Violent and property crime trends: local and international comparisons

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**Aim:** To compare crime trends in New South Wales (NSW), Australia, New Zealand, Canada, the USA, England and Wales, and Scandinavia.

**Method:** Trend data were extracted from publications and online data repositories. Population counts were used to calculate rates from crime counts as required. Violent and property crime series were presented for the period 1995 to 2014 (where requisite data were available).

**Results:** Rates of recorded property crime have fallen almost continuously since 2003 in all jurisdictions considered in this paper; property crime has fallen since the mid-1990s or earlier in New Zealand, Canada, and the USA, and since 2001 in NSW. Violent crime rates have also trended downwards in most jurisdictions, but over a shorter period than for property crime, for example since 2000 in Canada, 2007 in NSW, and 2010 in New Zealand. Available data suggest that these falls followed longer-term increases in both property and violent crime. The interpretation of these data is complicated by variation around these general trends (e.g. homicide vs. sexual assault) and methodological variation within and between series.

**Conclusion:** Long-term crime data have major limitations but nonetheless show rates of recorded violent and property crime are in widespread decline. These falls began later in NSW than in most jurisdictions. The violent crime decline is a more recent phenomenon and has been less pronounced and less consistent across jurisdictions than the fall in property crime; violent crime began to fall earlier in NSW than in New Zealand.

**Keywords:** Crime trends, violent crime, property crime, international, comparison, statistics, long-term trend, assault

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**Introduction**

The NSW Bureau of Crime Statistics and Research often receives queries about how local crime trends compare with those further afield. Following recent academic treatment of this issue (e.g. Clancey & Lulham, 2013), this paper provides a concise, graphical summary of violent and property crime trends since 1995. After describing data sources and methods used to calculate crime rates, the paper presents trends in recorded crime for New South Wales (NSW), Australia, New Zealand, England and Wales, Scandinavian countries, Canada, and the USA, considers international trends and relevant evidence from victimisation surveys, and then integrates the results.

**Method**

**Methodological issues**

Recent years have seen significant advances in the coverage, quality, and availability of crime trend data in Australia (including the National Crime Recording Standard: Australian Bureau of Statistics, 2012a; United Nations Economic and Social Council, 2012). Nonetheless, substantial limitations remain (Baumer, 2011; Weatherburn, 2011) and these warrant mention. Comparative crime trend analysis carries many of the general limitations of crime data as well as problems arising from differences within and between series (Barclay, Tavares, Kenny, Siddique, & Wilby,
Common factors affecting crime trend data include data quality, offence counting rules, offence definitions and groupings, survey methodologies, reporting rates, and recording practices (Eurostat, 2012b; Weatherburn, 2011). Crime rates also partly reflect jurisdiction-specific legal and administrative processes that generate these data. Cross-jurisdictional comparisons of rates may therefore be misleading; it is preferable to compare trends, on the assumption that crime recording systems are reasonably stable (Eurostat, 2012b). However, major series breaks (such as the introduction of new offence recording systems) can prevent long-term trends from being inferred.

**Data sources**

Police-recorded crime data are based on incidents reported to or discovered by police. These data generally do not provide reliable estimates of the prevalence of most crimes (as many crimes go unreported to or undiscovered by police), but they can reliably reveal trends providing that reporting and recording is stable and comparable across locations (Weatherburn, 2011). Crime victim surveys provide more reliable estimates of the prevalence of crime but few jurisdictions have carried out regular surveys using a consistent methodology over the period covered by this paper. Nevertheless, where consistent survey information is available, it is also included in the discussion.

