"Trouble in Paradise: Small Arms in the Pacific": A Brief Critique

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Introduction

This paper provides a brief review of a 2003 study by Alpers and Twyford in which they claim that the availability of civilian firearms contributes to criminal violence in the Pacific region. The authors admit that they could not collect any information on illegal or smuggled firearms, but instead they chose to focus on firearms that are legally owned. Despite recognizing that the principal source of illegal arms in the Pacific is police armouries, these authors conclude that the most important next step to solving the problems of criminal violence in the region is to introduce more restrictive firearms laws and to disarm civilians. This is a stunning non sequitur as the authors merely assume their conclusion. Their study provides no empirical support that civilian ownership of firearms poses any potential for criminal or terrorist misuse.

The drive to introduce further restrictions on civilian firearm ownership in the Pacific is based upon the fallacy that the availability of civilian firearms exacerbates criminal violence. If this were true, then logically there would be higher levels of crime where there are higher densities of gun ownership. This is not the case. Alpers and Twyford imply that legal firearms in the hands of civilians are somehow the most important factor in destabilization. This is false. The problem lies with illicit firearms, not legal firearms. Contrary to what Alpers and Twyford claim, there is no empirical support for criminals or terrorists obtaining significant numbers of firearms from civilians in any of the countries in the Pacific region. Alpers and Twyford claim that criminals obtain the bulk of their firearms from police armouries or from home-made weapons in the South Pacific. This is a further internal contradiction in their study.

A review of the evidence at the international level undermines the claim that criminal violence in a country is strongly linked to civilian firearm ownership (Greenwood, 2000; Kates, 2003; Malcolm, 2005). Other factors, such as economic development and illegal drugs, are more important (Kopel, 2005; Miron, 2001). It would therefore be ineffective to base either national or regional laws on attempts to restrict civilian firearm ownership.

The Trouble with Alpers and Twyford's "Small Arms in the Pacific"

At the heart of recent papers by Philip Alpers and Conor Twyford is the claim that civilian firearm ownership in the Pacific exacerbates or increases criminal violence (Alpers and Twyford, 2003, 2004). While these papers are replete with tables and statistics, they cannot be considered a reliable basis for understanding the situation in the Pacific Region. Alpers and Twyford's analysis is pseudo-scientific because they do not provide empirical support for their claims.

If access to firearms "increases both the lethality of violent encounters and the number of victims", as Alpers and Twyford claim, then there should be a statistical correlation between civilian firearm ownership and homicide rates across the countries in the South Pacific.

In order to test this claim empirically, I analysed the data Alpers and Twyford provide concerning civilian firearm ownership and homicide rates across the countries in the South Pacific. Table 1 presents the data set for Chapter 9, and Table 2 the data for the Occasional Paper.

Unfortunately, the data sets differ somewhat between the two versions of their study. Therefore, I analysed both data sets and found essentially the same result: despite the authors' claims, no significant correlation could be found between the civilian firearm ownership and homicide rates in their data for the countries in the South Pacific.

Chart 1 shows the analysis for Chapter 9. I took the civilian firearm ownership rates presented in Figure 9.1 from Trouble in Paradise and calculated the homicide rates for those countries from the number of homicides reported in Table 6.7 and the population reported by SPC Demography/Population Programme (http://www.spc.org.nc/demog/). Only 10 countries in this data set had complete data on both variables. The correlation between civilian firearm ownership and the homicide rate was 0.519, which is in the hypothesized direction but not significant ($t = 1.716$, $p > 0.01$).

Chart 2 shows the analysis for the Occasional Paper. For this analysis I took the civilian firearm ownership rates presented in Table 2.4 in this paper, and calculated the homicide rates for those countries from the number of homicides reported in Table 3.1 divided by the population reported by SPC Demography/Population Programme. Occasional Paper #8 includes sufficient data to analyse 12 countries. The correlation between civilian firearm ownership and the homicide rate for these countries was 0.547, which is in the hypothesized direction but not significant ($t = 2.066$; $p > 0.01$).

