211	0.482
43	1600.375	1401.541	198.337	0.496
44	1534.342	1355.753	178.095	0.494
45	1764.676	1517.839	246.525	0.311
46	2274.645	1968.739	305.124	0.781
47	2375.660	2064.964	309.938	0.759
48	2693.857	2334.083	359.279	0.496
49	2658.428	2251.815	405.908	0.704
1950	2739.858	2303.707	435.557	0.594
51	2800.070	2336.146	463.030	0.893
52	2576.059	2239.354	335.612	1.093
53	2338.980	2043.423	294.911	0.646
54	2382.236	2051.220	329.364	1.652
55	2521.922	2187.127	332.583	2.212
56	2510.343	2174.727	332.942	2.675
57	2566.467	2196.403	367.866	2.198
58	2447.394	2106.476	338.791	2.127
59	2445.615	2092.115	351.607	1.893
1960	2373.385	2111.440	259.476	2.470
61	1979.596	1738.089	238.486	3.021
62	2030.174	1784.324	243.580	2.270
63	2004.678	1736.499	265.386	2.793
64	1935.177	1677.407	255.509	2.261
65	1916.689	1672.400	241.830	2.459
66	1762.857	1511.626	248.211	3.020
67	1713.465	1479.637	230.437	3.392
68	1615.662	1380.937	231.893	2.832
69	1686.993	1427.661	255.882	3.450
1970	1649.067	1396.532	249.689	2.846
71	1695.922	1459.890	231.572	4.460
72	1739.136	1470.858	262.890	5.388
73	1755.796	1424.097	326.553	5.146
74	1817.461	1402.100	410.109	5.252
75	1754.807	1358.067	389.626	7.113
76	1697.291	1314.957	376.097	6.256

Table C.5 *All petty offences charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976*

Year	Total charges	Convictions	Discharges etc.	Committals
1900	2205.870	1797.415	401.235	7.221
1	2056.208	1691.088	359.804	5.316
2	2031.132	1677.752	348.172	5.208
3	2059.571	1721.902	331.111	6.558
4	1821.780	1537.445	277.322	7.013
5	1867.417	1573.508	287.047	6.862
6	1946.272	1626.785	311.658	7.829
7	1789.967	1504.104	280.304	5.559

Table C.5 *All petty offences charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	*Total charges*	*Convictions*	*Discharges etc.*	*Committals*
1908	1766.945	1481.082	280.979	4.885
9	1554.721	1272.119	276.995	5.608
1910	1652.933	1372.438	276.406	4.089
11	1389.999	1138.150	247.687	4.162
12	1853.904	1524.694	324.575	4.636
13	1923.212	1575.055	343.770	4.386
14	1969.625	1610.886	354.746	3.993
15	2220.459	1811.990	403.119	5.349
16	2238.851	1774.468	459.927	4.456
17	2013.180	1655.094	353.516	4.570
18	2365.403	1961.481	400.130	3.792
19	2150.943	1828.990	315.867	6.085
1920	2053.689	1708.906	341.747	3.036
21	2094.553	1742.485	348.610	3.458
22	2112.305	1775.034	333.985	3.285
23	2225.019	1899.520	321.872	3.628
24	2255.060	1941.655	310.196	3.209
25	2531.940	2191.890	336.712	3.338
26	2794.946	2465.356	326.222	3.368
27	2737.585	2426.245	308.049	3.291
28	2675.338	2385.259	286.879	3.200
29	2513.608	2210.992	298.999	3.617
1930	2504.347	2183.668	317.440	3.240
31	2451.512	2139.481	308.347	3.684
32	2333.845	2012.451	317.557	3.837
33	2376.647	2084.333	288.828	3.487
34	2409.978	2136.751	270.441	2.787
35	2700.865	2396.844	301.253	2.768
36	3101.387	2765.682	332.509	3.197
37	2798.549	2523.616	272.985	1.940
38	2749.095	2494.288	252.332	2.475
39	3149.709	2857.283	290.273	2.154
1940	3111.402	2835.589	270.924	4.888
41	2625.683	2395.071	228.588	2.024
42	2791.308	2553.985	235.495	1.829
43	2348.687	2090.081	255.149	3.457
44	2133.161	1903.173	227.470	2.518
45	2102.539	1887.938	212.292	2.308
46	2445.583	2209.196	234.564	1.823
47	2595.630	2352.631	240.205	2.794
48	2631.045	2414.153	214.429	2.463
49	2909.272	2689.206	217.138	2.928
1950	3187.119	2955.617	229.825	1.676
51	3656.669	3374.565	279.542	2.561
52	4470.544	4130.325	337.376	2.843
53	4849.174	4490.434	355.223	3.518
54	4795.699	4430.787	362.921	1.991
55	4913.617	4578.269	332.016	3.331
56	5386.104	5024.293	357.596	4.215
57	6045.966	5671.991	367.669	6.306
58	6469.844	6033.656	427.526	8.662
59	6797.918	6340.453	452.479	4.985

Table C.5 *All petty offences charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	Total charges	Convictions	Discharges etc.	Committals
1960	6600.958	6138.646	455.286	7.026
61	6524.412	5998.830	520.816	4.766
62	6350.994	5793.140	551.790	6.065
63	6535.499	5949.233	580.576	5.691
64	7051.462	6390.749	653.566	7.147
65	7315.144	6581.809	727.871	5.464
66	7048.758	6321.976	717.525	9.257
67	7359.481	6564.618	785.181	9.681
68	7469.861	6574.531	887.046	8.284
69	7598.148	6591.821	999.529	6.798
1970	7593.388	6592.129	994.114	7.145
71	7812.037	6735.182	1069.327	7.528
72	8086.381	6933.148	1140.202	13.032
73	8368.967	7189.616	1171.463	7.888
74	8641.693	7461.478	1172.051	8.164
75	8522.352	7428.315	1085.109	8.928
76	8199.239	7191.585	1000.405	7.251

Appendix D Changes in Rate of Offences

Table D.1 *Changes in rate for offences charged before magistrates' courts, New South Wales 1900 to 1976*

