

The Costs of Crime in Australia

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Background

Novice

- Some familiarity with UK Home Office costs of crime work

Baptism of fire....

- Work in 2002-03 at Australian Institute of Criminology a matter of chance

Plan

- Background on Australian costs of crime studies
- Current costing principles and sources
- Main Australian costings
- General findings
- Lessons for future work

Background (Australia)

- John Walker (1992 and 1997) - AIC
 - Largely omitted medical, lost output and intangibles
 - Did not start with crime survey estimates
- I was meant to update this work
- Australian Domestic and Family Violence Clearinghouse (2002)
 - Review of Australian studies on cost of domestic violence
- Costs of drug abuse: Collins and Lapsley (2002)
 - Illicit drugs (+ alcohol and smoking)
 - 'Demographic' rather than 'human capital' approach
 - I found cost estimates difficult to use

Background (UK)

- Brand & Price (2000)
 - “The Economic and Social Costs of Crime”
 - British Crime Survey (BCS) figures for many crimes
 - Some other crimes - including
 - Speeding, some traffic offences, fraud, & drugs (CJS costs only)
 - Lost output – mainly BCS
 - Intangible losses
 - Violence: ‘Willingness to pay’ to avoid road accidents - high
 - Property: BCS question on what financial sum would have compensated victims
 - System costs largely apportioned to individual crimes
 - Unlike current work – system costs a total cost

The Australian work: costing issues

- What costs were covered?
- What were the crimes costed?
- What number of crimes were costed?
- Which were unit (individual crime) costs and which were only total costs?
- Where did the cost estimates come from?

What costs were covered?

The various costs of crime

- In anticipation of crime
- As a consequence of crime
 - Mainly costs to victims
- In response to crime
 - Mainly criminal justice system costs

In anticipation of crime

	Australian costs	
Security expenditure	✓	Total cost
Insurance	✓	Total cost
Individual precautionary behaviour	✓	(Total cost)
Central & local government crime prevention		
Community defensive action		
Individual costs of fear and precautions		

As consequence of crime

	Australian costs	
Property stolen & damaged	✓	Unit cost (main)
Lost output	✓	Unit cost (main)
Health service costs	✓	Unit cost (main)
Intangible costs to victims	✓	Unit cost (main)
Victim support services	✓	Total cost
Lost earnings for prisoners	✓	Total cost
Mental health costs		
Supporting offenders and their families		
'Second generation' costs of offending		
Disinvestment in high-crime areas		

In response to crime

	Australian costs	
CJS (police, prosecution, courts etc)	✓	Total cost
Dealing with offenders (e.g. police and prison)	✓	Total cost
Dealing with victims	✓	(Total cost)

What crimes were costed?

	No. of crimes	Unit cost	Total cost
Main set	Yes	Yes	Total cost
Arson	No	No	Total cost
Fraud	(No)	No	Total cost
Drugs (n.e.i)	No	No	Total cost

Main set of offences

Violence		Property
Homicide Assault Sexual assault	Robbery	Burglary Theft of cars Theft from cars Shoplifting Other theft Criminal damage

Crimes and different costs

	Property loss	Medical	Lost output	Intangible loss	Total unit cost	Total cost
The main set						
Violence		✓	✓	✓	✓	✓
Robbery	✓	✓	✓	✓	✓	✓
Property	✓		✓	✓	✓	✓
Arson	✓		M + LO + IL			✓
Fraud	✓		LO + IL			
Drugs		✓	✓			✓

What number of crimes were costed?

The multiplier issue

Similar to US & UK

- Number of survey-measured crimes as base (1998 Australian Crime & Safety Survey)
- Compares survey crimes to 1998 police recorded crimes in 1998 (Australian Bureau of Statistics) to give a

MULTIPLIER >> Ratio of survey crimes to recorded crimes

Some adjustments for differences in coverage

- Multiplier applied to police recorded crime in 2001
- UK multipliers used for offences not in C&S Survey
 - Thefts from vehicles, other theft, criminal damage
- Research estimate for shoplifting

Sources of estimates for the number of crimes

	Police	Crime & Safety Survey	Other sources
Homicide	✓		
Assault, sexual assault		✓	
Robbery, burglary, theft of motor vehicle		✓	✓
Theft from motor vehicle	✓		✓
Shoplifting, other theft	✓		✓
Criminal damage	✓		✓
Arson	Exact number not estimated		
Fraud			
Drug offences			

Survey data used

- 1998 Crime & Safety Survey
- 1991 Queensland Household Victim Survey
- 1997 South Australia Retail Crime & Safety Survey
- 1999 Small Business (Retailers) Crime Survey

- UK household and business surveys

Where did the cost estimates come from?