There is another, even more basic concern with the Alpers and Twyford data set. Because the correlations are based upon so few countries, they are highly vulnerable to any change in the estimates. Calculations were based upon the estimates given in the Alpers and Twyford reports, but it is unclear how much confidence can be put in them. Any errors could introduce large and dramatic changes. For example, homicide rates for small countries are inherently quite variable from year to year because those homicides they do have are so relatively rare, and when they are expressed as percentage figures they appear to move substantially. Thus, even assuming that Alpers and Twyford did not err in collecting and reporting the data, the high homicide rate for Niue may not be typical. Had another time period been selected, because of the country's small population the estimated homicide rate might be quite different. And Niue is particularly important in the authors' argument, as it alone accounts for most of the observed relationship. Remove Niue, and the correlation, already weak, entirely disappears. Thus, this data set provides a weak reed for any claims about a link between civilian firearm ownership and criminal violence.

Discussion

Politicians have always searched for a solution to criminal violence. Unfortunately, the real world is more complex than any simplistic analysis. The campaign against firearms ownership may be able to attract emotional support among certain groups, but there is no solid academic research implicating civilian firearms ownership as the wellspring of criminal violence.

As I have shown, and despite the Alpers and Twyford claims, no significant relationship could be found between civilian firearm ownership and homicide rates across the countries in the South Pacific. The availability of SALW (small arms and light weapons) is a red herring. The problem is illegal firearms in criminal hands, not legal firearms in the hands of civilians.

Alpers and Twyford do not provide empirical support for their claim that civilian firearms are a primary source for criminals or terrorists. Efforts to control small or large numbers of firearms in the hands of those determined to stay outside the law need to be focused on the realities of the problem, including why those firearms are in particular hands. It is an error to focus legislative changes on the lawfully-owned and manifested arms which are demonstrably not part of that problem.

There are far more pertinent questions than those raised by Alpers and Twyford. For example: if Alpers and Twyford are correct, one would expect that in places where strict gun laws have been introduced, such as Australia and Great Britain, the murder and the violent crime rate would decline. As shown in Charts 3 and 4, this has not occurred.

There are a variety of explanations for understanding why some countries have more problems with criminal violence or terrorism, e.g., poverty, drug smuggling, social or political instability. The number of civilians who legally own firearms is not important. Two illustrative examples make this case: both Brazil and the former USSR have [or had] a higher homicide rate than the USA, even though firearms are much more restricted, and even prohibited, in those countries than they are in the USA. By way of further comparison, New Zealand has the highest proportion of civilian firearm owners in the Pacific, yet it has one of the lowest homicide rates in the region.

Alpers and Twyford fail to take into account the cultural and social variability of the Pacific region. This betrays the authors' commitment to advocacy and not science. Their pseudo-scientific analysis produces an unsatisfactory recommendation. Despite the variability amongst the countries in the South Pacific, Alpers and Twyford persist in promoting a one-size fits-all solution, the Nadi framework.

The Nadi framework is based on non-scientific advocacy that is currently enjoying unwarranted favour in the international arena, where greater control is justifiably sought over SALW. In the case of the South Pacific, there is simply no connection between the data and the authors' assertions. It is difficult to see how the Nadi framework could be assumed to be effective as a solution to diminishing criminal violence.

Focusing on the availability of firearms -- handguns or long guns -- has all too often meant that governments simply increase the legal restrictions on firearm ownership. Since civilian firearms are not a major source of firearms for terrorists and criminals, it should come as no surprise that such a solution, quite apart from being exceptionally expensive to enforce and manage, then does nothing to reduce criminal or terrorist activity and merely affects normal citizens who use their firearms for legitimate purposes, such as hunting.

References

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Table 1. Alpers and Twyford, Chapter 9, Small Arms Survey 2004

Pacific nations			2003			
	FO [1]	Homicide	Population [3]	Homicide rates		
New Zealand	22.25	69	4,000,000	1.73	97 - 01	Alpers
Niue	19.85	1	1,650	60.61	97 - 01	Alpers
Samoa	11.15	35	178,800	19.57	97 - 01	Alpers
Australia	10.98	314	20,000,000	1.57	97 - 01	Alpers
New Caledonia	8.48	NA	235,200			
Cook Islands	2.5	0	17,800		97 - 01	Alpers
Vanuatu	2.27		204,100			
Papua New Guinea	0.99	522	5,617,000	9.29	96 - 04	[4]
Tonga	0.79	1	101,700	0.98	1999	Interpol
Micronesia (FSM)	0.49	1	112,600	0.89	97 - 01	Alpers
American Samoa	0.41		61,400			
French Polynesia	0.25	NA	250,000			
Fiji	0.18	18	831,600	2.16	1998	UN
Solomon Islands	0.17		450,000			
Tuvalu	0.12	1	10,200	9.80	97 - 01	Alpers
Marshall Islands	0.05	2	54,000	3.70	97 - 01	Alpers
Kiribati	0.01		88,100			
Nauru	0	0	12,100		97 - 01	Alpers
Palau	0		20,300			
Wallis & Futuna	NA		14,800			