This paper reproduces or adapts several sources of recorded crime and population data. For NSW, unpublished crime data were extracted from the Bureau’s recorded crime database, Australian crime data were derived from various Australian Bureau of Statistics (ABS) sources (see Table A1) and population rates were calculated using estimated residential population data (ABS, 2015a). Australian victim survey data (ABS, 2010; ABS, 2014) were also examined. New Zealand crime and population data were extracted from Statistics New Zealand (2015a, 2015b). For England and Wales, crime counts were extracted from the Home Office (2013a, 2013b); population and victim survey data were sourced from the Office for National Statistics (2013, 2014a). All Scandinavian data were extracted from Eurostat (2015). US and Canadian data were extracted from the Federal Bureau of Investigation’s Uniform Crime Reports (Federal Bureau of Investigation, 2014) and from Statistics Canada (2014). Other international data were extracted from reports to the United Nations Economic and Social Council (2014) and the International Crime Victim Survey (van Dijk & Tseloni, 2012).

**Reporting protocol**

This paper focuses on the period since 1995, when recorded crime data in NSW and Australia became relatively comparable. This paper reports rates where possible, rather than counts, as rates are sensitive to changes in population size. Counts refer to incidents, rather than victims, unless specified. Total crime trends are dominated by property crime (Mayhew, 2012) and are not presented here. Where possible, this paper presents violent crime series that include homicide, assaults, robbery and sexual offences, and property crime series that include burglary, fraud, and all other theft. Violent and property crime series for NSW, New Zealand, and England and Wales, are consistent with these groupings, as are the violent crime series for Canada and Scandinavia. Series comprised of different offences are defined in text. Trends are presented for assault and burglary where possible, as these tend to be the most prevalent crime of each type. Much of the data used in this paper is drawn from dynamic databases. The rates presented here may therefore differ from those reported in earlier studies. Crime counts may, for example, be revised retrospectively following improvements in counting processes (NSW Bureau of Crime Statistics and Research, 2015) or recasting of population estimates (ABS, 2015a). A complete description of all series breaks is beyond the scope of this paper.

**Results**

**New South Wales**

The Bureau publishes annual updates of long-term trends for violent and property crime and trends in specific offences, for NSW (Goh & Ramsey, 2015; NSW Bureau of Crime Statistics and Research, 2015). Figure 1 presents 20 years of data for violent crime, assault (58% of violent crimes in 2014), property crime, and burglary (19% of property crimes in 2014). All series show a general increase and then decrease. The violent crime rate has increased overall since 1995 but is now 15 per cent lower than its 2007 peak. The property crime rate has declined by 55 per cent since 2000.

The violent and property crime trends are broadly matched by the assault and burglary trends, respectively. The assault rate sat at around 1 per 100 persons during the 2000s and has since declined to 1 in 119. The burglary rate is now 1 for every 161 persons, down from 1 in 49 in 2000. Although not shown here, there is heterogeneity within the series. Contrary to the
broaden trends, the murder rate has nearly halved over the past 20 years (Goh & Ramsey, 2015), while fraud and domestic violence-related assault have increased significantly over the past five (NSW Bureau of Crime Statistics and Research, 2015).

**Australia**
The ABS publishes a subset of recorded crime data compiled from administrative systems maintained by state/territory police agencies. Individual offence series do not count unique victims and so cannot be aggregated to create total ‘violent’ or ‘property’ series. For assault, this paper uses the published national counts of victims for 1995 to 1999 (ABS, 2000), and sums the published state totals (per Mayhew, 2012) for 2000 to 2009. For burglary with theft, this paper uses the national counts of victims provided by the ABS to Weatherburn and Holmes (2013) for 1995 to 2011 and published counts for 2012 to 2013 (ABS, 2014). These data are reported Table A1. The full implementation of the National Crime Recording Standard resulted in a break in the burglary series in 2010, and assault data for the years since 2009 have not yet been standardised. Mayhew (2012) suggests that national trends are rendered imprecise, but not substantively different, by other breaks within individual jurisdictions (e.g. the 2006 downward correction by NSW of its approach to counting burglary).

