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A Guide to the US Small Arms Market, Industry, and Exports, 1998–2004

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About this Occasional Paper

This report will be of interest to scholars, policy analysts, diplomats, and activists concerned about the global gun economy and/or the impact of firearms on society in the United States or the world at large. It presents a snapshot of what, precisely, is knowable—and what is not—about the world’s leading small arms maker and market. The report tracks US firearms production, imports, and domestic sales during 1998–2004 and provides insight into fluctuations in the civilian, military, and (to a limited extent) law enforcement markets. It surveys US small arms manufacturers and the special constraints under which they were operating during this period, and it highlights the increasing market share gained by imported weapons and foreign-owned producers. It also describes US shipments of small arms to other countries, particularly as part of the ‘war on terrorism’ initiated by the US government following the 9/11 terror attacks. A brief overview of the relevant US laws and policies governing firearms imports and exports is provided. Finally, the report provides a guide to further research and a template for more meaningful transparency around US weapons production, imports, exports, and domestic sales.

List of abbreviations

AECA	Arms Export Control Act
AFMER	<i>Annual Firearms Manufacturing and Export Report</i>
ATF	Bureau of Alcohol, Tobacco, Firearms and Explosives
ATK	Alliant Techsystems
DCS	Direct Commercial Sales
DHS	Department of Homeland Security
DOD	Department of Defense
DSCA	Defense Security Cooperation Agency
ECOWAS	Economic Community of West African States
EDA	Excess Defense Articles
FAA	Foreign Assistance Act
FBI	Federal Bureau of Investigation
FFL	Federal Firearms Licensee
FMF	Foreign Military Financing
FMS	Foreign Military Sales
FOIA	Freedom of Information Act
FTC	Foreign Comparative Testing Program
FY	Fiscal Year
H&K	Heckler & Koch GmbH
ITA	US International Trade Administration
ITAR	International Traffic in Arms Regulations
IWA	Internationale Waffenausstellung (International Trade Fair for Hunting and Sports Arms, Nuremberg, Germany)
NFA	National Firearms Act
NICS	National Instant Criminal Background Check System
NRA	National Rifle Association
NSSF	National Shooting Sports Foundation
OAS	Organization of American States
OICW	Objective Individual Combat Weapon

SCAR	Special Combat Assault Rifle
SHOT	Shooting, Hunting and Outdoor Trade (show)
SOCOM	US Special Operations Command
TACOM	US Army Tank-automotive and Armaments Command
TSA	Transportation Security Administration
UN Comtrade	UN Commodity Trade Statistics Database
USITC	US International Trade Commission
USML	US Munitions List
USMIL	US Munitions Import List

I. Introduction and overview

The United States is by far the world's largest consumer of small arms. It is also a major manufacturer and innovator of both civilian and military firearms, and the world's largest exporter of small arms (in terms of value, if not quantity). All these facts are well-known to scholars, diplomats, journalists, and activists concerned with the global gun economy, violence prevention, or some other aspect of small arms.

Among arms-exporting countries the United States is often said to be a model of transparency or openness in the provision of information, especially on small arms exports (see, for example, Haug et al., 2002, pp. 83–84; Small Arms Survey, 2005, p. 112). However, close examination reveals many inconsistencies and omissions in the data. In particular, it is not possible to discover much detail about the US civilian gun market.¹

This Occasional Paper is a compendium, reference, and research guide, examining what precisely is knowable about:

- the US civilian firearms market;
- small arms procurement by the US military, police, and other security agencies;
- production by the US small arms and ammunitions industries;
- firearms and ammunition imports into the United States; and
- US small arms and ammunition exports.

It assembles all systematic data that is or was available in the public domain for the years 1998–2004 and provides caveats and notes explaining data holes and inconsistencies.² It includes some informed speculation about why certain trends might be occurring, but it leaves detailed analysis of those trends to other researchers.

Transparency in these areas is critical to understanding the global gun economy. Information about levels of weapons availability is also essential if researchers are to be able to test hypotheses about the impact of firearms

availability on crime levels, armed conflict, respect for fundamental human rights, and economic development. Such information is necessary for the formulation of sound public and foreign policies.

The overarching conclusion of this paper is that the level of transparency around US small arms manufacture and trade, while high, is still insufficient. The key recommendation is for coherence and cooperation on the part of all relevant US government agencies in the collection, collation, and integration of data that is currently made available, and for the publication of statistics to fill the large remaining gaps.

Small arms politics: the impact of 9/11

The time period covered by this report—1998 to 2004—spans two presidential administrations with quite different philosophies with regard to firearms regulation, government transparency, human rights, and multilateralism in foreign policy. It also encompasses the periods both ‘before’ and ‘after’ the terror attacks of 9/11, which permits preliminary examination of the impact of the United States’ changed domestic and foreign policies on small arms production, marketing, imports, and exports.

One trend evident since 9/11 has been the further liberalization of gun sales and protection of the privacy of individual gun owners. The US Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) is the federal government agency with lead responsibility for preventing illicit trafficking of weapons within the United States. This agency has long been caught between the need to access and publish information on firearms production—for the benefit of criminal investigations and public oversight—and the demand from some quarters that such data be confidential in order to protect the privacy of manufacturers and purchasers. In January 2004 Congress chose privacy over transparency, voting that ATF can no longer make available to the public any data collected from licensees on ‘records of importation, production, shipment, receipt, sale, or other disposition of firearms’.³

Researchers have also noted a marked decline in transparency in many government agencies since the 9/11 attacks. In early 2002, the White House ordered federal departments and agencies to review publicly available infor-

mation with a view to restricting material that could harm national security, and many responded by taking information off their Web sites (White House, 2002). The US Census Bureau, which sells compact discs of customs data on all imports into and exports from the United States, excludes military small arms for the years 2002 onwards (although the data is available elsewhere). In addition, the US Department of Defense has been even slower than before to deliver data for a report required by US law (the 655 Report), citing other pressures on its time. Compounding difficulties, in October 2001, the then Attorney General John Ashcroft told federal agencies to be less forthcoming in releasing data in response to requests for information under the Freedom of Information Act (FOIA).⁴ His memo cited the need to protect not only information related to national security matters but also ‘sensitive business information and . . . personal privacy’ (Ashcroft, 2001).

Since the United States’ declaration of a global ‘war on terrorism’ in late 2001, the US government has rewarded those providing material or political support for US military efforts in Afghanistan and Iraq. For example, the Bush Administration ended US embargoes of arms shipments to Pakistan, India, Azerbaijan, and Armenia, and it has increased the flow of arms to other states, often paid for with US government funds.

Governments that have been able to redefine their needs in counter-terrorism terms have benefited most (Federation of American Scientists, 2005). For instance, Maoist rebels fighting Nepal’s government were added to the State Department’s list of terrorist organizations in October 2003 (*Federal Register*, 2003), and the Nepalese government received more than 7,000 military rifles that same year.⁵ In addition, the Executive Branch pressed Congress to lift limits on military aid to Colombia so that arms could be used directly in counter-insurgency (also called counter-terrorist) activities, instead of only in counter-narcotics operations. Georgia also received military aid because of the reported presence of a small number of Al-Qaeda operatives in a conflict-ridden northern region of the country. The Bush Administration has also been trying to persuade Congress to lift a ban on military transfers to Indonesia, imposed after killings and massive displacements in East Timor in 2000. The goal is to help Jakarta arm its counter-insurgency efforts, again under the umbrella of Washington’s counter-terrorism agenda.

The administration’s desire to arm partners against terrorism is taking precedence over its concerns for human rights abuses in those countries. For example, the United States has transferred tens of thousands of M16 rifles to the Philippines⁶ for use in fighting various insurgencies, including the Abu Sayyaf, which allegedly has ties to Al-Qaeda. Yet the State Department’s 2001 human rights report states, ‘Members of the [Filipino] security services were responsible for extrajudicial killings, disappearances, torture, and arbitrary arrest and detention; there were allegations by human rights groups that these problems worsened as the Government sought to intensify its campaign against the terrorist Abu Sayyaf Group’ (US Department of State, 2002).⁷

How transparent?

Although a good deal of data is available, there is considerable confusion about the small arms trade within and from the United States. For instance, there are no accurate figures for the number of guns purchased annually in the United States. A plausible estimate can be arrived at by looking at import, export, and manufacturing data, as well as the number of background checks conducted for firearms purchase applications (which can cover the purchase of more than one weapon, or they can be run on persons who ultimately do not purchase a firearm). To find out how many small arms were transferred out of the United States in 2000, one must consult at least four public sources, which do not give anywhere near the same result. Similarly, there are at least three sources of data for imports, again all providing different statistics. The reports present data in slightly different ways, using different weapon categories (or different weapons within the same nominal categories), and different timetables (fiscal versus calendar years), and so are not readily comparable in terms of data presented.

The principal sources of official public data on US manufacturing, imports, and exports of small arms are as follows:

- ATF reports, including the *Annual Firearms Manufacturing and Exportation Report* (AFMER) and the occasional *Firearms Commerce in the United States* report.⁸ They contain data on US firearms production, exports, and imports—

though the latter report primarily contains data gathered from other sources listed here.

