State *Society* *and* *Governance* *in* Melanesia

DIAGNOSING DEMAND: ASSESSING THE MOTIVATIONS AND MEANS FOR FIREARMS ACQUISITION IN THE SOLOMON ISLANDS AND PAPUA NEW GUINEA

ROBERT MUGGAH

Grafitti, Guadalcanal, Solomon Islands (R. Muggah 2004)

INTRODUCTION

This paper considers why and in what circumstances small arms are acquired by individuals and groups in selected areas of the Solomon Islands and Papua New Guinea. It reviews the 'demand' for small arms – a comparatively understudied thematic area of the disarmament sector. Demand for small arms is shaped by a dynamic combination of motivations (e.g. socially and culturally-mediated preferences for small arms) and means (e.g. relative monetary and non-monetary prices and individual and collective resources to acquire them). The theoretical moorings of the paper draw from an extensive literature review (Muggah and Brauer 2004), while its empirical foundations emerge from fieldwork undertaken in the South Pacific in 2004.

Predicting human behaviour in open systems is a complex – in some cases unattainable – proposition for the social scientist. This is especially the case when considering social systems (e.g. households, communities, societies and states) affected by and emerging from violent conflict. An enormous variety of theoretical, practical and ethical challenges confront the researcher when administering research in such environments. However, understanding how the demand for firearms is constructed in a particular setting – as distinct from the demand for armed violence – is essential to the formulation of evidence-based and appropriate policy. Greater awareness of the complex array and interplay of independent variables shaping demand (the dependent variable) is integral to the design of appropriate interventions to influence attitudes and behaviour associated with arms acquisition.

A considered treatment of motivations and means can move the 'demand' debate beyond narrowly defined and mechanistic interventions. The aim of this paper is to review the demand of a certain segment of the Solomon Island and Papua New Guinean population for small arms in the aftermath of periods of intense violence. The **first section** includes a background review of the theoretical foundations of the study. A selection of methods are reviewed and discussed. **Section two** provides a very general treatment of the social norms in the Pacific that potentially influence the demand for weapons – including demand for firearms. **Sections three and four** include short case studies focusing primarily on two comparatively high profile interventions that aimed to reduce the 'demand' for small arms. These were the 'Weapons Free Village'

intervention established by the National Peace Council (NPC) in the Solomon Islands and a 'Peace Agreement' brokered by the Catholic Church between warring tribes in the Southern Highlands of Papua New Guinea. The **fifth section** includes a number of concluding reflections on demand in the context of the South Pacific.

SECTION 1: THEORETICAL AND METHODOLOGICAL BACKGROUND

Demand is constituted by a constellation of independent variables – many of which can be categorised into what are hereafter referred to as 'motivations' and 'means'. Motivations include the social, cultural and politically constituted preferences for firearms. These motivations are dynamic and wide-ranging – from a proclivity for hunting and sport shooting to a concern with personal and collective self-defence, the pursuit of social status and even predatory behaviour. Means refer primarily to the relative price of obtaining firearms and the relative resources and assets available to purchase, rent, steal or borrow them. Motivations and means are seldom either/ or but are rather both/and. In other words, there are often manifold and overlapping motivations for seeking particular weapons and a constantly shifting set of means that constrain or facilitate their acquisition.

The motivations and means approach can potentially account for the demand for particular weapons types – from craft or homemade firearms to light machine guns and artillery. The acquisition of a specific type of weapon – say a handgun or a rocket-propelled grenade launcher – will be shaped by clusters of motivation of the purchaser (e.g. crime in the case of the concealable pistol and offensive military use in the case of the RPG) and, importantly the weapons relative price (e.g. cost, accessibility and punishments associated with acquisition, etc.) and assets at their disposal (e.g. cash, other tradable commodity, social capital, etc.). For example, the relative price of a handgun is generally low – not only are they comparatively inexpensive in relation to automatic rifles, they are concealable (and therefore hidden from police or potential victims) and can often be easily accessed with limited resources (whether through retail outlets or on the black market). In most cases, the price of an RPG tends to be somewhat higher – they are rather more expensive, are more visible and, with the exception of situations of state

collapse or intense conflict, more difficult to source. Ultimately, the motivations and means framework offers a novel approach to appraising 'demand' for firearms in the Solomon Islands and Papua New Guinea.

The 'demand' for small arms has hitherto been explained largely in rational utility terms. In this view, arms acquisition is a direct and explicit response to fulfilling an individually determined and time-specific function – whether in pursuit of a particular political agenda, as a rent-seeking opportunity, protection of self and family, or some other readily identifiable and individuated interest. In this view, demand is a consequence of rational self-interest – for self-defence, predatory activities, recreation or some other preference. Arms acquisition – from low calibre rifles (0.22) to light machine guns (M60) – fulfil a purpose for the potential holder. Demand is therefore individually rather than collectively determined and it can be rationally disaggregated into constituent either/or variables.

