



**Australian Government**

**Australian Institute of Criminology**

# Costs of Crime in Australia: Why they are only estimates

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# Current research study

- **An update of Pat Mayhew's original work (estimating 2001 costs)**
- **Based heavily on methodology used in the UK by the Home Office (Brand & Price 2000)**
- **Uses a 'bottom-up, building blocks' approach**
  - Costs individual crime types – victims costs
  - Costs of government services in their entirety
- **Should be considered an estimate only - methodological limitations which will be discussed shortly**



# Methodology

**Multipliers used to estimate the unknown crimes**

**Building blocks approach – calculate component costs for each crime type and include the costs of the criminal justice system in its entirety afterwards**

- Medical costs, property costs, productivity losses, intangible costs

**External rather than social costs applied**

- i.e. total value of lost goods to an individual costed rather than acknowledging the property might be used by an offender, thus the lost value to society isn't as great



# An example: Costs of robbery

	Per-incident cost (A\$)			Total cost (\$A mil)		
	Medical	Lost output	Intangible	Medical	Lost output	Intangible
Hospitalised	4,000	7,500	5,200	14	27	19
Injured, medical treatment	1,000	1,800	1,900	13	24	25
Injured, no medical treatment	-	580	580	-	10	10
All injured	1,600	1,800	1,600	28	61	54
Not injured	-	35	350	-	2	23
Average/total	280	640	780	28	63	77



# Major studies used for the estimates

- **Australian Bureau of Statistics (ABS) data**
  - Recorded Crime, Crime and Safety Survey, Personal Safety Survey
- **UK home office data**
  - The economic and social costs of crime against individuals and households (Dubourg, Hamed & Thorns 2005)
  - Crime against retail and manufacturing premises (Shury *et al* 2005)
- **US data on the costs of injury (Finkelstein, Corso & Miller 2006)**
- **Individual police jurisdictions provided offence data when ABS data was not available**



# Costs of crime in Australia: recent findings

- **Costs of crime were estimated at A\$35.8b**
- **This was a small ‘real’ increase over the previous estimates, but not substantial**
- **The largest components of the costs were fraud offences and criminal justice system costs (police, corrections & the court system)**
- **Robbery (separate from burglary) had the lowest total costs**

