

Private Crime Prevention Expenditure in Fiji

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Recently, the Prime Minister of Fiji and the Police Commissioner have made statements to the effect that criminal activity in Fiji has been declining and that the incidence of crime in Fiji is lower than in Australia and New Zealand. Indeed, despite the reports of crime that feature large in the local media, the crime statistics do show a decline in the incidence of crime in recent years. But while the incidence of crime may be falling and may be lower than in Australia and New Zealand, this is not the full story. From casual observation it would appear that there is large private expenditure on security to protect homes and businesses from theft and personal assault in the form of protective fences, security grilles, security alarm systems, and security guards. This private expenditure can be seen as an indication of the ineffectiveness of public security, or at least an indication that the public holds the perception that public security is ineffective. Criminal activity may be declining but this may be because the private expenditure on crime prevention is high and rising. Thus, the broader and more relevant question is: what are the costs, both public and private, of the declining incidence of criminal activity?

State provision of public security in the form of police forces and the accompanying deterrence mechanisms of courts and prisons is justified as a public good because of the positive externalities that arise from public provision of these services. However, if the public feels that the state is not providing a sufficiently high level of security, there will be private expenditure to supplement the public expenditure. For individual businesses such as banks, the level of public security provided will usually not be high enough, given the costs that such businesses could incur from the failure of the public security. Hence, we observe high levels of expenditure in making businesses such as banks more secure than people's residences.

The private expenditure on self-protection — for example, in the form of security barriers around homes and businesses — is not the only private cost of the failure of government to provide the level of protection demanded. There are other costs that are not easily observed or measured, such as the insecurity that people feel from the threat of crime and how this restricts their social activity. Businesses similarly suffer unobservable costs in the form of restrictions on market activity (both spatially and temporally) — even to the extent that businesses do not exist because the costs of insecurity are believed to be too high. As well, there are the private costs associated with the involvement of people in

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voluntary community activities that attempt to control crime, such as Neighbourhood Watch.

A significant level, or significant increase, in private expenditure on security would be an indication that the state is not providing the expected level of security. Therefore, this study addressed two questions. First, there is a public perception that law and order has deteriorated in Fiji since the coup in 2000. Hence, the study attempted to see whether there has been a change in the level of private household expenditure on security that would suggest that the public believes that public security has become less effective in recent years, and especially since 2000. Second, what is the extent of private expenditure on the protection of households from criminal activity?

There is limited information from other countries on private expenditure on security. It has been estimated that in the US private expenditure on crime prevention is three times the level of public expenditure — US\$300 billion (about US\$3,000 per household) versus US\$100 billion (US\$1,000 per household) (see Benson, 1998). This private expenditure includes expenditure by commercial enterprises as well as households. The study here covers only private household expenditure. Estimates have also been made in the US of the growth in private security services. For example, it has been estimated that at least 10 per cent of the homes in the US were connected to central alarm systems in 1990 (Reynolds, 1994), as compared to one per cent in 1970 (Cunningham and Taylor, 1985). The ratio of private security personnel to police personnel in the US is estimated to have increased from 1:1 in 1970 to 2.5:1 in 1990 (Cunningham, Strauchs and Van Meter, 1991). Here the focus is on estimating private expenditure on security by households at different income levels in Fiji.

Criminal Incidence in Fiji

As can be seen in Table 1 below, the aggregate incidence of crime as recorded by the Fiji Police Daily Crime Reports has indeed been on a declining trend. There was a steady increase from 1992 to a peak in 1997. Subsequently, except for the upturn in 2000, crime has been on a declining trend. The increase in 1997 was mostly due to an increase in the incidence of ‘assaults occasioning actual bodily harm’ (from 2,849 in 1996 to 3,521 in 1997). Such crimes, which may lead people to be more fearful about their lives and property, declined over the 1998-2000 period but rose sharply in 2001 (by 20.6 per cent), and have remained at a relatively high level (3,257 in 2002 and 2,943 in 2003).

The increase in crimes reported in 2000 was primarily due to a large increase in ‘other offences against the penal code’; in particular, in forgery offences, which rose by 750 and in the ‘other’ category (up by 330). Crimes such as ‘larceny in dwelling houses’, ‘burglary’, ‘house breaking’ and ‘theft’ have been on a declining trend since 1999 or 2000. For instance, house breaking declined from 1,569 in 2000 to 1,237 in 2003 and burglary declined from 982 in 1999 to 725 in 2003.