This paper intends to broaden the current approach to demand-related research on small arms. At the outset, it advocates a shift from deterministic and mechanistic understandings of human behaviour to one that embraces plurality and multiplicity of perspectives and possibilities. There is no singular or ultimately true motive or preference for gun acquisition. Rather, the motivation and means to acquire guns are hugely diverse and interconnected, and can only be understood, if at all, in specific contexts or *in situ*. Similarly, a preference for handguns can be conditioned by manifold factors – including a desired social status (guns as symbol of virility, masculinity), as a means of self-defence and also for the purpose of successfully pursuing rents – illegal or otherwise. Moreover, demand for a particular weapon can change over time – from otherwise legitimate to illegitimate purposes. It is important to recognise at the outset the considerable limitations of isolating segments of a situation and analysing them independently. Rather, a more holistic and contingent appraisal is necessary.

The field research adopted in this study drew on a grounded, comparative and multi-method approach. Each of the research tools and instruments were designed iteratively, and following an initial round of intensive interviews, focus groups and pilot testing in the Solomon Islands and Papua New Guinea. The primary approach entailed participatory focus group assessments with trained local researchers in more than ten communities: particularly 'weapons free villages' in Guadalcanal and Malaita and sites where Peace Agreements had been developed in 'tribal areas' of the Southern Highlands. A range of tools were adopted for the study, including participatory research with ex-militants, a small-scale demand survey administered to convicted militants serving sentences in the Solomon Islands and a purposive survey carried out with 'tribal fighters' in Papua New Guinea. Accompanying the entire process were site visits to validate information and key informant interviews with a selection of senior bureaucrats, military and civilian police and international peacekeeping forces, non-governmental agencies and faith-based organisations, women's associations and community-based organisations, academics, as well as mining and security consultants, epidemiologists and public health specialists and others.

SECTION 2. REFLECTIONS ON SOCIAL NORMS IN THE PACIFIC

Though often aggregated together, the nations, states and communities of the Pacific exhibit a high degree of socio-cultural complexity and diversity. While clustered into Melanesian, Polynesian and Micronesian ethnic groups, these groupings mask a considerable level of fluidity between categories. For example, largely Melanesian Papua New Guinea, a country with a population of just over five million, registers over 800 distinct languages and literally thousands of sub-dialects within a highly dispersed and ethnically diverse population. The Solomon Islands, also Melanesian, is home to some 87 languages and literally hundreds of dialects among a comparatively small population of 409,000 people (1999 census). Between 80 and 85 per cent of the PNG and Solomon Islands' populations live in rural areas and these two countries register among the highest population growth rates in the world. The separate regions and islands that make up each country are themselves inhabited by a complex mixture of matrilineal and patriarchal societies and an innumerable array of inter-ethnic and inter-tribal marriage and customary compacts. It is difficult if not erroneous, to speak of stable, fixed or homogeneous identities in the Pacific.

Individual and collective identity in PNG and the Solomon Islands is largely porous and overlapping. Though a gross simplification, identities can be seen as radiating in concentric circles outwards from blood lineage (e.g. the family unit and the clan) to those of a common sub-tribe and tribe. The tightest identity unit

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is tied to genealogical networks – and can span several generations. Binding together those of a blood and tribal affiliations is a common language. Unsurprisingly, 'civic' and 'national' identities are widely perceived as the most remote of all identities. Identities are also strongly correlated with one's matrilineal or patriarchal descent, and thus highly correlated with particular culture groups.

The concepts of nationhood and the consolidation of the institutions of the state are nascent in PNG and the Solomon Islands, much less the Pacific. Due to the comparatively recent colonisation and independence of PNG (1975) and the Solomon Islands (1978), notions of a national and civic identity have been slow to materialise. There is no tradition of overarching governance, and clans and clan sections had headmen who were repositories of clan history and led groups in feuding, ritual and warfare. The apparatus of the state appears to be regarded more as a resource to be exploited for the benefit of tribe and clan than for advancing otherwise 'progressive' economic and social development. Though coming increasingly under external pressure, domestic trade and commerce, the administration of justice and retribution, marriage rites and the management of conflict continue to be regulated in large part by customary mechanisms. This is in fact typical of traditional stateless and so-called pre-modern societies – where injunctions are rarely encoded in a formal *corpus juris* (Goldman 2003). Rather, norms are informally expressed through figurative genres of proverb or adage. This is not to suggest that such rules are weakly held, applied or understood – even if connoted as such by outsiders.