After violent and property crime rates rose in the 1970s and 1980s (Mayhew, 2012), Figure 2 shows that the national burglary with theft rate stabilised during the 1990s, more than halved during the 2000s and fell slightly from 2010 to 2013. The national assault rate increased in the mid-late 1990s and stabilised during the 2000s at around 50 per cent above the 1995 level. There are no national assault figures for 2010 to 2013; data from NSW and four jurisdictions with much smaller populations suggest a slight fall in assault during this time, but a national trend cannot be calculated from these data due to between-state differences in methodology.

Other data reveal offence-specific variation during this period, particularly for violent offences; unlike assault, homicide and robbery rates fell from 2001 to 2009 and from 2010 to 2013 (ABS, 2014; Weatherburn & Holmes, 2013). Trends have also varied between some Australian jurisdictions. For example, over the past five years, assault has trended downward in some states including NSW (as reported in the previous section) and Queensland (Queensland Police Service, 2014) but upward in others including Victoria (Crime Statistics Agency, 2015) and Western Australia (ABS, 2014).

Australian crime victim survey data (Mayhew, 2012) contain substantial methodological discontinuities that compromise the estimation of trends since 1995. The current National Crime Victimisation Survey (ABS, 2015b), conducted each fiscal year since 2008-9, shows slight falls to 2013-14 in rates of violent and property crime victimisation, including assault and burglary. These trends align closely with those for NSW. Earlier surveys reported increases in assault and falls in burglary from 1998 to 2005, in line with police data (Mayhew, 2012). In lieu of unbroken national series for recorded crime, these survey data provide the strongest suggestion that recorded crime continues to decline, nationally. In the past six years the rate of reporting of assault to police has increased slightly, and therefore cannot account for the reduction in assault (although this was linked with rising assault rates in the 1990s: Ringland & Baker, 2009).

However, among assaulted persons, there was an increase in repeat victimisation, with the proportion of victims reporting having been assaulted more than five times within a given year nearly doubling (see Tables 10 & 11: ABS, 2015b).

**New Zealand**
Recorded crime data for New Zealand show violent crime was largely stable between 1995 and 2004, rising by around 25 per cent to a peak in 2009 and stabilising in recent years, at 10 to 15 per cent higher than the pre-2005 period. By contrast, property crime rates have halved, with declines across most years.

![Figure 2. Assault and burglary with theft rates (victims), Australia](source)

![Figure 3. Violent and property crime rates, New Zealand](source)
A step increase in recorded crime occurred in June 2005 due to changes in recording (Statistics New Zealand, 2015a).

Trends for assault and burglary resemble the violent and property crime series, respectively, however there was some variation in trends for specific offences. For example, since 2009-10, assault rates have fallen while sexual assault rates (not shown) have risen by around 25 per cent. Although longer-term trend data for violent and property crime rates in New Zealand are not available, the familiar curvilinear pattern is evident in the total recorded crime series for New Zealand, which rose during the 1970s to 1980s and peaked in 1992 (Mayhew, 2012).

**England and Wales**

In England and Wales (Figure 4), violent crime increased slightly from 2002-03 until 2005-06 and then decreased for several years. Unabated annual falls over this period took rates of property crime rates to around half their 2002-03 level. Scottish data also show declining rates in violent and property crime over the past decade (Eurostat, 2015). Earlier data are no longer reported by the Home Office and longer-term trends cannot be calculated because of fundamental changes in crime recording made in 1998 and 2002 (Office for National Statistics, 2012). However, total recorded crime and victimisation rates (see below) have been in decline since the early to mid 1990s. Victim survey data for England and Wales shows that after a steady rise of at least a decade until 1995, violent, property and total crime counts have trended downward to less than half their peak level (Office for National Statistics, 2014a). It has been argued that this reduction was somewhat driven by reductions in repeat victimisation (Britton, Kershaw, Osbourne, & Smith, 2012).