Medical costs

- Cost of injury from violence in Victoria 1993/4
Monash University Accident Research Centre (MUARC)
(Watson & Ozanne-Smith, 1997)
 - About 21,000 incidents of interpersonal violence
 - Fatalities, and those treated in and outside hospital
- Used for
 - Homicide, assault, sexual assault, robbery
 - Crime & Safety Survey data on injuries
 - British Crime Survey data on hospitalisation
- Slightly different approach for drugs

Lost output (violence & drugs)

- MUARC Victoria study

Wage earnings and add-on costs

- Based on age & sex of violence victims

Household labour

- Australian Bureau of Statistics Time Use Survey
- Replacement cost

Social discount rate changed from 7% to 4%

- Used for

Homicide, assault, sexual assault, robbery, drugs

Lost output (property crime)

Mixture of

Business survey data on 'indirect costs' - for

- Non-residential burglary
- Theft of and from commercial vehicles
- Shoplifting
- Criminal damage against businesses
- British Crime Survey data on time off work - for
 - Residential burglary
 - Thefts of and from household vehicles
 - Other theft
 - Criminal damage against householders
- Arson and fraud – approach different

Where did the cost estimates come from?

Arson, fraud and drugs

- Arson

 - Fire brigade costings; insurance payouts

- Fraud

 - State police costs; Australian Federal Police

- Drugs

 - Deaths; treatment data; methadone maintenance

Intangible costs (violent crime)

Based on compensation awards

- Bureau of Transport Economics (BTE):
“Costs of Road Crashes” (1996)
 - Jury awards for road accidents funded by compulsory third-party insurance
 - Ratio of BTE’s lost output to intangible losses applied to MUARC’s lost output figures
- Used for
Homicide, assault, sexual assault, and robbery

Intangible costs (property crime)

Victims' desired compensation

British Crime Survey question

“Apart from your financial losses, what would be a reasonable sum to compensate you for the upset and inconvenience you and/or your household has suffered?”

- Arson and fraud – approach different

Prices etc

- Previous Australian price estimates inflated
 - Chain Price Index: final consumption expenditure
- Previous UK prices inflated as appropriate
 - Converted to Australian dollars using Purchasing Price Parities
- Costs mainly 2001-2
- Converted here to current Euros (no PPP)

The overall bill

Main set of offences

€6,000 m

Arson

€820 m

Drugs ('human costs')