Conflict in the Papua New Guinea and the Solomon Islands, as in most other countries, has and will continue to be a normal feature of daily existence (Fitzpatrick 1982). Indigenous conflict systems have in fact been described as embracing a 'cultural logic', with fighting constituting a sequenced set of behavioural responses that itself constitutes a coda or precipitate closure. As noted by Goldman (2003: 1): "the idea of a 'community' without conflict may be an objective that is neither socially imaginable nor even desired". Indeed, social equilibrium predicated on cyclical patterns of grievance management is natural – and conflict and conflict resolution characterise all social organisations irrespective of their locale or level of development. But violent conflict can often throw conflict management strategies out of kilter. In Papua New Guinea, and more recently the Solomon Islands, violent symptoms of conflict are a comparatively recent development. The introduction of domestic sourced high-powered firearms has undeniably contributed to the scale and distribution of armed violence. Contrary to conventional belief, however, firearms have been in the region for over a century.

A growing literature on the complex systems of 'compensation' and 'payback' has emerged in the past decades (Glasse 1959; Strathern 1977). According to Goldman (2003: 3): "the logic of revenge and redress, the payback system, the cycle of killing and counter killing that can ramify from any breach of rights may appear indiscriminate". But as he notes, "this would be to ignore the calculus of segmentary descent principles whereby the named clan section that owned a fight was held corporately responsible for the actions of its members". Any descent unit member, kin or affine, could become a legitimate target for retributive homicides. The motivations guiding such actions were determined by: (1) a belief that the spirit of the slain person would visit sickness on relatives who did not avenge his death; (2) the anger of relatives against a fight 'owner' who did not both avenge and compensate the death of an ally; (3) descent unit pride at war prowess; and (4) the need to avoid public opprobrium and shame. Such opaque motivations allowed for multiple 'readings' of deaths depending on the social circumstances of the reader (Ibid).

It should be emphasised that 'motivations' for small arms acquisition are not necessarily individually determined. Western interpretations of 'demand' tend to envision individuals in a particular society as 'bound agents' – a world of atomised, self-interested and frequently conflicting actors. When considering the demand for small arms in Papua New Guinea and the Solomon Islands, what may appear at first to be driven by self-interest are often heavily influenced by tribal, clan, household and familial affiliations and corporate interests. Demand is greatly facilitated by kinship and tribal affiliations. Put another way, the preference for weapons, the price of firearms and their acquisition, and the resources available to purchase them is strongly related to the predominant social networks in society. The relative influence and importance attached to kinship and tribal affiliations must be adequately recognised in any consideration of demand reduction initiatives. As this paper will make clear, deterrence-based strategies that focus on penalising and raising the price of firearms for individuals may only be partially successful. Approaches advancing normative compliance, that build on values, norms and attitudes prevalent in Pacific society should

also be considered. Penalties could be adjusted to accommodate these, equally legitimate, customary regulatory systems.

SECTION 3. WEAPONS FREE VILLAGES IN THE SOLOMON ISLANDS

The Solomon Islands is recovering from a period of armed violence that erupted in the late 1990s. Although a peace agreement was signed in 2000 between the two principle militant factions – the *Isatabu Freedom Movement (IFM) and the Malaita Eagle Front (MEF)* – and an International Peace Monitoring Team (IPMT) set-up to monitor its terms, the law and order situation continued to deteriorate. Under the auspices of the Pacific Island Forum's *Biketawa Declaration* and following its authorisation by the Solomon Islands Parliament, members of a 2,250-member Regional Assistance Mission to Solomon Islands (RAMSI) arrived in Honiara during the last week of July 2003. While *Operation Helpem Fren* began with an 18-month mandate, RAMSI was first and foremost a policing operation. Its principal objective was to establish security in Honiara in order to enable government, business and community to operate free of armed intimidation. Improved security was rapidly extended beyond Honiara by the end of 2003. The collection of illegal weapons constituted a major priority in the early stages of the intervention.

The recent 'conflict' in the Solomon Islands has been popularly interpreted as one between two distinct ethnic groups –Malaitans and Guadalcanalese (see GoS 2003; UNDP 2004). As with other internal conflicts around the world, the reality is more complex. Land scarcity and the progressive encroachment of Malaitan settlers on the island of Guadalcanal represented a central factor contributing to the onset of conflict. A range of indigenous grievances, including perceptions of the dominance of Malaitans in the civil service and Royal Solomon Island Police (RSIP), contributed to the outbreak of violent conflict. The conflict resulted in the intentional deaths of an estimated 150-200 individuals, as well as approximately 430-460 non-fatal small arms related injuries. At the height of the 'tensions', more than 35,000 Solomon Islanders were displaced from their homes in rural Guadalcanal. Table 1 highlights the distribution and types of reported injuries associated with high and low-powered small arms (see also Annex 1). More than 3,500 weapons – including high-powered weapons stolen from police armories and homemade guns– were believed to be in circulation in mid-2003 (Muggah 2003). While key foreign investment sectors were affected, including mining and copra plantations, the informal sector was not hugely affected.