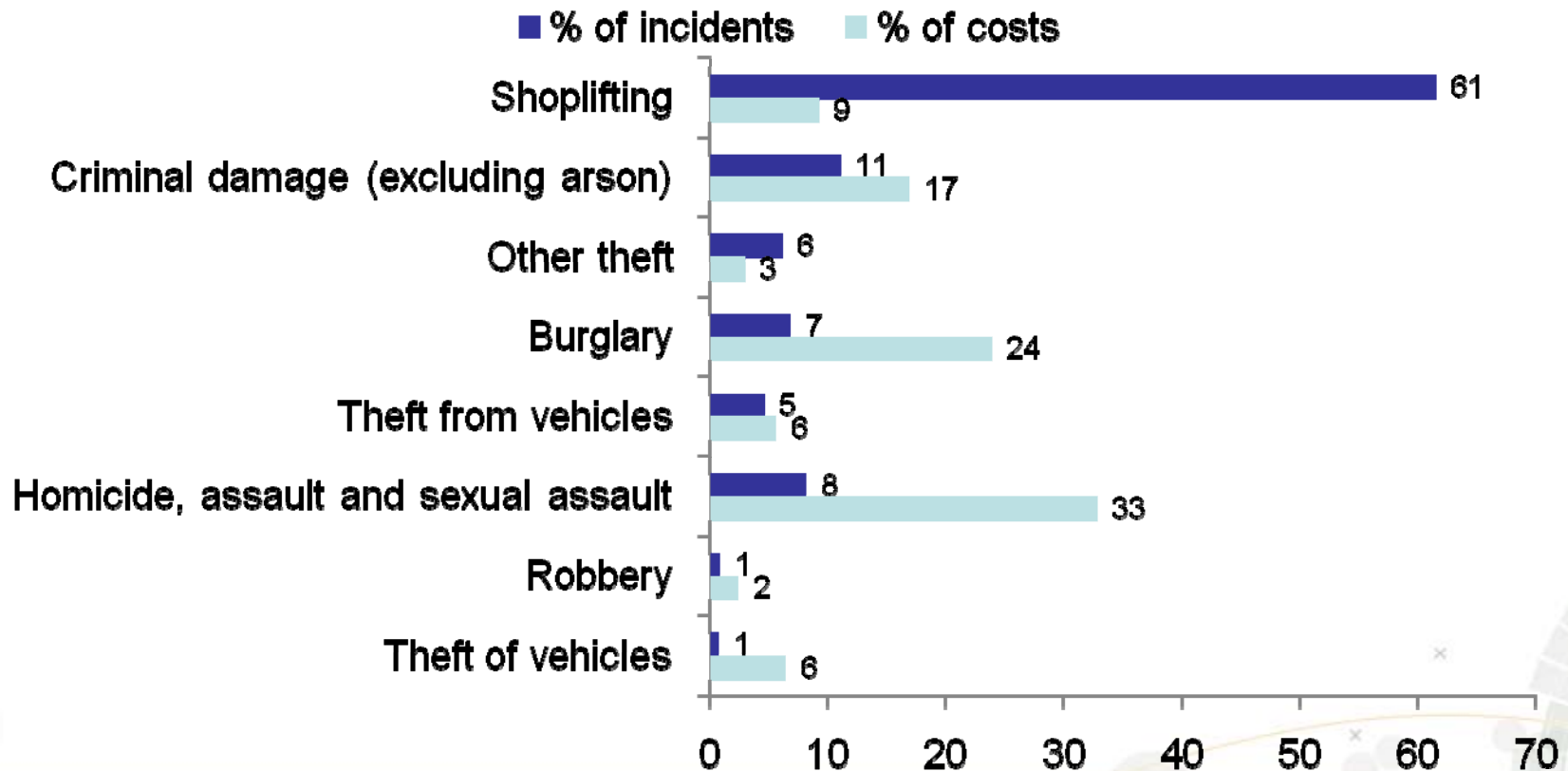


# Overall costs of crime in Australia 2005

Cost type	Estimated cost in 2005 (\$m)	Percentage of costs	Cost type	Estimated cost in 2005 (\$m)	Percentage of costs
<b>Costs – crime type</b>			<b>Other Costs</b>		
Homicide	950	2.7	Criminal justice	9,808	27.4
Assault	1,411	3.9	Victim assistance	1,073	3.0
Sexual assault	720	2.0	Security	2,999	8.4
Robbery	225	0.6	Insurance admin	580	1.6
Burglary	2,229	6.2			
Thefts of vehicles	597	1.7			
Theft from vehicles	529	1.5	<b>TOTAL</b>	<b>35,802</b>	<b>100.0</b>
Shop theft	861	2.4			
Other theft	282	0.8			
Criminal damage	1,582	4.4			
Arson	1,624	4.5			
Fraud	8,516	23.8			
Illicit drug related harm	1,816	5.1			



# Volume and costs of crime, excluding arson, fraud and drugs (%)





# Changes over time

- **2001 estimates were \$32b (3.8% of GDP)**
- **Current estimates are \$36b (4.1% of GDP)**
- **This is a 12.6% increase over the four year period, slightly higher than inflation (11.2%)**
- **So a 'real' increase, but very small and given there is a margin of error for the estimates, costs of crime can be considered stable**



# Proportional changes over time

- **While overall costs did not change over time, proportions within the total costs did change**
  - An increase in the costs of fraud offences
  - An increase in the costs of the criminal justice system (post 9/11)
  - A decrease in the costs of burglary
  - A decrease in the costs of car theft
- **Highlights the changing nature of crimes – better physical security decreases historically high property crimes, but emerging electronic crimes increase fraud related offences**



# Putting the figures into context

- **Estimated costs of crime - \$35.8 bil in 2005**
- **4.1% of national GDP**
- **In 2005 Australian governments spent:**
  - \$47.2b on education (5.0% of GDP)
  - \$83.8b on health (8.9% of GDP)
- **Due to data restraints to be discussed later, the costs of crime figure is likely an underestimation**



# What was not included in the costs

- **Social costs of fear of crime**
- **Costs of supporting offenders and their families**
- **Local government crime prevention activity**
- **Community defensive action**
- **Costs associated with disinvestment in high-crime areas**
- **Lost productivity of offenders and prisoners**



# Methodological strengths

- **ABS recorded crime data is very strong and has been collected over a long period of time**
- **ABS victim surveys are strong**
- **Most results (in terms of multipliers and per-incident victim cost estimates) are comparable with current UK estimates**
- **Very transparent methodology, easily allowing for duplication and improvement when stronger data become available**



# Methodological weaknesses

- **Lack of Australian estimates on intangible losses and lost output**
- **Lack of estimates of costs of crime to Australian business**
- **Lack of data on costs of injury in Australia**
- **National counts of all crime types are not available**
- **No lost productivity estimates for offenders**
  - How much would criminals be 'worth' to society if they were engaged in the legitimate economy?
  - How many individuals are involved in crime?



