



Anti-terrorist
commandos stand at
attention at Tokyo's
Narita International
Airport, April 2004.
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The Count Continues: STOCKPILES

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INTRODUCTION

The year 2004 saw powerful states struggling with unrestrained small arms proliferation. In Iraq and Afghanistan, in particular, armed individuals and groups continue to present a great obstacle to human security, coalition forces, and reconstruction efforts. Yet elsewhere, with far less firepower and attracting far less public attention, governments and civil society have quietly pressed on with a number of initiatives to address civilian small arms possession and armed violence.

The aspect of small arms stockpiles most prominent in 2004 was internationally sponsored disarmament. Efforts in Afghanistan, Cote d'Ivoire, Haiti, Iraq, Liberia, and Sudan attracted the most attention, but many more were tried or debated. At the domestic level, 2004 also represented a turning point in a number of states' efforts to control armed violence through enhanced domestic controls. All of these initiatives have hinted at strong national and international will to further the small arms control agenda.

The will to act has not been uniform. North-east Asia and the Middle East¹ are among the most prominent regions only beginning to assert a strong presence in small arms processes. They are addressed in depth in this chapter, which continues the regional review of past editions of the *Small Arms Survey*. This chapter's major conclusions include the following:

- Small arms disarmament has emerged as a prominent element of international, multilateral, and domestic efforts to control armed violence.
- Major initiatives may reduce local stockpiles, but disarmament reductions are outweighed by increases in global small arms stocks elsewhere.
- Arms reduction, both post-conflict and in societies not at war, is most successful when pursued as part of an integrated system of violence reduction initiatives.
- Middle Eastern militaries and police forces stockpile some 13 million–17 million firearms.
- North-east Asian militaries and police forces hold an estimated 22 million–42 million firearms.
- The Middle East has anywhere from 45 million to 90 million firearms in the hands of civilians.

The year was characterized by the continued working out of processes that began earlier. Ideas and approaches set in motion previously could be seen progressing and gaining broader support, as well-known dangers grew more troubling and incremental progress gradually made their effects more visible.

The cumulative effect was to confirm the steady globalization of the small arms agenda. No longer is small arms proliferation an issue exclusively for particular countries or regions. By examining the Middle East and north-east Asia, this chapter completes the region-by-region survey of small arms stockpiles initiated in the first edition of this yearbook.

While this undertaking remains general and open to revision and better information, it offers a sense of the scale of firearms inventories and their world distribution.

Since the small arms issue came on to the international agenda in the early 1990s, a few regions have remained aloof. Most of the governments of the Middle East and north-east Asia, regions that together contain one-quarter the world's population, were able to avoid small arms transparency and to keep the dimensions of their stockpiles secret, while debate focused on other parts of the world. This chapter shows that even in these regions, seemingly immune to global trends, small arms stockpile issues are beginning to demand attention. Although gaps and weaknesses still complicate global stockpile management, greater responsibility for small arms is gradually becoming more universally accepted.

2004: OLD PROBLEMS, NEW INITIATIVES

A number of initiatives in 2004 raised the profile of stockpile management. Some of these were the legacies of earlier years only now coming into full effect; others were designed and implemented in 2004. Most involve ongoing efforts. This reflects the fact that control initiatives, whether as part of formal, internationally-sponsored disarmament, demobilization, and reintegration (DDR), more ad hoc multilateral initiatives, or changes in national policy and implementation, are long-term endeavours.

It is a sign of the transformation that small arms disarmament has spread from the domain of specialists to become an increasingly routine element of global policy-making. Not just the international community, but affected states, former combatants, and their leaders have made small arms disarmament an accepted instrument for addressing a diverse spectrum of problems. Where the misuse of small arms has emerged as a vector of human suffering, disarmament wins rapid recognition as an essential part of the solution. Disarmament is a formal element in conflict resolution in countries as diverse as Afghanistan, Colombia, Iraq, Haiti, Liberia, and Northern Ireland. In addition, formal small arms disarmament was discussed in 2004 as part of conflict resolution in India, Lebanon, Nigeria, Spain, and Sudan, among others. The results of such efforts have been uneven and in some cases contradictory.

United States initiatives to control the estimated 7 million–8 million small arms loose in society in Iraq (Small Arms Survey, 2004, p. 49) have been of the trial-and-error variety, focusing primarily on light weapons such as machine guns, rocket-propelled grenades, and heavier ordnance (Centcom, 2003; BBC, 2004). Nonetheless, events in Sadr City, Baghdad, illustrate how initiatives aimed at local communities can bear fruit. Although figures have not been released, in October 2004 successes in collecting small arms and light weapons in the city prompted the Interim Government to extend an amnesty throughout the country (BBC, 2004; CNN, 2004). The collection effort appears to have targeted militias indirectly and to have been instrumental in offering them a dignified transition to a more political role (Schwartz, 2005). It demonstrates that adopting a community perspective can often be more successful in arms control than targeting any one set of armed actors.

Elsewhere, prominent international weapons reduction initiatives continue in states such as Liberia and Haiti, with mixed success yet clear indications of the necessity for multifaceted approaches to reducing demand for small arms (POST-CONFLICT).

With regard to stockpile management, a number of states, notably the United States, have been heavily involved in promoting the destruction of military small arms and light weapons. Initiated in 2005, the NATO Partnership for Peace Trust Fund has pledged to help Ukraine destroy an estimated 1.5 million military small arms and light weapons

Box 3.1 Iraq: Disarmament through trial and error

American-led initiatives to control the small arms loose in society in Iraq have been of the trial-and error-variety. 'Even before the war', notes the *Small Arms Survey* (2004, p. 47), 'Iraq's combined civilian and military small arms stockpile can be conservatively estimated at between 7 and 8 million firearms, with the potential to be considerably higher'. A lively cross-border weapons trade has made the situation more dynamic (Hider, 2003). An accurate tally probably must wait until the Iraqi conflict abates enough to permit systematic field research and public polling.

Campaigns against Iraqi small arms have been a staple of American operations since the early weeks of Operation Iraqi Freedom. These efforts have evolved over time. In the early days of the occupation, the Coalition Provisional Authority called for the confiscation of all civilian firearms.² On 24 May 2003 the Authority announced a 14-day amnesty to permit Iraqis to turn in light weapons (Centcom, 2003; BBC, 2004). In subsequent weeks this amnesty was diluted to permit Iraqis to keep a single automatic rifle or pistol, so long as it was not brandished publicly. The Authority and its successor, the Interim Government created on 30 June 2004, tried to absorb some of the surplus with cash incentives. In Iraq such efforts rapidly exhausted any amount of cash allocated, without making a palpable impact on insurgent attacks or civil violence (Hauser, 2004; Walt, 2004).

Originally aimed at all small arms in the hands of the general Iraqi public, these efforts gradually become more narrowly focused. As conflict with militias intensified, the Coalition shifted its emphasis from small arms in general to those of the militias in particular. This revised approach was part of a more focused strategy of trying to separate insurgents from civilian society.³ A subsequent deal, brokered by Interim Prime Minister Iyad Allawi, sought agreement from 12 militias to disarm. Their members were to demobilize and join the new Iraqi security services at a cost of roughly USD 200 million (Filkins, 2004). This plan collapsed because of practical problems of implementation, such as who would make the first move. Even so, it demonstrated the promise of a comprehensive disarmament combined with demobilization and reintegration.

The leading disarmament target became the Mahdi Army of Shiite leader Moktada al-Sadr. During the April 2004 battle of Fallujah, civil leaders appeared to have secured a commitment from the rebels to surrender their light weapons, but this later disintegrated (Fisher, 2004). The Mahdi Army was allowed to evacuate the shrines it had occupied without giving up its weapons. A less ambitious programme was aimed exclusively at Baghdad's Sadr City, a centre of support for al-Sadr's Mahdi Army. Although the number of weapons recovered has not been made public, officers involved express satisfaction with the undertaking.

A major dispute over the future of Iraq has arisen over exactly this point. One school of thought has emphasized the importance of systematic DDR since before the war even began, stressing the need to keep armed men from becoming a disruptive force. Advocates continue to stress systematic disarmament through amnesties for insurgent militiamen and former police and soldiers (Barton and Crocker, 2003, pp. 8-9; 2004, pp. 79-80). Coalition insiders like senior adviser Larry Diamond stressed the need to combine disarmament with merging former combatants into the country's new police and armed forces (Diamond, 2004a). More recent proposals have recommended that disarmament become a prerequisite for participation in electoral politics (Diamond, 2004b). Other observers focus on the imperative for political solutions, implicitly obviating the need to deal directly with small arms issues (ICG, 2004).

The outcome of the debate is impossible to evaluate as of this writing, but there can be little doubt that small arms issues will continue to play a crucial role in debates over the future of Iraq. So long as small arms are the most prominent symbol of Iraqi instability, they will be the natural focus of efforts to bring peace and stability to that troubled country.



