

THE COSTS OF CRIME TO THE SOCIETY IN MALAYSIA

SURYATI ISHAK

ABSTRACT

Crime has many effects on the daily lives of citizens; it can affect everyone, not just victims. The consequences of criminal activities are the costs incurred, including direct costs (immediate impacts) and indirect costs (long-term effects). This paper provides a preliminary estimation of the monetary costs of crime in Malaysia. For the purpose of this study, only the immediate impact of monetary value was calculated; for example, indirect costs were not included in the cost estimation. A self-administered survey questionnaire or closed ended question was carried out to gather the information on costs of crime in Malaysia. It was found that majority of the respondents were involved in property crime compared to violent crime. The highest number of respondents involved in this crime was from snatch theft. The direct costs involved from this crime can be divided in three which were damage or loss, medical costs and insurance claimed from the crime involved. This paper discusses only on the loss of crime based on the property crime involved.

Introduction

The crime problem in this country has received considerable attention through extensive coverage in newspapers and the electronic media as of late. Crime cases from snatch thefts to murders are becoming increasingly common in Malaysia. The database of the Royal Malaysian Police (RMP) also revealed that the number of property crimes reported in this country has always exceeded the number of violent crimes. Although, crimes related to property are higher than violent crime, the gradual increase in the latter does worry Malaysians. Based on a report in New Straits Times in 2016, Malaysia's crime index recorded a 4.6 per cent increase between January and April due to an increase in property crimes.

Crime can be defined as an illegal activity that is against the law of a nation. The term crime itself varies across countries depending on the respective laws of the nations. What is legal in one country may be illegal in another country. Crime has many effects on the daily lives of citizens. Due to the fear of being victimized, crime affects everyone adversely, not just the victims (Stevens, 1983). The consequences of criminal activities are the costs incurred, including direct costs (immediate impact) and indirect costs (long-term effect). Examples of indirect cost include fear of crime, lower level of life satisfaction, psychological issues, decreased quality of life and other non-monetary costs. Thus, crime not only affects the victims; it also threatens the non-victims and society as a whole.

In addition to discussing the determinants of crime, researchers have also interested to investigate the possible costs associated with crime. The various research studies assessing the costs of crime, to either individuals or society, have had different focuses and employed research methodologies. However, the findings may serve as a guide for the policymakers, specifically in shaping better policies.

THE IMPORTANCE OF THE COST OF CRIME ESTIMATION

All over the world, crime has been recognized as a problem that affects all of us directly or indirectly. The problem of crime also costs the communities, government and the private sectors a great deal of money. Furthermore, crime leads to increased costs for victims and their families. For instance, it leads to individuals taking costly preventative measures, such as buying burglar alarms, installing 'Closed Circuit Tele-Visions' (CCTVs) or taking taxis instead of walking at night. In spite of the material costs, the fear of physical or emotional harm is of greater concern for most people.

According to Cohen (2005a) a further impact of crime is the economic loss to society. The author states that in some crimes, the pain, suffering and reduced quality of life suffered by the victims of certain crimes far exceed any physical damage. Crimes also lead to other less obvious costs, such as time spent reporting the crime. Meera's (1990) research revealed that crimes such as theft involving capital goods can also increase costs to victims, because they can reduce future earnings.

Normally, different types of crime are associated with different costs to victim and society. For example, the cost of repairing the damage and the medical problems are different. Direct costs involve medical costs, legal policing, lost wages due to physical injuries, cost of prevention, and government cost for law and regulation.

Additionally, costs of crime incurred in response to criminal incidents. For example, the police, the justice System, and other policymakers also face the costs of the crime. In addition, society also incurs the cost of crime. Whereas some costs are incurred as a direct result of victimization, others are considered as indirect costs. Thus, estimating the cost of crime is really important.

According to Bolle (2005), cost of crime estimates vary across countries and depend on the focus and methodology of the respective study. Cohen (2005a), holds the view that the cost of crime is not always the same and thus cannot be treated equally.