- Databases created by the Census Bureau from forms or automated reports filed with the Customs Service at the time of import or export; the International Trade Administration’s US Trade Quick Reference Tables;⁹ and the International Trade Commission’s Interactive Tariff and Trade DataWeb.¹⁰ All of these agencies are part of the Department of Commerce.
- Reports to Congress by the State and Defense Departments on planned and actual arms transfers. These include the Report Pursuant to Section 655 of the Foreign Assistance Act (commonly referred to as the 655 Report)¹¹ and the Congressional Presentation Document on the State Department budget. Until 2003, the 655 Report also included data on firearms imports.
- Records kept by the Commerce Department on the export of dual-use firearms, such as hunting shotguns, but these are released only upon demand through the Freedom of Information Act.

Appendix A describes the data available from various agencies more fully and presents the caveats associated with each data source. To illustrate the challenges here, however, Table 1 highlights the large variance between small arms export data obtained from ATF, the US Customs Service, and the State Department.

Table 1
Comparison of three US agencies’ arms export data (quantities of weapons exported), 2001

	ATF	Customs Service	State Dept. (licences)
Pistols and revolvers	64,813	72,825	174,632
Shotguns	46,174	127,772	154
Machine guns	10,021	1,511	74
Rifles	50,685	97,922	1,064,783
Total	171,693	300,030	1,239,643

Note: Data on military weapons exports could not be included in this table because the Department of Defense does not publish information on the quantities of small arms it ships abroad (with limited exceptions).

Sources: US Customs Data, ATF, 655 Report

It is not surprising that the export quantities among the weapons categories are not the same, given the different category definitions the various agencies use. But the overall export totals also vary significantly, which is surprising. Some of the reasons for the discrepancies have already been signalled: the State Department uses fiscal years, while ATF and the Customs Service report on calendar years; the State Department has high totals because it reports on licences issued—a much larger number than actual shipments (which currently are not published by the State Department). In addition, Customs' figures are higher than ATF numbers (except for machine guns) probably because Customs shows total exports (new and used), whereas ATF data is based on manufacturers' reports and, therefore, shows exports only of new weapons. (The different trend for machine guns is most likely a result of the use of different definitions.) Finally, State Department data for shotgun exports are under-reported because the Commerce Department actually has jurisdiction for licensing foreign shipments of shotguns. The Commerce Department does not make any export data public.

Additionally, with regard to the US market, the ATF report does not include firearms manufactured for the US military, whereas Customs data does. Yet the Customs categories do not clearly separate out military items, so one can make only approximate estimates of imports bound for the civilian market. As for the military market, only half of the picture is clear because data on US-produced weapons is not publicly available. The Defense Department provides information about planned small arms purchases in its annual budget, but it is not clear whether the weapons are of foreign or domestic origin, or whether and when they will actually be purchased (since the numbers are for planned, not actual, acquisition). The Department of Defense also uses a fiscal calendar for its budget, which makes a comparison with Customs figures all the more challenging.

Another major problem is presented by the different reporting techniques used in the 655 Report for industry-negotiated Direct Commercial Sales (DCS) and government-negotiated Foreign Military Sales (FMS), as described in Chapter VI. It is clear that the Defense and State Departments have more accurate information on US small arms transfers than does the US Customs Service. But it is difficult to use these government agencies' data because one reports on

potential transfers (State) and the other on actual transfers (Defense). Their reports must be put together to produce a complete picture of arms transfers (that is, both industry-negotiated and military-negotiated), and yet they cannot logically be combined. This problem should be corrected if and when the State Department finishes its automated reporting system (allowing it to gather information on which licences have resulted in shipments). In the meantime, the data presented is confused and confusing. 🗑️

II. The civilian firearms market

The large population, widespread acceptance of guns for use in hobbies and self-defence, and the limited system of controls on firearms purchases combine to make the United States an enormous market for small arms consumption. In fact, the US population is the world's leading market for US and most foreign firearms manufacturers. In 2002 there were believed to be about 640 million firearms worldwide (Small Arms Survey, 2002, p. 63). While there is no precise data available on the quantity of small arms held by the US public, recent credible estimates place it at between 230 million and 280 million—one out of every three guns in the world and nearly one gun per person in the United States (Small Arms Survey, 2003, p. 61).¹²

No agency in the United States collects or coordinates data on annual firearms purchases by private citizens. In fact, the US Congress has expressly prohibited the government from registering civilian-held firearms, firearms owners, firearms transactions, or firearms holdings.¹³ These restrictions have been tightened in recent years.¹⁴ Therefore, much of what one can discern about the civilian market is derived from interviews with firearms industry and association spokespeople, as well as records of domestic gun production and gun imports.

Given the lack of official reporting, this chapter presents the best framework possible for approximating annual firearms demand by US civilians—based largely on available *supply*—and it examines post-9/11 marketing efforts by US manufacturers and retailers to expand the size of the civilian market. (This report does not include supply or demand within the *illicit* firearms market in the United States.¹⁵)

Trends

Table 2 represents the totality of small arms—including US-made and foreign imports—newly available for sale each year to the US domestic market during

the period 1998–2003 (some data on US-made weapons became unavailable to the public after 2001¹⁶). While the figures in this table do not represent numbers of weapons actually purchased by individuals in the United States, this supply-side data serves as the best possible approximation of small arms demand. There are obvious limitations to this methodology; for example, newly produced items may go into a company's inventory or to a retailer without being bought by individuals. However, stagnant inventory would result in subsequent reductions in production or import levels. In addition, this approach omits purchases of used weapons being resold. No data is available on such sales, which can take place in stores, homes, or thousands of unregulated gun shows around the country each year. Finally, this data would include weapons purchased by police and other law-enforcement agencies. However, as shown in Chapter III, that segment of the US small arms market is small compared with the civilian market.

With these caveats, the data shows that on average about 5.3 million new firearms were introduced into the US civilian market each year from 1998 to 2003. A small rise was discernible during 1999 and 2000 (up from 4.8 million to 5.5 million weapons), a decline in 2001, followed by a post-9/11 surge in 2002, and a levelling off in 2003. Overall, the figures reflect a slight rebound in gun purchases since 1995, when firearms sales plummeted and US manufacturing dropped 20 per cent from the preceding year's record high levels (see Appendix B for data on US firearms manufacture during 1986–99) (Thurman, 2001). In 1998 and 1999 domestic US firearms production levels increased, albeit modestly, for the first time since 1994. Meanwhile, imported firearms levels have charted steady upward growth—from 1.3 million guns in 1998 to 2.3 million in 2003.

Based on new production being introduced into the civilian market, the types of weapons in greatest demand are pistols, rifles, and shotguns—in decreasing order. According to the ATF figures in Table 2, handguns represent about one-third of the US market.

Several interesting trends or events can be seen in the table. A steep fall in the market for pistols is noticeable in 2001, when US producers made 300,000 fewer of them than in the previous year. Imported pistols remained steady in 2001 but then spiked upward in 2002, presumably due to increased perceptions

Table 2

Guns available for sale: US production and imports, 1998–2003

	1998	1999	2000	2001	2002	2003
Domestic production for US market^a						
Pistols	930,828	960,783	934,265	594,685	718,959	795,320
Revolvers	308,602	287,168	270,830	287,481	312,883	282,840
Rifles	1,280,092	1,504,016	1,533,400	1,233,869	1,454,642	1,367,802
Shotguns	946,821	1,039,653	863,355	633,639	709,428	696,541
Machine guns ^b	20,337	235	35,681	46,346	N/A	N/A
Any other NFA weapon ^c	622	12,322	28,155	17,190	N/A	N/A
Miscellaneous firearms	21,993	35,809	19,064	10,370	20,227	23,989
Subtotal domestic production	3,509,295	3,839,986	3,684,750	2,823,580	3,216,139	3,166,492
Imports for US civilian market						
Pistols/revolvers	590,661	657,957	712,846	711,017	949,106	762,764
Military rifles	113,962	158,513	233,173	185,160	266,270	140,007
Machine guns	2,331	6,547	2,386	6,692	2,894	3,428
Military shotguns	408	20	8	22	1,758	16,071
Muzzle loading firearms	186,514	155,764	259,315	345,534	380,499	353,673
Non-military shotguns	166,490	332,650	332,888	428,312	499,206	498,686
Non-military rifles	229,242	315,413	319,633	322,206	458,684	517,509
Subtotal imports	1,289,608	1,626,864	1,860,249	1,998,943	2,558,417	2,292,138
Total domestic supply	4,798,903	5,466,850	5,544,999	4,822,523	5,774,556^d	5,458,631^d

^a Exports have already been subtracted from total US production numbers.

^b None of these newly manufactured machine guns is available to civilians.

^c This category includes weapons, such as machine guns and short-barrelled rifles and shotguns, which are designated for registration and special taxation by the National Firearms Act.

^d Full data on domestic production is not available after 2001 due to a change in US law. See n. 16.

Sources: Domestic production: ATF, *Annual Firearms Manufacturing and Export Report*. Imported firearms: US Customs Department data.

of insecurity following the 9/11 attacks. The market for shotguns has also been robust but volatile. In 1999, 300,000 more newly manufactured shotguns were available for purchase than in 2001. Shotgun imports into the United States levelled off at half a million in 2002 and 2003.

The ATF report that reveals the US production figures does not give dollar values associated with levels of firearms produced; but, according to Bob Delfay, President of the National Shooting Sports Foundation, manufacturers' annual receipts have amounted to about USD 1.5 billion in recent years (Wharton, 2000).