Year	Major offence categories				
	Person	*Property*	*Good order*	*Petty*	*Total*
1900	395.2	581.6	3540.3	1074.8	5591.9
1905	- 100.6	- 39.5	- 168.7	+ 199.7	- 109.2
1910	- 5.7	- 9.5	+ 266.3	+ 188.1	+ 439.3
1915	- 3.8	+ 41.9	- 501.8	+ 687.1	+ 223.4
1920	- 15.9	+ 113.0	- 1086.8	- 141.0	- 1130.6
1925	- 40.0	- 41.3	+ 701.1	+ 98.6	+ 718.4
1930	- 21.3	+ 331.8	- 545.9	+ 752.9	+ 517.6
1935	- 32.7	+ 128.8	- 177.9	+ 74.0	- 7.8
1940	- 24.9	- 217.7	+ 167.1	+ 419.3	+ 343.7
1945	+ 78.7	- 92.4	+ 485.6	- 1170.4	- 698.5
1950	+ 31.9	- 164.8	+ 1318.7	+ 1316.6	+ 2502.3
1955	+ 25.7	+ 163.9	- 120.0	+ 686.7	+ 756.3
1960	- 16.8	+ 384.4	- 437.4	+ 1735.2	+ 1665.4
1965	- 0.4	+ 66.0	- 278.6	- 445.4	- 658.4
1970	+ 35.2	+ 81.0	- 933.1	+ 1141.2	+ 324.3
1975	+ 83.8	+ 277.6	+ 394.5	+ 1586.6	+ 2342.5
1976	- 3.2	- 12.9	- 21.3	- 66.6	- 104.2

Note: Rate change = rate (year n + 5) – rate (year n).

Table D.2 *Changes in rate for offences charged before magistrates' courts, Victoria 1900 to 1976*

Year	Major offence categories				
	Person	Property	Good order	Petty	Total
1900	178.6	391.3	2338.2	3017.6	5925.8
1905	- 16.9	- 36.6	- 179.1	- 207.7	- 440.4
1910	+ 6.5	- 11.6	+ 69.1	- 345.9	- 281.9
1915	- 20.0	+ 28.0	- 169.1	+ 796.9	+ 635.8
1920	+ 11.1	+ 37.4	- 864.8	- 290.9	- 1107.2
1925	- 34.0	- 126.1	+ 143.1	+ 900.3	+ 883.3
1930	- 7.8	+ 74.2	- 179.1	- 1533.7	- 1646.4
1935	- 18.6	+ 89.8	+ 2.3	+ 305.4	+ 378.9
1940	- 12.7	+ 52.2	+ 65.7	+ 1073.8	+ 1179.0
1945	+ 17.4	- 98.7	- 191.9	- 1577.3	- 1850.6
1950	+ 12.8	- 33.8	+ 661.0	+ 1093.1	+ 1733.3
1955	+ 21.9	+ 175.9	- 47.0	+ 3085.9	+ 3236.5
1960	+ 40.8	+ 377.6	+ 89.0	+ 2650.4	+ 3157.9
1965	+ 59.2	+ 148.5	- 1376.5	+ 1199.3	+ 30.5
1970	+ 54.3	+ 228.3	+ 25.4	- 884.1	- 576.1
1975	+ 57.7	- 323.9	+ 20.8	+ 715.3	+ 469.8
1976	- 34.8	- 37.4	+ 5.5	- 1245.9	- 1312.5

Note: Rate change = rate (year n + 5) - rate (year n).

Table D.3 *Changes in rate for offences charged before magistrates' courts, Queensland 1900 to 1976*

Year	Major offence categories				
	Person	Property	Good order	Petty	Total
1900	532.8	714.6	2545.3	2908.7	6701.4
1905	- 110.5	- 196.2	- 931.3	- 1100.7	- 2338.7
1910	- 232.5	- 142.0	+ 1757.8	- 928.6	+ 454.7
1915	- 32.4	- 38.3	+ 452.8	+ 697.3	+ 1079.5
1920	- 63.2	- 83.8	- 1061.1	- 421.7	- 1629.9
1925	- 11.3	+ 137.9	- 47.7	+ 181.6	+ 260.6
1930	- 8.3	+ 45.1	- 991.3	+ 543.6	- 411.0
1935	- 17.3	- 142.4	- 364.6	+ 556.9	+ 32.7
1940	+ 3.9	- 7.8	+ 81.8	- 633.4	- 555.6
1945	+ 24.1	+ 75.8	+ 238.8	- 693.5	- 354.8
1950	- 12.0	- 65.7	+ 1380.5	+ 93.9	+ 1396.5
1955	- 1.7	+ 92.0	- 691.4	+ 431.1	- 170.1
1960	+ 16.0	+ 97.6	+ 91.1	+ 2115.3	+ 2320.0
1965	+ 17.7	+ 99.4	+ 47.0	+ 1698.6	+ 1862.7
1970	+ 5.9	- 21.6	- 231.8	- 815.8	- 1063.4
1975	- 0.3	+ 109.1	- 31.0	+ 25.5	+ 103.5
1976	+ 10.2	- 28.6	- 89.6	+ 558.3	+ 450.1

Note: Rate change = rate(year n + 5) - rate(year n).

Table D.4 *Changes in rate for offences charged before magistrates' courts, South Australia 1900 to 1976*

Year	Major offence categories				
	Person	*Property*	*Good order*	*Petty*	*Total*
1900	130.4	256.9	979.5	1328.6	2695.5
1905	− 51.8	− 72.0	− 132.7	− 458.8	− 715.3
1910	+ 23.7	− 33.4	+ 858.2	− 200.0	+ 648.3
1915	− 12.1	+ 37.7	− 299.1	+ 389.4	+ 116.0
1920	− 16.5	+ 40.2	− 233.9	+ 134.1	− 76.2
1925	+ 8.1	+ 27.5	+ 610.8	+ 1680.0	+ 2326.4
1930	+ 6.8	+ 152.8	− 792.0	− 288.5	− 920.8
1935	− 21.9	− 29.8	+ 165.8	− 561.3	− 447.3
1940	+ 8.9	− 40.4	− 246.2	+ 936.5	+ 658.9
1945	+ 62.2	− 47.2	+ 142.5	+ 22.1	+ 179.6
1950	− 2.2	− 2.1	+ 287.0	+ 901.6	+ 1184.3
1955	− 22.5	+ 23.0	− 443.8	− 265.9	− 709.2
1960	+ 10.9	+ 194.7	+ 53.9	+ 2800.2	+ 3059.8
1965	+ 2.9	+ 108.2	+ 246.1	+ 1445.0	+ 1802.1
1970	+ 49.8	+ 230.3	+ 294.0	+ 2698.5	+ 3272.6
1975	+ 27.4	+ 17.6	− 418.4	− 451.3	− 824.7
1976	+ 6.4	+ 134.6	− 88.2	+ 1005.3	+ 1058.1

Note: Rate change = rate(year n + 5) − rate (year n).

