Estimates of the Costs of Crime in Australia in 1996

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Estimating the financial and economic costs of crime involves the use of sophisticated methodology plus a pinch of guesswork. This paper aims to identify the scale of the costs and if the current range of crime prevention efforts result in a reduction in crime of one-half of one per cent, the saving to the Australian community, on the basis of data in this report, could be in the order of $100 million per annum.

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It is widely recognised that an assessment of the overall economic impact of various crimes is an essential basis for policy and decision making. An estimate of the relative costs of different types of criminal offence was first attempted by the Australian Institute of Criminology in 1992 (Walker 1992), and this paper revises those estimates.

The approach taken is as follows. Some types of crime are estimated from police and/or victim survey data on average community costs per crime and the estimated incidence of crime throughout Australia. Other crimes, including the significant categories of fraud and drug offences, have been estimated by assembling the results of various authoritative studies and “reading between the lines” to find the most credible figure.

Where updated figures have been found, then these new figures have replaced those used in 1992. Where no new figures are available, then a simple adjustment has been made to the 1992 figures to reflect inflation. Where entirely new and more credible data sources have produced new estimates for either cost-per-crime or for incidence of crime, these have been preferred.

The two fundamental questions addressed by this paper are:
• How much did crime cost the Australian economy in 1996?
• How were these costs shared between the different types of crime?

Defining the Costs of Crime

The costs of crime include not only property losses and/or medical costs incurred during the actual incident and its immediate aftermath. They include the costs of long-term and wide-ranging consequences of the incident, the costs of preventive efforts made to reduce the future incidence or severity of such crimes, and they include the costs of the criminal justice system set up to deal with the offenders. Some less tangible costs, such as those resulting from a lack of full participation in life because of the fear of crime, should in theory be included, but can rarely be quantified. Two quite separate types of costs are identified by economists (HOSCCP 1988): the financial and the economic costs of crime.
Financial costs are those costs which are not, in the eyes of economists, losses to the community, but are illegal transfers of purchasing power from victims to offenders. Thus the thief who steals $100 is better off by that amount, cancelling out the $100 loss incurred by the victim. Yet we intuitively count these as costs of crime; this report follows this intuition.

Economic costs of crime arise when crime causes society to divert time, energy and resources from more productive purposes. These include the diversion of scarce medical resources to the treatment of victims of crime, the quality of life losses incurred by victims, and the time spent by victims assisting police with enquiries, as well as the more obvious costs of public and private resources used against crime.

Caveat

It must be stressed that these figures can at best be regarded as estimates only. They vary considerably in the extent to which they include “intangible” and long-term costs. While comparisons between these estimates for 1996 and those for 1992 will inevitably be taken as indicating likely changes over this four-year period, this interpretation should be used with great caution as, in some cases, the basis for estimation has changed significantly owing to improved data sources.

563 461. The survey also suggested that of these, around 29.2%, or 164 531 victims, would have been physically injured to some degree. The combined results of the 1989 (Walker 1993) and 1991 International Crime Victimization Surveys (ICVS) (van Dijk et al. 1990) suggest that 62% of those hurt in non-sexual assaults (i.e. 102 051) would have received medical treatment.

Also, the NCVS suggests an estimated 38 900 women were victims of a sexual assault or an attempt in 1992-93. Taking multiple victimisations into account, it suggests a total of at least 53 682 incidents, of which 30.5%, or 16 373 would have involved physical injury. If we assume the same ICVS proportion of 62%, it suggests that 10 151 of those will have required medical treatment.

In contrast, the NCS data on numbers of assaults and sexual assaults reported to police in 1995 indicate that only 101 149 victims of non-sexual assaults and 12 809 victims of sexual assaults reported incidents in that year. In part, this is explainable by the low reporting rate for this type of crime. The similarity between the estimated numbers of victims who would have received medical treatment and the number of incidents reported to police is probably no coincidence, however.

The National Injury Surveillance and Prevention Project (NISP) has been interpreted as suggesting an average total cost per violent incident equivalent to $264 in 1995-96, and $7532 if injuries are involved. This includes immediate loss of earnings and medical expenses (see, for example, NCV 1990). Some researchers however, such as the New South Wales Women’s Coordination Unit (1991), estimate the long-term losses of earnings and the social costs faced by victims of domestic violence to be many times these figures. Including costs of injuries, an estimate of $979 million is generated by these data

Some Problems

Neither financial costs nor economic costs of crime are easy to define or measure. For example, the economic costs of crime prevention can include security hardware, environmental design and various lifestyle measures. Estimates from the security industry therefore must underestimate total prevention costs, yet, by its very nature, the extent of the underestimation is indeterminate.