Cohen explains that sometimes, the cost is inflicted on only one individual, whereas in some cases costs are incurred by society as a whole.

Brand and Price (2000) discuss that the economic or social cost of crime is essentially a measure of the impact of crime on society. Cohen (2005a) emphasises that different types of crime impose different types of crime on various parties. Consequently, crimes can affect the victims or non-victims in many ways. Cohen also summarises, the various costs of crime where some costs are incurred as a direct result of victimization and others are incurred indirectly. According to Kathryn E. McCollister, Michael T. French, and Hai Fang (2010) estimating the cost to society of individual crimes is essential to the economic evaluation of many social programs, such as substance abuse treatment and community policing.

In the case of Malaysia, Matin (1998) estimates the cost of murder, using Kuala Lumpur as an example and provides a clear distinction between transfer effects and direct losses to the society.

Coverage Of Cost Item

Generally, the costs of crime can be categorised as direct costs and indirect costs, where the direct costs are divided into direct monetary costs and direct non-monetary costs. For the purposes of this study, the cost of crime is considered the direct monetary cost of the individuals. The estimation of the cost of crime was based on the cost of crime borne by the victim of a specific crime. The cost of crime in this research is measured using a questionnaire that was designed by adapting the questions from the following surveys to suit the Malaysian lifestyle and the crime situation in Malaysia: the British Crime Survey, the Victimization Survey, the National Crime Victimization Survey (NCVS) (developed in the USA) and the Crime Victimization Survey Software Sample Questionnaire. The number of victims of crime was gathered from the crime survey. The costs include the cost of lost property, self-protection after being a victim of crime or from becoming a victim (again). This category comprises property lost and damage immediately after the criminal acts.

Methodologies For Estimating The Cost Of Crime

To estimate the cost of crime first attempt was made by Thaler (1978) by using the data from Rochester, New York, he examined the price of housing in Rochester, New York. According to Cohen (2005b), there are many different approaches for estimating the cost of crime. Cohen explains that these approaches refer to both the direct and indirect methods. Direct methods, as discussed by Cohen, use primary sources such as surveys or budgets of the criminal justice system, whereas the indirect methods use secondary sources such as property values or jury awards. Olavaria-Gambi (2007), estimated the cost of crime in Chile, using the accountancy method. Bolam and Coast (2008), in their health economic study, compared the results of simple and more complex methods for estimating the economic cost of alcohol misuse in the population of North Somerset, England, during the 2000/2001 financial year.

Another possible method for valuing the impact of crime that is commonly used is 'stated preference'. Brand and Price (2000) stated that this method involves directly questioning respondent on their willingness to pay (WTP) for a reduction in the risk of an outcome occurring and on their willingness to accept (WTA) compensation for the increased risk. In addition, Brand and Price (2000) also emphasized second available technique, 'revealed preference'. With revealed preference, the estimation is made based on people's actual spending patterns in order to reduce the risk of an undesirable outcome. They also highlighted that this method could be used to analyse expenditure on security and the real or perceived reduction in risk associated with extra spending. However, according to Brand and Price, the 'revealed preference' method may yield inaccurate results because of the different reasons for expenditure and because crime occurrence also covers a wide range of incidents. Therefore, it is quite difficult to cover all incidents in one study.

Based on Cohen's (2005b, p. 32) discussion concerning the methodologies for estimating the cost of crime, the direct source of crime-victim costs is the on-going NCVS which interviews households and elicits information from those who have experienced a recent criminal victimization. In addition, Cohen also emphasises that the cost of crime can be measured by including the public expenditure and the criminal justice system. However, Cohen asserts that although the aggregate cost may be available from government statistics, the cost per crime is not always available.

Based on Nyantara Wickramasekera, Wright, Elsey, Murray and Tubeuf, (2015) findings there were twenty-one studies that estimated the cost of crime. There was considerable variance in the estimated total costs of crime and studies from the United States consistently reported the highest total costs. All the studies consistently included robbery and burglary in the total cost estimate. Homicide was ranked as the most costly offence and accounted on average for 31 per cent of the total cost of crime, followed by drug offence 21 per cent and fraud 17 per cent. Crime categories that involved violence to a person were associated with large intangible costs.