Table D.5 *Changes in rate for offences charged before magistrates' courts, Western Australia 1900 to 1976*

Year	Major offence categories				
	Person	*Property*	*Good order*	*Petty*	*Total*
1900	771.6	1314.7	2284.2	6688.3	11058.9
1905	− 386.4	− 350.1	+ 2545.7	− 4579.2	− 2770.2
1910	− 106.1	− 417.1	− 719.4	− 664.2	− 1906.8
1915	− 120.3	− 51.6	− 371.5	+ 613.4	+ 70.1
1920	− 19.0	− 33.3	− 1152.4	− 1097.4	− 2302.0
1925	− 39.5	− 23.3	− 986.6	+ 988.0	− 61.7
1930	+ 17.3	+ 111.0	− 55.8	+ 743.1	+ 815.7
1935	− 22.3	− 36.0	− 144.5	+ 949.6	+ 746.8
1940	+ 12.7	+ 290.1	− 89.4	+ 927.9	+ 1141.3
1945	+ 30.5	− 123.8	+ 190.9	− 1571.5	− 1474.0
1950	+ 20.7	− 14.6	+ 501.0	+ 1113.3	+ 1620.5
1955	− 16.6	+ 259.3	− 215.4	+ 6805.1	+ 6832.2
1960	− 17.5	+ 185.3	− 92.1	− 4289.8	− 4213.9
1965	+ 48.4	+ 196.1	+ 333.9	+ 986.2	+ 1564.5
1970	+ 83.3	+ 972.8	+ 601.2	− 965.2	+ 692.1
1975	+ 53.4	+ 6.3	− 209.3	+ 2104.1	+ 1954.5
1976	+ 15.0	+ 86.0	− 230.0	− 1398.4	− 1527.4

Note: Rate change = rate(year n + 5) −rate(year n).

Table D.6 *Changes in rate for offences charged before magistrates' courts, Tasmania 1900 to 1976*

Year	Major offence categories				
	Person	Property	Good order	Petty	Total
1900	286.3	547.7	2493.3	858.8	4186.1
1905	- 116.2	+ 25.6	- 131.6	+ 1301.6	+ 1079.4
1910	+ 17.2	-152.5	- 353.7	+ 188.5	- 300.6
1915	- 71.9	- 46.2	- 603.9	- 84.1	- 805.9
1920	- 18.5	- 17.0	- 345.0	+ 337.1	- 43.5
1925	+ 1.2	- 32.1	- 323.0	+ 371.3	+ 17.3
1930	+ 2.8	+ 65.8	- 185.5	+ 191.2	+ 74.4
1935	- 2.1	+ 164.4	+ 176.4	+ 110.3	+ 449.1
1940	- 15.8	- 88.9	- 175.0	- 226.4	- 506.1
1945	+ 18.9	- 73.6	- 77.8	- 746.5	- 879.1
1950	+ 37.5	- 4.4	+ 191.5	+ 2190.6	+ 2415.2
1955	+ 22.1	+ 140.9	+ 31.8	+ 2221.4	+ 2416.3
1960	+ 10.0	+ 478.3	- 168.9	+ 621.8	+ 941.2
1965	+ 91.7	+ 485.4	+ 182.0	+ 4176.3	+ 4935.3
1970	+ 54.7	+ 102.1	- 46.2	- 2113.4	- 2002.8
1975	+ 26.0	+ 67.6	+ 552.2	+ 3369.8	+ 4015.7
1976	- 69.4	- 124.1	- 303.8	- 547.6	- 1044.9

Note: Rate change = rate(year n + 5) − rate(year n).

Appendix E Disposition of Offences

Table E.1 *Homicides charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976*

Year	Total charges	Convictions	Discharges etc.	Committals
1900	6.121	0.778	2.231	3.112
1	5.918	0.658	2.428	2.832
2	5.026	0.936	1.971	2.119
3	6.075	0.675	1.977	3.423
4	5.562	0.707	2.451	2.404
5	5.671	0.507	1.844	3.320
6	4.655	0.407	2.034	2.215
7	5.600	0.489	2.978	2.133
8	5.188	0.654	2.834	1.700
9	4.275	0.299	2.052	1.924
1910	4.243	0.250	1.664	2.329
11	4.806	0.283	2.584	1.938
12	3.950	0.387	1.665	1.897
13	5.279	0.409	2.602	2.268
14	5.212	0.543	2.280	2.389
15	4.151	0.217	2.418	1.516
16	3.268	0.367	1.322	1.579
17	4.880	0.481	2.846	1.553
18	3.551	0.290	2.210	1.051
19	4.617	0.350	2.449	1.819
1920	4.230	0.235	2.753	1.242
21	4.781	0.327	1.572	2.882
22	3.841	0.320	1.056	2.464
23	3.246	0.281	0.718	2.247
24	4.319	0.456	1.764	2.099
25	3.847	0.326	1.716	1.805
26	4.100	0.577	1.473	2.050
27	4.767	0.564	1.777	2.426
28	3.883	0.358	1.570	1.955
29	4.869	0.352	1.948	2.570
1930	4.026	0.160	0.907	2.959
31	3.962	0.131	1.155	2.676
32	3.875	0.155	0.853	2.868

Table E.1 *Homicides charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	Total charges	Convictions	Discharges etc.	Committals
1933	3.080	0.076	0.738	2.265
34	3.540	0.050	0.979	2.511
35	4.603	0.099	0.990	3.514
36	4.225	0.098	1.148	2.979
37	3.518	0.048	0.651	2.819
38	3.680	0.142	0.665	2.873
39	3.140	0.117	0.844	2.179
1940	3.270	0.186	0.696	2.389
41	3.428	0.138	0.828	2.462
42	3.046	0.069	0.641	2.336
43	3.325	0.091	0.706	2.528
44	3.985	0.272	0.589	3.125
45	4.636	0.203	1.013	3.420
46	4.674	0.313	0.805	3.556
47	3.883	0.111	0.910	2.862
48	4.002	0.176	1.077	2.748
49	4.173	0.043	0.946	3.183
1950	4.893	0.125	1.067	3.701
51	5.111	0.143	1.329	3.639
52	4.992	0.080	1.163	3.749
53	4.761	0.217	1.403	3.141
54	4.087	0.292	0.954	2.842
55	5.511	0.114	1.945	3.452
56	5.211	0.075	1.326	3.810
57	4.772	0.164	1.129	3.479
58	5.677	0.161	1.089	4.428
59	5.111	0.140	0.840	4.131
1960	4.563	0.240	0.944	3.379
61	4.801	0.234	1.221	3.346
62	4.947	0.148	0.986	3.813
63	5.721	0.081	1.273	4.367
64	5.709	0.127	1.344	4.238
65	6.411	0.248	1.905	4.259
66	5.796	0.167	1.335	4.294
67	5.303	0.194	0.956	4.152
68	5.681	0.249	1.259	4.173
69	5.382	0.358	1.217	3.808
1970	5.089	0.266	0.841	3.981
71	5.672	0.135	1.118	4.419
72	5.998	0.132	1.268	4.598
73	5.609	0.130	0.909	4.570
74	6.671	0.140	0.993	5.538
75	6.050	0.200	1.052	4.797
76	6.406	0.359	0.989	5.058