**Europe and Scandinavia**

Aebi and Linde (2012) undertook sophisticated analyses of crime data from 1990 to 2007 in 10 European countries (including England & Wales) with sufficiently reliable data for that period. Their analyses indicate that violent crimes (apart from homicide) increased and possibly began to taper by 2007, while most property crimes declined from the mid-1990s (Aebi & Linde, 2012). Aggregated data for all available European Union member states suggest a slight decline in violent and property crime from 2007 to 2012 (Eurostat, 2015). However, these data are complicated by unclear and non-standard definitions in some countries, as well as diversity within series (e.g. burglary has increased over this time) and between series (e.g. violent crime has increased sharply over this time in Turkey).

Tonry (2014) argued that the UK should be compared with non-European English-speaking common law countries, and restricted his European analyses to Scandinavia due to the ‘vastly more complex’ picture elsewhere in Europe (vis-à-vis legal, recording and reporting systems). Figure 5 presents percentage changes in violent crime rates since 1995 for Scandinavian countries (Eurostat, 2015), indexed at zero to facilitate comparisons of the overall trend. Violent crime increased over this period, possibly tapering in recent years, although homicide continued its long-term decline during this period (Tonry, 2014). It has been reported elsewhere that property crime in these countries declined over this time, having peaked slightly earlier than violent crime (Von Hofer, Lappi-Seppälä, & Westfelt, 2012).

**USA and Canada**

Figure 6 shows the almost unabated falls over the past 20 years in recorded property crime (comprised of burglary, larceny/theft, vehicle theft, and arson) and serious violent crime (comprised of murder, rape, robbery and aggravated assault) in the US (Federal Bureau of Investigation, 2014).
Although not shown here, there was also variation within these series: for example, vehicle theft fell sharply over the past decade whereas burglary was largely stable before beginning to fall in 2012. Historical data (Tonry, 2014) show that these declines commenced in the early 1980s or 1990s following long-term increases.

In Canada, rates of police recorded violent, property and total crime peaked in 1991 (Boyce, Cotter, & Perreault, 2015), followed by a more attenuated crime drop during the 1990s than was experienced in the US (Zimring, 2007). The data presented in Figure 7 show that rates of violent crime and property crime (which includes property damage) are in long-term decline.

**International**

Special caution is required when aggregating national trends in crime over the past 20 years, due to the immense cultural and legal diversity that any overall series must subsume, and because of major changes in coverage and measurement of crime data during this period (e.g. Eurostat, 2012a). International trends also conceal regional and national variation. Regional trends in police-recorded crime (United Nations Economic and Social Council, 2014) diverged substantially during this period: for example, violent crime increased overall in the Americas, despite declining rates in North America. The World Health Organization (2014) has estimated that from 2000 to 2012, homicide rates declined globally, but by a much greater proportion in high-income countries than middle/low-income countries.

The International Crime Victim Survey has documented victimisation experiences via standardised interviews, which facilitates the comparison and aggregation of time series from different countries. International trends were most compellingly demonstrated in multi-level analyses (Tseloni, Mailley, Farrell, & Tilley, 2010) of 27 countries with more than two waves of survey data between 1989 and 2005 (most were in Europe; 16 provided national data, including Australia). The top level finding was that all recorded types of victimisation fell cross-nationally and the rate of decline was the same across countries for most types. Falls in incidence between 1995 and 2004 were larger for property crimes than for assault (Tseloni et al., 2010). Data from this survey do not adequately cover the post-2005 period.

**Summary**

This paper has compared long-term crime trends in NSW with trends in Australia, New Zealand, Canada, the USA, England and Wales, and Scandinavia. Wide variation within and between these series and methodological limitations preclude trends for some series from being conclusively described (Mayhew, 2012). Substantial differences between violent and property crime trends and problems with ‘total crime’ indicators also mean that it would be an over-simplification to refer to one ‘general’ trend in crime.

With these limitations in mind, the available data show property crime in decline in all jurisdictions considered in this paper, and violent crime in decline in most, although less consistently across jurisdictions than for property crime.