There exist the need for more intensive research on criminal activities in Malaysia and other developing countries as more crime research were focused in developed countries. Thus, this study intends to achieve the estimation of the cost of crime in Malaysia in terms of monetary value.

Research Method

A self-administered survey questionnaire or closed ended question was carried out to gather the information on costs of crime in Malaysia. According to Sekaran (2003), closed ended question help the respondents to make quick decisions. The intent of the survey is to measure the private prevention costs of crime experienced by communities and businesses to analyse the public insecurity about crime in more-developed states in Malaysia. This study uses the survey based on the British Crime Survey (BSC) and National Crime Victimization Survey (NCVS) questionnaire (developed in the USA). The relevant questions were

adapted and modified to some extent. The sample for the study was from several areas in Selangor such as from Sungai Buloh, Serdang, Bangi, Shah Alam and Puchong.

In Sekaran (2003), he discussed that the reason for using sample, rather than collecting data from entire population would be impractical impossible. He also mentioned that study of sample likely to produce more reliable results. Due to the limited of time of data collection, the survey was conducted through a random sampling of communities based on census data.

DATA COLLECTION

In terms of finding the right sample size this study followed the Israel (1992) to use formula to calculate sample size.

By using this formula the sample size is calculated $n_0 = \frac{Z^2pq}{E^2}$

Description:

n= required sample size

t=confidence level at 95% (standard value of 1.96)

p=estimated proportion of an attribute present in the population.

q= 1-p

Z= is the value found in the statistical tables which contain the area under the normal curve. By assuming that the population of people in the four states are large, however this study does not know the variability in the proportion being the crime victims. Therefore assuming p=0.5(maximum variability). The resulting sample size is as below:

$$n_0 = \frac{Z^2pq}{e^2} = \frac{(1.96)^2 (0.5)(0.5)}{(0.5)^2} = 385 \text{ respondents.}$$

This study decided that at least 450 sets of questionnaires needed to be distributed.

Descriptive Analysis And Discussions On Individual (Household) Survey Data

A brief descriptive summary of the variables in the study are presented in Table 1.1 below. The profile analysis on crime survey in the selected areas in Selangor comprised 155 males (35.1 per cent) and 287 females (64.9 per cent) from a total of 442 respondents. From 442 respondents, the range of ages is from 18 to 61 years. Based on race or ethnic background Malay were 65.2 per cent, followed by Chinese 16.1 per cent, Indian 14.5 per cent and other races were 4.3 per cent. In terms of highest level of education, 26.9 per cent had SPM qualification, 32.8 per cent had attained a bachelor's degree and 15.8 per cent with a master qualification.

Table 1.1 Frequency Analyses of Demographic Characteristics of Respondents in Selangor

NUMBER	DESCRIPTION	RANGE	FREQUENCY	PERCENTAGE
1.	Gender	Male	155	35.1
		Female	287	64.9
2.	Age	18-25	89	20.1
		26-35	192	43.4
		36-45	83	18.8
		46-55	52	11.8
		55-65	26	5.9
3.	Race	Malay	288	65.2
		Chinese	71	16.1
		Indian	64	14.5
		Others	19	4.3
	Level of Education	SPM	119	26.9
		STPM/Diploma	83	18.8
		Bachelor's Degree	145	32.8
	Master's Degree	70	15.8	
	Doctoral /PhD	18	4.1	
	Others	6	1.58	
			0.0	

*Other – also categorized as with PMR or at least with primary qualification

The Costs Of Crime To The Society In Malaysia

An important component of this study is to obtain an estimation of the number of incidents for different types of crime that occurred in Malaysia in a given time period. The costs of crime estimation were directly used the information on victims of crime experienced. Table 1.2 below shows the relationship between violent crime and the cost of crime to the society. As for the purpose of this cost estimation, this study used the number of respondents who answered the question from the survey on