Table E. 2 *Assaults charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976*

Year	*Total charges*	*Convictions*	*Discharges etc.*	*Committals*
1900	248.118	122.373	117.341	8.404
1	254.971	128.320	118.255	8.396
2	243.091	122.605	111.460	9.010
3	225.964	112.958	105.051	7.955
4	204.956	104.552	91.440	8.956
5	190.188	91.244	89.472	9.452
6	191.806	97.304	88.491	6.011
7	201.704	100.096	91.251	10.356
8	194.582	95.700	88.070	10.813
9	177.472	88.157	79.437	9.876
1910	190.965	96.127	85.875	8.943
11	187.941	95.666	81.613	10.664
12	195.585	100.445	85.614	9.526
13	185.587	97.664	78.034	9.809
14	194.157	100.988	82.817	10.352
15	169.199	86.187	74.169	8.842
16	157.106	81.906	65.868	9.252
17	146.276	70.717	66.688	8.872
18	147.045	72.588	68.848	5.689
19	164.162	84.232	72.609	7.241
1920	163.614	80.599	74.456	8.560
21	133.224	76.109	50.827	6.288
22	125.746	78.890	48.007	6.849
23	124.451	66.205	51.379	6.867
24	115.279	61.654	47.480	6.144
25	111.710	60.872	45.661	5.978
26	112.374	58.006	48.478	5.870
27	109.592	56.446	45.388	7.757
28	109.010	56.873	45.939	6.197
29	102.982	54.452	41.657	6.844
1930	104.169	55.404	40.793	7.972
31	93.307	47.592	38.257	7.470
32	102.640	53.960	41.740	6.924
33	85.412	45.195	33.926	6.312
34	83.476	43.784	34.244	5.448
35	82.042	42.840	33.733	5.469
36	78.537	39.903	33.676	4.957
37	74.333	39.612	29.637	5.084
38	72.867	39.437	27.874	5.556
39	73.948	38.732	29.078	6.139
1940	69.512	39.847	24.701	4.963
41	69.912	39.983	24.201	5.728
42	83.305	47.550	28.219	7.536
43	86.677	46.231	33.773	6.673
44	93.722	51.582	34.396	7.744
45	95.458	51.892	35.667	7.899
46	109.569	60.588	40.683	8.298
47	107.512	55.886	44.460	7.166
48	107.235	57.432	41.645	8.157
49	100.774	54.054	38.911	7.808
1950	103.095	56.002	39.390	7.696
51	107.896	53.846	45.383	8.668

Table E.2 *Assaults charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	Total charges	Convictions	Discharges etc.	Committals
1952	160.931	76.516	75.073	9.342
53	164.736	73.291	81.311	10.134
54	161.345	74.133	80.439	6.773
55	159.865	77.577	75.594	6.694
56	150.660	73.537	70.417	6.706
57	147.442	76.699	66.973	3.770
58	147.607	74.356	66.824	6.427
59	136.942	71.779	59.212	5.951
1960	126.843	70.026	54.158	2.659
61	132.655	68.284	58.900	5.470
62	134.986	69.153	60.492	5.341
63	135.053	71.491	56.978	6.591
64	128.783	75.366	51.029	2.388
65	141.418	76.423	58.553	6.442
66	141.521	74.994	60.080	6.448
67	151.327	82.706	61.944	6.677
68	165.423	85.588	72.251	7.584
69	180.078	97.626	73.592	8.861
1970	185.640	102.157	74.483	9.000
71	199.499	109.187	80.355	9.957
72	207.963	111.255	86.219	10.490
73	220.056	120.869	87.867	11.321
74	228.506	125.952	90.600	11.954
75	227.722	125.899	90.450	11.374
76	227.641	125.625	91.455	10.561

Table E. 3 *Robberies charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976*

Year	Total charges	Convictions	Discharges etc.	Committals
1900	11.101	.882	5.551	4.669
1	12.695	.556	5.311	6.828
2	10.447	.591	4.090	5.766
3	9.353	.530	4.387	4.435
4	9.050	.236	3.300	5.515
5	7.976	.415	2.951	4.611
6	8.316	2.531	3.616	2.169
7	7.823	2.889	2.711	2.222
8	5.842	2.180	1.918	1.744
9	6.584	2.651	2.437	1.496
1910	7.362	3.161	2.662	1.539
11	5.411	2.302	2.181	.929
12	6.428	2.246	1.394	2.788
13	7.733	3.606	2.342	1.784
14	7.674	3.366	2.642	1.665
15	7.218	2.887	2.454	1.877
16	4.075	.881	1.175	2.019
17	3.401	1.590	1.331	.481
18	3.732	1.087	1.486	1.160
19	5.212	2.204	1.749	1.259