NICS data

Another source of data that indicates the civilian demand for small arms in the United States is available from the Federal Bureau of Investigation (FBI) and the Bureau of Justice Statistics at the Justice Department.¹⁷ As mandated by the Brady Handgun Violence Prevention Act (hereafter 'Brady Law'), which entered into force in 1994, these agencies keep track of the number of applications for firearms purchases and subsequent background checks required by that law.¹⁸ From December 1998, when the background check system took effect, through December 2003, there have been nearly 41 million applications to purchase firearms in the United States. Of these, 790,000 applications were denied. (This data is for newly manufactured weapons, as well as resales by regulated retailers. However, the vast majority of secondary sales (resales) of guns in the United States are carried out by individuals and do not require a background check. Such sales, therefore, are not included in this data.)

The background checks are carried out by the National Instant Criminal Background Check System (NICS) in a procedure that varies from state to state. Some states check applications through state and local law-enforcement authorities' records, others through FBI records, and yet others through a combination of federal and local law-enforcement agencies. Reasons for denial of a firearms purchase permit by the NICS system vary slightly from year to year; however, the main reason (for more than half of all denials) during 1999–2003 was that the applicant had a felony indictment or conviction. The second most common reason for a denial was a record of domestic violence (more than 10 per cent of denials).

Table 3
Firearms applications processed by the NICS, 1998–2003

Year	Applications	Denials
1998 (partial)	893,000	20,000
1999	8,621,000	204,000
2000	7,699,000	153,000
2001	7,958,000	151,000
2002	7,806,000	136,000
2003	7,831,000	126,000
Total	40,808,000	790,000

Note: Figures are rounded to the nearest 1,000.

Source: Bureau of Justice Statistics

Table 3 shows the number of applications for firearms purchases processed annually by the NICS system since 1998. While not all background checks result in firearms purchases, and some applications are for multiple weapons purchases, this data provides an indication of the annual relative demand for small arms in the United States. This source confirms a spike in gun purchases in 1999, with a drop of nearly one million applications the following year. It also makes clear that there was no dramatic annual increase in gun purchase applications following the 9/11 attacks on the United States. What is also of interest, this data shows that a significant portion of gun purchases in any given year is of previously owned weapons; comparing Table 2 and Table 3, one sees that there are two million to three million more applications a year than newly produced weapons available for sale in the United States. And, as mentioned previously, this data excludes resales by private citizens who are not licensed firearms dealers taking place at gun shows. Such transactions are not covered by the Brady Law.

This source of data does not contain any demographic breakdown of firearms purchasers (beyond the reasons applications are denied), but it does provide the number of applications by each US state, allowing regional or state-by-state comparisons.¹⁹

Behind the data

US consumer demand for guns declined sharply in the mid-1990s. Likely explanations for reduced demand include a prospering economy and diminishing levels of crime, removing the incentive for many people to buy guns for self-protection. A number of mass shootings in work settings and schools perhaps also contributed to changed public perceptions about gun possession. In addition, the firearms industry was subject to bad publicity from lawsuits—brought by at least 30 cities and counties—blaming manufacturers for flooding the market with cheap weapons and making it easy for criminals to obtain firearms (Crowder, 2000). Finally, the number of hunters in the country has been steadily declining, softening demand for long guns (Wharton, 2000; Smith, 1997).

The rebounding demand for small arms shown in Table 2 may, paradoxically, have been influenced by the anticipated passage of tighter gun control laws—and resulting decreased access to firearms—following school shootings and city lawsuits.²⁰ These legal changes, however, did not materialize.

Also contributing to the late-1990s increase in gun sales, the industry has worked to repair its image by organizing a public education campaign under the leadership of the National Shooting Sports Foundation (NSSF). This group's goal is to end the 'demonization' of the gun industry by showing support for 'common sense' gun control laws. As an example, the NSSF launched a 'Don't Lie for the Other Guy' campaign in conjunction with ATF to educate retailers and individuals about the risks of buying weapons on behalf of someone prohibited from buying them (NSSF, 2004). The NSSF believes that its campaign has raised public acceptance of shooting sports and gun ownership by 5 to 10 per cent during 1999–2002 (Kopel, 2002).

The subsequent slowdown in sales in 2001, indicated in Table 2 and Table 3, might be explained by simple economics. After experiencing an unparalleled level of steady growth in the 1990s, the US economy was hit hard in 2000 when the high-tech stock-market bubble burst. An official economic recession was declared in 2001, and the subsequent recovery has been slow in many sectors. In 2001, US firearms production (including exports) decreased to just below three million weapons—a 23 per cent reduction from 2000 (Thurman, 2003b). Total domestic supply (US production plus imports) fell from 5.5 million guns in 2000 to 4.8 million in 2001—a drop of 13 per cent. Import and US

production levels rebounded in the following year, helped along by an aggressive marketing campaign in response to the 9/11 terrorist attacks (see below).

Yet William B. Ruger, Jr., chairman of Sturm, Ruger & Co., describes the market in 2003—especially the first six months—as still soft (Dawkins, 2004). Expected declines in 2002 and 2003 from continued economic lethargy were partially offset by fears of domestic terrorism and a backlash from war in Iraq (Associated Press State and Local Wire, 2003). Based on anecdotal evidence (sharp increases in orders at the 2004 Shooting, Hunting and Outdoor Trade—or SHOT—show), sales in 2004 appeared to be on the rise (Shooting Industry, 2004).

Customer profiles

The population of the United States is about 295 million. Thirty-four per cent of people polled in 2003 reported having a gun in their home.²¹ According to the NSSF, almost 60 per cent of firearms sales are to hunters; one-quarter go to target shooters; and 15 per cent to individuals seeking weapons for self-protection (Wharton, 2000). This observation from the industry appears somewhat contrary to recent trends in gun ownership reported in national polling data and to the preferences indicated through weapons production and importation levels shown in Table 2 (Smith, 2001). Both of these sources reveal a growing preference for handguns, which would indicate that target shooters and those seeking weapons for self-protection account for a higher percentage of sales.

Firearms are durable commodities; therefore, retailers constantly promote innovations to maintain demand. Regular sport shooters or hunters may be counted on to upgrade their equipment—for instance, buying new guns equipped with laser sights, guns made with plastic components (making them lighter and sturdier), or more powerful weapons (Kopel, 2002). Gun owners who currently possess firearms for self-defence purposes might also be tempted into buying smaller weapons that are easier to conceal (there are 44 US states where one can obtain a permit to carry concealed weapons legally; NRA-ILA, 2005a). Another innovation—lauded by gun control advocates as well as the industry—is the smart gun, or personalized weapon. These weapons have an activation device, such as a special ring or key, to prevent them from being stolen, fired by a child, or, perhaps, used against their owner.

Assault-rifle makers might profit from the expiration in September 2004 of the national ban on sales to civilians of semi-automatic assault rifles. Congress had outlawed new sales of 19 specific weapons—including the AR-15 rifle and TEC-9 pistol—in the 1994 Crime Bill, but it allowed the provision to expire in the lead-up to presidential and congressional elections in 2004. Gun makers and law enforcement officers alike predicted a spike in sales after the ban's expiration, but no dramatic increase had materialized by May 2005 (Sontag, 2005).

In addition to marketing new products, firearms makers and retailers also seek to develop new sectors of the market—targeting women, youth, and Hispanics (the fastest-growing minority population) in recent years.²² As crime levels increased in the 1980s, gun sellers marketed small arms to women for self-protection. But declining crime levels in the 1990s led retailers to identify new marketing strategies. Social and political developments in 1999 and 2001 provided sought-after opportunities.

Y2K and 9/11

Anticipation of the year 2000 created panic within some US households. The news media repeated dire predictions of technology-induced chaos stemming from the failure of powerful computers that run the country's infrastructure to manage the transition from 1999 to 2000. In addition, a small minority of the population anticipated religious prophecies of Armageddon being fulfilled in 2000. As a result of both factors, some families around the country stocked up on water, food, cash, and guns to protect themselves from bandits or neighbours who had not properly prepared.

Gun magazines played into the Y2K (as the computer bug was known in the United States) hype. They ran headlines such as 'Y2K Survival Guide to Revolvers' and 'Survive Y2K—Guns and Gear You Need' (Violence Policy Center, 1999). Firearms manufacturers developed special Y2K models, such as the Bushmaster Y2K Limited Edition AR-15 assault rifle (with special Y2K engraving) and the Wilson Combat Millennium Protector .45 pistol. Others, such as Smith & Wesson and Colt's Manufacturing, suggested using existing models for one's Y2K needs (Violence Policy Center, 1999). (Colt's actually developed, but never marketed, a 'survivalist' weapon that could fire any bullet caliber; Bai, 2000.)

Sales (including imports and domestic manufacture) of all categories of firearms increased from 1998 to 1999. Sturm, Ruger & Co., one of the few publicly held firearms manufacturers, reported an increase in sales of nearly 30 per cent between the third quarter of 1998 and the third quarter of 1999.²³

The terrorist attacks against the United States on 11 September 2001 (commonly known in the United States as 9/11) also provoked a great deal of general insecurity among the US population. Some reacted by purchasing firearms. The Federal Bureau of Investigation reported a steep increase in background checks for firearms purchases in the immediate aftermath of 9/11, peaking at 1,029,691 in October 2001 (Baker, 2001). The number of background checks was 10.5 per cent higher in September 2001 than in September 2000. There were 22 per cent more background checks in October 2001 than in October of the previous year, and 9 per cent more in November 2001 than November 2000 (Baker, 2001). In California alone, according to the California Department of Justice, in the six weeks after 9/11 firearms sales rose to an average of 9,200 a week—up from an average of 7,000 a week in 2000 (Moreland, 2002).