An Iraqi National Guardsman drives a truck loaded with weapons collected in Sadr City, Baghdad, in October 2004.

and 133,000 tons of ammunition. The project, which is likely to cost in the region of USD 27 million, is predicted to span 12 years (USDOS, 2005).

Also of note are ongoing efforts of the Small Arms and Light Weapons programme of the United States Defense Threat Reduction Agency (DTRA). The DTRA provides technical expertise and support to the Department of State, and as of January 2005 had conducted operations in Europe, Latin America, Asia, and Africa. The operations included assessments of the physical security of stockpiles, destruction assessments, and destruction assistance. The project's annual budget has increased from USD 1 million to USD 10 million and is expected to continue to grow (DTRA, 2005).

The year 2004 also saw some clear successes on the domestic front. This was true both of societies with high rates of armed violence, such as Brazil, South Africa, and Venezuela, and of countries, such as Australia, with comparatively low levels of armed violence.



A Venezuelan soldier stands on illegal firearms during the destruction of more than 10,000 illegal weapons confiscated by the National Guard, Caracas, May 2004.

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In Brazil a national campaign is underway to persuade citizens to give up firearms. Following the enactment of the Disarmament Statute in December 2003, the high rates of public violence have become a fundamental political issue. The current campaign is centred on the government buying back any firearm—whether legally owned or not—for USD 40 to USD 120. These rates of compensation often are far below the commercial value of a firearm, suggesting that success has been the result of changes in perceptions of firearms ownership (Instituto Sou da Paz, 2005).

By March 2005 the campaign had recovered over 300,000 firearms from private hands (Instituto Sou da Paz, 2005). The Statute also provides for a referendum in October 2005 on whether to

prohibit trade in arms and ammunition in Brazil. Civil society groups continue to mobilize support for a prohibition. Efforts to tackle armed violence in Brazil are centred firmly on the theme of disarmament (Instituto Sou da Paz, 2005).⁴

In 2004 Australia launched another round of its buy-back programme, which collected 68,727 weapons (Hudson, 2004). This figure was in addition to more than 700,000 weapons collected in earlier rounds (Australia, 2002). As in Brazil, the sheer number of weapons collected was not the most important aspect of the initiative. The continued receipt of large numbers of weapons suggests widespread changes in public perceptions of gun ownership (Bourgois, 2005). As happened in the United Kingdom, public perceptions were affected mostly by outrage at a massacre (in Port Arthur in 1996). The support of potentially affected communities is a core component of the decision to relinquish weapons.

Inspired by the reduction of firearms deaths after the first buy-back, the new campaign further tightened regulations by banning public possession of most types of handguns, including revolvers and semi-automatic handguns. In addition to reducing gun deaths and injuries, it was also expected to cut gun crime in general by draining the civilian stockpile from which most illegal guns were stolen (Australia, 2003).

In South Africa the Firearms Control Act of 2000 began to come into full effect in 2004. The Act has introduced controls on supply, possession, safe storage, transfer, and use of weapons (South Africa, 2001). Of greatest importance to typical gun owners, the act requires owners to apply for renewal of their existing firearms licences. To facilitate cooperation, the law also became the basis for an amnesty that ran from January to March 2005. By March 2005 12,100 firearms had been handed in (Kirsten, 2005). While the numbers of firearms received are not particularly high, other aspects of the Act are expected to do more to alter future small arms possession in South Africa and enhance the importance of domestic firearm controls.

However, in some instances, disarmament campaigns have faltered or simply failed to materialize. In Nigeria, efforts by President Olusegun Obasanjo to bring an end to violence between the two strongest warring militias in the oil-producing Niger Delta region led to a limited weapons buy-back programme with the aim of disarming both militias. The government offered USD 1,800 for the return of each assault rifle; 1,100 were reportedly turned in by mid-December 2004. The figure is, however, thought to be only a fraction of those held by the two groups. In terms of reducing stockpiles and violence, the initiative was not a success, although as an exercise in crisis management it clearly offered value in averting a potentially dramatic escalation in hostilities (HRW, 2005).

In the United States the theme for 2004 was clearly one of relaxed restrictions. This was manifested most spectacularly on 13 September 2004, when a ten-year-old ban on the sale of 19 types of semi-automatic firearms (the so-called Assault Weapon Ban) was allowed to lapse (PRODUCTION). The ban retained strong public support—71 per cent in one recent poll, 73 per cent in another—although American opinion on all matters related to gun control policy varies greatly according to the exact wording of the question (Annenberg Center, 2004; Schulman, 2004). Of greater political salience was the adamant opposition of the National Rifle Association.

The original law was far from ideal. Compromises in the legislation, inserted at the insistence of gun rights advocates, made it easy for manufacturers to circumvent the narrowly written provisions by modifying their products (Page, 2004). Nor was there much evidence of an effect on crime or gun injuries (Koper, 2004). Tellingly, there were few reports of significantly accelerated sales of banned weapons after the law expired (Eisenstadt, 2004). Even if the effects of the ban were debatable, though, the symbolic importance of its end was widely acknowledged by both its supporters and its adversaries.

Although it attracted less attention, actual firearms practice was affected more by a trend in state legislatures, where new laws have been passed making it easier for Americans to carry concealed guns in public (NRA-ILA, 2005). In practice, several states report that there has been less demand for the new licences than originally anticipated: half as many in the first year as predicted in Colorado (10,444 applicants) and one-quarter in Missouri (15,442), for example (*Columbia Daily Tribune*, 2005; Fong, 2004; Jones, 2004).

The year 2004 illustrates that far-reaching changes to firearm ownership patterns require concerted effort at the international, national, and community levels. It is at least as important to change the norms of firearm ownership—demand reduction—as it is to enact national legislation and launch international initiatives. As the Australian and US cases illustrate, societies differ in their perceptions of firearm ownership, but those perceptions are not necessarily fixed. The Australian, Brazilian, and UK cases present clear evidence that public opinion on the possession of weapons can change.

By March 2005, the Brazilian disarmament campaign had recovered over 300,000 firearms from private hands.

Nevertheless, taking a global view of small arms stocks can lead only to the conclusion that stockpiles are growing rather than shrinking. Production in regions such as the United States and the Russian Federation alone, estimated at around 4 million units for 2001, suggests that growth in stockpiles far outweighs the impact of known arms-reduction initiatives (Small Arms Survey, 2004, pp. 13, 16). Even NATO's initiative in Ukraine, probably the largest envisaged international stockpile reduction effort to date at 1.5 million arms, appears small in relation to potential global stocks.

ESTIMATING TOWARDS REALITY

Civilian ownership

Ascertaining the number of privately owned firearms in a society remains the toughest challenge for stockpiles research. In the absence of official registration reports, reliable public polling, or expert assessment, the scale of civilian gun ownership can be established only through indirect indicators. The most important indirect statistical insights come from:

- comparison with better documented but comparable societies;
- population size and per capita wealth;
- official gun crime rates (especially gun homicide, which presumably is the most reliably reported gun crime);
- the number of shooting deaths among on-duty police officers; and
- the number of confiscated or voluntarily collected illegal guns and collected unwanted guns.

None of this data is independently conclusive; it always must be interpreted through a skein of qualitative indicators as well. Population and wealth, for example, are useful only in light of the intensity of the local gun culture. For example, the Netherlands and Canada, two well-understood countries, have similar income levels but dramatically different gun cultures, with fundamental implications for the scale of public ownership. Other data like crime rates and gun confiscation must be interpreted with an appreciation of important local nuances.

None of these indicators in and of themselves allow an accurate sense of civilian ownership. The easiest check is by way of comparison with other countries in the same region with similar public gun cultures. This is the approach applied usefully on South America and Mexico in the *Small Arms Survey* (2004, pp. 50–54) and for the Middle East, in this chapter. Another check is to test estimated totals against accurate figures when they are available. This is the approach used in the case of Turkey.

This approach allows for a broad sense of the scale of private gun ownership in countries with inferior data. Consequently, such civilian estimates are given exclusively in terms of a range of likely stockpiles size.

Military inventories

Small arms policy is heavily influenced by the quality of data. In the absence of a sense of how many weapons there were to begin with, disarmament programmes such as those examined above can produce only inconclusive results. How well did disarmament work in places such as Afghanistan, Iraq, or Liberia? We may never know, because it was impossible to be certain of the original number of guns. Even in countries at peace national stockpile estimates tend to be controversial, vulnerable to being suppressed, or inflated for political purposes.