€1,200 m

Fraud

€3,600 m

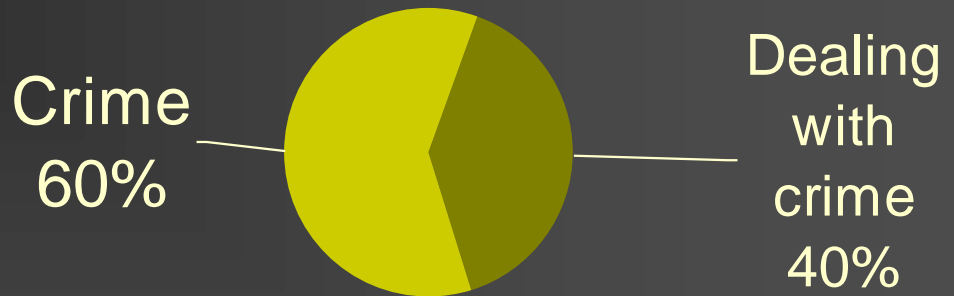
Dealing with crime

€7,800 m

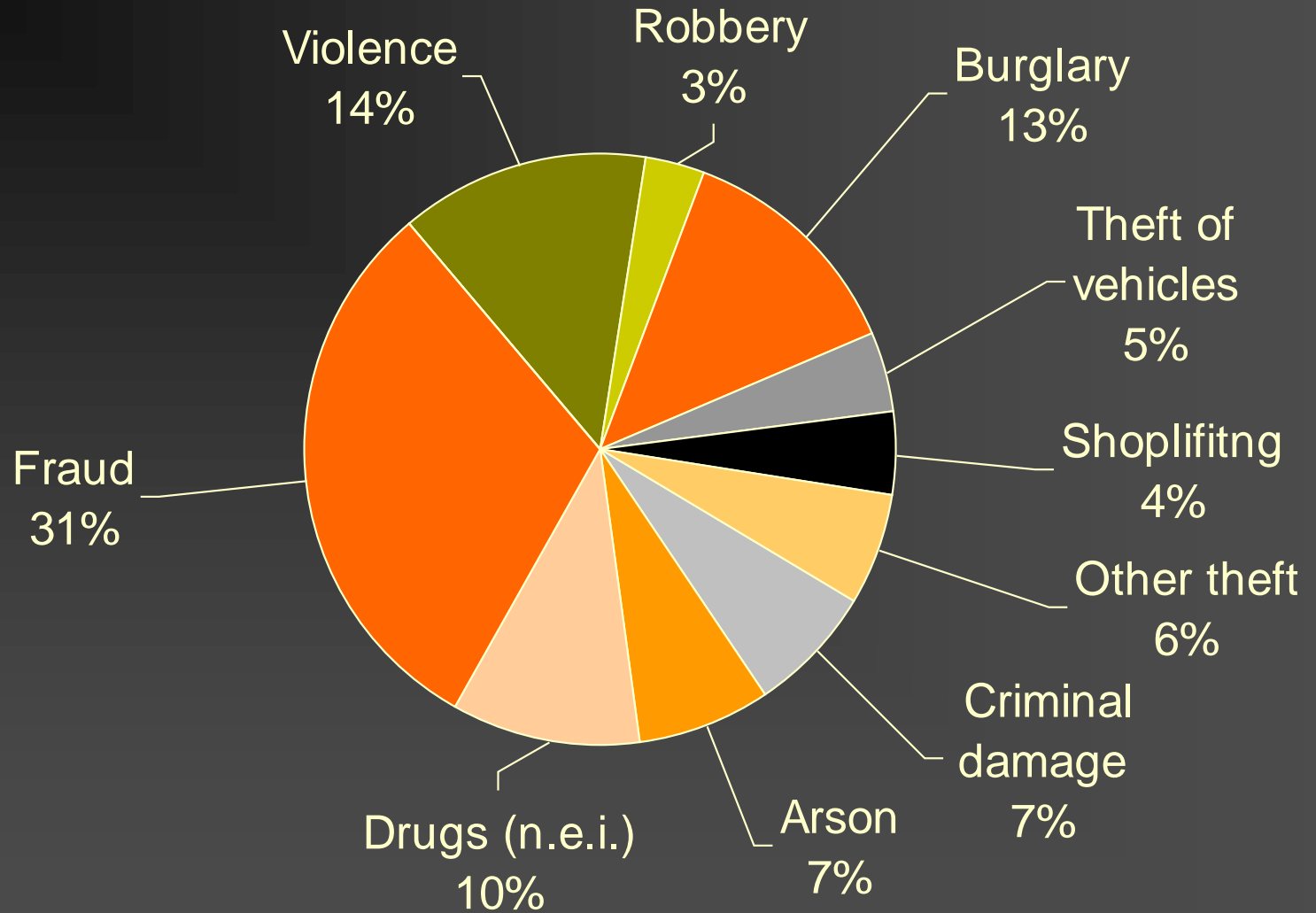