A number of small-arms makers created special limited-edition 9/11 guns. For example, Beretta issued a new 'United We Stand' 9 mm pistol, with a US flag etched on the side. The company reportedly sold 2,000 of the special-edition weapons to wholesalers on a single day in October 2001 (Baker, 2001).

However, as noted above, the mini-boom after 9/11 did not translate into a longer buying pattern. It appears that most people who were considering buying a firearm did so immediately after the attacks. Once they purchased their weapons, the market became satiated, and demand dried up for a while. ■

III. US government small arms procurement

The US military, with a force of 2.6 million and a presence in more than 146 countries, is a significant purchaser of small arms, albeit in much smaller quantities than the US public.²⁴ US military spending and associated weapons procurement declined in the 1990s with the end of the cold war, but has increased sharply since 2001 due primarily to prolonged military action in Afghanistan and Iraq. As described below, ammunition is the first to go during combat, but the regular, intensive use of small arms erodes weaponry as well, in particular the M16 assault rifle and M4 carbine ammunition magazines (Tiron, 2004).

The 2002 edition of the *Small Arms Survey* provides extensive data on the US military's pre-9/11 firearms stockpile.²⁵ In 2001 the total number of firearms in all four branches of the military was approximately 3.3 million weapons—or 1.27 guns per uniformed serviceperson at the time. The service branch breakdown was as follows:

- Air Force—260,000 (estimate);
- Army—2,300,000²⁶;
- Coast Guard—20,000; and
- Navy/Marines—800,000 (estimate).

Table 4 reveals that the US military has added at least 300,000 weapons to its arsenal since the end of 2001—for a total of about 3.6 million firearms, or 1.38 guns per person in the armed forces. The civilian market (with at least 230 million weapons and five million added annually) dwarfs demand from the military sector. Nevertheless, this segment is important because government-funded research, development, and procurement of weapons and ammunition can entail quite high profit margins for manufacturers. In addition, military innovations often translate—eventually—into civilian models of firearms.

US law enforcement officials are believed to hold approximately 900,000 small arms²⁷—a fraction of the quantity held by the US public. Following attacks on the World Trade Center and Pentagon in 2001, the US Congress created the

Department of Homeland Security (DHS), incorporating some previously existing agencies and establishing some new functions. This federal department has become a significant new source of firearms procurement.

This chapter presents the US military's procurement budget for small arms and ammunition, as well as pending contracts. It describes the military's small arms modernization plans in some detail and outlines procurement plans of police departments and agencies established following the 9/11 attacks.

Examining the data

There is no single source of data on the US military's weapons acquisition. Most of the companies competing for small arms sales contracts with the Department of Defense (DOD) are publicly traded corporations. The companies and the contract awards are thoroughly covered in the business and military press, providing a major source of insight into this segment of the US small arms economy.

In addition, the DOD provides public details of its budget for weapons and ammunition procurement (see Appendix C). Overall, the budget for small arms procurement has fluctuated widely from year to year during the fiscal years (FY) covered (1997–2005). It leapt from under USD 40 million in FY 2002 to more than USD 177 million the following year. In terms of specific programmes, the budget numbers do not always translate into purchases, but they indicate plans and trends.

For example, the budget data shows the phasing out of the M16 rifle in FY 2004, dropping from about USD 10 million budgeted for procurement annually in previous years. Appendix C also shows the steadily increasing procurement budget for the military's new XM107 sniper rifle, starting with about USD 1 million in FY 2000 and rising to almost USD 12 million in FY 2005. The appendix demonstrates that more than USD 240 million was allocated during FY 2001–2005 for unspecified small arms for special operations forces. The second largest procurement programme, in dollar terms, has been the M240 armour machine gun. The DOD allocated USD 195.6 million for purchase of this weapon during FY 1997–2005.

Another source of information is the DOD contracts Web site, where pending contracts are posted.²⁸ Unfortunately, the site does not make clear whether

the contracts were actually fulfilled for the initial quantity, cost, or delivery date posted. In addition, it does not specify whether contracts are new or simply modifications of previously awarded contracts, and contracts often appear more than once. Table 4 is a compilation of recent small arms-contract announcements from this Web site, including only those that were to be delivered from 1998 onward. An effort has been made to ensure that no contract is listed twice.

In sum, Table 4 shows that the US military contracted for delivery of nearly 450,000 firearms during 1998–2003, including at least:

- 136,679 M16 variant rifles;
- 179,769 M4 variant carbines;
- 11,569 M240 variant machine guns;
- 17,336 M249 machine guns;
- 2,636 other machine guns; and
- 61,656 M9 pistols.

The total figure probably underestimates actual small arms procurement, for a number of reasons. First, the DOD site lists only contracts valued at USD 5 million or more. It does not include smaller contracts—which may add up to significant dollar amounts and weapons quantities. For example, Heckler & Koch's USD 500,000 contract to develop the XM8 lightweight assault rifle (see below) and to deliver 7,000 XM8 rifles to the Army by mid-2005 does not appear on the DOD contract site, although it does appear on the US Army Tank-automotive and Armaments' Command (TACOM) procurement site—another useful source of information.²⁹

The contracts listed in Table 4 are worth at least USD 466 million. (Several of the contract values were subsequently modified, making a precise tabulation impossible.) The table shows wide variation in price per unit, probably indicating that many of these contracts are continuations of pre-existing deals. For instance, two different contracts with the same manufacturer (FN) for the same weapon (M16A2 rifles) appear to have a per unit price of nearly USD 400 in one case and USD 133 in another. The table also makes clear that three companies—FN Manufacturing, Colt's Manufacturing, and Berretta USA—dominate the US military's small arms business.

Table 4
Major DOD contracts for small arms, 1998–2004

Weapon	Quantity	Value (USD)	Company	Completion date
M16A2 rifle	31,700	12,621,672 ^a	FN Manufacturing	Jun 2002
M16A2 rifle	88,500	11,840,880	FN Manufacturing	Dec 2001
M16A4 rifle	14,835	49,972,650	FN Manufacturing	Aug 2002
M16A4 rifle	16,464	6,371,568 ^a	Colt's Manufacturing	Jun 2001
M4 or M4A1 carbine	124,803	123,035,995	Colt's Manufacturing	Sep 2007
M4 and M4A1 carbine	26,064 ^b	18,468,365	Colt's Manufacturing	Sep 2004
M4/M4A1 carbine	24,000	12,504,000	Colt's Manufacturing	Jun 2002
M4/M4A1 carbine	15,925	18,253,235	Colt's Manufacturing	Feb 2001
M4 and M4A1 carbine	10,577 ^c	8,479,796 ^a	Colt's Manufacturing	Apr 1998
M240B machine gun	1,780	29,986,208	FN Manufacturing	Jun 2006
M240B machine gun	2,582	19,365,000	FN Manufacturing	Feb 2004
M240B machine gun	1,306	9,277,824	FN Manufacturing	Mar 2003
M240B machine gun	4,801 ^d	67,855,777	FN Manufacturing	Jun 2002
M240H machine gun	1,100	9,572,882	FN Manufacturing	Dec 2005
7.62 mm LWMG	2,500	29,000,000	FN Manufacturing	Mar 2007
M249 machine gun	500 ^e	21,060,471	FN Manufacturing	Dec 2001
M249 machine gun	3,198	^a	FN Manufacturing	Feb 2001
M249 machine gun	13,638	^a	FN Manufacturing	Jul 1999
M9 9 mm pistol	16,500	^a	Beretta USA Corp.	Jul 1998
M9 9 mm pistol	45,156 ^f	18,467,001	Beretta USA Corp.	May 1998
Totals	445,929	>466,000,000		

^a Contract value was subsequently modified.

^b Weapons to be allocated to the US Air Force, US Army, and Foreign Military Sales. Contract was for 25,764 M4 carbines and 300 M4A1 carbines.

^c Quantity was for 9,861 M4 carbines and 716 M4A1 carbines.

^d There was an option of up to 8,162 M240B machine guns under this contract.

^e A potential maximum quantity of 6,780 M249 machine guns may be procured under this contract.

^f Sixty of these pistols were intended for Bolivia; the rest were for the US Navy.

Modernization plans

The US military traditionally has used a wide variety of small arms, but the latest trend is to reduce the number of models in order to ease the logistical burden of providing ammunition and repairs, while at the same time reducing the size and weight of the weapons and increasing their power and durability (Kennedy, 2002, p. 36). The military plans to replace the M16 and M16A4 rifles, the M203 grenade launcher, the M4 carbine, the Mk 19 automatic grenade launcher, the M2 .50-calibre machine gun, and the M249 squad advanced weapon (Tiron, 2004). Table 4 and Appendix C indicate that purchases of M16s are already being phased out, with no new orders after 2002. The M4 carbine, popular because of its light weight and compact size, continues to be ordered, apparently to fill the gap until new models are produced.

In most cases, US subsidiaries of foreign-owned firms are developing the new models. Colt Defense LLC (the military supply branch of Colt's Manufacturing Company), maker of the M4 carbine, is the sole remaining US-owned supplier of small arms to the US military (Kennedy, 2000).

The following sections describe new developments planned or under way for various types of US military small arms and light weapons.