To evaluate global stockpiles and promote effective policy-making, the Small Arms Survey uses several kinds of data. Official national figures are preferred, but this is not consistently available and is rarely comprehensive. It is most firmly buttressed by public polling, but this must be done carefully to generate reliable results, and in practice is rarely done at all. Field research is easier to undertake but less conclusive. International trade data can convey a partial sense of total stockpile size. Expert estimates can be helpful but must be used cautiously. Too often there is no alternative to estimation by comparing national situations, establishing priorities, and identifying urgent problems and worrying trends.

Faced with an absence of official data in most cases, military stockpile estimates in the Small Arms Survey yearbooks are based on troop strength reported in various sources, most notably the International Institute of Strategic Studies' *Military Balance* series.

The scale of military small arms inventories in any country depends largely on doctrine, both past and present. While there are clearly disparities in weapon-holding trends in armed forces (Table 3.1), a working assumption is that a 'multiplier' derived from a reasonable ratio of small arms to persons in any given military force can be applied to yield small arms stockpile estimates. At present, the Small Arms Survey's multiplier of choice is 2.25 small arms for every serving member of the armed forces (Small Arms Survey, 2001, pp. 76–77).

As Table 3.1 illustrates, actual armament levels can be significantly higher. This is clearest for countries that historically relied on massed infantry doctrine or mass mobilization, especially the Maoist 'People's War'. One of the better-understood examples—the former Yugoslavia (Table 3.1)—maintained roughly 4.5 firearms per uniformed personnel to allow for sudden expansion. Other examples in Table 3.1 show how these doctrinal choices can push armament inventories much higher still. Field research suggests that nationalism and the lingering shadow of the national security state also leads some Latin American countries—such as Argentina and Brazil—to accumulate very large inventories. As personnel declined and weapons procurement continued, hoarding created ever-greater national multipliers, equal to at least three modern firearms per soldier, sailor, and airman.⁵

Often, there is no alternative to estimation for comparing national situations, establishing priorities, and identifying urgent problems and worrying trends.

Table 3.1 Known military firearm inventories and multipliers

Country	Year	Armed forces personnel*	Military firearms	Firearms per person
Canada	2000	103,900	233,949	2.25
Central African Republic**	1996	3,000	3,300	1.10
Finland	2003	462,000	531,000	1.15
Macedonia***	2003	11,650	85,446	7.33
Russia	2003	3,360,000	15,000,000–45,000,000	4.6–13.4
Togo	2000	6,950	12,850	1.85
Yugoslavia	1989	705,000	3,115,000	4.42

*Active duty and reserves in all armed services.

**Excludes Presidential Guard.

***Personnel and firearms are for Macedonian army only.

Sources: Canada: Small Arms Survey (2001, p. 73); Central African Republic: Telephone interview by Nicolas Florquin, Small Arms Survey researcher, with a former senior Central African Republic government official, 23 March 2005; Finland: Small Arms Survey (2004, p. 46); Macedonia: Grillot et al. (2004, p. 16); IISS (2003, p. 76); Russia: Pyadushkin (2003, p. 29); IISS (2003, p. 89); Togo: Small Arms Survey (2002, p. 82); IISS (2000, p. 285); Yugoslavia: Gorjanc (2000); IISS (1989, p. 91)

Current force levels, therefore, are not generally treated as a reliable indicator of arms stocks. Regardless of downsizing, state armed forces often continue to hold numbers of weapons commensurate with previous personnel totals (Small Arms Survey, 2001, p. 71). In other countries, changes in doctrine may not be accompanied by concomitant

Military estimates in the *Small Arms Survey* refer exclusively to firearms; there still is not enough data to estimate inventories of other kinds of small arms and light weapons.

reductions in stockpiled weapons. As an element of national security, stockpiled small arms are frequently maintained as 'insurance' for potential national emergencies.

Estimates of stockpiles must take this factor into account, whether or not it actually holds true. Thus, with regard to north-east Asia and the Middle East two sets of calculations are made: one using a country's estimated current force levels and the other employing the country's highest known force levels since the mid-1970s. The 2.25 multiplier is applied in each calculation to generate broad upper and lower parameters for military small arms stockpiles.

Estimating police inventories

In contrast to military figures, it is difficult to comment on the reliability of police figures in north-east Asia and the Middle East. This is simply because of the lack of transparency in both regions. Nonetheless, it is clear that broad assessments of military numbers are more readily available than those of police forces, due to a general preponderance of international security issues in research.

As a result, police estimates in this chapter are based, not on regularly updated lists of force levels, but on often solitary, anecdotal reports in the press and elsewhere. Without trends against which to estimate the relative validity of these figures, the Small Arms Survey can offer only tentative estimates of police force levels in north-east Asia and the Middle East.

Table 3.2 Multipliers derived from various police forces

Country	Year	Personnel	Firearms	Firearms per person
Belgium	2000	17,767	23,870	1.3
Japan	2004	240,000	250,000	1.0
Norway	2000	7,500	9,000	1.2
United States	2000	641,000	831,000	1.3

Sources: Belgium, Norway, United States: Small Arms Survey (2001, p. 70-71); Japan: Answers to the questions of the Small Arms Survey National Stockpiles Questionnaire by the Conventional Weapons Division of the Japanese Ministry of Foreign Affairs, August 2004.

As the figures in Table 3.2 illustrate, when the majority of serving police officers are armed, police forces tend to stock in the region of 1.2 firearms per person. The Small Arms Survey uses this multiplier to calculate weapons holdings based on the strength of armed police forces around the world. Despite the potential to overestimate police forces holdings in countries such as the United Kingdom, where the majority of police officers are unarmed, the multiplier is a useful means of gauging lower parameters of police small arms stocks.

REGIONAL REALITIES: IN THE SHADOWS

Progress on small arms policy-making requires an ever-improving sense of where the weapons are, who has them, and which pose the greatest dangers. In the absence of reliable and comprehensive national statistics, this process will continue to rely on a mix of official data, as well as expert estimates. So far this approach has created portraits of small arms possession in Africa (Small Arms Survey, 2003, pp. 80-86), Europe (2003, pp. 62-72), Latin America (2004, pp. 50-54), and South Asia (2002, pp. 99-102), in addition to a number of country-specific estimates such as Albania,

Iraq, and the United States, to name but a few (Small Arms Survey, 2002, pp. 68–69; 2003, p. 60; 2004, pp. 44–50). The process is an ongoing one; there will always be a need for better figures.

Two additional regions are examined systematically in this chapter. Although the Middle East and north-east Asia have an undeniable and often overwhelming presence in small arms debates—whether the topic is production, transfers, use, or consequences—they have escaped the most intense consideration of stockpile scale and management seen elsewhere in the world. The reasons for this oversight are not elusive. Many regional governments, including some of the very largest ones, are only beginning to acknowledge the importance of small arms availability in domestic security. Regional secrecy, well-known in innumerable other fields, is all too pervasive on these issues as well. Non-governmental organizations, which have pioneered small arms deliberations in much of the world, remain a nascent presence in these regions also.

Rather than aiming for the last word on Middle Eastern and north-east Asian small arms inventories, this edition of the *Small Arms Survey* provides a foundation for further investigation. Some of the figures presented here lack the scientific certainty required for reliable comparative analysis. Only concrete national insights from official data and carefully designed and administered public surveys can do that. General and uncertain as the figures presented here are, however, they allow better appreciation of the broad realities of small arms proliferation and priorities for action.

Previous estimates have catalysed international and domestic debate and action. Not only does a reasonable estimate of a country's or region's small arms stockpiles give some indication of how problematic its weapons are—the numbers-effects relationship—but it helps spark debate by presenting figures for comment, agreement, or refutation. This is particularly important with respect to the governments of the states and regions concerned. One of the best results the Small Arms Survey's stockpile analysis could elicit would be the release of reliable information and the encouragement of detailed public polling to improve the estimates presented in this chapter.

NORTH-EAST ASIA: THE WORLD'S LARGEST REGIONAL SMALL ARMS STOCKPILES?

Public officials throughout north-east Asia concede that firearms use is becoming an unprecedented source of public insecurity in the region. As described below, most countries in the region have seen government initiatives to reassure the public and restore government authority. Indeed, the state continues to dominate small arms issues to a degree largely unmatched elsewhere. Missing from this activity are regional proposals similar to those that have become commonplace in virtually every other part of the world.

This section looks at the scale and distribution of small arms in five countries of north-east Asia—China, Japan, North Korea, South Korea, and Taiwan. For most of the region, small arms inventories remain elusive. The dominance of the sovereign state, still the foundation of the region's security culture, is extremely relevant to small arms. The most obvious result is the lack of transparency and fundamental data.

State dominance is the result of large military establishments (IISS, 2004, pp. 152–72). China, for instance, while in the process of downsizing its armed forces by a planned 20 per cent, continues to field an estimated 2.25 million active personnel. This is in contrast to some 1.43 million in the United States (IISS, 2004, pp. 18, 146, 152). Another characteristic of the region is the relatively small size of police and internal security services in most of these countries. Although crime appears to be rising throughout the region, the societies remain largely peaceful. Several still

rely more on alternative forms of social authority and law enforcement, such as local party sentinels in China. It is the size of the armed forces, rather, which characterizes small arms distribution in north-east Asia.