Notes

[1] Figure 9.1 rate of lawful civilian firearm ownership per 100,000 population
Chap 9, Small Arms Survey 2004

[3] Population for pacific island states from website
http://www.spc.org.nc/demog/
SPC demography/population programme

[4] The PNG Post Courier reported that there were 4176 murders between mid-1996 and mid-2004
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Table 2. Alpers and Twyford, Small Arms Survey, Occasional Paper No. 8

Pacific nations			2003			
	FO [1]	Homicide [2]	Population [3]	Homicide rates		
New Zealand	22.25	346	4,000,000	8.65	97 - 01	Alpers
Niue	19.85	3	1,650	181.82	97 - 01	Alpers
Samoa	11.15	175	178,800	97.87	97 - 01	Alpers
Australia	10.98	1570	20,000,000	7.85	97 - 01	Alpers
New Caledonia	8.48	NA	235,200			
Cook Islands	2.5	1	17,800	5.62	97 - 01	Alpers
Vanuatu	2.27	6	204,100			
Papua New Guinea	0.99	193	5,617,000	3.44	97 - 01	Alpers
Tonga	0.79	NA	101,700			
Micronesia (FSM)	0.49	7	112,600	6.22	97 - 01	Alpers
American Samoa	0.41	NA	61,400			
French Polynesia	0.25	NA	250,000			
Fiji	0.18	95	831,600	11.42	97 - 01	Alpers
Solomon Islands	0.17	NA	450,000			
Tuvalu	0.12	3	10,200	29.41	97 - 01	Alpers
Marshall Islands	0.05	10	54,000	18.52	97 - 01	Alpers
Kiribati	0.01	34	88,100	38.59	97 - 01	
Nauru	0	0	12,100	0.00	97 - 01	Alpers
Palau	0	NA	20,300			
Wallis & Futuna	NA	NA	14,800			

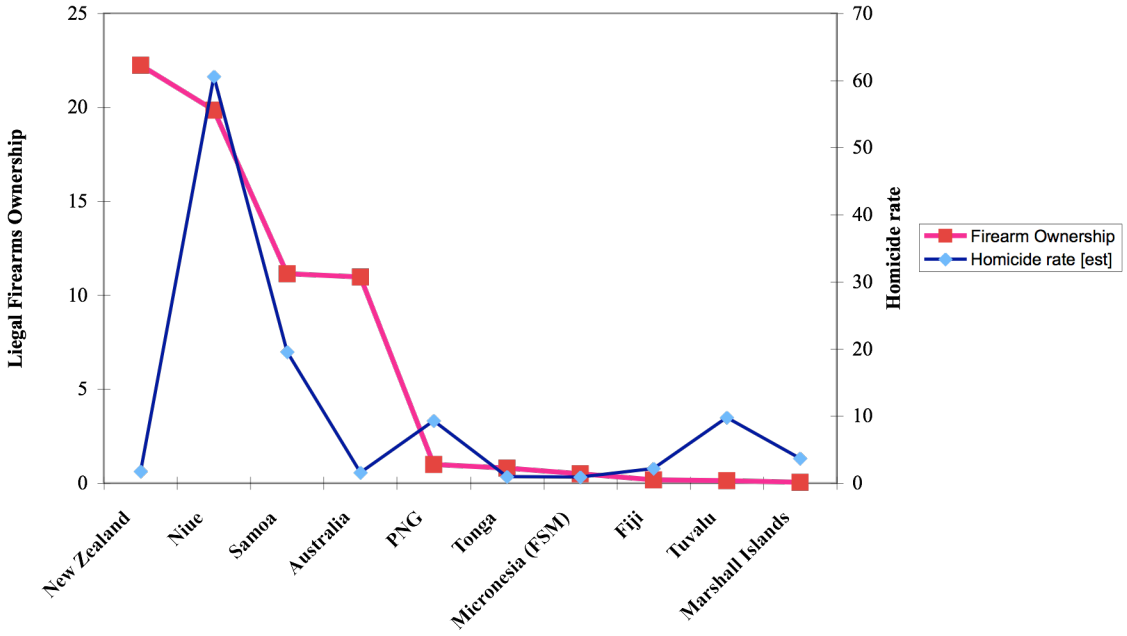
Notes

[1] Rate of lawful civilian firearm ownership per 100,000 population from Table 2.4 Small Arms Survey, Occasional Paper No. 8