The primary mechanism for collecting weapons in the Solomon's since the 2000 Townsville Peace Agreement (TPA) were amnesties. Both the Solomon Island Government and the RAMSI forces introduced short-term amnesties to collect illegal manufactured and homemade weapons.

Table 1. Frequency of Small Arm and Laceration Injuries at the National Referral Hospital, Honiara, 1994-2002
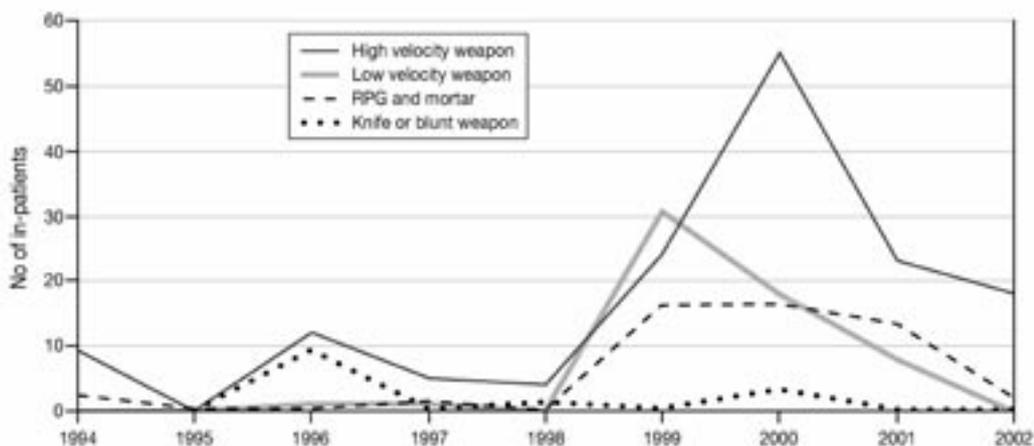
The record of amnesties prior to the arrival of RAMSI was mixed. Deficiencies of amnesty-related legislation and enforcement processes included their reliance on 'compensation' to aggrieved parties. In practice, the injection of new resources served to fuel demand for still more weapons. Pre-RAMSI amnesties failed to bring in 'high powered weapons', and succeeded more in collecting less desirable homemade firearms. Due to failures in effectively communicating the objectives of the amnesties, the symbolic dividends in terms of promoting a 'gun free' Solomon Islands were not realized. By contrast, the amnesty introduced after the deployment of RAMSI resulted in the surrender of some 3,730 weapons by the end of the August 2003. This amounted to an estimated 90-95 per cent of the country's stockpile (Nelson 2004). RAMSI introduced an extremely powerful and enforceable deterrent: anyone found with a weapon could expect to serve a prison sentence of up to 10 years or pay a USD 3,500 dollar fine. With RAMSI's arrival, the relative price of weapons possession rose steeply.

There are a number of reasons why weapons collection has been markedly more successful since the deployment of RAMSI. The overwhelming deterrence that RAMSI represents is an obvious one. Less obvious is the role of the National Peace Council (NPC) in fostering bottom-up and normative approaches to reducing the preferences for firearms and raising their 'social' price. The NPC was established by the Solomon Islands government in October 2002 to continue implementing reconciliation-oriented activities and initiate new interventions to advance the peace process. Its membership comprises government representatives, former MEF and IFM militia, and the provincial governments of Guadalcanal and Malaita. The NPC operates as a neutral body in a similar fashion to its predecessor, the Peace Monitoring Council. Its initial mandate is for three years subject to annual budgetary processes and appropriations.

The primary activities of the NPC include the 'Weapons Free Village' (WFV) campaign. The WFV initiative encourages communities to voluntarily achieve 'weapons-free status' through a formal certification process with the assistance of NPC monitors. It provides a degree of recognition and incentive (e.g. the donation of sporting equipment) to those villages that are certified as having acquired 'weapons free' status. Approximately eighty NPC monitors assess weapons availability in a given area and strive to ensure that no guns remain prior to a village being certified as 'weapons free'. During certification ceremonies chiefs and village leaders sign a weapons free declaration. Certification requires sanctioning from the government. Since its inception in August 2002, more than 974 villageshave been declared weapons free in public ceremonies (see Table 2). This amounts to more than three quarters of the set target of 1,200 villages by December 2004. The record of weapons collection by NPC has been generally under-appreciated. While a mere 22 weapons were returned to the NPC prior to RAMSI, approximately fifty per cent of all 3,730 weapons collected since RAMSI's arrival are alleged to have been provided to NPC representatives first before being handed over to RAMSI personnel.