The countries of north-east Asia had some of the world's largest armed forces and reserve systems during the cold war; several still do. The axiomatic result was exceptional military small arms inventories. In the absence of official data, this finding relies on conventional multipliers for estimating military small arms inventories, based on the largest contemporary personnel strength of the armed forces and parameters based on national military doctrines.

Major lacunas remain. Civilian ownership, which predominates in the rest of world, cannot be estimated for much of north-east Asia, with the notable exception of Japan (Box 3.2), which provides official data on civilian gun ownership. The lack of indirect indicators of widespread gun ownership, such as those noted above, suggests that civilian ownership is not high elsewhere. The most likely exception is China, where qualitative (and largely unquantifiable) indicators suggest that private gun ownership could be substantial.

Box 3.2 Civilian small arms in Japan

Japan is believed to have one of the world's lowest known firearms homicide rates: fewer than 30 deaths a year between 1996 and 2000 (JNPA, 2000). Although small arms in Japan are a comparatively minor issue compared to other countries, the country is exceptionally sensitive to firearms problems. Japan is at the forefront of international efforts to deal with small arms issues. Of the northeast Asian countries in this study, Japan alone provides relatively easy access to information on civilian firearm stocks.

In 2004 the Japanese Ministry of Foreign Affairs provided the Small Arms Survey with information suggesting that, as of December 2003, civilian firearms 'subject to licensing' totalled 413,096 (Table 3.3). Under the Firearms and Swords Control Law, Japanese citizens must obtain a licence from the Public Safety Commission to own a firearm. There are no limits on the numbers of weapons any one individual can stock. As of December 2003, for instance, 192,820 citizens were licensed to possess hunting rifles and shotguns. This might suggest that Japanese firearms owners stock more than one small arm, but numbers of licensed citizens also include those licensed to own air rifles. This may distort assumptions about firearm ownership. The Ministry of Foreign Affairs was unable to provide information on unlicensed or unregistered firearms in civilian hands.

If these figures are accurate, they suggest that licensed gun ownership rates are around one firearm per 310 citizens. Table 3.3 illustrates just how low this rate of ownership is in comparison with certain European countries.

Table 3.3 Registered firearm ownership rates in Japan and selected European countries

Country	Year	Population	Year*	Firearms	Firearm/number of citizens
France	2002	59,278,000	2000	2,802,057	1/21
Japan	2004	128,085,000	2005	413,096	1/310
Sweden	2002	8,877,000	2000	2,096,798	1/4
United Kingdom**	2000-01	56,984,733	2000	1,793,712	1/32

*Year of population data.

** Figures for Scotland are combined with those of England and Wales for 2000 and 2001, respectively. Excludes Northern Ireland. Population figures for Northern Ireland (2001) subtracted from figures for remainder of the United Kingdom (2000).

Firearm sources: France, Sweden, United Kingdom: Small Arms Survey (2003, p. 69); Japan: Answers to the questions of the Small Arms Survey National Stockpiles Questionnaire by the Conventional Weapons Division of the Japanese Ministry of Foreign Affairs, August 2004. Population sources: UNESA (2005); NISRA (2001)

Despite the fact that small arms in Japan are a comparatively small problem, the country is exceptionally sensitive to firearms problems.

China

While firearms were invented in China (Chase, 2003), there is, ironically, more information available about the country's ancient guns than its current stockpiles. Despite wrenching social changes, China remains a peaceful place; guns are seldom seen. Police in most major cities patrol unarmed. But, as anyone who has witnessed a minor traffic accident

in China can attest, armed authority usually is close by. China may be a relatively lightly-armed society, but its enormity appears to conceal arsenals of large absolute dimensions.

The People's Liberation Army (PLA) is the predominant owner of small arms in China. The PLA is undergoing extensive transformation as it sheds the guerrilla and large-formation doctrines inherited from its formative experiences in the Communist revolution and the Korean War (Scobell, 2003). Most of its equipment is the legacy of past doctrinal assumptions. Military factories produced small arms on a scale required to arm not only PLA regulars and reserve units but also politically reliable groups like Communist Party members, trusted classes, and students. Chinese production of better-known weapons like the Type-56 (AK-47) rifle is harder to estimate. Millions of these weapons were exported to allies and clients abroad. The number stored in China appears to reach the tens of millions (Small Arms Survey, 2002, p. 96).

While total armed forces today are estimated to number some 2,255,000 active personnel, this figure does not include reserve forces, which are estimated at around 800,000 (IISS, 2004, p. 170). With these force levels, a multiplier of 2.25 small arms per individual suggests the PLA could stockpile nearly 7 million small arms and light weapons.

A brief assessment of China's armed forces reveals that personnel levels have declined considerably since the cold war, and continue to do so (IISS, 1980, p. 62; 1985, p. 113; 2000, p. 194; PLA, 2004). In 1979 the PLA was probably at its largest in terms of personnel, with some 4.3 million active troops and around 7 million reserves⁶ (IISS, 1979, pp. 60–61). The 2.25 multiplier applied to these figures would suggest holdings of over 25 million small arms, many of which could now be held in reserve.

If we assume that the 2.25 multiplier has some validity in the case in question, stocks are thus likely to number between 7 million and 25 million small arms. If the estimation techniques are reliable, the true figure would fall somewhere between these, admittedly very wide, parameters. It would do so as a function of, on the one hand, the service life of stockpiled weapons and, on the other, China's particular policies on weapons retention. We know little of either factor, so the parameters must remain wide.

Police forces in China are far smaller in number than the PLA, and consist of the People's Police (PP) and a sub-branch, the People's Armed Police (PAP). The PAP clearly carry weapons, although it is unclear how many police officers in the PP do so. In addition, a number of other police forces, including the Prison Police and the Judicial Police, may carry firearms (IRBC, 2004).

The PP constitutes perhaps 86 per cent of China's combined police forces (Xiancui, 1998). The Small Arms Survey (2002, p. 95) estimated that the PP numbered some 3.4 million and suggested that perhaps half could be armed, but the estimate is not sufficient to generate even the broadest stockpile numbers. The PAP was estimated at 659,000 in 1991, at 960,000 in 2000, and between 1.1 million and 1.5 million in 2004 (IISS, 2004, p. 173; SolPo, 2000; USDOJ, 1993a).

Since estimates of the PP are uncertain, a figure of around 1.3 million firearms is derived from PAP numbers alone. This figure uses the conservative 2004 estimate of 1.1 million personnel and a multiplier of 1.2. The potential for Chinese police stockpiles to be greatly in excess of this estimate is obvious.

In the absence of better information, the estimated parameters for the People's Liberation Army, small arms must remain wide.



Police display guns seized from illegal traders in Chengdu, China, January 2005.

Civilian ownership in China is restricted through a licensing system revised in 1996. Although the authorities are legally entitled to examine a licensee's gun collection, there does not appear to be a national requirement for registration of private guns (China, 1996). Consequently, it is unlikely that Chinese officials have accurate figures on the scale of public ownership. Instead there is only a general sense that guns and gun crime are becoming more common (The *Economist*, 2001). Chinese crime statistics do not distinguish firearms crimes. A related indicator is deaths of Chinese police on duty, rising from virtually nothing in the 1970s to roughly 450–500 annually today. A prominent analyst cites this as evidence of a 'skyrocketing' problem (Tanner, 2004). Many of these deaths happen in traffic accidents, but the total should be compared with 45 police deaths by shooting in the United States in 2003 (Anderson, 2004). This does not prove that China is more dangerous than America; it shows only that China is not as peaceful as often assumed.

While public gun ownership in China is not commonplace, it is not as unusual as commonly assumed.

The only detailed information about Chinese public ownership is from Strike Hard campaigns against illegal gun markets in 1996–2002. According to a statement by the Chinese Foreign Ministry, 2.3 million firearms were seized (SAFER-Net, 2003). In addition, over 30,000 guns originally from PLA arsenals were apprehended (China, 2003). Most of these guns appear to have been confiscated from illegal manufacturers and dealers. Such reports are not a sufficient basis on which to calculate the total dimensions of China's civilian arsenal, but they leave no doubt that it must be at least in the tens of millions.

While public gun ownership in China still is not commonplace, the evidence presented here and in previous editions of the *Small Arms Survey* leads to the conclusion that it is not as unusual as commonly assumed (Small Arms Survey, 2002).

Japan

Not only are guns unusual in Japanese civil society (Box 3.2), but the nation's armed forces are numerically small as well. The only exception to this rule of gun scarcity—and a partial one at that—is the police.