Table E.3 *Robberies charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	*Total charges*	*Convictions*	*Discharges etc.*	*Committals*
1920	11.481	4.095	3.860	3.525
21	11.364	5.731	3.799	1.834
22	10.337	4.129	4.097	2.112
23	9.146	4.807	3.059	1.280
24	7.878	4.106	2.920	.852
25	9.588	5.001	3.788	.799
26	8.084	4.100	3.032	.953
27	8.350	4.203	3.357	.790
28	8.015	4.599	2.644	.771
29	7.655	4.112	2.516	1.028
1930	8.532	4.399	3.333	.800
31	4.697	2.283	1.417	.997
32	4.960	2.118	1.860	.982
33	5.294	2.036	1.731	1.527
34	5.448	2.812	1.858	.778
35	5.098	2.871	1.633	.594
36	5.568	2.027	2.466	1.075
37	5.470	2.843	1.638	.988
38	5.746	2.778	2.042	.926
39	6.256	2.859	2.062	1.336
1940	4.708	2.551	.997	1.160
41	8.029	5.774	1.357	.897
42	11.269	8.108	2.268	.893
43	12.685	8.517	1.890	2.277
44	8.763	6.431	1.291	1.042
45	9.969	7.381	1.080	1.508
46	10.087	7.492	1.006	1.588
47	10.782	7.832	1.242	1.708
48	9.829	7.146	1.231	1.451
49	8.260	5.593	.903	1.764
1950	10.205	7.612	.962	1.631
51	9.608	6.419	1.267	1.922
52	10.665	8.299	1.163	1.203
53	11.300	7.764	1.225	2.311
54	9.362	3.893	1.635	3.834
55	10.889	5.549	1.449	3.890
56	12.085	5.921	1.139	5.024
57	12.823	6.739	.710	5.373
58	13.675	7.534	1.143	4.999
59	15.473	9.819	1.085	4.568
1960	10.790	4.872	.755	5.164
61	9.267	4.048	1.171	4.048
62	11.997	5.998	2.005	3.993
63	8.187	4.061	1.434	2.691
64	7.685	3.147	1.170	3.368
65	12.760	5.683	1.951	5.126
66	16.507	8.633	2.352	5.522
67	13.473	6.363	2.270	4.840
68	13.894	6.413	2.108	5.373
69	26.525	14.028	4.523	7.973
1970	24.071	9.659	3.393	11.019
71	25.491	10.779	3.045	11.668

Table E.3 *Robberies charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	Total charges	Convictions	Discharges etc.	Committals
1972	22.314	8.152	2.959	11.203
73	28.263	11.983	4.193	12.087
74	32.825	14.080	4.774	13.672
75	27.682	11.023	3.157	13.503
76	27.789	10.858	4.761	12.169

Table E. 4 *Burglaries charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976*

Year	Total charges	Convictions	Discharges etc.	Committals
1900	18.831	2.542	4.980	11.309
1	21.547	3.389	5.311	12.847
2	20.845	2.957	5.568	12.320
3	27.191	4.146	6.412	16.633
4	21.683	2.970	4.290	14.424
5	19.365	2.674	3.965	12.725
6	19.434	6.056	3.390	9.988
7	18.935	6.089	3.956	8.890
8	21.407	5.057	8.676	7.673
9	15.605	5.173	3.292	7.140
1910	20.507	6.655	6.614	7.238
11	17.041	5.775	5.775	5.492
12	24.511	6.738	8.170	9.603
13	30.820	6.023	13.644	11.153
14	29.391	7.348	9.628	12.415
15	31.364	9.889	11.225	10.250
16	33.264	11.529	11.749	9.987
17	31.828	11.164	12.458	8.207
18	37.178	14.748	13.842	8.588
19	43.935	14.167	17.980	11.788
1920	49.783	7.016	18.597	24.170
21	66.317	17.455	17.455	31.406
22	64.841	20.003	18.659	26.180
23	69.358	13.360	27.344	28.655
24	68.315	13.292	29.534	25.489
25	65.902	14.056	31.752	20.093
26	66.004	21.424	22.261	22.319
27	62.313	19.492	21.354	21.467
28	80.366	25.669	28.340	26.357
29	95.486	25.238	39.574	30.675
1930	122.832	25.916	55.831	41.086
31	122.721	25.216	57.884	39.621
32	117.081	17.361	63.914	35.806
33	142.039	13.514	96.279	32.246
34	113.100	20.637	69.592	22.871
35	128.669	29.179	78.152	21.333
36	104.252	20.074	64.275	19.903
37	101.681	20.722	59.659	21.300
38	106.629	28.444	54.751	23.434
39	117.436	37.466	49.627	30.343

Table E.4 *Burglaries charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	*Total charges*	*Convictions*	*Discharges etc.*	*Committals*
1940	109.938	37.597	48.081	24.261
41	85.349	38.902	27.353	19.094
42	102.476	57.010	21.072	24.394
43	121.520	62.423	23.047	36.051
44	115.619	61.931	19.677	34.011
45	122.642	60.218	19.465	42.958
46	119.835	54.259	20.867	44.709
47	100.213	40.356	17.593	42.264
48	75.242	26.935	15.150	33.158
49	80.490	22.521	16.455	41.514
1950	75.178	26.223	10.602	38.352
51	72.408	30.950	7.768	33.689
52	90.448	37.346	7.357	45.745
53	83.464	37.356	6.282	39.826
54	75.573	37.310	3.756	34.507
55	90.087	41.172	6.007	42.908
56	101.274	43.091	6.220	51.963
57	117.316	46.828	5.683	64.805
58	134.702	67.413	5.963	61.325
59	147.164	85.869	6.249	58.047
1960	168.820	96.170	5.232	67.418
61	174.642	93.912	11.793	60.937
62	174.952	99.045	12.325	63.582
63	180.001	94.344	21.354	64.303
64	163.842	84.996	17.331	61.514
65	176.664	93.319	20.705	62.641
66	191.451	102.700	21.377	67.286
67	180.678	97.165	17.984	65.529
68	185.876	91.079	19.779	75.018
69	214.906	119.871	22.603	72.432
1970	234.244	134.232	25.627	74.385
71	258.525	152.518	27.997	78.010
72	275.091	170.469	34.654	69.968
73	277.037	179.784	33.041	64.212
74	289.827	182.397	37.834	69.596
75	285.968	177.167	41.899	66.901
76	280.102	179.026	43.396	57.680

Table E.5 *Larcenies charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976*

Year	*Total charges*	*Convictions*	*Discharges etc.*	*Committals*
1900	327.953	212.607	96.280	18.986
1	312.480	204.948	86.289	21.243
2	333.813	216.973	93.334	23.506
3	328.797	222.396	82.537	23.864
4	301.400	197.838	78.438	25.125
5	279.864	187.513	70.081	22.269
6	264.479	183.084	65.035	16.360
7	247.840	173.079	59.160	15.601