€19.4 million

5% of Australian GDP

€1,000 per person



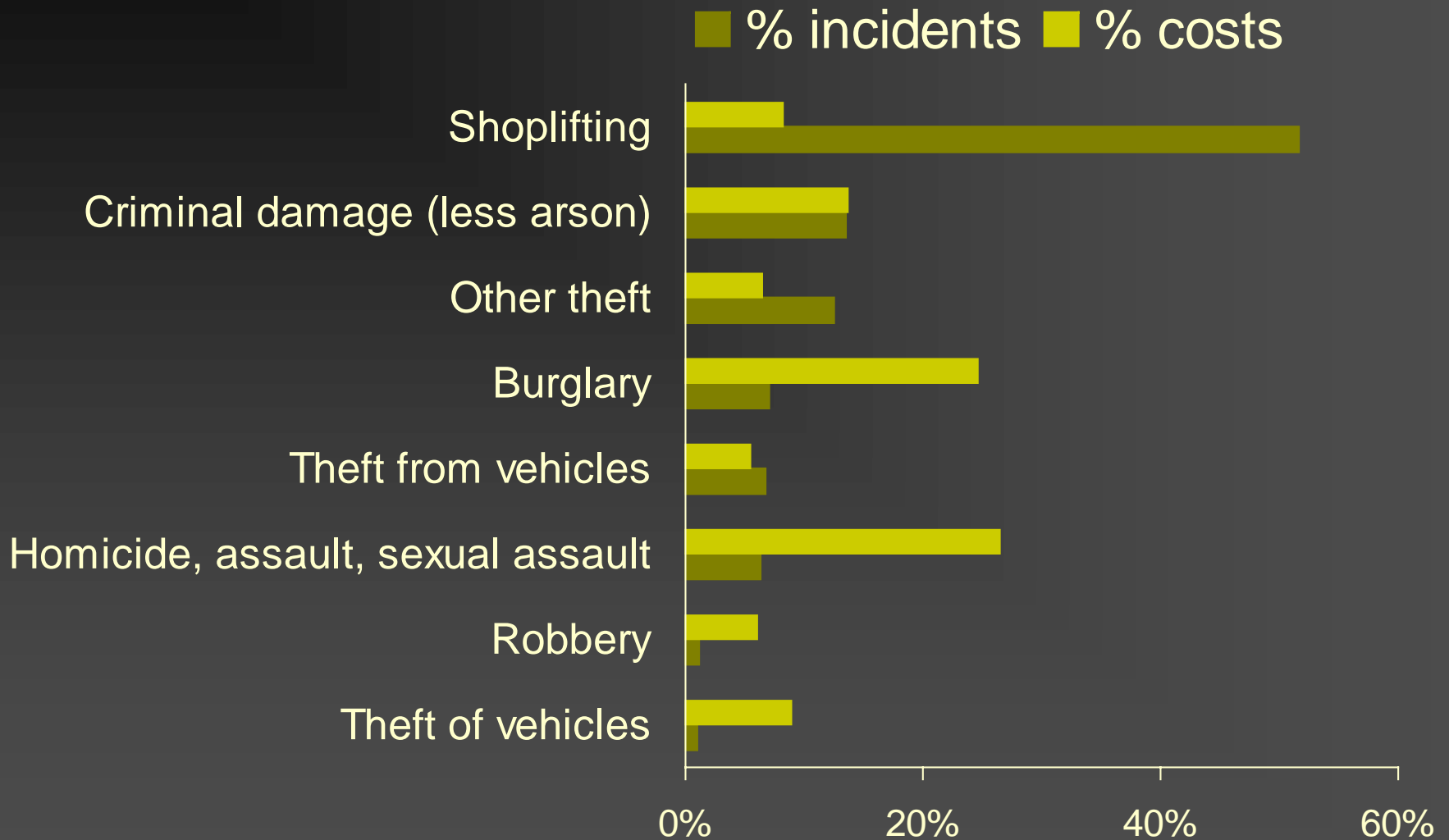
The crime costs (€ 11,600 m)