Japan's *Self-Defence Forces* consist of some 239,900 active troops and reserves of around 44,395 (IISS, 2004, p. 176). Japan's armed force levels have changed little in recent decades (IISS, 1980, p. 69; 1985, p. 125; 2000, p. 200). 1990 was probably the year in which Japan's military personnel figures reached their zenith, with around 249,000 active and approximately 48,000 reserves (IISS, 1990, pp. 164–66). If they were armed at the orthodox level of 2.25 firearms per service member, Japan would have a military inventory of around 669,000 small arms. A highly mechanized force, the Japanese military does not appear to plan for massed infantry operations.

Japanese *police* figures show that law enforcement authorities are relatively well-armed. In 1990 there were an estimated 258,800 authorized full-time police personnel in Japan (USDOJ, 1993b). In 2002, 234,000 police personnel were listed, based on a survey of wages of local government employees (JSY, 2005). In the same source, data for 1990 undercut the 1990 figure cited above by around 30,000, so both figures must be treated with some caution. The 2002 figure suggests stockpiles of around 281,000 small arms. However, if we assume that police forces, like militaries, do not necessarily dispose of weapons despite reductions in numbers of personnel, an estimate based on the 1990 figure would suggest around 311,000 stockpiled small arms.

In August 2004, however, the Japanese Ministry of Foreign Affairs informed the Small Arms Survey that '[t]he total number of small arms possessed by the police force in Japan is about 250,000 as of 31 March, 2004'. The Ministry also reported '[a]s of April 1, 2004, the number of police officers of the Prefecture Police is about 240,000'.⁷ These figures suggest Japanese police stockpile somewhat fewer small arms per member than the 1.2 multiplier would suggest.

Democratic People's Republic of Korea

North Korea is effectively closed to research into domestic security issues. No reliable data appears to exist in the public domain concerning police arsenals. Estimates of North Korea's military active and reserve strengths do exist, however, and standard multipliers can be applied to these figures.

North Korean *armed forces* personnel are thought to number between 1.1 million and 1.2 million⁸ (Bermudez, 2001, pp. 3–6; IISS, 2004, p. 178). Using a standard multiplier of 2.25 small arms per person, applied to the lower figure, yields just under 2.5 million small arms held by the North Korean armed forces. With reserves estimated at around 4.7 million (IISS, 2004, p. 178), applying the same multiplier gives a combined active–reserve stockpile figure of over 13 million small arms. However, since ‘many’ of the 3.5 million worker and peasant Red Guard, which comprise many of the reserves, are reportedly unarmed (IISS, 2004, p. 161), they are excluded from this estimate. This generates a combined active–reserve estimate of 4.4 million small arms. On the same assumption, 1995 highs of around 2 million personnel suggest that as many as 4.6 million small arms could be stockpiled today (IISS, 1995, pp. 183–84).

Police forces in North Korea operate under the authority of the Ministry of Public Security. Bermudez (2001, p. 204) estimates that there are around 30,000 staff in administration, civil defence, law enforcement, and security sections of the Ministry. If half of the 30,000 were armed, a 1.2 multiplier would yield a figure of around 18,000 firearms in the hands of police, which is clearly exceptionally low in comparison with other countries in the region. This analysis, however, omits the North Korean intelligence and internal security services, which are undoubtedly large and perform domestic security duties (Bermudez, 2001, p. 7). The IISS (2004, p. 179), on the other hand, estimates Ministry of Public Security paramilitary personnel to total 189,000. It is unclear to what extent these personnel perform duties which would count as police duties in other countries in the region. In view of the degree of uncertainty, these paramilitary forces are included in this chapter's North Korean military force estimates as reserves.

The Small Arms Survey was unable to document the scale of *civilian ownership* in North Korea.

Republic of Korea

South Korea makes little or no information available about its small arms stockpiles. However, its police forces provide detailed online information about police numbers and organization.

Armed forces personnel figures are estimated at 687,700 active troops and around 4,500,000 reserves (IISS, 2004, p. 179). Nonetheless, as in the case of North Korea, an estimated 3.5 million civilian defence forces are excluded from the estimate. This leaves approximately 1 million reserves (IISS, 2004, p. 181). At 2.25 small arms per member of the armed forces, the South Korean military would thus control almost 3.8 million small arms for active and reserve forces combined. In 1982 South Korean forces were listed as comprising 601,600 active troops and 1.2 million reserves, excluding 9.5 million paramilitaries for which little information is available (IISS, 1982, p. 89). South Korean force levels, therefore, are estimated to have been at their highest levels in 1982, with some 1.8 million active and reserve personnel and hence around 4.2 million small arms (IISS, 2004, p. 179).

In 2003 there were 92,165 *police officers* in South Korea, a figure which has changed only slightly (an increase of 2,000) in the past decade (KNPA, 2005). At the standard multiplier of 1.2 firearms per officer, the Korean National Police Agency (KNPA) should hold around 111,000 firearms.

Civilian ownership in South Korea cannot be estimated by the Small Arms Survey with available sources of information.

DPRK military inventories probably hold something between 4 million and 5 million firearms.

Taiwan

Taiwanese authorities have not revealed their island's total number of *civilian firearms* licences or registrations. But they have become vociferous in their criticism of the island's firearms crime. This was brutally illustrated on 19 March 2004 when President Chen Shui and Vice-President Annette Lu were victims of an assassination attempt, reportedly with an improvised gun (Hong, 2004). Three months later, on 16 June, a gun battle with suspected kidnappers armed with automatic rifles left two police officers dead (Ramzy, 2004). Neither incident was statistically significant, but they persuaded many Taiwanese that they confront a serious problem.

Taiwanese civilian gun ownership laws are strict; the Statute for Self-Defense Related to Firearms stipulates that licences must be renewed every two years (TMI, 2005). However, Taiwanese officials have not revealed the total number of firearms licences or registrations (TMI, 2005). Even so, illegal ownership is a major public issue. A three-month amnesty permitting owners to turn in illegal guns, the fourth in recent years, began on 1 July 2004, followed by a police crackdown on illegal trafficking (Chuang, 2004; Yiu, 2004). According to Interior Minister Su Chia-chuan, in 1989 police seized 9,850 illegal guns. Since then seizures have averaged a little over 1,000 annually, but rose to 1,720 in the first half of 2004 (*China Post*, 2004). This level of confiscation is similar to Japan, where the total number of civilian guns is much better understood.

Taiwan's current *armed forces* are estimated to consist of 290,000 active personnel and 1,657,500 reserves (IISS, 2004, p. 189). Applying the multiplier of 2.25 yields nearly 4.4 million small arms and light weapons in the hands of Taiwan's military. Research suggests that Taiwanese force levels peaked in 1984 at 484,000 active troops and some 1,695,000 reserves (IISS, 1984, pp. 109–10). This suggests a potential present stockpile of around 5 million small arms.

Little information is released in English on the numbers of *police* in Taiwan. The most recently available figures report 75,517 police officers for the year 1990 (USDOJ, 1993c). The multiplier of 1.2 firearms per officer suggests police holdings of small arms in Taiwan of around 91,000. It is unclear whether police forces have changed in number since 1990. In 1999 the Taiwan Provincial Police Administration (TPPA) was taken over by the Taiwan National Police Agency (TNPA, 2005). As the figures cited above include police under both national and provincial administration, reorganization is not thought to have affected numbers of police substantially.

North-east Asia's obscure arsenals

The estimating techniques employed here suggest that north-east Asian military stockpiles amount to between 20 million and 40 million small arms and light weapons (see Table 3.4). Although the data is not good enough to permit concrete comparisons, it appears that the Korean peninsula is the most heavily armed part of this region.

Based on the Small Arms Survey's estimates of other regions, this would suggest that north-east Asian armed forces stockpile more weapons than the militaries of South Asia (around 12 million), Latin America (7 million), and North America (3 million) (Small Arms Survey, 2002, pp. 74, 85, 102; 2004, p. 51).

Regional estimates on police numbers are less complete than those for armed forces. Given that the police forces of North Korea are entirely absent from this analysis and that China, in particular, is likely to field a larger number of armed police than estimated here, a tentative estimate is around 1.8 million police small arms regionally.

The other great enigma for the region is civilian ownership. In most countries of the region it is large enough to be a significant force in social affairs, but not large enough to be readily visible. In the absence of better national reports or public polling, it will be difficult to make more specific civilian estimates.

Table 3.4 Estimated firearms stockpiles in north-east Asian armed forces

Country	Lower parameter (based on current force levels and 2.25 small arms per person)	Upper parameter (based on maximum past force levels and 2.25 small arms per person)
China	6,806,000	25,560,000
Japan	640,000	669,000
N. Korea*	4,356,000	4,574,000
S. Korea**	3,797,325	4,143,600
Taiwan	4,382,000	4,903,000
Totals	19,981,000	39,849,000

* Excludes some 3.5 million worker/peasant Red Guard. As reported in the IISS (2004, p. 161); 'many units unarmed'.