‘whether the respondent or anybody in their family had ever been a victim of crime’. In response to this question, 24 respondents (54.5 per cent) indicated that they had been the victims of crime; 178 respondents or 40.3 per cent had never been crime victims. In the meantime, a small number of the respondents or 18 respondents were not sure whether anybody in their family had been crime victims. Most of the respondents and their family members (65.4 per cent) have been property crime victims or specifically victims of snatch theft. Around 1.1 per cent of the respondents did not respond to this question.

The total cost estimates for crime in this research, are solely derived from direct costs experienced by the crime victim. The direct costs paid by the victims include increased premium paid to insurance companies and increased medical costs (as a result of the crime situation, for example because of assault). In addition, precautionary actions measured against crime, usually involved costs (special locks, high fences, and installation of a burglar alarm). The table below shows the crosstab analysis for the cost paid by the victims of crime for violent crime and property crime.

Table 1.2 Crosstab analyses for damage or loss of violent crime

Violent crime	Damage or loss						Total
	No financial costs involved	Less than RM200	RM201- RM500	RM1001- RM5000	RM5001- RM10,000	More than RM10,000	
Assault	4	2	2	3	1	0	12
Attempted murder	1	0	0	2	0	2	5
Murder	4	2	1	6	3	0	16
Robber y	7	7	5	21	14	8	62
Others	3	0	0	4	1	0	8
Total	19	11	8	36	19	10	103

The cross tabulation analysis was performed to analyse the cost of violent and property crime. From the analyses many violent crime victims were due to robbery, followed by murder, next are because of assault, attempted murder and others. Crime victims and their families paid the bill for some crimes for instance because of the damages or loss from the crime. Table above shows that the highest cost borne by victims of violent crime can reach more than RM 10 000 for attempted murder and murder. At least 10 respondents pay more than RM 10 000 because of the damages due to violent crime.

Table 1.3 Crosstab analyses for medical cost of violent crime

Violent crime	Medical costs						Total
	No financial costs involved	Less than RM200	RM201- RM500	RM1001- RM5000	RM5001- RM10,000	More than RM10,000	
Assault	5	1	1	5	0	0	12
Attempted murder	3	0	2	0	0	0	5
Murder	4	8	2	2	0	0	16
Robbery	7	7	5	21	14	8	62
Others	0	3	0	5	0	0	8
Total	19	19	10	33	14	8	103

Not only the costs of damages and medical were imposed by crime incidences, but also in terms of insurance paid by the victims due to the crime or to avoid being victims again.

Next, the discussion is on cost of the property crime. From the table below, the property crime can be divided into few types such as burglary, vehicle theft, snatched theft and others. From the analyses it showed that many respondents (30.5 per cent) have been a victim of snatched theft crime and around 13.2 per cent have to pay more than RM 10 000 for their loss due to that crime. Most of the respondents (31.5 per cent) paid around RM 1000 to RM 5000 for every crime they involved in.

Table 1.4 Crosstab analyses for damage or loss of property crime

Property crime	Damage or loss						Total
	No financial costs involved	Less than RM200	RM201- RM500	RM1001- RM5000	RM5001- RM10,000	More than RM10,000	
Burglary	7	5	7	28	13	13	73
Vehicle theft	7	4	6	19	20	19	75
Property theft	8	6	13	20	11	7	65
Snatch theft	17	15	20	31	10	2	95

Others	1	0	1	0	1	0	3
Total	40	30	47	98	55	41	311

For the medical cost due to property crime, most of the respondents answered no financial costs involved. This is because they did not get any injuries to that crime and if they got minimum injuries sometimes they go to the government hospital and no medical costs involved.