Pistols

The US military issues pistols to almost all of its officers as well as to all servicemen and -women who require a firearm but do not have the space to carry an assault rifle. For nearly 75 years (1911–85), the official US military pistol was the M1911A1 .45 calibre semi-automatic, made by Colt's Manufacturing Company. When the US Congress determined in 1978 that there were more than 30 different types and sizes of pistols in use within the armed forces, it ordered trials for a new replacement pistol. The DOD also wanted a weapon that used the NATO standard 9 mm calibre. After a number of tests, contestations, and more tests, Fabbrica d'Armi Pietro Beretta SpA, more commonly known as Beretta, won a five-year, USD 75 million contract in 1985 to supply the military with its M9 9 mm semi-automatic pistol (Kennedy, 2000). The M9 is smaller and lighter than the Colt .45, with a faster bullet, longer effective firing range, and larger magazine. It is reputedly more reliable than the .45, which was known for accidental discharges and heavy recoil (Kennedy, 2000). However, in a recent

survey many US combat veterans expressed a preference for the M1911 (US Army Infantry Center, 2003). Beretta produces the weapon at a factory in Accokeek, Maryland. The DOD has continually renewed Beretta's contracts, including a USD 18.4 million contract in 1995 to supply 45,096 M9s to the US Navy and a USD 6.5 million contract the following year to supply 16,500 of the 9 mm pistols to the Army Reserve and National Guard (US Department of Defense, 1995; 1996).

Rifles and grenade launchers

Before the military operations in Afghanistan and Iraq made the requirement more urgent, the Army had been slowly developing a new weapon for its Land Warrior programme—the Army's concept of the 21st-century soldier. This Objective Individual Combat Weapon (OICW, or XM29) is meant to combine the features of the M16 assault rifle, M4 carbine, and the M203 40 mm grenade launcher into one rifle, with a 5.56 mm kinetic-energy ammunition round and a 20 mm air-bursting round. The weapon is designed to enable soldiers to shoot in the dark, through windows, and over hills. It will have a laser range finder that allows soldiers to communicate to the electronic fire-control system exactly where to aim, taking into account the air temperature and pressure (McHale, 2002). Based on the laser data, the air-bursting round can also be programmed to fly for a certain distance and then explode in the air, hitting targets below or nearby.

ATK Integrated is the system integrator and Heckler & Koch Defense Inc. of Sterling, Virginia (a subsidiary of Heckler & Koch GmbH, Germany) is the main weapon developer. Other participants are Brashear LP in Pittsburgh for the fire control system; Octec in Bracknell, England, for the target tracker; and Leica in Switzerland for the ovular compass (McHale, 2002). ATK Integrated was awarded an initial USD 105 million contract to develop the weapon, which is slated to cost at least USD 18,000 per unit (Kennedy, 2004a). Because of the cost, the Army plans to issue the OICW to only four of the nine members of an infantry squad. Moreover, the developers have been struggling to reduce the weight of the weapon from the current 18.8 pounds to 15 pounds or less. Because of the weight and bulk, the Marine Corps has not yet decided whether to use the gun at all (Kennedy, 2002). Because of other technical problems, the original target date for delivery—2005—has been pushed back until at least 2010.

Given these delays and the immediate requirement for weapons in the Middle East, the Army has decided to pursue rapid development of the separate components of the OICW. The newly planned XM8 Lightweight Modular Weapon System is the rifle portion of the XM29, designed to replace the M16 rifle and the M4 carbine. It will be a modular design in four variations: carbine, sharpshooter, automatic rifle, and compact carbine (Kennedy, 2004a). It is supposed to be much more reliable than the M16, firing up to 20,000 rounds before needing service (Kennedy, 2004a). In October 2002 the Army awarded a USD 5 million contract for its development to the same team developing the OICW—ATK Integrated—with Heckler & Koch Defense designing and building the weapon. HK Defense is building a large production facility in Columbus, Ohio, though initially the plant will assemble the weapons only from parts built in Germany (Adams, 2004). Also in development is the XM25 Air Burst Weapon, the other half of the OICW, using a 25 mm round instead of the OICW's 20 mm munition.³⁰ These weapons probably will not be ready until 2008.

The Special Operations Command (SOCOM) is also looking to develop its own next-generation rifle. Known as the Special Combat Assault Rifle (SCAR), the new weapon is meant to replace the M4A1, MK11, and the M14 rifles currently in use by Special Operations Forces (Kennedy, 2004b). SOCOM wants to have at least six varieties of the weapon—standard, close-combat, and sniper, all in both 5.56 mm and 7.62 mm formats. In fiscal year 2004, the Pentagon funded testing of Special Operations Forces combat rifles from Belgium and Germany under the Foreign Comparative Testing (FCT) Program (Kennedy, 2001). The FCT Program allows the US military to look abroad for competitive, non-development contracts to satisfy its requirements more quickly and economically (US Department of Defense, 2004). In November 2004, FN Manufacturing Inc. of Columbia, South Carolina, a subsidiary of the Belgian firm FN Herstal, won the contract, beating Heckler & Koch Defense and Colt Defense LLC for this contract (FN Herstal News, 2004).

The Army has completed production of a new M107 long-range sniper rifle, which it is now sending to soldiers in Afghanistan. Barrett Firearms Manufacturing Inc., of Murfreesboro, Tennessee, makes the rifles. As of August 2004, the Army had 650 M107 rifles in service (Tiron, 2004). It plans ultimately to purchase more than 2,900 of them—one for every sniper team (Kennedy, 2001).

The M107 is much shorter and lighter than the old .50 calibre sniper rifle being used by most services, the M82A3, also made by Barrett (Kennedy, 2001). The Pentagon’s research wing is working with Australian-based MetalStorm and the US-based Science Applications International Corporation to design a new lightweight sniper rifle that uses MetalStorm technology—a barrage of .45 calibre rounds fired at a very fast rate (Ezell, 2001). The Marines are replacing their M40A1 sniper rifles with M40A3 weapons, made by hand at the Marine Corps Marksmanship Training Unit at Quantico, Virginia (Kennedy, 2002).

Military shotguns

The Marines are managing the development of a new joint-services combat shotgun, the M1014, to replace the wide variety of shotguns currently in use throughout the armed services (Kennedy, 2001). The shotgun is semi-automatic instead of pump-action, meaning it reloads automatically. It is designed for use in guard duty, close combat, and crowd control. Benelli Armi SpA of Urbino, Italy produces the weapon, also known as the M4 Super 90, with the first USD 2.8 million contract for 4,000 copies for the Marines. As of January 2001, the Army, Coast Guard, and Bureau of Immigration and Customs Enforcement were planning to buy several thousand, while several other government agencies had also expressed interest (Kennedy, 2001). The US military deployed in Afghanistan is also testing a lightweight shotgun that attaches to the bottom of a weapon like the M4 carbine or the new X8. The weapon would be attached in close combat or in case of a need to break down a door or fire non-lethal munitions (Kennedy, 2004c).

Ammunition procurement and production

US military procurement of small arms ammunition dropped sharply in the 1980s and 1990s, first because of a glut in the ammunition supply and later because of a belief that guided missiles and smart bombs delivered by aircraft—rather than ammunition fired by infantry—were the wave of the future (Williams and Scully, 2004). While operations in places like Kosovo followed this logic, the wars in Afghanistan and Iraq have featured intensive close combat. As a result, US military demand for ammunition has risen suddenly and steeply.

Although the military is reluctant to state that there is a small arms ammunition shortage, producers are struggling to meet demand. As detailed in Appendix C, the DOD’s ammunition procurement budget doubled between FY 1998 and 2000, and again between FY 2000 and 2005.

US forces use about six million rounds of rifle and machine-gun ammunition per month in Iraq (Peters, 2004). Even more ammunition is used in training, as the Army has increased training in small arms for supply and other units that previously did not receive intense live-fire training. The Navy has also increased small arms training requirements—and ammunition demand—since the attack on the USS Cole destroyer in 2000 (Wallach, 2002).

According to a 2004 notice from the DOD to ammunition makers, the military is ‘in an environment where projected [ammunition] requirements are expected to increase for the foreseeable future’ (Matthews and Scully, 2004). The Army currently owns only one ammunition plant (down from 16), namely, the Lake City Army Ammunition Plant in Independence, Missouri, run by Alliant Techsystems (ATK) (Matthews and Scully, 2004). The increase in small arms ammunition demand is evident in ATK’s production levels. In 2000, it was producing about 350 million rounds a year, compared with the present production level of 1.2 billion rounds a year (Matthews and Scully, 2004). In July 2004 the DOD awarded the company a USD 36 million contract to increase production capacity from 1.2 billion rounds a year to 1.5 billion.³¹ Table 5 shows annual production at the plant since its creation in 1941.