The activities of the WFV program are clustered into twelve separate regions on the islands of Guadalcanal and Malaita. Each region consists of a cluster of wards registering between 20 and 50 villages each. A village is typically composed of a minimum of 10 households, though it can be larger, and is categorsied as such for purely budgetary reasons. 'Villages' declared 'weapons free' may not conform to their original (administrative) designation prior to the launch of the program. The weapons free villages scheme operates through the NPC, with team leaders and regional monitors visiting village chiefs and arranging for certification, as well as verifying villages that have not yet achieved status and collecting surrendered weapons for

Table 2. Weapons Free Village Data for Malaita and Guadalcanal from Jan-Dec 2003

	Guadalcanal	Malaita
January	104	220
February	70	90
March	41	91
April	17	55
May	23	5
June	7	50
July to December	108	93
Total	370 (38%)	604 (62%)

handover to RAMSI. The NPC also hold ward-wide ceremonies and transfer the incentive (eg. sporting equipment) on completion of the ceremony.

DEMAND IN THE WEAPONS FREE VILLAGES

A Small Arms Survey team sought to appraise the short to medium-term effects of the Weapons Free Village program, focusing primarily on process and impact indicators (Nelson 2004). The evaluation also devoted considerable attention to identifying and analysing factors contributing to the acquisition of firearms in the period before and after the arrival of RAMSI.

Though inter-communal conflict does not appear to be as deeply embedded in the Solomon Islands as in neighbouring PNG, significant tensions over land resources persist. As a result, a considerable number of residents are strongly in favour of the continued presence of RAMSI. There is a belief that the outbreak of violence is still possible in parts of the Solomon Islands given adequate means. While the motivations (e.g. preference for small arms acquisition) continue, albeit at lower levels than prior to the arrival of RAMSI, the means (e.g. price of acquisition) has increased considerably. The high cost of weapons possession, both in terms of the presence of RAMSI and the deterrent effects of recently introduced penalties, has increased the relative price of firearms. However, relative resources have also increased since the return of investment and stability. As a result, firearms acquisition could increase if RAMSI were to depart in the near future.

The field research indicated that awareness of types and calibres of weapons was relatively high among both ex-militants and the broader community. Participatory focus group sessions with randomly selected community residents and former militants living in WFVs in Malaita demonstrated knowledge of more than ten different types of firearms. For those living in WFV's in Guadalcanal, awareness of firearms types and calibres was less developed. The high level of awareness, particularly in Malaita, is surprising given the recent introduction of commercial and military-style weapons to the civilian population of the Solomon Islands.

Both militia groups claimed distinct command and control structures in relation to small arm acquisition and holdings. Participatory research suggested that the MEF distributed manufactured weapons on an *ad hoc* but needs-basis, while the IFM tended to produce their own weapons from galvanised water pipes and assorted springs (e.g. from umbrellas, sewing machines, etc). For the MEF, the majority of manufactured weapons were sourced from the Rove armoury in Honiara and the Auki police station in Malaita. They had little need for externally sourced or smuggled weapons. For the comparatively less well armed IFM, the majority of military-style weapons were acquired through exchanges for clothes, retail commodities and other goods in Western Province, presumabely through contacts with former combatants from the Bougainville Revolutionary Army (BRA).

The motivations for acquiring and possessing specific types of high-powered weapons ranged from protection to hunting and appeared the same for both MEF and IFM militia. According to a variety of sources, remaining high-powered weapons are cached in the Weather Coast of Guadalcanal and North and Eastern Malaita, areas with strong IFM and MEF associations. An important reason for continuing demand among communities living in Weapons Free Villages relates to hunting and pest control. Concerns were registered in both Malaitan and Guadalcanal communities related to the growing incidence of attacks by crocodiles on locals and the destructive impacts of wild pigs on subsistence and cash crops. Though RAMSI has offered a service to undertake pest-control, a number of respondents claimed that they would acquire a .22 and .303 calibre rifles for hunting purposes and self-protection.

The price of weapons also appeared to fluctuate over the course of the tensions. For example, prices for commercially manufactured firearms ranged from SI5,000 (USD 660) to 10,000 (USD 1,320) during the height of the 'tensions' as compared to approximately SI1,000 (USD 130) prior to the outbreak of tensions. With the arrival of RAMSI in July 2003, the relative price of weapons acquisition increased dramatically. Key informants reveal that the public display of manufactured and craft-produced weapons reduced precipitously. Though the monetary cost of weapons temporarily fell after the arrival of RAMSI, it is widely believed that a number of remaining high-powered weapons are still cached by small groups of former militia.