** It is unclear how many of the 9.5 million paramilitaries listed in the IISS (1982, p. 89) were armed, so these do not appear in the estimate. The 3.5 million Civilian Defence Corps personnel, listed in the IISS (2004, pp. 179-81), are subtracted from reserves of 4.5 million for the same reason.

Note: All figures are rounded. Totals are calculated on original figures and then rounded.

Sources for original armed forces totals: China: (lower) IISS (2004, p. 170), (upper) IISS (1979, pp. 60-61); Japan: (lower) IISS (2004, p. 176), (upper) IISS (1990, pp. 164-66); N. Korea: (lower) IISS (2004, p. 178), (upper) IISS (1995, pp. 183-84); S. Korea: (lower) IISS (2004, p. 179), (upper) IISS (1982, p. 89); Taiwan: (lower) IISS (2004, p. 189), (upper) IISS (1984, pp. 109-10)

Table 3.5 Estimated firearms stockpiles in north-east Asian police forces

Country	Lower parameter (based on current force levels and 1.2 small arms per officer)	Upper parameter (based on maximum past force levels and 1.2 small arms per officer)
China	1,300,000	1,300,000
Japan	281,000 (250,000) *	311,000 (250,000) *
N. Korea	-	-
S. Korea	111,000	111,000
Taiwan	91,000	91,000
Totals	1,802,000 (1,771,000) *	1,832,000 (1,771,000) *

*In August 2004, the Japanese Ministry of Foreign Affairs informed the Small Arms Survey that as '[t]he total number of small arms possessed by the police force in Japan is about 250,000 as of 31 March, 2004'. Answers to the questions of the Small Arms Survey National Stockpiles Questionnaire by the Conventional Weapons Division of the Japanese Ministry of Foreign Affairs, August 2004.

Note: All figures are rounded. Totals are calculated from original figures and then rounded.

Sources for original police force totals: China: USDOJ (1993a); Japan: (lower) USDOJ (1993b), (upper) JSY (2005); S. Korea: KNPA (2005); Taiwan: USDOJ (1993c)

This exercise has proved, clearly, that north-east Asia remains far from transparent for assessing small arms stockpiles. However, although the parameters presented here—around 22 million to 42 million small arms in military and police stockpiles—are broad, they clearly illustrate the potential magnitude of north-east Asian small arms holdings.

North-east Asian military and police firearms stockpiles number between 22 million and 42 million.

MIDDLE EAST: RISING CONCERNS AND PERSISTENT UNCERTAINTY

Like north-east Asia, the Middle East presents distinct obstacles to small arms analysis. With few exceptions, official secrecy is a pervasive barrier to informed small arms debate. Only a few countries in the region have released small arms data. Anecdotal press reports, however, testify to rising sensitivity toward the issue, especially aspects like public gun carrying, celebratory firing, and a public sense of greater gun violence. With such concerns in mind, in September 2004 the League of Arab States passed a resolution to coordinate efforts to combat the illicit trade in small

arms and light weapons (LAS, 2004). A small number of groups are active in researching small arms problems in Israel, Jordan, Lebanon, Sudan, and Yemen.

Military stockpiles

The Middle East holds approximately 12 million to 16 million firearms

The Middle East hosts the highest defence expenditure as a percentage of gross domestic product (GDP) globally (SIPRI, 2003, p. 303; IISS, 2004). While the end of the cold war, among other factors, has dampened down the arms race in the region, the legacy of decades of military regimes and regional security dynamics is reflected in the Middle East's large conventional armed forces (Feldman and Shapir, 2001, pp. 17, 77).



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Turkish soldiers march during a military parade in Nicosia, Cyprus, July 2003.

Egypt, Iran, Israel, Syria, and Turkey, in particular, have very large military personnel numbers. However, other states such as Bahrain and Qatar have small standing armies. This suggests that military small arms stockpiles will differ greatly among Middle Eastern countries. As Table 3.6 illustrates, military small arms stocks in the region could number between 12 million and 16 million. Sub-regionally, nonetheless, there are disparities. The Arabian Peninsula⁹ appears to host around 1 million–1.2 million small arms and light weapons, less than one tenth of the combined stocks of the countries to the north and west.

Based on orthodox armament ratios, these estimates are far from conclusive. In lieu of reliable totals from regional governments, these figures offer only a general sense of the scale of Middle Eastern military arsenals. Actual national military firearms arsenals could be smaller in some cases, such as Morocco (Box 3.3).

Box 3.3 Morocco

While small arms proliferation is serious throughout much of the Middle East, there are important exceptions. Morocco stands out as a country where small arms ownership appears to be rare and gun violence is unusual. The country is not without serious problems, as the Casablanca terrorist attacks of May 2003 revealed (Kalpakian, 2005). Widespread gun ownership and misuse does not appear to be among them, though. What accounts for what is locally known as 'the Moroccan distinction' (Jamal, 2003, p. 107)?

Above all, Morocco does not have a culture that prizes weapons ownership or display. Civilian firearms ownership is permitted for hunting and some ceremonial use. This was not always true. Before French occupation, the country was much like Yemen, sharply divided by tribal and intra-dynastic competition, and well armed. Arriving in 1911, the first French Resident-General of Morocco, Louis-Hubert Lyautey, had to address these problems. His programme of pacification and disarmament of tribesmen continued through the 1930s (Abun-Nasr, 1970, pp. 14-47; 1975, pp. 302-03). One of the earliest priorities of post-independence Morocco was to extend a similar policy to tribal areas in the north and the south-east. The policy was largely successful. There are exceptions, but they now mainly involve the drug trade and smuggling rather than organized violent resistance to the central government.

The rise and collapse of local industry: Unlike many better-armed countries, Morocco lacks a domestic firearms industry. Moroccan traditional gunsmiths produced smooth-bore firearms in the Sus valley and these are still used in the fantasia ceremonies. The French victory in the battle of Islay in 1844 forced the central government to consider modernizing the military and providing for an arms industry. This began in earnest with Sultan Mawlay Hasan (reigned 1873-94), who established munitions factories at Fez and Marrakesh (Abun-Nasr, 1975, pp. 294-95). During the French period Morocco relied on France for arms. Upon independence, the country continued reliance on direct imports (Damis, 1987, p. 148).

Above all, Morocco does not have a culture that prizes weapons ownership or display.

Box 3.3 Morocco (cont.)

Official small arms: Moroccan soldiers are equipped with a variety of Western and Soviet-style weapons. AK-47 types are most common. The state arsenal also includes FAL and M-16 rifles. It is common to see ceremonial units equipped with older Mausers or Enfields, such as at the royal tombs in Rabat. The regular armed forces number roughly 200,000, including about 1,500 troops in the Royal Guard. Regular troops guarding royal palaces and facilities often carry AK-47s without magazines. The Gendarmérie Royale, a force of about 20,000, is unarmed except when guarding government buildings. Its weapons tend to be obsolete, including 1940s vintage sub-machine guns. Many are not functional but are kept only for show.

The National Police and the associated Department of Territorial Security (the secret police, known by its French initials DST) were last reported to include more than 42,000 individuals (El-Sa'aif, 2000/2001, p. 108). It is likely that the number of officers has since increased to perhaps 50,000 police men and women. The Forces Auxiliaires, the national militia of about 30,000, patrols the streets in the company of the police forces, equipped with night-sticks.

Civilian ownership: Game—including deer, ibex, and gazelle—is commonly hunted and eaten in rural areas. Segments of Morocco's elite also enjoy hunting through membership in hunting clubs. These clubs have the licences and the weapons, and access to them is controlled and regulated. Moroccan law prohibits ownership of rifles and handguns and permits only shotguns for hunting, purchased with a licence from local police and gendarmes. Hunting also requires permits and licences issued by the Department of Forestry.

A further, special category of Moroccan firearms is used for ceremonial purposes. These are long, handmade, highly decorated black-powder muskets called *mokahala*—mascara sticks—because of the soot they belch after firing. *Mokahalas* are fired exclusively in traditional *fantasias*. Unlike in other Middle Eastern and North African countries, firearms are not fired in routine celebrations.

Illegal possession and use: The largest class of armed criminals is drug dealers, mostly involved in growing *kif*, a strain of marijuana, and trans-shipment of narcotics to Europe. Certain factors make Morocco a unique case in the drug trade. *Kif* was legal in the country well into the 1960s. The government banned it when thousands of foreigners started to arrive for no other purpose than to consume it. A shift in European policy may eventually enable Morocco to relegalize the product.