Long-term and indirect costs of crime are often particularly difficult to define. For example, serious victimisation which causes severe emotional stress can in turn affect employability and therefore career earnings. These types of costs can be seen to have economic “multiplier effects” in which the victims’ families, relatives, business associates and even whole communities also suffer losses. Where do we draw the line?

The criminal justice system itself costs taxpayers several billion dollars each year, yet its many employees contribute to taxation revenues. Arguably only the net costs, not the total costs, of the justice system should be counted. Yet it is extremely difficult to make these distinctions.

Including payments of fines, insurance payouts and Criminal Compensation payments is another difficulty. Fines, like taxation, must be counted on the other side of the ledger, and are not within the scope of this paper. In the cases of insurance and compensation, we count only the administrative costs incurred by the organisations making the payment.

It may even be argued that some community benefits accrue from crime; for example, for some offenders, crime may be an alternative to claiming social welfare benefits.

Financial & Economic Costs

Homicide

According to the 1995 National Crime Statistics (NCS) (ABS 1996), there were 351 victims of homicide in that year. In 1990, Steadman (LRCV 1990) is reported to have estimated that each homicide costs the community approximately $1 million, excluding the costs of the prosecution and trial itself, but including the income foregone by the imprisoned offender, and the costs of supporting the surviving dependents of both victim and offender. This figure would have to be updated by a factor of 11.5% to allow for inflation. The current total costs of homicide would therefore be around $391 million per year. Excluding imprisonment costs of the 1350 or so persons currently in prison for homicide would alone amount to $68 million per year (Walker & Dagger 1993; NCSSU 1996) however, and this should be deducted, along with police costs, to avoid double counting.

Total for this category: Max. $323m

Assaults, incl. Sexual Assaults

National Crime Victim Survey (NCVS) data suggest that in the twelve months to April 1993 around 334 200 people were victims of non-sexual assaults or threats of violence. Data on multiple incidence indicate a total number of incidents of at least 1350 or so persons currently in prison for non-sexual assault.

Excluding imprisonment costs of the 30.5% of these, around 164 531 victims, would have been physically injured to some degree. The combined results of the 1989 (Walker 1993) and 1991 International Crime Victimization Surveys (ICVS) (van Dijk et al. 1990) suggest that 62% of those hurt in non-sexual assaults (i.e. 102 051) would have received medical treatment.

Also, the NCVS suggests an estimated 38 900 women were victims of a sexual assault or an attempt in 1992-93. Taking multiple victimisations into account, it suggests a total of at least 53 682 incidents, of which 30.5%, or 16 373 would have involved physical injury. If we assume the same ICVS proportion of 62%, it suggests that 10 151 of those will have required medical treatment.

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for total sexual and non-sexual assaults, but it is likely that it may be a gross underestimate.  

Total for this category: Min. $979m

Robbery and Extortion

Estimates derived from the NCVS suggest that at least 229 500 robberies occurred in 1992-93, of which 52.1%, or over 119 570 were said to have been reported to police. These may include robberies of commercial premises where the business, not the survey respondent personally, was the victim. Such incidents, according to police data, would involve much greater losses than robberies of individuals (Victoria Police 1996).

By contrast, the NCS suggests only 12 765 robberies were reported to police in 1993, 13 983 in 1994 and 16 466 in 1995, including both personal and business robberies.

There are clearly major problems with the definitions of robbery. The word “robbery” is commonly used by victims when, technically, a theft or a burglary, not a robbery, has taken place—the difference being that no violence was used or threatened. So police data must be regarded as the more reliable for reported crime.

Using the NCVS figure of 52.1% reporting rate suggests that 15 139 unreported robberies would have occurred in 1995 in addition to the 16 466 that were reported.

Victoria Police data for 1995-96 suggest an average cost per reported robbery of $2042 (cf. ICVS estimates of $74 for non-reported incidents and $2388 for reported incidents in 1988). Combining these cost data and NISPP estimates of the costs of injury suggests current costs of only $37 million.