Table 1: Fiji Police Crime Statistics, 1996 to 2003

Criminal Offences	1992-96	1997	1998	1999	2000	2001	2002	2003
Against lawful authority	486	669	582	433	808	483	518	484
Against public morality	339	402	397	368	376	439	511	490
Against the person	3,446	5,007	4,585	4,381	4,202	4,565	4,523	4,109
Against property	14,098	14,808	14,834	12,302	12,414	11,328	10,458	10,367
Other offences against the penal code	1,266	1,263	1,117	1,310	2,319	1,583	1,266	1,499
Total	19,636	22,149	21,575	18,794	20,119	18,398	17,276	16,949

Source: Fiji Police Crime Statistics, Annual Reports, various.

Overall, it appears that the incidence of burglary and house breaking has declined but the more serious assaults against the person — ‘assault occasioning actual bodily harm’ and ‘robbery with violence’ — have increased since 2000. These trends may be interpreted to mean that the protection of property has improved but the threat to personal security has increased.

Private Expenditure on Crime Prevention

In an attempt to estimate some of the costs of self-protection incurred by households and to see what has been happening to these costs in recent years, information was collected from businesses in Suva involved in providing such services. This and other information collected are discussed below.

Security guard firms

An examination of the *Fiji Yellow Pages* shows that the number of firms providing security guard services increased from 15 in 1998 to 23 in 2001, but declined to 17 in 2002 and to 16 in 2004. Clearly, there was a short-term increase after the 2000 coup but a rapid rationalisation followed. However, interviews with some of the major firms providing these services showed that there has been a sharp increase in the numbers of personnel employed. In one firm the number of security guards employed has grown from around 400 in 1998 to around 740 in 2004. In another the number of guards employed has increased from 150 in 1998 to 550 in 2004. Overall, the number of security guards employed has grown significantly in recent years.

Sales of security doors, grilles and wiring

From the *Yellow Pages* directory, the number of firms advertising the fabrication of security doors, protective grilles and barbed and razor wire has declined from four in 1998 to one in 2004. However, the decline in the number of firms specialising in the supply of burglar grilles does not necessarily mean that there is less being spent on this form of self-protection, as we were advised that it is cheaper to have the security grilles and fencing installed by ordinary building contractors than by the specialist suppliers. It appears though that people are placing more trust in security alarm systems than in security grilles and fencing.

Security alarm systems

The increased reliance on security alarm systems is reflected in the installation of these systems in recent years. The number of firms advertising the supply of security alarm systems in the *Yellow Pages* has increased from one in 1998 to nine in 2004. Most of this increase has taken place since 1999, at which time there were four firms. Interviews with firms in this business also show rapid growth in sales. For example, one firm had average sales under 100 prior to 2000 but has

averaged around 400 installations per year since 2000. Installations by another firm jumped 14-fold in 2002.

Neighbourhood watch and other community activities

There are 92 Police Posts in operation throughout Fiji. Lay members of the community are members of the Post Central Committee associated with each police post. There are also crime prevention committees, neighbourhood watch committees, and youth groups working closely with the police posts in a community policing partnership. In 2003 there were 66 police post central committees, 447 crime prevention committees, and 156 neighbourhood watch committees. Crime prevention committees and neighbourhood watch committees have grown rapidly since 2000. In 2000 there were only six neighbourhood watch committees, while there were 178 crime prevention committees.

The establishment and operation of the committees associated with the police posts obviously involves a great deal of effort on the part of private individuals, which has an opportunity cost. However, it may be necessary to involve the community in these ways in order to have effective policing. There is a review of the use and location of police posts to be undertaken and this may provide an evaluation of the effectiveness of the involvement of communities in these ways.

Insurance costs

Taking out insurance is another form of self-protection against loss of property. There was little information made available to us by insurance companies in Suva. The number of insurance companies advertising in the *Fiji Yellow Pages* as providing insurance against theft has increased from two in 1998 to four in 2001 and five in 2004. Two insurance companies were unable to give any information about numbers of insurance holders and premiums because of 'inadequacy in their computer systems'. Others were less forthcoming and referred us to the Reserve Bank of Fiji's *Insurance Annual Report*.

One insurance company volunteered the information that insurance premiums are the same for all areas of Suva, regardless of the incidence of crime. As elsewhere, new clients are charged the highest premium in the first year and premiums in subsequent years depend upon the number of claims made. The minimum requirement for insuring premises against theft was said to be burglar grilles. However, it is preferred that houses have monitored alarm systems.