Table 5
Major ammunition production runs, Alliant Techsystems Lake City plant

Era	Average annual production
Second World War	1.5 billion
Korean War	1.2 billion
Vietnam War	2.2 billion
9/11/2001	0.4 billion
2004	1.2 billion

Source: Table reproduced from Peters (2004)

Table 6
US military small arms ammunition procurement contracts, 2002–04

Company	Type	Value (USD)	Quantity (rounds, unless listed otherwise)	Award date
ATK	5.56 mm	12,539,934	37,999,800	Sep 2000
Black Hills Ammo.	5.56 mm	9,905,805	11,505 boxes	Nov 2002
Black Hills Ammo.	5.56 mm	9,205,500	max 10m	Nov 2002
ATK	5.56/7.62 mm	24,969,828	–	Nov 2003
ATK	5.56 mm	28,873,120	154,476,720	Mar 2003
ATK	7.62 mm	10,140,139	–	May 2003
ATK	7.62 mm	88,023,488	–	Sep 2003
Nordic Ammo. Co.	5.56/7.62 mm	6,879,570	–	Sep 2003
Olin Corp.	5.56 mm	2,435,791	–	Sep 2003
ATK	Various	27,812,642	–	Dec 2003
Israel Military Ind.	Various	70,000,000	300m	Dec 2003
Olin Corp.	Various	70,000,000	300m	Dec 2003
Olin Corp.	7.62 mm	6,461,000	13m	Jun 2004
ATK	7.62 mm	69,182,458	–	Jan 2004
ATK	5.56/7.62 mm	24,622,117	–	Feb 2004
ATK	Various	140,171,449	–	Mar 2004
Olin Corp.	9 mm	5,011,248	–	Mar 2004
ATK	7.62 mm	38,018,056	–	Mar 2004
ATK	Cartridges	12,690,756	979,225	Apr 2004
ATK	5.56/7.62 mm, .50 cal	9,422,623	–	Mar 2004
Olin Corp.	.50 cal	16,245,955	–	Jun 2004
ATK	Various	5,601,424	–	Jun 2004

Sources: <<http://www.defenselink.mil>>, <<http://procnet.pica.army.mil>>, Peters (2004)

ATK produces more than 90 per cent of the US military’s small arms ammunition (Peters, 2004). Israel Military Industries Ltd. and the Winchester unit of Olin Corp are picking up much of the remaining business, though some members of Congress have expressed strong reservations about using foreign suppliers, in part because of the political dependence that may result (Weinberger, 2004). The Army sought to find another primary supplier to produce around 300 million to 500 million rounds a year for the next five years (Matthews and Scully, 2004). General Dynamics and Alliant were the primary competitors for this contract, with Alliant winning out in September 2005 (US Department of Defense, 2005). Other manufacturers may be reluctant to pursue military contracts because producing ammunition to military specifications requires an investment in special, expensive equipment, which the Army is not willing to underwrite.

If blank, armour-piercing, and tracer rounds are included, the US military uses 85 different types of small arms ammunition. Although there are 11 different sizes used, 95 per cent of procurement is spent on 5.56 mm, 7.62 mm, and .50 calibre munitions (Matthews and Scully, 2004). The Army is also concluding contracts for the development of new ammunition, particularly for the XM series.³² Some ammunition purchases appear on the DOD Web site³³; others appear at the US Army’s TACOM Picatinny Arsenal procurement site.³⁴ Table 6 lists the recent ammunition contracts gathered from these and other sources.

The law enforcement market

The Small Arms Survey estimated in 2001 that US law enforcement officials were holding more than 830,000 small arms.³⁵ Holdings have undoubtedly increased following 9/11, but there is no complete and central data source for small arms procurement by the country’s numerous law enforcement departments, which include local (city and county) forces, state police forces, and federal agencies. According to a source at ATF, under normal circumstances (i.e. on the assumption that the selling company is not under investigation by ATF for some reason) only small arms producers or federally licensed firearms dealers would know about law enforcement purchases.³⁶ Therefore, corporate press releases and news reports on sales contracts are the principal source of information about law enforcement weapons procurement.³⁷

The National Law Enforcement and Corrections Technology Center (NLECTC, 2000) finds that police departments generally in the United States purchase auto-loading pistols for officers—usually either 9 mm Luger, .357 SIG, .40 Smith & Wesson, or .45 ACP variants. (Law enforcement departments also purchase revolvers, carbines, shotguns, and sniper rifles.) These models are made by a number of companies, including Colt’s Manufacturing Company LLC, Glock, Kahr Arms, Kimber Manufacturing, Sturm, Ruger and Company, SIGARMS, Smith & Wesson, and Taurus International.

Glock is one of the leading providers of pistols to US law enforcement agencies. According to the company’s Web site, it supplies arms to more than 7,500 federal, state, and local law enforcement agencies—or 65 per cent of the country’s police departments.³⁸ Glock has a production facility in Smyrna, Georgia.

SIGARMS Incorporated (Exeter, New Hampshire) is also becoming a significant provider of pistols to US police departments. In October 2001, it won a contract to provide the SIG Sauer P228 in 9 mm to 3,200 members of the New Jersey State Police Department (SIGARMS, 2001a). In June 2004, it won a similar contract to provide the Rhode Island State Police’s new duty pistol (P226 in .357 calibre) (SIGARMS, 2004a). The company was already a supplier of guns to the Massachusetts, Connecticut, and Vermont state police departments and is on the list of approved weapons for the New York City Police Department (SIGARMS, 2001b; 2004).

In addition to company press releases, occasional US government reports shed light on US law enforcement firearms procurement or stockpiles. For instance, in 2003 the US General Accounting Office (now called the Government Accountability Office) issued a report on the degree to which various federal law enforcement agencies safeguarded their stockpiles of firearms. According to this survey, in 2002 at least 18 federal agencies had armed security forces, together holding nearly 250,000 firearms (see Table 7). The Immigration and Naturalization Service (which ceased to exist in March 2003) held the majority of these weapons, followed closely by the Federal Bureau of Investigation.

As noted above, in the immediate aftermath of the attacks on the World Trade Center and Pentagon, the US Congress created a Department of Homeland Security (DHS), incorporating many of the previously existing agencies listed in Table 7 as well as creating some new functions. As noted above, this federal

Table 7
US Federal law enforcement small arms inventories, 2002

Agency	Number of firearms
Bureau of Alcohol, Tobacco, Firearms and Explosives	21,125
Bureau of Engraving and Printing	527
Drug Enforcement Agency	14,921
Federal Bureau of Investigation	49,600
Federal Bureau of Prisons	19,023
Federal Emergency Management Agency	188
Federal Protective Service	1,806
Immigration and Naturalization Service	54,930
Internal Revenue Service	5,467
National Institutes of Health	263
National Park Service	10,718
US Customs Service	24,751
US Fish and Wildlife Service	5,234
US Marshals Service	14,495
US Mint	1,026
US Postal Inspection Service	6,228
US Secret Service	9,396
Department of Veterans Affairs	3,319
Total	243,017

Source: US General Accounting Office (2003, table 1)

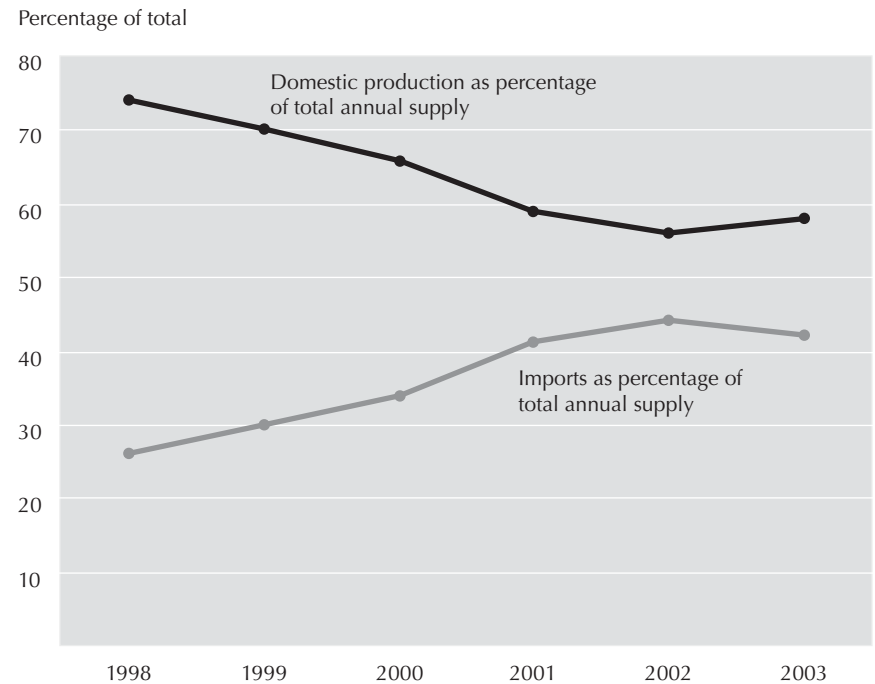
department has become a significant source of firearms procurement. In August 2004 it awarded a USD 26.2 million contract to Heckler & Koch for 65,000 pistols (9 mm, .40 calibre, and .357 calibre) (US Department of Homeland Security, 2004). It also granted a USD 23.7 million contract to SIGARMS, for 65,000 SIG Sauer P299 9 mm and .40 calibre pistols over five years. The weapons will go to the Bureau of Immigration and Customs Enforcement (an agency created as part of the DHS in 2003), Customs and Border Protection, Transportation and Security Administration, the US Coast Guard, and the Federal Law Enforcement Training Center.³⁹

The Transportation Security Administration (TSA), created to ensure US civilian flight safety after 9/11, is also buying handguns to arm pilots in civilian aircraft. Congress passed a law in November 2002 allowing airplane pilots to carry arms to protect themselves against future terrorist attacks. The TSA will provide arms to pilots that specifically request them, after they undergo background checks and a training course. The TSA angered some members of Congress by granting a USD 5 million contract for 9,600 .40 cal semi-automatic pistols to Heckler & Koch of Germany, rather than to a US-based manufacturer (Simon, 2003; Sia, 2003). 🗨️

IV. The US firearms industry

The late 1990s and early 2000s were difficult for US producers of firearms—especially those seeking sales in the civilian market. As Chapter 2 demonstrated, that market fell sharply in 1995, grew only slightly from 1998 to 1999, stagnated in 2000, and dropped again in 2001 (with the exception of a minor boom after 9/11). This period saw a decline in the number of US firearms producers and factories, although not in the overall number of workers. The impact of declin-

Figure 1
Foreign imports and US domestic production for the US civilian market, 1998–2003



Source: ATF reports for US production, US Customs data for imports

ing sales was felt across the top US firearms manufacturing firms, though it hit Colt's Manufacturing Company and Smith & Wesson hardest for various economic and political reasons discussed below.