A further complication is the extent to which stolen property is recovered or other economic damage is caused. No information has been found to provide meaningful estimates of this.

Some rare cases of extortion (for example, instances involving tampering with food products on supermarket shelves) for which few statistics of any sort are available, not only involve very large amounts demanded from the victim, but often the full cost includes considerable lost sales. In addition, anecdotal evidence exists of significant under-reporting of extortion amongst some migrant communities in our cities. Total costs of robbery and extortion may therefore be considerably greater than the costs indicated here.  

Total for this category: Min. $37 million

Other Offences Against Property

Breaking and Entering

The Victoria Police 1995-96 data suggest an average property loss of $1786 per reported commercial break-in and $2307 per reported other premises break-in, while 1995 NCS data on crimes reported suggest there were 94 671 commercial incidents (of which 25 947 involved no property loss) and a combined total of 290 226 other offences reported in that year in Australia ($6 036 involving no property loss). From this we can derive total costs of reported break-ins at $169 million for commercial break-ins and $670 million for the remainder. Neither of these figures include unreported crime. The 1993 National Survey of Crimes against Businesses (NSCB) (Walker 1994, 1995) found that, while average losses per incident ($1413) were similar to the Victoria Police figures, businesses in the retail, manufacturing, primary industry and tourism/recreation sectors alone lost over $461 million at today-s prices to burglary, suggesting that the extent of under-reporting might be quite high for crimes against businesses. Anecdotal evidence from conferences on business crime support this contention—businesses may not wish to involve the criminal justice system because of the additional costs imposed on them by the time taken to deal with police and courts.

The NCVS suggests also that 40.6% of household burglaries go unreported, although there are no data on costs. This percentage, applied to NCS figures for reported burglaries in non-commercial premises gives an estimated incidence of unreported crimes of 198 370 in 1995. The ICVS of 1989 showed average costs per unreported household burglary of around $314 at today’s prices, including associated property damage. Combining these estimates gives a total cost of unreported non-commercial burglaries of $62.4 million. The most likely estimate for breaking and entering appears to be the $461 million for commercial break-ins, $670 million for other reported crimes and $62.4 million for other unreported crimes.  

Total for this sub-category: $1193m

Fraud and Misappropriation

This is without doubt the most difficult type of crime to assess. The nature of the crime is deception and secrecy, so that it is often particularly difficult to define the extent of a crime, and sometimes difficult to know if a crime has even taken place at all. Neither the NCVS nor the NCS provide any national information about frauds.

In 1995-96, the Australian Federal Police completed investigations into 1637 crimes against the Commonwealth including frauds to a total estimated value of $807 million (AFP). In addition, the 29 805 crimes reported to Victoria Police in 1995-96 (in the category described as “deception”, which includes fraud) mostly cost under $200 and averaged a mere $3225 per incident. Extrapolated to a national figure, these incidents would add up to little more than $100 million.

The 1993 National Survey of Crimes against Businesses concluded that over $235 million was lost by businesses in the retail, manufacture, primary industry and tourism/recreation sectors in 1992-93 to frauds by customers and others. This figure excludes important sectors, such as finance and business services. The report also found that, where the offender was an employee of the firm, only one in six frauds were reported to police.

Amongst the 650 large businesses (mostly with annual gross revenues of between $25 million and $5 billion) which responded to its 1994 survey, KPMG (1995) found losses from frauds totalling in excess of $350 million averaging at $1.3 million per incident. This average was slightly down on their 1993 figure, suggesting that imp-
rovements in fraud prevention may be reducing the extent of the prob-
lem. KPMG believes that an extra-
polation of their survey results, based on estimated average fraud losses per employee, suggests a total cost of frauds against busi-
nesses of the order of $16 billion. Their definition of frauds, however, appears to include thefts by staff, customers and suppliers.

Insurance Council of Australia (1994) research suggests that fraudulent claims on insurance companies in Australia had declined from $1700 million in 1991 to $1100 million in 1993, and was probably lower still in 1995 owing to improved auditing and crime prevention checks.