# Australian Bureau of Statistics (ABS): Recorded Crime data

- **National count of crimes in the categories of homicide, assault, sexual assault, robbery, burglary, vehicle theft, and other theft (also kidnapping, extortion and blackmail).**
- **Does not collect national statistics on fraud, arson, criminal damage, shop theft (specifically) or theft from vehicles (specifically)**
- **This is mainly due to definitional differences between state and territory jurisdictions**



# ABS data gaps– what do they mean?

- **Methodological weakness of the study**
- **Recorded crime data not available from ABS was received from some states/ territories and this was adjusted to give a national estimate**
- **Data was not received from all jurisdictions, so recorded crime figures are estimates rather than ‘solid’ figures**
- **Possibility for over/underestimation in recorded crime types**
- **Any errors will be magnified when multipliers are applied**



# Multipliers

- **The ‘gap’ in the number of known and unknown crimes is a major methodological hurdle.**
- **Many crimes occur but are not reported to police by the victim (e.g. sexual assault and domestic violence related assault)**
- **Many crimes occur but the victim isn’t aware the crime has taken place (shoplifting and fraud)**
- **This doesn’t mean there are no costs associated with the ‘unknown’ or ‘unreported’ crimes**



## Multipliers cont.

- **Multipliers are used to estimate the ‘unknown’ number of crimes**
- **Using victim surveys, the recorded number of crimes are adjusted by the multiplier to estimate the ‘true’ number of crimes**
- **Some form of multiplier is necessary, but this may still underestimate some crime types (e.g. homicide and sexual assault) or overestimate others (shop theft)**



# Multipliers by crime type

	2001 multiplier estimate	Current multiplier estimate
Homicide	1.0	1.0
Assault	5.3	5.2
Sexual assault	5.6	5.3
Robbery against individual	7.5	7.2
Robbery against commercial	1.1	1.2
Burglary	3.0	3.4
Thefts of vehicles	1.05	1.0
Thefts from vehicles	3.6	2.8
Shop theft	100.0	100.0
Other theft	4.5	2.7
Criminal damage	6.0	4.3
Arson	-	-
Fraud	4.0	4.0



# Tangible vs. intangible costs

- **Intangible costs are those costs not usually 'exchanged in private or public markets, such as fear, pain, suffering, and lost quality of life' (Cohen 2005:25)**
- **Tangible costs include medical costs, lost output, value of stolen property and are easier than intangible costs to quantify**
- **Intangible costs for this study are mainly taken from UK estimates and are based on a 'willingness to pay' model**
- **Almost no work on intangible costs of crime have been conducted in Australia**



# Examples: methodological decisions in costing crime

- **Should ‘handling of stolen goods’ or ‘money laundering’ offences be included? Do these offences generate a cost over and above what has already been costed? (*we didn’t include them*)**
- **As above, do drug trafficking/ dealing offences generate a cost over and above the human costs of drug abuse and the criminal justice response to drug offending? (*we didn’t include them*)**
- **Should intangible costs be included? (*we included them*)**



# Examples: methodological decisions in costing crime cont.

- **Social costs vs. external costs (*we used an external costs model*)**
- **Should lost productivity and lost quality of life for prisoners and their families be included? (*we didn't include them*)**
- **Should costs of illicit drug community awareness campaigns be included? (*we didn't specifically include them*)**



# Why are they only estimates?

- **Over reliance on overseas data**
- **The unknown number of crimes**
- **Incomplete reporting of recorded crime**
- **Any methodological change can yield big changes in costs**
- **Missing or un-costed areas**



# Conclusions

- **Costing of crime is a worthwhile exercise – highlights emerging areas of crime and gaps in the existing knowledge base**
- **Methodologically, costing of crime is not straight forward**
- **Of utmost importance is transparency in what has been included, what has not and why (usually data availability issues)**
- **More research is required in the areas of costing methodologies, emerging areas of crime and data ‘gaps’**



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**Questions or comments?**

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