While demand for firearms appears to be negatively correlated with high levels of punitive deterrence, it also appears that social pressures applied by communities on militants are influential in curbing demand. Indeed, by raising the relative 'social cost' of weapons acquisition and ownership in particular villages, the WFVs

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encouraged the voluntary surrender of weapons to the NPC and deterred further demand. Put another way, by stigmatising gun ownership, firearm ownership incurred a community penalty. As noted above, up to 50 per cent of the 3,740 collected by RAMSI by August 2003 were believed returned to NPC monitors as part of local surrender initiatives.

Key entry-points identified by the communities in Malaita and Guadalcanal to 'reduce' demand related to the increased investment in law and order. This had the effect of both reducing the latent 'preference' for small arms and raising the cost or price associated with acquisition. Virtually all respondents felt that deliberate and targeted investments (monetary and non-monetary) and support for employment of male youth would similarly reduce 'preferences'. There nevertheless remains the possibility that this could also potentially increase relative resources, thereby triggering more demand. The harnessing of women's groups was also seen as a constructive investment in influencing both preferences and the relative price of weapons. Though women appeared to register a comparatively ambivalent attitude toward small arms acquisition, women's groups were extremely active in reducing armed violence and calling for reductions in weapons possession during the height of the 'tensions'. In other words, women's groups stigmatised weapons possession and raised the cost, to men in particular, of acquiring them.

SECTION 4: PEACE AGREEMENTS IN THE SOUTHERN HIGHLANDS OF PNG

Papua New Guinea has suffered from rising levels of insecurity since independence in 1975. Despite comparatively high levels of overseas development assistance to improving policing and safety the situation has continued to deteriorate in many areas. The most dramatic instance of low-intensity conflict was the nine-year civil war on the island of Bougainville. PNG is now widely perceived as a haven for criminal and tribal violence. The towns of Port Moresby and Lae, as well as the Southern Highlands and Enga provinces, are regarded as especially volatile. Studies have identified a wide variety of forms from domestic and sexual violence to acute levels of armed criminality (eg. 'raskols' gangs) and tribal conflicts (Dinnen and Thompson 2004).

Small arms are a relatively recent phenomenon in PNG and most appear to be sourced domestically from the PNG defence force , police and unscrupulous political leaders (Alpers and Muggah 2004). The Southern Highlands province has been the location of chronic levels of violent armed conflict in recent years with remarkably high rates of firearm and knife-related violence (see Table 3 and Annex 1). In the absence of effective government or policing responses, a number of local peace-making initiatives involving women's groups, churches, and development agencies, have quietly emerged.

More than twenty-two sub-regions of the Southern Highlands have experienced severe outbreaks of armed violence since 1989. The use of commercially manufactured weapons first became apparent in the early 1990s (Alpers and Muggah 2004). An especially severe armed conflict erupted between the two tribes bordering the provincial capital, Mendi. The Ujamap and Wogia tribes, made up of a collection of clans and sub-clans, began a major conflict in 1998 resulting in an estimated 120 intentional firearm deaths by 2002. Public services crumbled as the violence escalated. The referral hospital closed for six months in early 2002 and numerous clinics, schools, transport nodes and government offices were also shut down.

Table 3. Percentage Gunshot and Knife Injuries as a Proportion of All Admissions at Mendi Hospital: 1998-2004
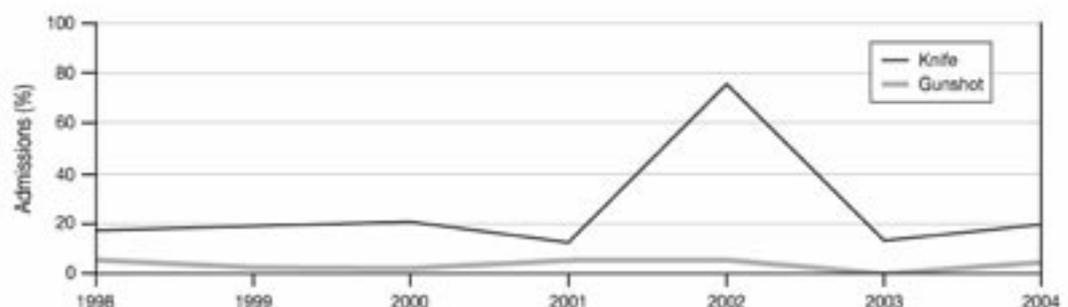
Though popularly perceived as an extremely heavily armed society, there are in fact relatively few commercially manufactured weapons in the Southern Highlands. A recent Small Arms Survey study suggests that there may be less than 2,000 in the entire province (Alpers 2004). The low number of units can be attributed to their comparatively high price and the scarcity of ammunition. There is, however, a considerable diversity of weapons available and prices range from the equivalent of K2,000 (USD630) for a pistol to K24,000 (USD 7,550) for an M60. Common semi-automatic assault rifles are valued at some K5,000 – 8,000 (USD1,575- USD2,520), though prices appear to vary considerably. Though homemade guns are common, M16 assault rifles, pump action rifles, self-loading rifles and pistols were reportedly widespread and highly prized.