To gain insight into the role of firearms in Moroccan crime, 30 days of crime news were examined from the national mass-circulation newspaper *Al Ahdath al Maghribiya* for June 2004. Eight firearms-related incidents were reported for the country during that period; four were related to terrorism and in two the police used firearms. One story mentioned terrorists training with weapons, another reported the seizure of a small terrorist weapons cache. The most unusual story involved a suicide attempt by a policeman after a female fellow-officer ended her relationship with him (*Al Ahdath al Maghribiya*, 2004). Violent crime mostly features bladed weapons or arson (Morocco, 2002, p. 539). These observations suggest one of the lowest rates of civilian ownership in the region, probably less than one for every five or six households, or roughly one for every 20 people.

Why is Morocco not Yemen? Morocco follows the political practices and bureaucratic procedures introduced by the French colonial pattern, still practised to a lesser degree in a few other Arab states like Algeria, Tunisia, and Syria. France found tribes armed with rifles, muskets, and sometimes cannon. It withdrew after having dramatically altered this picture and endowed the state with a social monopoly in the use of violence.

In a country like Morocco, terrorists may threaten the state's control of firearms, but their efforts are unlikely to succeed. As one Moroccan officer put it: 'People understand that without a state, everyone will try to use force to get what they feel is due them, and in those times, everyone loses'.¹⁰ Morocco appears to have the small arms genie under control.

Author: Jack Kalpakian, Al Akhawayn University, Ifrane, Morocco

French colonial policies found armed tribes and left the Moroccan state with a social monopoly on the use of violence.



The climax of a fantasia charge: mokahala in the air. Meknes, Morocco.

Table 3.6 Estimated firearms stockpiles in Middle Eastern armed forces

Country	Lower parameter (based on current force levels and 2.25 small arms per person)	Upper parameter (based on maximum past force levels and 2.25 small arms per person)	Sources for original armed forces totals (upper; lower)
Algeria	625,000	720,000	IISS (2004, p. 120; 1985, p. 120)
Bahrain	25,000	25,000	IISS (2004, p. 121; 2003, p. 106)
Egypt	1,935,000	1,935,000	IISS (2004, p. 122)
Iran	2,002,000	2,371,000	IISS (2004, p. 124; 1986, p. 96)
Iraq*	151,000	151,000	Miles (2005)
Israel	1,296,000	1,363,000	IISS (2004, p. 126; 1993, p. 118)
Jordan	305,000	313,000	IISS (2004, p. 127; 1998, p. 131)
Kuwait	88,000	88,000	IISS (2004, p. 128)
Lebanon	162,000	162,000	IISS (2004, p. 129; 2003, p. 114)
Libya	261,000	281,000	IISS (2004, p. 130; 1991, p. 113)
Mauritania	35,000	35,000	IISS (2004, p. 131)
Morocco	779,000	779,000	IISS (2004, p. 132)
Oman	94,000	98,000	IISS (2004, p. 133; 2000, p. 149)
Palestinian Territories	31,000	79,000	IISS (2004, p. 134; 1997, p. 137)
Qatar	28,000	28,000	IISS (2004, p. 134)
Saudi Arabia**	449,000	453,000	IISS (2004, p. 135; 2001, p. 152)
Sudan	236,000	267,000	IISS (2004, p. 246; 1995, p. 257)
Syria	1,464,000	2,414,000	IISS (2004, p. 136; 1995, p. 147)
Tunisia	79,000	95,000	IISS (2004, p. 138; 1987, p. 114)
Turkey	2,010,000	3,947,000	IISS (2004, p. 71; 1990, p. 81)
UAE	114,000	146,000	IISS (2004, p. 138; 2001, p. 149)
Yemen***	240,000	340,000	IISS (2004, p. 139; 1990, pp. 121–22)
Totals	12,410,000	16,092,000	

*Includes serving or training army, air force, national guard, and coastal defence units (Miles, 2005). Does not include an estimated 4.2 million small arms and light weapons, formerly in the possession of Iraqi military forces, which are now believed to be dispersed throughout Iraqi society (Small Arms Survey, 2004, p. 46).

**Includes 75,000 National Guards in lower and upper parameters.

***Composite of highest active and reserve figures for North and South Yemen prior to unification.

Note: All figures are rounded. Totals are calculated on original figures and then rounded.

Police stockpiles

It is somewhat easier to calculate the scale of Middle Eastern police arsenals than that of military firearms, with enough data available to permit a regional police multiplier to estimate the number of sworn police officers. This figure is not conclusive and must be updated as additional governments make policing figures available.

In the absence of police employment data in the majority of countries in the Middle East, a ratio of police to population is used (Table 3.7) to determine likely police figures, based on five countries for which data is available.

Most Middle Eastern governments treat police numbers and weapons inventories as state secrets, but some have released figures. Others have been the subject of foreign studies arriving at useful, although often dated or imprecise, figures. The cases where police manpower figures are available reveal enormous diversity (Table 3.7). Tunisia appears to be among the most carefully policed countries on Earth; if reports are right, it has one officer for every 73 people.

Table 3.7 Sample police numbers, police/population ratios, and firearms stocks estimates from five Middle Eastern countries

Country	Police officers	Base year	Population	Year (population)	Police/population ratio	Estimated small arms (1.2 multiplier)
Algeria*	51,000	1993	28,271,000	(1995)	1/554	61,000
Israel	18,600	1994	5,374,000	(1995)	1/289	22,000
Morocco	42,000	2000	29,231,000	(2000)	1/696	50,000
Tunisia	130,000	2002	9,563,000	(2000)	1/74	156,000
Turkey	166,000	2000	68,234,000	(2000)	1/411	199,000
Totals	407,600		140,673,000		1/345	489,000

Note: All figures are rounded. Totals are calculated on original figures and then rounded.
 * Gendarmerie Nationale and Sûreté Nationale.
 Sources: Algeria: Metz (1993); Israel: USDOJ (1993d); Morocco: El-Sa'aif (2000/2001, p. 108); Tunisia: *Economist* (2002); Turkey: UN (2000, p. 461); Population: UNESA (2005)

At the opposite extreme, Sudan has just one police officer for every 1,000 residents, a level more typical of Sub-Saharan Africa. The average for these five countries is one sworn police officer for every 345 national residents.

Table 3.8 applies this figure to the remaining countries in the Middle East and subsequently applies the 2.1 multiplier to deliver an extremely loose police stockpile figure.

Table 3.8 Estimates of police stockpiles of firearms in the remaining 17 Middle Eastern countries

Country	Population (2005)	Police (at 1/345)	Small arms (1.2 multiplier)
Bahrain	727,000	2,000	2,500
Egypt	74,033,000	214,000	257,000
Iran	69,515,000	201,000	241,000
Iraq*	28,807,000	83,000	100,000
Jordan	5,703,000	16,000	20,000
Kuwait	2,687,000	8,000	9,000
Lebanon	3,577,000	10,000	12,000
Libya	5,853,000	17,000	20,000
Mauritania	3,069,000	9,000	11,000
Oman	2,567,000	7,000	9,000
Palestinian Territories	3,702,000	11,000	13,000
Qatar	813,000	2,000	3,000
Saudi Arabia	24,573,000	71,000	85,000
Sudan	36,233,000	105,000	126,000
Syria	19,043,000	55,000	66,000
UAE	4,496,000	13,000	16,000
Yemen	20,975,000	61,000	73,000
Totals	306,373,000	888,000	1,066,000

All figures are rounded. Totals are calculated on original figures and then rounded.
 *On the assumption that Iraqi police forces remained more or less intact in the period 2003-04.
 Population source: UNESA (2005)

Because virtually all police in the Middle East normally appear to work armed, the orthodox police multiplier of 1.2 small arms per sworn officer has been used. Extrapolated to the other 17 countries of the region, the police forces of the 22 Middle Eastern countries analysed here would host some 1.5 million firearms (Tables 3.7 and 3.8).

This estimate of police firearms stockpiles offers only a starting point for more refined analysis. In addition to the lack of reliable national data, the model misses other internal security and secret police agencies. Nor does the approach take account of the lack of a clear dividing line in a number of Middle Eastern countries between police and military forces, as regimes must often respond to both domestic and international threats to security (David, 1991). The approach is clearest at showing the small relative size of police inventories compared to the armed services, with at least eight to ten times as many firearms.

Box 3.4 Civilian firearms ownership in the Middle East

Of the 22 countries of the region only Israel and Turkey have released official statistics on gun ownership (UN, 1998, pp. 52-53). Although official secrecy shields much from public view, regional observers note a climate of mounting concern. A series of unofficial, Track-2 meetings in Amman in 2001 and 2002 and Cairo in 2004 elicited diverse responses. Officials from several governments were satisfied with the balance between individual rights and national controls. Representatives from some governments—notably Jordan, Sudan, and Yemen—expressed concern that small arms were becoming a factor in regional instability and a threat to public safety. Among outside observers, Middle Eastern gun culture is increasingly seen as a barrier to investment and political development (Widmer and Odibat, 2004, pp. 1-3; Jackman, 2002).