Access to the Reserve Bank of Fiji's *Insurance Annual Report* provided the information summarised in Table 2. It is difficult to draw many conclusions from these aggregate data. Burglary policies (covering damage of property and theft from break-ins) increased fairly sharply in 1999 and 2003, while householder policies (which cover losses from break-ins as well as losses from fire, etc.) increased sharply in 1999 but just as quickly declined and have since been stable. Average gross premiums are very difficult to interpret because of the possible variations in the numbers of new and existing policyholders and the variations in the amounts insured against. Net claims paid show a sharp upturn in 1999 for

both burglary and household policies and a sharp decline in payouts in 2001. Again, the annual changes are difficult to interpret because of the time lags that may be involved. The low payout in 2001 may have been because of uncertainties over the insurance situation following the coup. The notable feature of the data is the sharp increases in policies taken out in 1999 and in payouts in that year.

In summary, from the information collected it appears that there has been a large increase in demand for security guards and a very large increase in demand for security alarm systems. The timing of these increases appears to have a strong association with the coup year of 2000 and possibly with the increase in crime in 1997. Private efforts towards crime prevention in the form of neighbourhood watch and other community activities associated with the establishment of police posts throughout the country have also increased sharply over this period. Putting these conclusions together with the conclusions from the previous section, the case can be argued that, on the one hand, this self-protection expenditure has contributed towards the declining trend in criminal activity, particularly in the reduction of house breaking, burglary and theft. On the other hand, the increase in recent years in the level of violent crimes has possibly contributed to the heightened sense of insecurity in the community that has stimulated the sharp increase in self-protection expenditure.

A Comparison of Public and Private Costs of Crime Prevention

In 2003 the budget received by the Police Department was around \$53 million, while the budget received by the Department of Justice was \$10.4 million. Hence, leaving aside the expenditure on the running of prisons, the total public cost of crime prevention in 2003 was around \$63.6 million. In the 2004 Budget, the police received an additional \$4.6 million, for a total budget allocation of \$69 million for the Police and Justice departments. This public expenditure on crime prevention as a percentage of total tax revenue was 7.4 per cent in 2003 and a projected 7.5 per cent in 2004.

We have constructed the following two examples to compare what people are paying for public crime prevention activities through their taxes and the additional amount that they are paying privately for self-protection. These examples are of households with medium to reasonably high incomes. These are legitimate examples as it is households at these income levels that pay the bulk of taxation. It is also the case that households at these income levels are paying most of the monetary costs of self-protection. This is not to say that people at low levels of income do not suffer from criminal activity. Indeed, they do. Much criminal activity is inflicted on the lower income strata. Unfortunately, while they are unable to pay little in the way of taxes, they are also not able to afford much in the way of self-protection measures.

Table 2: Insurance Details for Fiji, 1998 to 2003

	Policies Issued (no.)		Average Gross Premiums (\$)		Net Claims Paid ('000)	
	<i>Burglary</i>	<i>Householders</i>	<i>Burglary</i>	<i>Householders</i>	<i>Burglary</i>	<i>Householders</i>
1998	1,260	10,339	591	391	853	1,220
1999	1,614	13,758	745	313	1,169	1,623
2000	1,830	11,777	627	342	833	1,123
2001	2,108	11,776	526	373	589	863
2002	2,096	11,450	570	432	843	1,103
2003	2,525	12,242	554	384	900	1,300

Source: Reserve Bank of Fiji, *Insurance Annual Report*, various years.

Taking the example of a household earning an annual income of \$100,000, and assuming explicit or implicit house rental payments of 25 per cent of salary, savings (provident fund plus other) of \$20,000, income tax of around \$30,000, and indirect taxes of \$25,000 paid on the remaining disposable income (VAT plus customs duty plus other taxes) at a rate of 20 percent, the total direct and indirect tax paid would be around \$35,000. The 7.5 per cent share of this household's direct and indirect taxes forming part of the public expenditure on crime prevention would be \$2,625. For a household earning \$50,000, the share of taxes going to public expenditure on crime prevention would be less than one-half of the amount contributed by the \$100,000 household because of the lower tax rate applied — say \$1,160. Those renting residences are paying the costs of security fencing and security alarms as part of their rental payments (although they would be likely to be paying additional to the security alarm firm for the monitoring of their alarm system).

How do these shares of households in public expenditure on crime prevention compare with their direct private expenditures? It is possible that those households earning \$100,000 per year could be hiring a security guard, in which case they would be paying \$2,600 to \$3,200 per year for these services. If they do not have a security guard, it is likely that they will have a live-in help, and part of the rationale for this expense will be security. At lower income levels it is less likely that households will have these services. However, they are more than likely to have dogs (houses with upwards of seven to nine dogs are not uncommon), in large part for security purposes. In this case some of the cost of dog food has to be seen as a self-protection expense.