In a recent survey for the Australian Transactions Reporting Agency (AUSTRAAC) (Walker 1995), Australian Federal Police research staff estimated that frauds involving $3000 to $3500 million were perpetrated in Australia each year. (Considerably less than unofficial figures quoted in 1992 by the Australian Federal Police Association [press statement, June 1991]). The AUSTRAAC report notes, however, “there is anecdotal evidence to suggest that improved auditing of government agencies and businesses in the intervening years may have actually reduced the scope for fraud, so these estimates are not inconsistent”.

When all these figures are taken into account, one must conclude that the AFP estimate is credible. **Total for this sub-category: $3000-3500m**

**Theft of Motor Vehicle, Boat, Aircraft**

The NCVS estimated that, taking multiple victimisations into account, 119 900 incidents occurred in 1992-93, of which 112 346 were reported to police. The NCS figures for 1995 suggest 126 919 incidents were reported to police, including commercial vehicles. The NSCB gives a figure of 8143 businesses experiencing motor vehicle thefts in 1992-93. There are no cost figures in either the NCS or the NCVS, but the Victoria Police report gives an average value of $7739 per incident, and the NSCB gives an average per business vehicle stolen of $12 500. These figures, however, probably represent the total values of the cars stolen rather than the net costs—some vehicles are recovered with no, or only slight, damage. Unreported crime would be rare and one can assume that little loss is involved. These cost figures may therefore overestimate to some extent, but result in an estimate of $1036 million.

Motor insurance industry estimates, presented recently by the National Motor Vehicle Theft Task Force, gave an estimated total cost of $654 million, which seems to be the most convincing estimate. **Total for this sub-category: $654m**

**Shoplifting**

The NSCB found that thefts by customers and staff cost the retail, manufacturing, primary industry and tourism/recreation sectors a total of $287 million in 1992-93. Only 42.8% of customer thefts and 26% of employee thefts were reported to police. As well, these businesses suffer “leakage & shrinkage” (unexplained stock losses) of over $900 million per year, 75% of which is possibly undetected shopstealing (King 1994)—which would rarely be reported to police.

By contrast, extrapolation of Victoria Police figures for 1995-96 suggest that businesses in Australia lost only $10 million to shop-stealing that year. Under-reporting is known to be very high for this type of crime, because the costs of the resulting police and court pro-
cesses outweigh the simple alternative of increasing prices to cover the losses.

Use of a Retail Traders Association (RTA) rule of thumb, that the value of goods stolen from retail stores is of the order of 2% of total retail sales, results in a total estimate of $2460 million at today’s prices. The New South Wales RTA have used figures which suggest a national figure of $1000 million per annum (Geason & Wilson 1992). These figures are also very much greater than extrapolation of Victoria Police data would suggest.

The Retail Traders’ figures appear to be the best available upper bound, with the NSCB estimates (including the 75% of the costs of leakage and shrinkage) being a lower bound. **Total for this sub-category: $1020-2460m**

**Stealing from the Person**

Neither the NCS nor the NCVS attempt to measure the extent of stealing from the person. A survey of Queensland, conducted in 1991 for the Criminal Justice Com-
mision (CJC), found that 194 900 persons in that State experienced a theft from the person or from their office, at school, in shops or elsewhere during the year. This would extrapolate to a national figure of over a million incidents per year. No cost data were presented. Estimates derived from the 1989 ICVS suggest that incidents of stealing from the person cost an average of $500 at 1996 prices. These figures together suggest a total of $545 million. **Total for this sub-category: $545m**

**Other Theft**

Estimates extrapolated from 1995-96 Victoria Police data suggest that stealing from motor cars cost $145 million in 1995. Estimates also derived from Victoria Police suggest that bicycle theft cost $14 million nationally in 1995-96 and other thefts, not already count-
ed, cost $500 million nationally. **Total for this sub-category: $659m**

**Property Damage/Environmental**

Extrapolating from Victoria Police statistics for reported arson in 1995-96 gives a national figure of $150 million. Similar figures for Victorian reported criminal damage incidents extrapolate to $80 million nationally. But the CJC crime victims survey suggests that less than a quarter of residential criminal damage incidents are reported to police, suggesting a total Australian figure of as much as $320 million. This is similar to ICVS-derived estimates, which suggest that damage to private motor cars alone cost over $266 million at today’s prices.
Estimates from local authority, education department, Telecom and State Rail Authority data for 1986-87 (Potas et al. 1990), suggest a minimum for public property damage equivalent to around $125 million in today’s prices.