Table 1.3 Crosstab analyses for medical cost of property crime

Property crime	Medical costs							Total
	No financial costs involved	Less than RM200	RM201- RM500	RM1001- RM5000	RM5001- RM10,000	More than RM10,000	No responses (99)	
Burglary	46	17	4	2	1	1	2	73
Vehicle theft	47	17	1	5	1	1	3	75
Property theft	48	11	1	4	1	0	0	65
Snatch theft	58	20	9	8	0	0	0	95
Others	3	0	0	0	0	0	0	3
	202	65	15	19	3	2	5	311

Conclusion

The impact of crime is varied and can affect anyone in the community; it also involves different costs, such as monetary costs, fear of crime, and reduction in the quality of life of the victims and non-victims, besides loss of productivity.

From the incidence of crime, the cost of crime not only direct victims but also those in the lives of these victims, the consequences of just one incident can touch hundreds and last a lifetime. For example, the impact of murder; the family lost the income for a lifetime if the victims were the bread winner of the family. Additionally, the actual cost is actually would be much greater.

This study has shown that different types of crime have different costs. This study is in line with the government's aim to reduce crime. However, this study has few limitations in terms of coverage and data collection. In terms of coverage, it covers only few locations in Selangor. Furthermore, the estimation of cost of murder was difficult to calculate and beyond the average costs calculated.

Public security is important in ensuring economic development and quality of life of Malaysians, and accordingly, the involvement of police plays a vital part in preventing crime. The crime issues in Malaysia have received considerable attention from the government. The government publicly stated its target of reducing the crime index and street crime in Malaysia. Thus, the strong commitment from the Ministry of Home Affairs (MOHA), civil servants and non-government agencies are needed to bring down the street crime index and crime index.

References

- Bolam, B. And Coast, J. (2008). Comparison of methods for estimating the sub national cost of alcohol misuse. *Journal of Royal Institute of Public Health*. 122. 307-312.
- Bolle.F., (2005). Economics of crime. Universitat Viadrina.
- Brand, S. And Price, R. (2000). The economic and social cost of crime: Home office research study.
- Cohen, M. A. (2005a). *The costs of crime and justice* (First Edition). Routledge.
- Cohen, M. A. (2005b). *The costs of crime and justice* (Second Edition). Routledge.
- Kathryn E. McCollister, Michael T. French, and Hai Fang (2010). The Cost of Crime to Society: New Crime-Specific Estimates for Policy and Program Evaluation. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2835847/>.
- Matin, M.M. (1998). Aspects on economics of crime: A case study of Malaysia. Unpublished Master thesis, International Islamic University Malaysia.
- Meera, A. K. M. (1990). Crimes: socio-economic aspects: A case study of Malaysia. Unpublished Master thesis, International Islamic University, Malaysia.
- Nyantara Wickramasekera, Wright J., Elsey H., Murray J., Tubeuf S., (2015) Cost of crime: A systematic review. *Journal of Criminal Justice*. Volume 43(3), 218–228.
- Olavarria-Gambi, M. (2007). The economic cost of crime in Chile. *Global Crime*, 8(4). Retrieved from: <http://www.nst.com.my/news/2016/05144196/malasyias-crime-index-sees46-cent-increase?d=1>

- Sam, B. and Richard, P (2000). The economic and social costs of crime. n Home Office Online Report 30/05. Retrieved from <http://webarchive.nationalarchives.gov.uk/20110218135832/rds.homeoffice.gov.uk>.
- Sekaran, U. (2003). *Research Methods for Business: A Skill Building Approach*. Fourth Ed. John Wiley & Sons, Inc. .Hermitage Publishing Services.
- Stevans, L.K. (1983). *Urban property crime and the distribution of income* (New York city).Oklahoma State University.
- Thaler,R.(1978). A note on the value of crime control. Evidence from the property market. *Journal of Urban Economics*. 5, 137-145.

SURYATI ISHAK
DEPARTMENT OF ECONOMICS
FACULTY OF ECONOMICS AND MANAGEMENT
UNIVERSITI PUTRA MALAYSIA
SERDANG, MALAYSIA
drsuriaishak@gmail.com