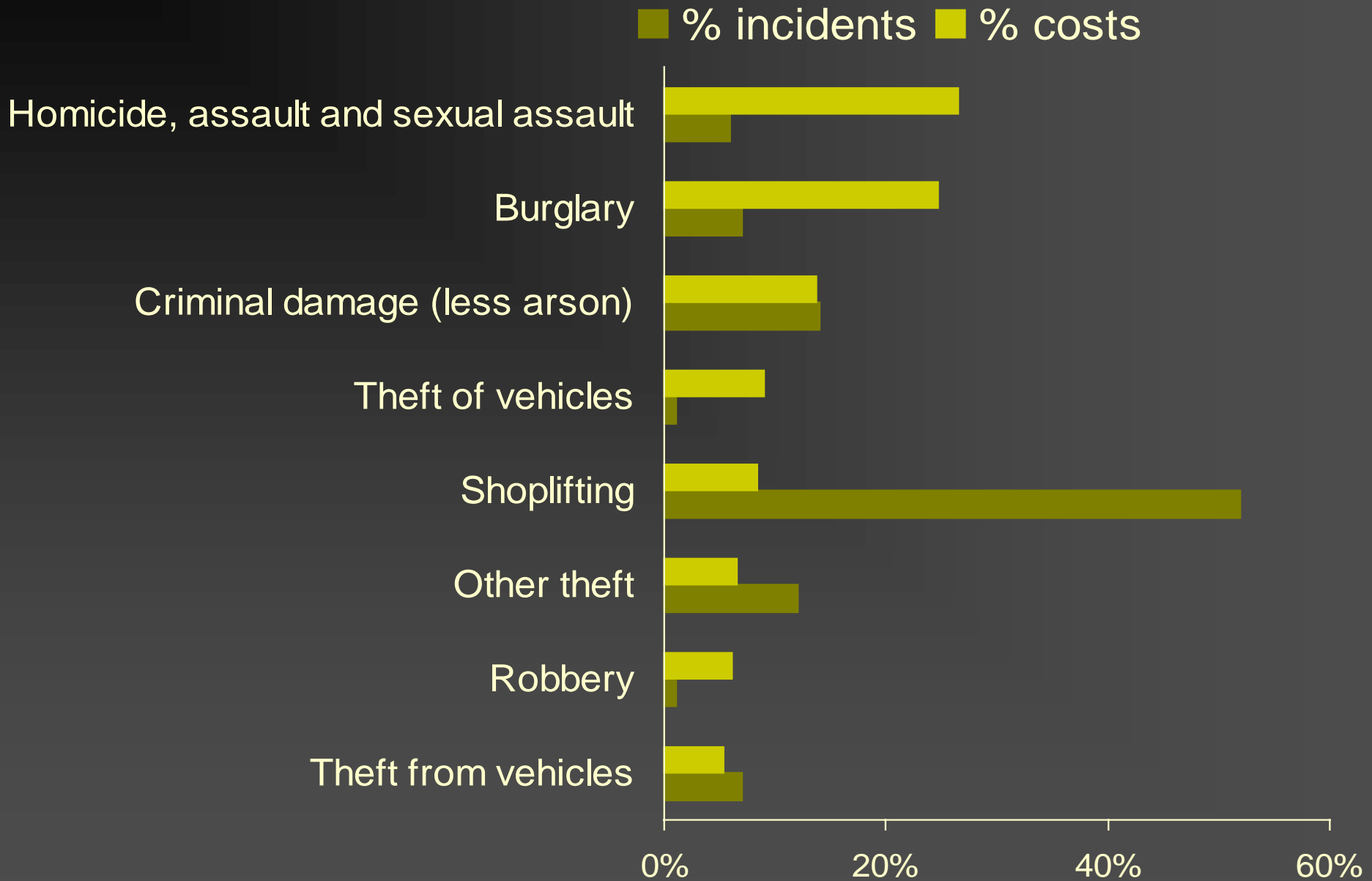
Unit costs € (main set)