Table E.5 *Larcenies charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	Total charges	Convictions	Discharges etc.	Committals
1908	249.255	177.230	60.821	11.205
9	242.843	173.368	53.272	16.204
1910	249.698	168.129	66.511	15.058
11	237.450	161.490	60.089	15.870
12	253.706	178.547	55.218	19.942
13	243.843	172.650	53.609	17.585
14	242.587	170.665	55.018	16.904
15	251.668	178.799	56.051	16.819
16	263.140	179.135	64.950	19.055
17	244.311	167.347	60.625	16.339
18	281.479	189.151	74.646	17.683
19	302.368	203.340	79.650	19.379
1920	293.526	206.112	63.411	24.002
21	316.979	220.107	74.504	22.368
22	308.492	211.102	77.035	20.355
23	284.673	199.146	67.766	17.761
24	266.509	187.487	64.787	14.235
25	276.775	195.574	71.554	9.647
26	309.952	236.094	63.752	10.106
27	317.548	247.082	63.696	6.770
28	351.844	264.097	78.714	9.034
29	389.682	297.631	80.717	11.334
1930	414.036	286.058	114.194	13.784
31	431.952	310.227	108.054	13.671
32	414.847	269.529	135.113	10.205
33	406.369	247.354	151.583	7.432
34	395.285	255.021	133.009	7.255
35	417.314	261.100	149.920	6.286
36	393.953	260.739	126.841	6.374
37	353.184	247.455	99.849	5.879
38	355.620	261.361	86.495	7.764
39	373.116	271.449	92.084	9.583
1940	353.310	266.612	79.670	7.028
41	293.245	233.708	51.278	8.259
42	361.736	297.510	56.575	7.650
43	391.730	317.878	65.019	8.836
44	370.542	298.059	62.972	9.510
45	355.143	290.289	53.940	10.914
46	321.215	265.189	40.951	15.074
47	315.940	261.083	41.022	13.844
48	302.663	249.474	40.084	13.105
49	297.030	243.922	36.997	16.111
1950	302.448	254.874	30.761	16.813
51	332.234	281.720	30.807	19.707
52	355.820	302.397	32.876	20.547
53	339.270	294.387	27.993	16.890
54	358.949	315.547	22.635	20.767
55	392.043	347.419	22.045	22.579
56	425.680	370.485	23.890	31.305
57	443.255	382.530	24.625	36.100
58	498.548	434.741	27.030	36.777
59	516.352	452.642	25.764	37.946

Table E.5 *Larcenies charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	*Total charges*	*Convictions*	*Discharges etc.*	*Committals*
1960	518.281	450.245	24.291	43.745
61	518.105	445.288	31.666	41.151
62	541.504	470.396	33.459	37.649
63	551.042	471.735	35.359	43.949
64	548.342	476.787	36.940	34.615
65	573.694	502.815	38.529	32.350
66	567.922	493.853	40.296	33.772
67	574.642	500.211	42.137	32.294
68	630.889	553.923	43.292	33.673
69	650.471	558.815	54.353	37.304
1970	670.223	571.318	57.296	41.609
71	706.808	603.010	55.362	48.436
72	730.731	603.689	77.195	49.847
73	710.425	592.971	67.445	50.009
74	736.310	600.658	83.739	51.913
75	721.083	571.718	94.721	54.613
76	731.068	566.190	114.581	50.297

Table E.6 *Charges of drunkenness before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976*

Year	*Total charges*	*Convictions*	*Discharges etc.*	*Committals*
1900	1895.042	1617.355	277.686	0.000
1	1867.144	1593.053	274.091	0.000
2	1793.048	1584.403	208.645	0.000
3	1701.839	1524.857	176.982	0.000
4	1578.650	1415.883	162.767	0.000
5	1579.779	1420.805	158.974	0.000
6	1646.035	1461.369	184.665	0.000
7	1819.377	1609.362	210.015	0.000
8	1832.768	1605.095	227.674	0.000
9	1820.383	1604.732	215.652	0.000
1910	2035.770	1808.159	227.611	0.000
11	2146.376	1909.814	236.561	0.000
12	2271.199	2236.194	35.005	0.000
13	2235.708	2202.917	32.790	0.000
14	2233.093	2223.031	10.063	0.000
15	1825.380	1803.364	22.016	0.000
16	1611.444	1594.482	16.963	0.000
17	1430.898	1416.703	14.195	0.000
18	1231.835	1218.101	13.733	0.000
19	1111.669	1094.004	17.630	0.035
1920	1250.874	1237.614	13.260	0.000
21	1681.737	1667.000	14.737	0.000
22	1715.730	1706.929	8.801	0.000
23	1653.664	1645.735	7.928	0.000
24	1630.294	1622.173	8.121	0.000
25	1620.995	1604.068	16.897	0.030
26	1609.872	1591.855	18.017	0.000
27	1547.766	1535.551	12.214	0.000

Table E.6 *Charges of drunkenness before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	Total charges	Convictions	Discharges etc.	Committals
1928	1519.168	1331.830	187.311	0.028
29	1396.806	1222.036	174.743	0.027
1930	1100.106	947.839	152.267	0.000
31	844.539	741.129	103.409	0.000
32	855.657	766.193	89.464	0.000
33	939.837	846.459	93.378	0.000
34	983.455	874.924	108.531	0.000
35	1057.269	939.291	117.978	0.000
36	1166.329	1013.920	152.409	0.000
37	1102.440	923.319	179.122	0.000
38	1106.154	903.485	202.669	0.000
39	1157.470	1014.892	142.578	0.000
1940	1162.028	1033.883	128.145	0.000
41	1222.258	1079.304	142.953	0.000
42	1217.069	1060.378	156.692	0.000
43	1190.630	1026.956	163.674	0.000
44	1147.607	1002.800	144.807	0.000
45	1423.115	1194.754	228.361	0.000
46	1955.851	1661.228	294.622	0.000
47	2105.723	1788.288	317.435	0.000
48	2526.294	2139.924	386.371	0.000
49	2476.022	2025.068	450.954	0.000
1950	2482.489	1999.739	482.750	0.000
51	2547.376	2043.608	503.768	0.000
52	2326.924	1962.323	364.600	0.000
53	2120.072	1800.439	319.634	0.000
54	2120.529	1750.779	369.751	0.000
55	2220.692	1863.758	356.935	0.000
56	2137.831	1788.807	349.024	0.000
57	2129.287	1729.691	399.597	0.000
58	1919.404	1543.614	375.790	0.000
59	1950.204	1567.784	382.420	0.000
1960	1864.419	1590.834	273.585	0.000
61	1830.482	1576.481	254.001	0.000
62	1871.658	1605.844	265.814	0.000
63	1811.499	1517.670	293.829	0.000
64	1693.256	1412.949	280.306	0.000
65	1691.567	1431.108	260.382	0.077
66	1552.943	1287.484	265.459	0.000
67	1535.675	1295.532	240.142	0.000
68	1558.452	1319.593	238.860	0.000
69	1635.905	1374.333	261.571	0.000
1970	1598.999	1342.562	256.436	0.000
71	1591.221	1362.539	228.669	0.013
72	1632.843	1366.392	266.437	0.013
73	1635.818	1282.455	353.350	0.013
74	1690.433	1227.018	463.415	0.000
75	1587.668	1161.672	425.821	0.175
76	1501.847	1099.743	402.103	0.000