These figures seem modest by comparison with estimates for England and Wales, suggesting that criminal damage to public property was five times the cost of damage to individual victims (HOSC 1988). No recent data on damage to public property are available to test this apparent discrepancy however.

Environmental crime is even more difficult to quantify. The Australian Birds Association has presented estimates of $40 million for illegal exports of Australian birds. Illicit dumping or pollution offences also undoubtedly cost the community very significant but unquantifiable amounts. Total for this sub-category: Min. $510m

**Drug Offences**

Costs associated with drug offences lie in the consequences of substance abuse rather than in the commission of the crime itself. These are mainly in the health, law enforcement and tax evasion areas.

The National Campaign against Drug Abuse report (Collins & Lapsley 1991) gave a figure of around $1320 million at today’s prices for total costs of abuse of illicit drugs in Australia in 1988, including treatment of drug related illness, accidents resulting from drug abuse, loss of productivity due to absenteeism, premature death, property crime and damage, and excluding justice system costs.

However, the crime element of this is double-counted elsewhere.

The AUSTTRAAC survey (John Walker Consulting 1995) of police and researchers concluded that the illicit drugs trade is worth around $2000 million per year, and, while this value does not necessarily equate to the actual economic costs of the illicit drugs trade, it relates to financial costs.

**Total for this category: $2000m**

**Offences excluded**

Owing to lack of incidence data and information on costs, some crimes have had to be excluded from this report. Some are consequential to previous crimes and therefore no additional costs are incurred by victims. Indeed, some are victimless. In some cases it was not possible to differentiate between crime-related and non-crime-related costs. These include: kidnapping, abduction, child abuse, hijacking, defamation; handling stolen goods, pollution, flora/fauna, other environmental offences, good order offences; traffic offences.

### The Criminal Justice System

Government expenditures on crime prevention and law enforcement are shown in Table 1. Agencies which carry specific crime preventative and compliance responsibilities within a broader field of responsibility are also included, greatly increasing the justice system costs compared with the 1992 estimates.

Expenditure on juvenile corrections is specifically excluded from Commonwealth Grants Commission (CGC) data but there were 791 persons in such institutions on 30 June 1992. If one assumes that costs are similar to adult prisons, this results in annual costs of juvenile detention of around $40 million.

Finally, all Commonwealth agencies are now required to develop and implement comprehensive fraud control plans, the costs of which ought in theory be included. Data are not yet available, but could be included in future compilations of this kind.

The total criminal justice system costs therefore appear to be of the order of $6.4 billion, of which around 63% consists of State and Territory expenditures.

**Totals for this category**

- Policing and Law Enforcement: $2858m
- Courts & Administration of Justice: $817m
- Corrective Services: $747m
- Other Agencies: $2011m

**Other Crime-Related Costs**

**Crime Prevention**

Estimates provided by the Australian Security Industry Association Ltd (ASIAL) (personal communication) suggest that the industry was worth $1250 million in 1991-92. This covers the principal areas of security industry activity: manpower (guards, surveillance, cash-carrying etc), alarms (monitoring, responding etc) and electronics (access control, closed-circuit TV etc).

Adjusting for inflation gives a figure of $1300 million; however, in view of the apparently increasing use of such home
hardware items as motion-sensitive lighting and double deadlocks, this is very probably an underestimate.

Insurance Industry

Only the aggregate excess of crime related insurance policy premiums over payouts are counted. No estimates have yet been obtained for this, and advice from the Insurance Council of Australia and the Insurance and Superannuation Commission suggests that it is not readily computable from existing data.

Total for this category: Min. $1300m

Conclusion

As far as this paper has been able to estimate, the minimum total costs of crime in Australia lie somewhere between $11 billion and $13 billion per year. Since there have been numerous instances where significant additional costs have been identified but not quantified, the true figure is likely to exceed the upper end of this range—that is a minimum of 2.5% of Gross Domestic Product. The largest components of these costs are the result of white-collar crime. The cost of the combined private and public efforts to prevent and counter crime amount to around $8 billion per year—around 1.9% of GDP. This figure, too, is likely to err on the low side, since there are additional costs which have not proven amenable to calculation. Overall, then, it appears that crime costs Australians at least $18 billion per annum, or around $1000 per man, woman and child, $2800 per household, or over 4% of GDP.

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