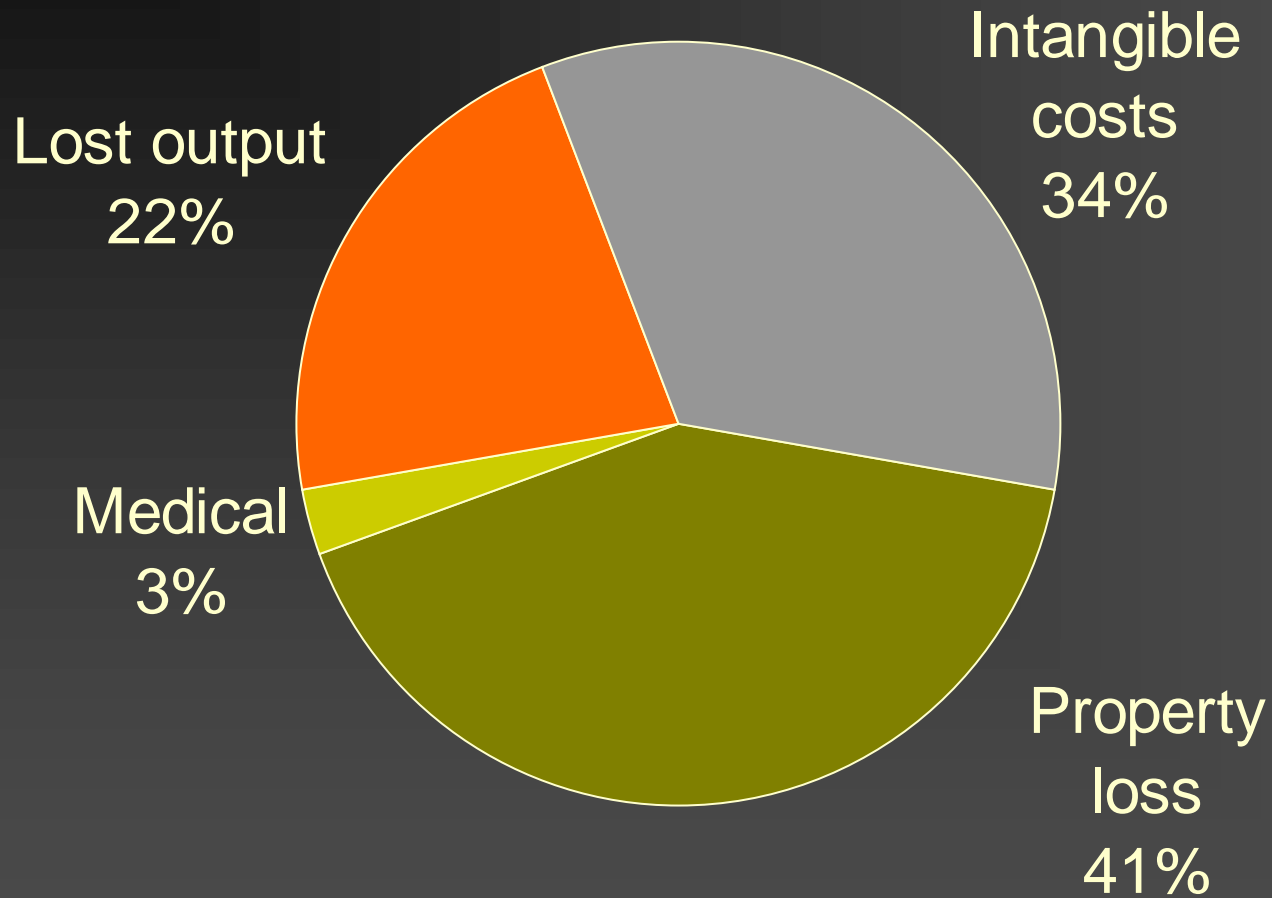
The main set: volume and costs (incidents)



The main set: volume and costs (costs)



Component parts (main set)



The other three

- Fraud (€ 3,600 m total cost)
- Drugs (€ 1,200 m total cost)
- Arson (€ 820 m)

Fraud = € 3,600 m

- Many types, but can't build up overall costs from them
 - not good enough information
- Likely to be large variation in unit costs
- Basically built up from known offences
 - State Police figures
 - Australian Federal Police (Commonwealth cases)
- Made **estimates** of number of undetected / unrecorded
- Made **estimates** of value of undetected
- **Estimate** to allow for lost output and intangibles

Fraud

	Number	Unit cost €	Total cost (€ million)
Police recorded	110,000	6,000	660
Undetected	330,000	1,000	320
Undetected - high value	160	300,000	50
AFP	920	300,000	280
AFP undetected	2,760	300,000	840
Total			2,100
Inflated for lost output & intangibles			3,600

Drugs: human costs = € 1,200 m

- Did NOT cost
 - Cultivation, manufacturing dealing and trafficking
- Rather, effects of drug misuse
 - Loss of life, medical treatment, lost productivity
- Costed methadone maintenance
- Drug-related crime costs within offence costings
 - Though can be calculated

Human costs of drugs

	€ million
Deaths	
As for homicide. Lost productivity?	300
Hospitalisation (Productivity Commission) 1998 estimates adjusted; stays and A&E	20
Drug users in treatment AIHW & Clients of Treatment Service Agencies	200
Methadone maintenance	60
Lost productivity	600
TOTAL	1,200

Drugs: the contribution to the crime bill

Drug Use Monitoring in Australia results

- Violence: 14% (half)
- Robbery: 27%
- Property: 43%
- Fraud: 11% (quarter)
- Criminal damage and arson: 8%