Table E.7 *Traffic offences charged before magistrates' courts by disposition per 100 000 population aged 10 years and over, Australia 1931 to 1976*

Year	*Total charges*	*Convictions*	*Discharges etc.*	*Committals*
1931	1269.589	1196.565	73.024	0.000
32	1010.042	932.565	77.451	0.026
33	1131.225	1051.590	79.609	0.025
34	1153.042	1080.763	72.253	0.025
35	1270.331	1201.579	68.752	0.000
36	1549.366	1470.390	78.976	0.000
37	1493.622	1413.844	79.754	0.024
38	1425.661	1344.389	81.248	0.024
39	1904.217	1801.121	103.073	0.023
1940	1899.680	1816.206	83.474	0.000
41	1616.955	1552.242	64.713	0.000
42	1464.441	1408.806	55.636	0.000
43	1138.365	1097.486	40.856	0.023
44	1026.259	985.184	41.008	0.068
45	1078.706	1036.338	42.373	0.000
46	1405.858	1351.755	54.102	0.000
47	1477.709	1418.695	58.970	0.044
48	1632.444	1581.718	50.704	0.022
49	1908.700	1844.729	63.949	0.022
1950	2090.517	2019.584	70.912	0.021
51	2476.644	2392.870	83.774	0.000
52	3106.120	2977.082	129.017	0.020
53	3446.987	3309.513	137.454	0.020
54	3673.276	3474.718	198.441	0.117
55	3437.021	3277.042	159.903	0.076
56	3532.301	3381.566	150.734	0.000
57	3915.915	3745.814	170.028	0.073
58	4000.681	3737.241	263.387	0.054
59	4326.708	4034.900	291.738	0.070
1960	4500.924	4197.627	303.194	0.103
61	4434.709	4108.409	326.233	0.067
62	4215.108	3839.797	375.196	0.115
63	4187.963	3779.839	407.995	0.129
64	4669.080	4212.946	456.071	0.063
65	4777.725	4241.042	536.605	0.077
66	4764.379	4215.847	548.350	0.182
67	5011.489	4428.198	583.141	0.149
68	5081.016	4370.571	710.225	0.220
69	5224.167	4488.710	733.954	1.503
1970	5453.396	4703.054	750.257	0.084
71	5817.722	5038.280	779.119	0.323
72	5948.332	5075.431	871.329	1.572
73	6106.743	5208.224	897.856	0.662
74	6552.449	5630.508	921.457	0.484
75	6611.639	5749.225	860.936	1.478
76	6680.675	5778.929	901.190	0.557

Appendix F Convictions at Higher Courts

Table F.1 *Distinct persons tried and convicted at the higher courts per 100 000 population aged 10 years and over, Australia 1900 to 1976*

Year	Offences against the person		Offences against property	
	Tried	Convicted	Tried	Convicted
1900	28.103	15.821	59.428	39.784
1	26.751	14.877	64.478	41.973
2	24.113	12.682	65.576	41.970
3	24.402	12.784	71.575	47.306
4	24.282	12.321	65.832	44.140
5	25.870	12.725	63.982	42.010
6	23.169	12.108	53.882	34.865
7	25.076	11.992	50.465	32.633
8	24.209	11.766	55.084	37.665
9	21.829	10.884	58.131	38.533
1910	23.004	11.061	47.333	30.800
11	21.363	10.197	43.667	28.228
12	18.668	9.896	45.230	31.387
13	20.410	11.169	44.331	30.918
14	17.323	10.939	43.140	32.587
15	14.389	9.250	43.450	32.915
16	17.387	9.296	48.942	32.654
17	13.618	9.923	32.355	24.253
18	10.897	6.850	32.821	25.427
19	15.663	8.807	42.784	30.925
1920	17.455	8.113	59.467	39.412
21	18.053	8.909	59.776	41.676
22	16.898	8.541	55.424	37.608
23	16.941	8.929	53.375	35.830
24	16.273	8.006	47.031	33.048
25	20.100	9.157	51.545	36.141
26	16.724	8.705	41.489	29.501
27	18.004	8.434	44.563	31.973
28	17.696	8.570	46.838	33.050
29	16.606	7.786	50.500	37.602

Table F.1 *Distinct persons tried and convicted at the higher courts per 100 000 population aged 10 years and over, Australia 1900 to 1976 (con't)*

Year	Offences against the person		Offences against property	
	Tried	Convicted	Tried	Convicted
1930	15.258	7.581	57.877	44.235
31	13.776	7.618	56.318	41.083
32	13.095	6.912	49.707	35.978
33	14.120	7.511	43.153	31.076
34	13.140	6.706	38.967	29.079
35	13.201	6.870	36.213	28.088
36	12.491	6.502	29.747	22.235
37	13.146	7.055	32.699	24.612
38	14.555	7.631	36.413	27.573
39	12.072	6.650	40.871	32.243
1940	12.781	7.672	31.666	24.887
41	14.968	9.284	28.585	22.185
42	14.896	9.809	29.676	24.059
43	16.996	10.896	37.272	29.030
44	16.764	10.662	34.430	27.245
45	18.159	11.747	36.791	28.535
46	19.560	12.310	40.532	31.108
47	18.697	12.422	39.775	30.797
48	19.289	13.045	38.435	29.786
49	18.330	11.830	38.187	30.035
1950	20.052	13.059	37.798	29.789
51	20.923	13.870	38.957	30.852
52	19.541	13.419	45.771	38.111
53	21.646	15.416	41.619	35.247
54	21.834	16.214	41.560	34.563
55	22.682	16.527	45.556	39.521
56	21.959	16.452	52.473	45.758
57	22.661	17.127	59.205	54.325
58	23.770	18.378	60.886	54.649
59	24.425	19.600	61.470	55.116
1960	25.697	21.077	67.973	60.793
61	23.739	20.498	66.379	62.994
62	26.485	21.759	66.366	59.721
63	25.903	21.238	61.812	55.691
64	27.219	20.830	53.708	48.913
65	26.616	20.781	54.584	51.419
66	25.093	19.465	60.387	55.426
67	23.980	19.324	58.469	53.908
68	26.700	21.297	63.322	58.086
69	25.269	20.080	64.111	59.833
1970	25.986	21.610	73.423	64.513
71	27.446	20.659	75.914	66.641
72	27.902	22.084	73.428	65.661
73	27.947	22.251	63.183	56.511
74	26.950	21.239	59.819	54.333
75	24.887	18.852	51.978	45.374
76	23.478	17.736	41.039	35.498