The annual cost of an alarm system is the cost of depreciation of the system plus the cost of the monitoring of the alarm system by the security firm. Security alarm system costs are within the range \$700 to \$3,000 for residences and the monthly monitoring service fee around \$30-33 (security guard responses are in the range of \$16-20 per call). A 10 per cent depreciation rate seems appropriate for this kind of technology; therefore, the annual cost of an alarm system priced at \$1,500 and the monitoring service is estimated to be around \$600.¹

Most houses occupied by people who are contributing the major part of government tax revenue have security fencing and window and door grilles. The total cost of these additions is estimated to be in the range of \$3-10,000; although it is acknowledged that the expenditure may well be higher, especially in the case of residences built in the more elevated parts of the urban areas. If it were assumed that the lifetime of these structures is 25 years, the annual depreciation cost would be \$150 to \$400.

In aggregate, therefore, the annual costs of self protection for households at income levels around \$100,000 per year — assuming the employment of a security guard, a monitored security alarm system, dogs, security fencing, and burglary insurance (say \$350) — could be around \$4,500 annually. Without a

¹ For commercial enterprises the cost of a security alarm system can be as high as \$10,000 and the monthly monitoring service \$45-50.

security guard but with a live-in help for whom part of the cost is self-protection, the annual cost is estimated to be around \$2,100. These figures can be compared to the estimated \$2,625 contribution to public expenditure on crime prevention of a household at this income level.

For a household on an annual income of around \$50,000, with a live-in help partly for self-protection, a monitored alarm system, depreciation on security fencing, dogs, and burglary insurance, the costs of self-protection are estimated at \$1,850 annually. If there is no live-in help and no monitored security alarm system, the self-protection costs are estimated to be around \$600 per year. This range of costs can be compared to the estimated \$1,160 contribution of the household to public expenditure on crime prevention.

Conclusions

While the incidence of crime in Fiji has continued its downward trend after upturns in 1997 and 2000, the incidence of the more violent crimes against persons has increased, dating back to 1997. The increase in these crimes could have resulted in a greater sense of personal insecurity and led to what appears to be a significant increase in private expenditure on crime prevention in recent years. There has clearly been a sharp increase in private expenditure on self-protection in the form of the installation of monitored security alarm systems and in the demand for security guards.

The estimates made here of private expenditure on self-protection for middle- to upper-income households appear to be large in comparison to public expenditure on crime prevention through the police and justice departments. Some higher-income households could be paying considerably more in such private expenditure than their contribution to public crime prevention through direct and indirect taxes. The difficult-to-measure costs in the form of reductions in business and social activity could well be even larger. Overall, it appears that the private expenditure on crime prevention and the community involvement in the form of neighbourhood watch and police post committees is considerable and could well have made a large contribution to the lessened incidence of the less-violent crimes against property in recent years.

It may be argued that the decline in the less-violent crimes is the result of the improved effectiveness of policing in Fiji. Other arguments for the decline in the incidence of crime that may hold in other countries, such as declines in the population cohorts most likely to commit crimes, lowered unemployment, increased expenditures on prisons, and increased prison sentences, clearly do not hold in Fiji. The appointment of an expatriate Police Commissioner in 2003 certainly appears to have led to a significant improvement in policing in a short time. However, the decline in criminal activity has been going on for much longer.

References

Benson, B. (1998), *To Serve and Protect: Privatization and Community in Criminal Justice*, New York University Press, New York.

Cunningham, W., J. Strauchs, and C. Van Meter (1991), 'Private Security: Patterns and Trends,' *National Institute of Justice: Research in Brief*, U.S. Department of Justice, Washington D.C.

Cunningham, W. and T. Taylor (1985), *Crime and Protection in America: A Study of Private Security and Law Enforcement Resources and Relationships*, U.S. Department of Justice, Washington D.C.

Reynolds, M. (1994), *Using the Private Sector to Deter Crime*, National Center for Policy Analysis, Dallas, TX.

We thank all the people associated with firms in the security business and those associated with community policing who provided us with the information on which this paper is based. Because of the small numbers of firms involved in the provision of security services, the data are presented in such a way that individual firms cannot be recognised. Any errors in the interpretation of the information provided are ours alone. Helpful comments from an anonymous referee are also gratefully acknowledged.