[2] Homicide from Table 3.1, Occasional Paper No. 8

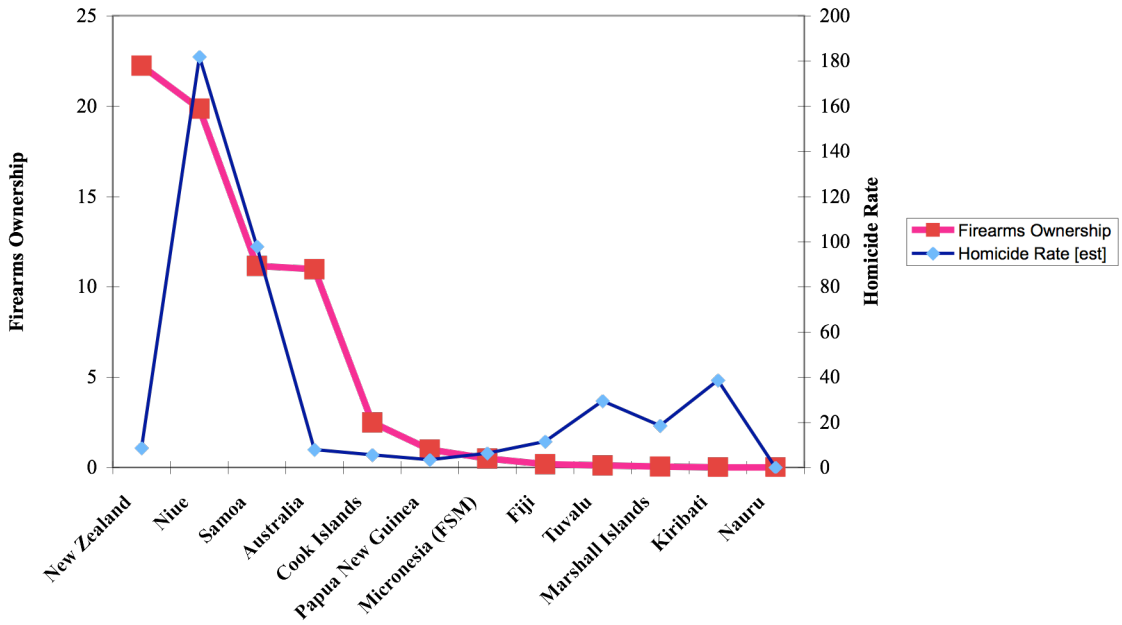
[3] Population for pacific island states from website, http://www.spc.org.nc/demog/ SPC demography/population programme