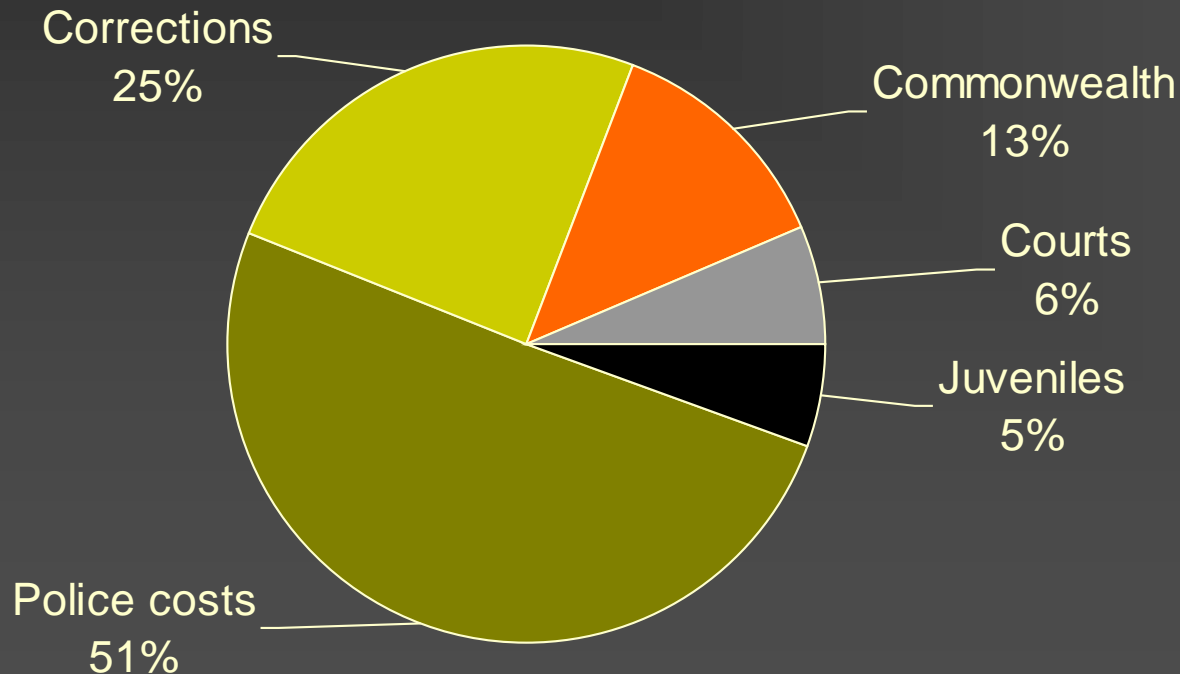
	€ million
Previous costs: human costs	1,200
Drug-related crime	2,200
Total	3,400
% of total crime bill	29%

Other costs

- Criminal Justice System
- Private security industry
- Household precautions
- Provision for victims
- Insurance administration costs
- Lost productivity of prisoners not included because estimated to be neutral

Criminal Justice System

Police	Assumed 70% of total policing bill
Corrections	Public & private prisons. Community corrections
Commonwealth	Various estimates. Took % of Customs costs
Courts	Excludes Civil courts
Juveniles	Estimates based on NSW Dept of Juvenile Justice figures