Part of the difficulty for US manufacturers is the loss of market share to foreign producers (see Figure 1). In 1998 US producers controlled three-quarters of the US civilian firearms market (based on newly available weapons for sale, as indicated in Table 2). By 2001 domestic production accounted for only 60 per cent of guns available for civilian sales. Import data for 2002–04 indicates that imports hover just above 40 per cent of the available US civilian firearms supply.

This chapter provides an overview of the US industries furnishing firearms and ammunition to the US civilian and—to a lesser extent—military markets. It identifies some industry-wide trends and highlights company-specific issues that have arisen since 1998. Most of these companies are privately held businesses—that is, they do not issue publicly traded stock shares. Obtaining information about private firms is substantially more difficult than it is for publicly traded companies; trade publications serve as a main source of information (see Appendix A for more on researching US gun manufacturers).

Overview of US firearms and ammunition industries

According to the US Census Bureau's economic survey for 2002, the total value of small arms and small arms ammunition produced in the United States in 2002 was almost USD 2.7 billion (US Census Bureau, 2004a; 2004b). The Census Bureau collects data from US industries every five years. Table 8 presents the US industry's small arms and ammunition production values for the years 1997–2002. While 1997 and 2002 data is based on actual reports from the industry as a whole, the Census Bureau derives statistics for the intervening years from a smaller sample of the total manufacturers canvassed annually. The statistics show a steady rise in the value of small arms production over this time—a 12.5 per cent increase when adjusted for inflation. The production output values for ammunition were stagnant, growing by only 2 per cent with inflation taken into account.

This economic census data also indicates that firearms companies employ fewer than 10,000 people nationwide, and those employees earn less than USD

Table 8

Total value of US small arms and ammunition production, 1997–2002

Year	Value of small arms production (USD)	Value of small arms ammunition production (USD)
1997	1,248,048,000	976,944,000
1998	1,249,508,000	1,018,425,000
1999	1,356,265,000	1,124,881,000
2000	1,371,300,000	1,032,798,000
2001	1,384,581,000	1,139,560,000
2002	1,574,170,000	1,114,343,000

Source: US Census Bureau

400 million annually. The average annual salary of an employee in the small arms industry (including non-production line staff and part-time staff) is USD 40,000 per year. The ammunition industry is even smaller, with 6,816 total employees in 2002, down from 7,135 in 1997. Firearms and ammunition represent a relatively small share of total industrial production in the United States.⁴⁰

It is also an industry of relatively small-scale production. Of the 184 small arms factories reported in the industry census taken in 2002, only 56 employed more than 20 people. Eighty-four factories had four or fewer employees. Only two factories employed more than 1,000 people. Of the 110 small arms ammunition companies (and corresponding 112 factories) in the United States in 2002, 66 had four or fewer employees; only two employed more than 1,000 people.

Geographically speaking, the small arms industry is concentrated in the north-eastern part of the United States (see Table 9). Four states had more than 1,000 people working in the small arms industry: Connecticut, Massachusetts, New Hampshire, and New York. Texas had the greatest number of factories (16), but these factories employed a total of only 245 people.⁴¹

Between 1997 and 2002, the number of companies manufacturing small arms in the United States decreased from 189 to 177. Likewise, over the same time period the number of factories producing small arms decreased from 196 to 184.⁴² This decline can be explained in part by the financial pressures placed on companies from a number of lawsuits brought against them (see below).

Table 9

Leading US firearms manufacturers: location and estimated yearly revenue*

• Beretta USA (Accokeek, Maryland), a subsidiary of Fabbrica D'Armi Pietro Beretta SpA of Italy; USD 92 million in sales
• Browning Arms Co. (Morgan, Utah and Arnold, Missouri), a subsidiary of Herstal of Belgium; USD 64 million in sales
• Colt's Manufacturing Co. (West Hartford, Connecticut); USD 90 million in sales
• Glock Inc. (Smyrna, Georgia); USD 60 million in sales
• Marlin Firearms Co. (North Haven, Connecticut); USD 55 million in sales
• OF Mossberg & Sons, Inc. (North Haven, Connecticut); USD 53 million in sales
• Remington Arms Co. Inc. (Madison, North Carolina); USD 381 million in sales
• Smith & Wesson Corp. (Springfield, Massachusetts); USD 125 million in sales
• Sturm, Ruger & Co. Inc. (Southport, Connecticut); USD 200 million in sales
• US Repeating Arms Co. Inc. (New Haven, Connecticut), a subsidiary of BWA Inc.; USD 51 million in sales

* As of February 2000

Source: Palmer (2000)

Table 10 lists the leading US firearms manufacturers, as determined by the number of weapons produced annually. This table shows the domination of long-gun makers in the United States—like Remington, the Marlin Firearms Company, and the US Repeating Arms Company—over companies like Smith & Wesson, which make only handguns. Eight of the top ten US-based producers in 2001 were either uniquely or partially devoted to long-gun manufacture.

Appendix D presents the top firearms makers broken down by weapon category. Both the appendix and the table demonstrate that the company rankings remain largely stable among the first-tier producers. For example, Sturm, Ruger was the leading producer of pistols during the four years covered, Smith & Wesson was second for two of those years, and Beretta USA was third for all four years. The next tier of producers is more volatile in terms of company rankings.

The table and the appendix show significant fluctuations in production runs by companies from year to year. Of the top eight pistol producers, all but two produced substantially fewer pistols in 2001 than they did in 1998. Most dramatically, Smith & Wesson cut production from 130,000 in 1998 to 53,000 in 2001.

Of special note, the Violence Policy Center (a US research and advocacy organization that works for greater national arms control) reported in July 2004 that at least 42 companies were producing assault weapons in the United States, of which a significant number also produced other types of firearms.⁴³ This assessment was made before the US Congress allowed the ban on sales of assault weapons to civilians to expire in September 2004.

Export dependence by company

A later chapter presents data on US small arms exports in general, but this section looks at how exports figure within US firearms and ammunition manufacturers' production levels. As a whole, the US industry is producing firearms for the US market, but, as Table 11 illustrates, some particular categories of weapons are produced largely for export. Similarly, some leading small arms manufacturers are not at all dependent on the export market, while others are highly dependent. Table 11 lists those companies that exported more than 1,000 of any type of firearm in any given year during 1998–2001.

As the table shows, there are several instances when a company—usually a small producer—exported its entire annual firearms production; see, for example, American Derringer Corporation, Black Creek Inc., Davis Industries, and Gerald Gordon. These particular companies are not major producers, and in some cases they produced for only one year, probably producing solely for one export order. Even so, they were able to fill relatively large foreign orders; Black Creek supplied more than 8,000 pistols in 2000, and Davis Industries exported more than 13,000 pistols in 2001. These companies are obviously highly dependent on foreign purchases. Two other small companies—OF Mossberg and Maverick Arms—showed an increase in export dependence during 1998–2001 in their production of 'miscellaneous' small arms. Both went from exporting 11 per cent of annual production in 1999 to 38 per cent and 79 per cent, respectively, in 2001.

By contrast, of the top ten US small arms producers in 2001 (see Table 10), only Smith & Wesson exported more than 10 per cent of its annual production in 2001. Two of the top ten producers—Bryco Arms and Beemiller Inc.—exported nothing at all. It is clear from the data that the top producers, with

Table 10
Leading US firearms manufacturers: production levels, 1998–2001

Company	2001			
	Total production	Rank	Domestic production	Rank
Remington	565,586	1	533,467	1
Sturm, Ruger & Co.	515,031	2	500,008	2
Marlin Firearms Co.	258,383	3	247,772	3
H & R 1871, LLC	192,541	4	186,877	4
OF Mossberg	182,091	5	164,144	5
US Repeating Arms Co.	158,371	6	154,904	6
Smith & Wesson	155,560	7	119,376	7
Savage Arms Co.	72,765	8	71,754	8
Bryco Arms	66,874	9	66,874	9
Beemiller Inc.	64,328	10	64,328	10
Argus Publications Inc.	63,037	11	63,037	11
Beretta USA Corp.	58,356	12	56,593	12
Kel Tec CNC Ind. Inc.	46,229	13	46,229	13
Arms Technology Inc.	46,198	14	45,856	14
Colt's Manufacturing Co.	43,119	15	38,282	15
Maverick Arms Inc.	38,293	16	18,540	22
Thompson Center Arms	36,878	17	36,101	16
Heritage Mfg. Inc.	34,100	18	34,100	17
Kimber Mfg. Inc.	32,746	19	32,533	18
Bushmaster	31,346	20	31,179	19
Springfield	27,483	21	26,867	20
North American Arms Inc.	27,555	22	25,959	21
Sig Arms Inc.	–	NA	–	NA
Southwest Metal Fin.	–	NA	–	NA
Phoenix Arms	–	NA	–	NA
Lorcin Engineering Co.	–	NA	–	NA
Davis Industries	13,656	no rank	–	NA