Armed violence around the capital of the Southern Highlands, Mendi, peaked between 2001 and 2002. Concentrated primarily between the Wogia and Unjamap tribes, an estimated 120 tribesmen and women were shot and killed, and hundreds more intentionally injured (see table 3 above). Despite repeated pleas to government authorities from representatives of civil society, the situation became progressively worse. In 2001 and 2002, a number of faith based organisations sought to broker a Peace Agreement between the two warring tribes. The 'Mendi Peace Commission' was chaired by a local businessman, along with the bishops of both the Catholic and United churches of Mendi. With limited support from government, these three community leaders spent months brokering a 'Peace Agreement' which, when signed on May 3, 2002, offered closure to a three-year tribal war.

A transparent process of reconciliation was organised to cement the Peace Agreement. The key parties to the fighting – the Urum tribe of Unjamap village and the Tungujup tribe of Wogia village – publicly acknowledged the harm done by their actions and offered unreserved expressions of sorrow and apology to all those affected. Both tribes sought forgiveness and reconciliation, and repeated their vows to cease all hostilities, allow freedom of movement, and to respect each other's tribal boundaries. Commitments were also made to 'dismiss' mercenary gunmen, entrust all firearms to the control of tribal leaders, cease the public display of offensive weapons, and to cooperate with police in clamping down on alcohol and marijuana abuse which were seen as key catalysts for driving 'preferences' for weapons. Stolen property was returned and mediation was set in motion to negotiate reparations and forgiveness. More than two years after its signing at a public ceremony attended by more than 10,000 people, the Mendi Peace Agreement has held without any major breach.

DEMAND IN THE AFTERMATH OF THE PEACE AGREEMENT

As in Solomon Islands, conflict lays a regulating function in the daily life of Southern Highlanders. Tribal fighting has been an integral part of the historical experience of local societies. Conflict constitutes a deep preference among tribes in the region. A core indicator of 'victory' appears to be the number of deaths inflicted on the opponent as compared to the number sustained by one's native tribe. The introduction of military-style weapons has dramatically increased the number of deaths and consequent retributive killings on all sides.

As in Solomon Islands, community members and tribal fighters in the Southern Highlands demonstrated a considerable awareness of the various types of high-powered weapons in circulation. Unjamap and Wogia tribes identified between 18 and 23 distinct types of small arms and light weapons used in conflicts and paybacks over the past decade. Though the precise identification of specific brands and calibres were occasionally confused, respondents showed a high level of insight into the technical and practical maintenance of manufactured firearms. A strong preference for manufactured and homemade small arms has taken hold despite their comparatively recent introduction and low availability.

Research revealed a similarly wide variety of categories of weapons holders – from police, correctional facilities, and PNGDF to 'politicians', 'raskols', 'tribal shooters' and 'mercenaries'. Those believed to possess the most varied types of weapons – from bush knives to M60 light machine guns – were the tribal fighters themselves. A structured and purposive survey of 'tribal fighters' indicated that the motivation (preference) for manufactured weapons was persistent. Protection and payback are key motivations although it is clear that there are likely to be multiple and competing motivations underlying acquisition. Specific types of weapons were preferred. Over seventy per cent of respondents favoured M16s, though for others, SLR, shotguns and pistols were the weapons of choice. More than seventy-four per cent of respondents claim that it is 'fine' or 'always fine' to own a weapon.

Due to the persistence of tribal conflict and a vigorous culture of exchange, the demand

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for weapons (e.g. motivation and means) is high. As in many parts of the PNG Highlands, tribal conflict is an endemic feature of Southern Highlands. Unlike homicides and other forms of violence where compensation can be arranged, there are no clear mechanisms to permanently end tribal conflicts. Rather, these are systematic and their outbreaks can only be reduced through reconciliation and other processes. It appears that while the real price of weapons remains high, Southern Highlanders are able to acquire weapons by using a variety of forms of asset exchange. Key informants highlighted the prevalence of collective acquisition by communities – whether through barter trade (e.g. livestock, women, etc), credit, or other assets. Alternatively, community representatives would rent weapons, or owners of weapons as mercenaries, to pursue conflict. Survey findings suggested that over sixty per cent of informants would buy guns if they could, while a third would either buy or borrow.