The recorded rate of property crime has fallen almost continuously since 2003 or earlier in all of the jurisdictions. Among those jurisdictions with longer-term data, New Zealand, Canada and the USA show property crime rates declining since at least the mid-1990s, several years prior to the decline in NSW (2002 to the present). Where such comparisons can be made, current levels of property crime are substantially below their 1995 levels.

Violent crime trends are also falling in most jurisdictions, but compared to the falls in property crime these falls have
generally occurred later and have shown less uniformity across jurisdictions. The jurisdictions with the most sustained reductions in violent crime are England and Wales, Canada and the USA (all with decreases of at least several years' duration). Violent crime has fallen in NSW since 2007; in New Zealand the fall began more recently and is thus less well established; data do not yet show whether violence is in decline in Scandinavia. Bearing in mind the more recent start to the falls in violent crime, current rates of violence exceed their 1995 levels in some jurisdictions, including NSW.

Although not quantified in this paper, it is clear that the magnitude of these changes varies widely. Falls in property crime generally appear to have been proportionally greater than those for violent crime (although these changes may even out over time). There was also considerable heterogeneity between offences within these series. Homicide is in an almost universal decline (including in Scandinavia), and assault and robbery rates in Australia diverged substantially (Weatherburn & Holmes, 2013). Against the broader falls in violence, the stability or increases in some types of violence (including sexual assault) in some regions (United Nations Economic and Social Council, 2014) also warrant further scrutiny.

**Acknowledgements**

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**References**


## Appendix

### Table A1. Data used to calculate Australian and New South Wales crime rates

<table>
<thead>
<tr>
<th>Data</th>
<th>AUSTRALIA</th>
<th>NEW SOUTH WALES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Population</td>
<td>Assault</td>
</tr>
<tr>
<td>1995</td>
<td>18,004,882</td>
<td>101,710</td>
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<tr>
<td>1996</td>
<td>18,224,767</td>
<td>114,156</td>
</tr>
<tr>
<td>1997</td>
<td>18,423,037</td>
<td>124,500</td>
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<td>1998</td>
<td>18,607,584</td>
<td>130,903</td>
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<td>1999</td>
<td>18,812,264</td>
<td>134,271</td>
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<td>2000</td>
<td>19,028,802</td>
<td>138,708</td>
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<td>2001</td>
<td>19,274,701</td>
<td>152,283</td>
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<tr>
<td>2002</td>
<td>19,495,210</td>
<td>160,118</td>
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<tr>
<td>2003</td>
<td>19,720,737</td>
<td>157,280</td>
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<td>2004</td>
<td>19,932,722</td>
<td>156,849</td>
</tr>
<tr>
<td>2005</td>
<td>20,176,844</td>
<td>166,507</td>
</tr>
<tr>
<td>2006</td>
<td>20,450,966</td>
<td>172,441</td>
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<tr>
<td>2007</td>
<td>20,827,622</td>
<td>176,077</td>
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<td>2009</td>
<td>21,691,653</td>
<td>175,277</td>
</tr>
<tr>
<td>2010</td>
<td>22,031,750</td>
<td>152,691</td>
</tr>
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<td>2011</td>
<td>22,340,024</td>
<td>153,051</td>
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<tr>
<td>2014</td>
<td>23,475,349</td>
<td>140,314</td>
</tr>
</tbody>
</table>

Note. ABS* = customised data for Weatherburn and Holmes (2013).
BOCSAR = Unpublished recorded crime data extracted on 1 Jul. 2015.
Australian data count victims; NSW data count incidents.

* Includes ‘Receiving or handling stolen goods’, which is not included as a ‘property’ offence in the Bureau’s annual reports (NSW Bureau of Crime Statistics and Research, 2015).

# For 2000, Figure 2 in this paper uses the mid-point of the 1999 and 2001 rates.