Chart 1. Alpers and Twyford, Chapter 9



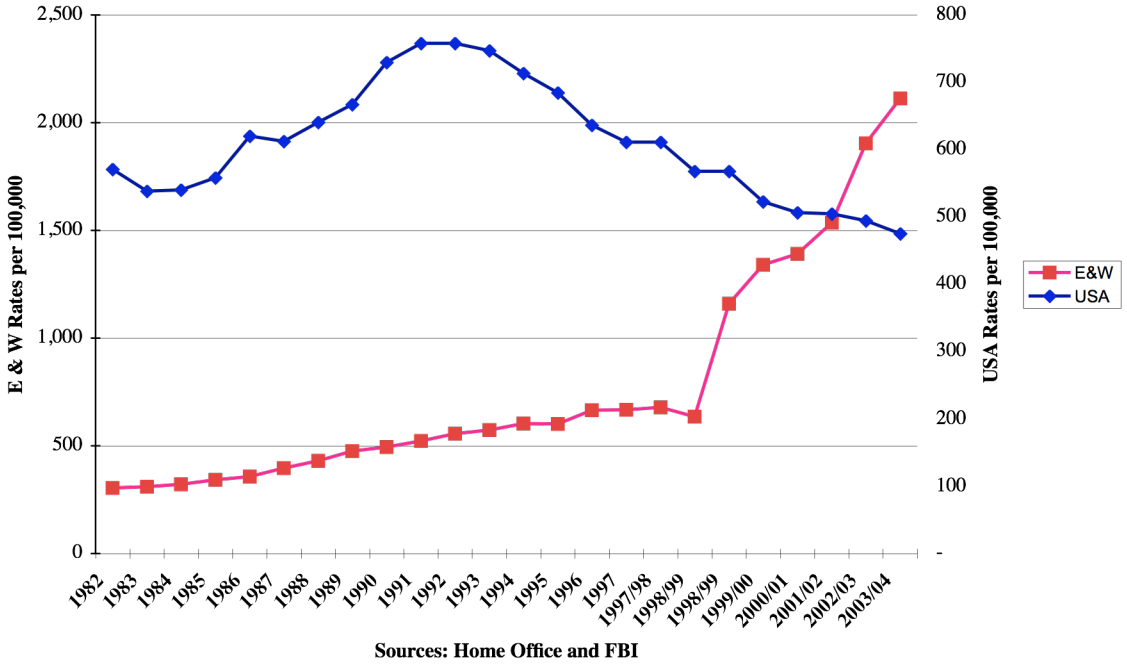
r = 0.52, t = 1.72 (p > 0.01), not significant

Chart 2. Alpers and Twyford, Occasional Paper #8



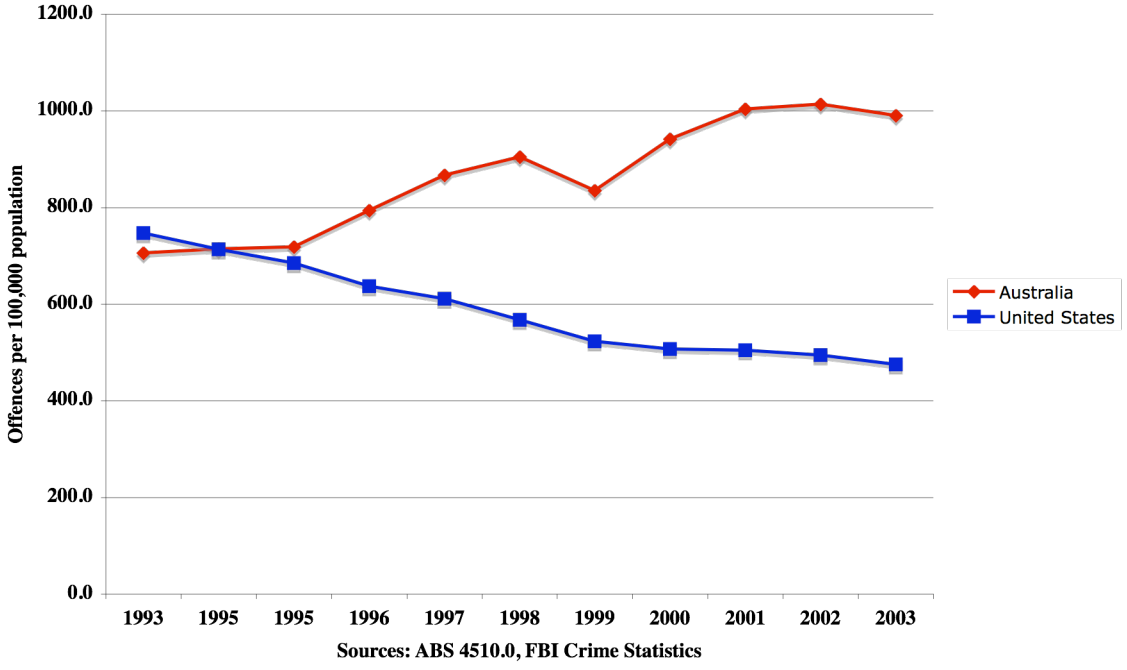
r = 0.55, t = 2.07 (p > 0.01), not significant

Chart 3. Violent Crime Rates in England and Wales and USA



Sources: Home Office and FBI

Chart 4. Violent Crime Rates in Australia and USA



Sources: ABS 4510.0, FBI Crime Statistics