Other costs

Criminal Justice System

€3,900 m

Private security industry

€1,900 m

Household precautions

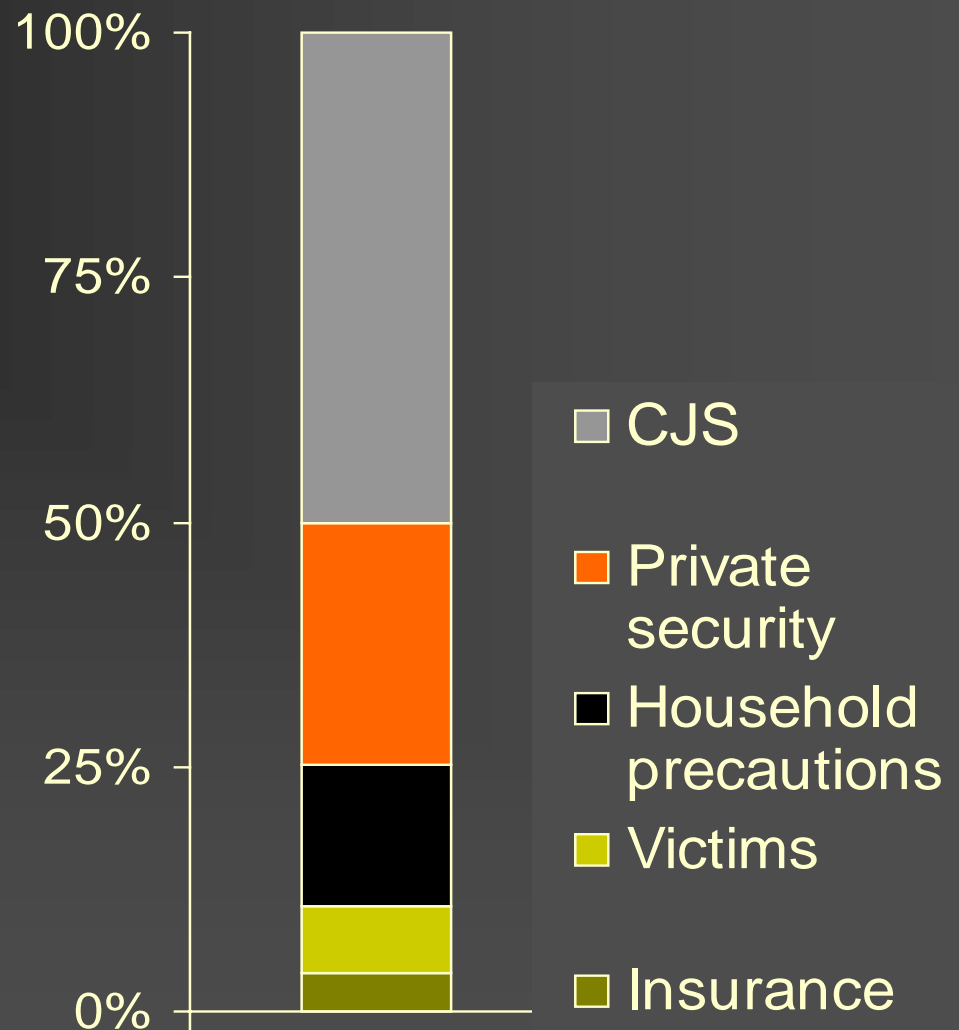
€1,100 m

Provision for victims

€540 m

Insurance administration costs

€300 m



Other costs: non CJS

		€ million
Private security	Australasian Security Industry Association (80%)	1,900
Household precautions	Opportunity costs of US estimate of adult time spent locking doors	1,100
Provision for victims	Medley.... E.g., criminal injuries compensation; volunteer time	500
Insurance administration costs	15% of premiums	300

Other costs: Victims

- Criminal Injuries Compensation
- Victim support units – administrative costs
 - NB: programme funds largely omitted
- Value of volunteer time
 - Estimated 5% of hours spent on community & welfare activities; 1% of all volunteer time
 - Market replacement value
- Child protection
- Housing assistance for domestic violence

General points (1)

- **Total cost of crime** pie in the sky
 - Many crimes very difficult to cost
 - or at least on an equal basis
 - Large degree of judgement & estimation
 - Note current Australian costs very different from previous ones
- **Cross-jurisdictional comparisons** ... pie in the sky
 - Costs within one country difficult to do
 - Severe comparative data limitations ...
 - We cannot even count crime internationally
 - No consensus about how to cost
 - Pricing parity issues

General points (2)

But note different methodologies

- Intangible costs high
 - UK and Australia – about a third
 - USA - about three-quarters
- Violence costs high
 - UK and Australia – about a third
 - USA – about three-quarters
- Fraud costs high ... but poorly estimated
 - UK and Australia – about a quarter / third

Future work (1)

- The 'multiplier' issue

 - Accuracy of survey counts

 - How many crimes are not reported to interviewers?
 - But do victims regard what they report as 'crimes'?

- Better information needed on costs of victimisation

 - Many countries not likely to have good cost data

 - Australia did not – much estimation needed
 - Business surveys needed across broader sectors
 - Indirect costs likely to be poor (eg, time off work)

- Intangible costs particularly important

 - Costs vary considerably under different methodologies

Future work (2)

- Cost difference for reported and non-reported crime
 - Important for thinking about policing resources
- Better estimate for fraud
- Need costs for some omitted crimes
 - People trafficking
 - Illegal immigration
 - Pollution
 - Disorder offences
 - Traffic offences
 - Speeding and drunken driving

Future work (3)

- Need costs for :
 - What public agencies spend
 - General community defensive action
 - Costs of 'fear' – individual and societal

The end

Links

“Counting the Costs of Crime in Australia”

Trends and Issues No. 247

Australian Institute of Criminology

<http://www.aic.gov.au/publications/tandi/tandi247.html>

“Counting the Costs of Crime in Australia”

Technical Report

<http://www.aic.gov.au/publications/tbp/tbp004.html>

Details

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