Anecdotal reports do not add up to a complete picture, but news reports leave little doubt that private firearms ownership is common in much of the region and growing. In a permissive environment where firearms ownership is widely seen as a masculine necessity, population and wealth are key determinants to the growth of civilian ownership. The population of the entire region doubled between 1970 and 2000. It is expected to double again by 2050 (PRC, 2004). In Arabic-speaking countries population growth is even faster, and predicted to double between 2000 and 2020 (UNDP, 2002, pp. 35-38). Fuelled by such demographic forces, regional firearms ownership seems likely to grow. More people will desire firearms, and if they can afford them then they are very likely to buy them. Regional economic performance is harder to predict, but it seems unlikely to become a major barrier to continued private small arms buying.

In the absence of official statistics from most Middle East countries, assessment of public stockpile dimensions requires cautious sifting of clues, especially comparison with better-understood cases. The exceptions to this analysis are Iraq and Israel, special cases discussed previously (Small Arms Survey, 2003, pp. 77-78; Small Arms Survey, 2004, pp. 44-50). For insight into the rest of the region, the most useful civilian stockpiles come from Jordan, Lebanon, Morocco, Sudan, Turkey, and Yemen.

The Jordanian figure is based on a semi-official estimate. The country has 126,000 registered firearms, which are believed to constitute some 20 per cent of all firearms in civilian hands, or some 600,000 in all (Al-Fawaz, 2002, p. 91). The Lebanon estimate of 500,000 private guns used here comes from unofficial observers, some of whom prefer a higher figure of 750,000 (Jackman, 2002). In Sudan it is estimated that '25 percent possess small arms and light weapons' and '50 percent of the population in the area has good knowledge on how to use' them (Elobeid, 2002, p. 126). If this means one-quarter of heads of households, it would equal some 1.6 million weapons. The Yemeni estimate of 6 million-9 million private firearms is based on field research by the Small Arms Survey (Miller, 2003). Using these figures for comparison makes it possible to calculate a broader regional estimate (see Table 3.9).

These six examples allow explication of a regional civilian firearms multiplier. This equals an average of 16 civilian-owned firearms per every 100 people (Table 3.9). This is only the average of six relatively well-understood cases; its applicability to the rest of the region is only suggestive. Applied to the region as a whole, though, this allows a crude estimate of civilian firearms throughout the Middle East of approximately 67 million privately owned guns. If a 33 per cent margin of error is allowed to account for wide differences in wealth and gun cultures across the region, the Middle East has anywhere from 45 million to 90 million civilian firearms.

The scale of Middle East firearms stocks revealed in this assessment is tentative and must be considered with caution. Even taken loosely, however, the approach applied here suggests that in the Middle East civilian ownership tends to exceed military and police firearms inventories, probably by a significant margin. The Middle East and north-east Asia may resemble each other as two of the least understood and most opaque parts of the world for small arms policy-making, but they are fundamentally different in other respects. While north-east Asian small arms ownership appears to be dominated by the state, Middle Eastern ownership is probably dominated by civilians. More authoritative and nuanced conclusions must await additional field research, public polling, and official cooperation.

Middle Eastern
police forces host
around 1.5 million
firearms.

Table 3.9 Estimated Civilian Firearms in the Middle East

Country	Population	Rate of firearm ownership	Firearms
Iraq	24,000,000	15/100	8,000,000
Israel*	6,200,000	8/100	503,000
Jordan	6,900,000	9/100	600,000
Lebanon	3,600,000	14/100	500,000
Turkey	67,600,000	12/100	8,000,000
Yemen	18,900,000	37/100	7,000,000
Middle East projected	420,000,000	16/100	67,000,000

Sources: Population statistics: IISS (2003); Iraq: Small Arms Survey (2004, pp. 44–50); Israel: Small Arms Survey (2003, p. 78); Jordan: al-Fawaz (2002); Lebanon: Jackman (2002); Morocco: Box 3.3; Sudan: Eloheid (2002); Turkey: UN (1998, p. 53) (registered guns only); BBC (2003) (unregistered guns); Yemen: Miller (2003)

The Middle East's shadowy stockpiles

Stockpiles of small arms in the military and police forces of the Middle East total some 13 million–17 million weapons. This would suggest that stockpiles in the region are likely to be far smaller than those of north-east Asia. Nonetheless, as the Small Arms Survey (2004, p. 46) notes, perhaps 4.2 million of Iraq's former small arms arsenal are now dispersed among the civilian population.

As is clearly not the case in north-east Asia, perhaps the majority of Iraq's weapons have been removed from state arsenals and are now in the hands of civilians and non-state combatants—which is why they do not appear in Table 3.8. The situation in Iraq is a warning that military and police stockpiles are only as secure as the institutions that control them.

Civilian stockpiles in the Middle East are cautiously estimated at 45 million to 90 million firearms. What is clear, however, from previous studies of select countries is that trends in ownership differ considerably (Small Arms Survey, 2002, pp. 90–94; 2003, pp. 77–80; 2004, pp. 44–50). This suggests that more research, particularly fieldwork, needs to be conducted into firearm ownership in the Middle East before a more accurate regional civilian estimate can be attempted.

CONCLUSION: TRANSPARENT TRUTHS

Whether the theme is the riddles of small arms disarmament and stockpile management, or the dynamics of two poorly understood regions, this chapter consistently points to the need for better and more comprehensive data on small arms ownership around the world. Time and again, the lack of reliable figures emerges as a barrier to informed debate and effective policy-making. How serious are small arms problems? Which problems should domestic and international attention focus on first? How well do different kinds of disarmament programmes work? All such questions must remain unanswered until there is a much stronger sense of where the guns are and which ones cause the most trouble.

This chapter repeatedly emphasizes the limits of what can be known. But weaknesses should not obscure accomplishments. The differences in the performance of domestic and international disarmament schemes, like the differences between small arms ownership in two major regions, are becoming clearer. Through the incremental work of

innumerable researchers and officials generous with their time and energy, a more complete picture of the global distribution of small arms is emerging.

The chapter also emphasizes just how much more remains to be revealed. Stockpile management and control are still slippery and elusive subjects. Except for a handful of countries in the Middle East and north-east Asia, very little systematic data is available on small arms possession in two regions that are home to 25 per cent or more of the world's population. These two regions clearly have a long way to go in improving transparency on small arms issues.

The growing willingness of governments in the Middle East and north-east Asia to discuss stockpile issues is modest compared with achievements elsewhere. Regional action on small arms stockpile management, previously unimaginable in much of the world, now seems more and more likely. Adding the Middle East and north-east Asia to the list of regions with productive dialogues on the subject would leave no part of the world untouched by this trend.

LIST OF ABBREVIATIONS

DDR	Disarmament, demobilization, and reintegration
DST	Département de la Surveillance du Territoire
DTRA	Defense Threat Reduction Agency
GDP	Gross domestic product
IDF	Israeli Defense Forces
KNPA	Korean National Police Agency
KPA	Korean People's Army
KPAF	Korean People's Air Force
KPN	Korean People's Navy
PAP	People's Armed Police
PLA	People's Liberation Army
PP	People's Police
TPPA	Taiwan Provincial Police Administration

ENDNOTES

- ¹ This chapter uses 'Middle East' to refer to the Middle East, North Africa, and selected neighbouring states.
- ² Author interview with Centcom personnel, United States Joint Forces Staff College, Norfolk, Virginia, June 2004.
- ³ Author interview with Centcom personnel, United States Joint Forces Staff College, Norfolk, Virginia, June 2004.
- ⁴ In March 2005 Brazil hosted an international meeting on the Regulation of Civilian Ownership and the Use of Small Arms and Light Weapons. The conference was a strong indication of the extent to which both governments and civil societies across the globe recognize the importance of domestic controls on civilian stockpiles.
- ⁵ Personal communication from Pablo Dreyfus, 10 December 2003.
- ⁶ This figure excludes some 6 million Ordinary Militia, which the IISS (1981, p. 75) claims were generally unarmed.
- ⁷ Answers to the questions of the Small Arms Survey National Stockpiles Questionnaire by the Conventional Weapons Division of the Japanese Ministry of Foreign Affairs, August 2004.
- ⁸ The figure of 1.2 million is composed of 1,003,000 Korean People's Army (KPA), 60,000 Korean People's Navy (KPN), and 110,000 Korean People's Air Force (KPAF) (Bermudez, 2001, pp. 3-7).
- ⁹ The Arabian Peninsula is taken here to include Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Yemen.
- ¹⁰ Interview conducted by Professor Jack Kalpakian, Al Akhawayn University, Ifrane, Morocco, with a mid-level military official, International Congress of Military History, Rabat, 1-7 August, 2004.

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Principal author

Aaron Karp

Other contributors

Jack Kalpakian and Keith Krause