There are, however, a number of entry-points in the Southern Highlands to potentially reduce the demand for weapons. Ways of mitigating demand focused on reconstruction of small-scale clinics, schools and road infrastructure that could revitalise community development and address the 'deep preference' for conflict. Communities highlighted the importance of collective incentives to reduce gun acquisition – akin to a 'weapons for development' intervention. As long as tribal tensions persist, the preference for weapons, whether for self-defence or protection, will remain. Episodic violent outbreaks can nevertheless be mitigated with interventions designed to (i) reduce weapons availability, (ii) strengthen the credibility, capacity and reach of the policing and justice sectors, (iii) curb corruption and strengthen accountability among local and district-level political representatives, and (iv) ensure an equitable investment in social and economic infrastructure in key flashpoint communities throughout the Southern Highlands.

SECTION 5: CONCLUDING REMARKS AND OBSERVATIONS

Disarmament is a long-term, even permanent, exercise. To be truly effective it must influence both motivations – including attitudinal and behavioural preferences for weapons – as well as raise the real and relative price of acquisition and ownership. Conventional approaches to arms control tend to focus primarily on increasing the relative price of weapons – through either increased

military and police presence or the introduction and enforcement of penalties. More recently, interventions inspired by the development sector seek to increase the relative resources and assets of potential users so as to provide incentives and 'alternatives' to weapons acquisition and retention and, by implication, predatory behaviour. To be successful, disarmament must endorse a more multifaceted agenda – one that addresses demand reduction alongside with arms reduction. As this paper argues, demand reduction encompasses three key factors – preferences, relative prices and relative resources. A number of instructive lessons associated with demand reduction emerge from the two cases studies.

As evidenced in the case of the Solomon Islands, the introduction of a military-backed intervention force – together with its largely deterrence-based approach (e.g. amnesties, penalties, enforcement, convictions) – offers a compelling approach to reducing demand in the short-term. The overwhelming threat of penalties and the capacity to enforce them resulted in a rapid de-escalation in weapons availability, an unprecedented increase in 'security' and a reduced incentive on the part of either Malaitan or Guadel community members and militants to acquire firearms. The presence of a legitimate or respected deterrent was not similarly present in the case of the Papua New Guinea's Southern Highlands. Thus, the relative price of weapons – while still high – could not be raised higher still. In the absence of a strong security presence, local actors developed alternative approaches and seeking to engender an approach based on normative compliance.

Externally driven intervention efforts in both the Solomon Islands and Papua New Guinea – whether peacekeeping forces, amnesties or 'weapons for development' programmes, could benefit tremendously by inculcating local ownership of disarmament efforts. Local buy-in can be ensured through the harnessing of customary mechanisms and high profile efforts to raise the benefits - and reduce the relative price - of disarming and stigmatising (raising the relative price of) weapons ownership. The 'Weapons Free Village', while imperfect, offers a template that could be used in comparable circumstances. The Peace Agreement signed in the Southern Highlands drew explicitly on customary mechanisms and appropriate norms to instil confidence in, admittedly temporary, stability and to disarm warring belligerents.

AUTHOR NOTE

Robert Muggah is a Global Security Cooperation Fellow of the Social Science Research Council (SSRC) and affiliated with Queen Eilzabeth House, University of Oxford. He is also project manager at the Small Arms Survey, based at the Graduate Institute of International Studies in Geneva, Switzerland.

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ANNEX 1 INJURIES IN SOLOMON ISLANDS AND PAPUA NEW GUINEA

Reported Firearm Injuries in the Solomon Islands: 1994-2002

National Referral Hospital: Types of injuries Sustained by Small Arms: 1997-2002

	Chest	Extremity	Pelvis, Abdomen or Spine	Head	Other
1994	2	12	2	0	0
1995	0	1	0	0	0
1996	2	20	1	1	0
1997	0	5	0	2	0
1998	3	3	1	1	0
1999	11	33	7	16	3
2000	13	45	8	17	4
2001	8	19	2	17	0
2002	0	12	5	0	1
2003			150-180		

High Velocity includes M-16, Police-issue SL88 and pistols
Low Velocity includes Shotguns, .22 rifles and homemade weapons

Table. Profile of Reported Gunshot Victims at Mendi Hospital: 1998-2002

	Male	Female	Total Admissions of All Types	Percent Gunshot
1998	24	0	422	5
1999	9	1	449	3
2000	11	0	414	3
2001	23	0	457	5
2002	5	2	128	5
2003	4	0	416	1
2004	5	0	116	4
Total	81	3	2402	3.5

*1998 beginning in April only

** Mendi Hospital closed for January to September 2002 and only semi-operational thereafter

***2004 includes January to mid-May only

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