Appendix G Prison Data

Table G.1 *Annual prison data, Australia 1900 to 1976*

Year	Daily average		Expenditure ($)*	
	Number	Rate per 100 000 population 10+	Per capita	Per prisoner
1900	4755	168.302	1.05	833.00
1	4499	155.292	1.02	859.00
2	4374	147.926	.99	871.00
3	4557	151.706	1.05	894.00
4	4592	150.474	.97	832.00
5	4459	143.652	.85	766.00
6	4157	131.757	.85	829.00
7	3947	123.258	.77	809.00
8	3928	120.674	.76	816.00
9	3935	118.643	.78	850.00
1910	3603	105.991	.70	850.00
11	3291	93.813	.71	963.00
12	3396	93.159	.62	852.00
13	3567	94.253	.58	780.00
14	3688	94.997	.53	713.00
15	3777	97.134	.50	655.00
16	3508	91.949	.46	642.00
17	3068	81.048	.42	678.00
18	2783	72.281	.40	726.00
19	2545	63.734	.35	723.00
1920	2793	67.294	.41	791.00
21	3047	71.674	.46	816.00
22	3224	74.071	.45	775.00
23	3180	71.214	.47	849.00
24	3135	68.430	.45	831.00
25	3295	70.055	.49	882.00
26	3420	71.099	.50	883.00
27	3702	75.204	.49	816.00
28	3983	79.174	.49	778.00
29	4327	84.604	.57	847.00

Table G.1 *Annual prison data, Australia 1900 to 1976 (con't)*

	Daily average		Expenditure ($)*	
Year	*Number*	*Rate per 100 000 population 10+*	*Per capita*	*Per prisoner*
1930	4620	89.088	.60	834.00
31	4438	84.274	.56	825.00
32	4474	83.746	.54	786.00
33	4366	80.546	.51	771.00
34	3998	72.819	.50	836.00
35	3767	67.714	.50	899.00
36	3538	62.829	.47	907.00
37	3321	58.275	.48	991.00
38	3417	59.145	.48	963.00
39	3688	63.054	.48	897.00
1940	3578	60.517	.49	964.00
41	3444	57.607	.49	1009.00
42	3772	62.705	.49	928.00
43	3758	62.154	.54	1036.00
44	3956	65.109	.53	983.00
45	4271	69.924	.53	910.00
46	3859	62.812	.59	1129.00
47	3928	63.434	.62	1190.00
48	3908	62.508	.62	1215.00
49	4084	63.936	.65	1248.00
1950	4300	65.529	.59	1108.00
51	4523	67.347	.72	1331.00
52	5189	75.645	.69	1141.00
53	5196	74.614	.71	1202.00
54	5252	74.177	.74	1260.00
55	5725	79.137	.77	1226.00
56	6701	90.524	.83	1160.00
57	7143	94.033	.88	1181.00
58	7116	91.726	.93	1272.00
59	7088	89.451	.95	1338.00
1960	7394	91.299	1.00	1377.00
61	7862	94.619	1.03	1364.00
62	7865	92.980	1.00	1355.00
63	8138	94.323	1.03	1371.00
64	7922	90.018	1.06	1482.00
65	8139	90.574	1.06	1470.00
66	8736	95.254	1.29	1685.00
67	9319	100.021	1.29	1609.00
68	9768	102.820	1.35	1638.00
69	9802	100.956	1.48	1827.00
1970	10208	103.016	1.59	1915.00
71	10532	102.566	1.85	2226.00
72	10329	98.684	1.92	2404.00
73	8939	83.939	2.05	3001.00
74	8626	79.488	2.34	3612.00
75	8683	78.780	2.50	3882.00
76	8675	77.757	2.76	4325.00

* At constant 1966–67 prices.

Endnotes

1 Introduction: the Problem

1. Until the census of 1966 the Australian Aboriginal population was never included in the population count. For the first time an estimate of full blood Aboriginal population was made in 1961. In 1976 the Aboriginal population numbered 160 915 or 1.16 per cent of the total population.
2. Some of the most recent works are: R.A. Easterlin, 'What Will 1984 be Like: Socioeconomic Implications of Recent Twists in Age Structure', *Demography* 15, 4, 1978, pp. 397–421; R.A. Easterlin et al., 'Demographic Influences on Economic Stability: The United States Experience', *Population and Development Review* 4, 1, 1978, pp. 1–22; G. Collins, 'The Good News About 1984', *Psychology Today* 12, 8, 1979, pp. 34–48.
3. For details see: C. Forster (ed.), *Australian Economic Development in the Twentieth Century*, Australasian Publishing Company, Sydney, 1970; M.W. Butlin, A Preliminary Annual Database 1900/01 to 1973/74, Research Discussion Paper no. 7701, Reserve Bank of Australia, Sydney, 1977 (unpublished).
4. Butlin, op. cit., pp. 5–6.
5. Ibid.
6. United States crime data partly estimated (see President's Commission on Law Enforcement and Administration of Justice, *Task Force Report: Crime and its Impact — An Assessment*, U.S. Government Printing Office, Washington, D.C., 1967, figs 3 and 4, pp. 19 and 20) and partly taken from J.A. Fox, *Forecasting Crime Data*, Lexington Books, Lexington, Mass., 1978, Appendix A, Table A–1, p. 86.
7. E. Durkheim, *The Rules of Sociological Method*, The Free Press, New York, 1964.

2 Crime Statistics and this Study

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Satyanshu K. Mukherjee is Senior Criminologist at the Australian Institute of Criminology. For five years he served as a research consultant to the United Nations Social Defence Research Institute and is the author of *Administration of Juvenile Correctional Institutions*, co-author of *Delay in the Administration of Criminal Justice* and co-editor of *Women and Crime*.

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