2000				1999			
Total production	Rank	Domestic production	Rank	Total production	Rank	Domestic production	Rank
605,427	2	583,017	2	617,130	2	589,176	2
672,728	1	652,682	1	759,751	1	736,048	1
288,541	3	278,393	3	304,074	4	291,475	4
220,459	6	213,086	5	229,079	7	214,929	7
272,134	4	258,584	4	352,637	3	335,979	3
191,180	7	184,376	6	299,978	5	279,301	5
220,993	5	171,971	7	279,435	6	224,379	6
162,467	8	161,486	8	82,119	10	81,257	9
116,664	9	116,664	9	68,254	12	68,254	12
62,060	12	62,060	11	64,040	14	63,940	14
61,387	14	60,987	13	41,405	16	40,905	15
91,291	10	89,308	10	118,368	8	116,889	8
42,792	16	42,792	16	31,553	22	31,553	22
19,812	24	19,812	23	20,695	26	16,917	27
65,363	11	60,425	14	84,447	9	76,362	10
32,432	20	19,490	24	49,299	15	37,699	17
26,511	22	25,713	21	19,785	27	17,944	26
24,170	23	24,170	22	32,025	21	32,025	21
49,075	14	48,926	15	37,298	18	37,170	18
39,932	17	39,926	17	64,506	13	64,374	13
36,904	18	36,182	18	38,990	17	38,161	15
32,932	19	31,216	19	35,268	19	33,064	20
–	NA	–	NA	72,398	11	71,964	11
61,957	13	61,957	12	31,268	23	31,268	23
–	NA	–	NA	22,195	25	22,195	25
–	NA	–	NA	–	NA	–	NA
28,723	21	27,313	20	33,344	20	33,344	19

Table 10 continued

Leading US firearms manufacturers: production levels, 1998–2001

Company	1998			
	Total production	Rank	Domestic production	Rank
Remington	612,439	2	573,391	2
Sturm, Ruger & Co.	634,692	1	609,308	1
Marlin Firearms Co.	308,389	4	284,603	4
H & R 1871, LLC	236,360	6	212,604	6
OF Mossberg	322,764	3	308,538	3
US Repeating Arms Co.	187,474	7	174,284	7
Smith & Wesson	273,060	5	270,054	5
Savage Arms Co.	85,172	10	84,789	10
Bryco Arms	66,329	12	66,329	12
Beemiller Inc.	52,285	15	52,135	14
Argus Publications Inc.	35,210	18	33,971	17
Beretta USA Corp.	110,890	9	108,557	8
Kel Tec CNC Ind. Inc.	20,512	24	20,512	23
Arms Technology Inc.	20,198	25	20,198	24
Colt's Manufacturing Co.	120,437	8	108,492	9
Maverick Arms Inc.	60,862	13	35,461	15
Thompson Center Arms	26,980	21	24,193	21
Heritage Mfg. Inc.	–	NA	–	NA
Kimber Mfg. Inc.	31,762	20	31,688	19
Bushmaster	25,610	22	25,098	20
Springfield	23,818	23	22,675	22
North American Arms Inc.	38,937	17	34,673	16
Sig Arms Inc.	54,531	14	52,137	13
Southwest Metal Fin.	–	NA	–	NA
Phoenix Arms	44,295	16	–	NA
Lorcin Engineering Co.	79,250	11	75,250	11
Davis Industries	33,308	19	33,308	18

Notes: Total column includes quantity of weapons produced for domestic consumption and export; domestic column is production quantities for consumption by US civilian market only; NA means not applicable due to zero quantity.

Source: ATF

Table 11

Export dependence of US small arms firms, 1998–2003

Company/Weapon Type	1998		
	Produced	Exported	Per cent
American Deringer Corp./Pistols	3,167	3,167	100%
AR-7 Industries/Rifles	–	–	NA
Argus Publications Inc./Rifles	35,210	1,239	4%
Arms Technology Inc./Pistols (2)	20,198	–	0%
Beretta USA Corp./Pistols	110,719	1,198	1%
Beretta USA Corp./Shotguns	–	1,113	*
Black Creek Inc./Pistols	–	–	NA
Colt's Manufacturing/Pistols	62,757	3,968	6%
Colt's Manufacturing/Revolvers	24,468	4,329	18%
Colt's Manufacturing/Rifles	33,212	3,648	11%
Davis Industries/Pistols	33,308	–	0%
Gordon, Gerald Paul Jr./Rifles	–	–	NA
H & R 1871 Inc./Shotguns	202,908	23,051	11%
Ithaca Gun Parts & Serv./Shotguns	1,326	–	0%
Lorcin Eng. Co. Inc./Pistols	79,250	4,000	5%
Marlin Firearms Co./Rifles	306,164	15,884	5%
Maverick Arms Inc./Misc.	No Data	No Data	NA
Maverick Arms Inc./Shotguns	60,862	25,401	42%
North American Arms/Revolvers	32,667	4,122	13%
OF Mossberg & Sons/Misc.	No Data	No Data	NA
OF Mossberg & Sons/Shotguns	322,764	14,226	4%
Remington Arms/Rifles (2)	275,912	21,772	8%
Remington Arms/Shotguns	336,527	17,276	5%
Savage Arms Inc./Rifles	80,894	273	–
Savage Arms Inc./Shotguns	4,278	110	3%
Sig Arms/Pistols	54,531	2,394	4%
Smith & Wesson Corp./Pistols (2)	133,477	3,006	2%
Smith & Wesson Corp./Revolvers	139,583	–	0%
Special Weapons LLC/Rifles	–	–	NA
Sturm, Ruger & Co./Pistols	161,058	4,026	2%
Sturm, Ruger & Co./Rifles (2)	332,538	14,050	4%
Sturm, Ruger & Co./Revolvers	120,417	7,178	6%
Taurus International/Pistols	17,820	772	4%
Thompson Center Arms/Pistols	11,192	1,659	15%
Thompson Center Arms/Rifles	15,788	1,128	7%
United States Firearm Manu./Rev.	–	–	NA
US Repeating Arms/Rifles (2)	112,357	5,288	5%
US Repeating Arms/Shotguns (2)	75,117	7,902	11%

Note: NA = Not applicable; – = No data reported; * = Exports greater than production.

Table 11 continued

Export dependence of US small arms firms, 1998–2003

Company/Weapon Type	1999		
	Produced	Exported	Per cent
American Deringer Corp./Pistols	2,774	–	0%
AR-7 Industries/Rifles	6,049	6,049	100%
Argus Publications Inc./Rifles	41,405	500	1%
Arms Technology Inc./Pistols (2)	20,695	3,778	18%
Beretta USA Corp./Pistols	117,684	1,070	1%
Beretta USA Corp./Shotguns	–	408	*
Black Creek Inc./Pistols	–	–	NA
Colt's Manufacturing/Pistols	38,320	2,355	6%
Colt's Manufacturing/Revolvers	16,984	2,120	12%
Colt's Manufacturing/Rifles	29,143	3,610	12%
Davis Industries/Pistols	33,344	–	0%
Gordon, Gerald Paul Jr./Rifles	–	–	NA
H & R 1871 Inc./Shotguns	187,562	13,713	7%
Ithaca Gun Parts & Serv./Shotguns	–	4,357	NA
Lorcin Eng. Co. Inc./Pistols	–	–	NA
Marlin Firearms Co./Rifles	301,874	12,534	4%
Maverick Arms Inc./Misc.	10,961	1,250	11%
Maverick Arms Inc./Shotguns	38,338	10,350	30%
North American Arms/Revolvers	27,892	2,122	8%
OF Mossberg & Sons/Misc.	22,793	2,570	11%
OF Mossberg & Sons/Shotguns	329,829	14,088	4%
Remington Arms/Rifles (2)	252,776	16,833	7%
Remington Arms/Shotguns	364,354	11,121	3%
Savage Arms Inc./Rifles	79,102	759	1%
Savage Arms Inc./Shotguns	3,856	94	2%
Sig Arms/Pistols	72,398	434	1%
Smith & Wesson Corp./Pistols (2)	126,711	17,199	14%
Smith & Wesson Corp./Revolvers	152,724	37,857	25%
Special Weapons LLC/Rifles	253	1	0%
Sturm, Ruger & Co./Pistols	213,876	3,519	2%
Sturm, Ruger & Co./Rifles (2)	426,226	13,044	3%
Sturm, Ruger & Co./Revolvers	98,855	6,350	6%
Taurus International/Pistols	10,418	1,145	11%
Thompson Center Arms/Pistols	8,605	828	10%
Thompson Center Arms/Rifles	11,180	1,013	9%
United States Firearm Manu./Rev.	–	–	NA
US Repeating Arms/Rifles (2)	154,019	8,731	6%
US Repeating Arms/Shotguns (2)	145,959	11,946	8%

2000			2001			2002		
Produced	Exported	Per cent	Produced	Exported	Per cent	Produced	Exported	Per cent
1,446	92	6%	1,794	–	0%	860	–	0%
–	–	NA	2,439	–	0%	2,567	–	0%
61,387	–	0%	63,037	–	0%	89,149	1,050	1%
18,996	–	0%	38,145	92	0%	22,399	–	0%
90,532	1,116	1%	58,151	1,752	3%	72,283	3,001	4%
–	–	NA	–	73	*	333	11	3%
8,150	8,150	100%	–	–	NA	–	–	NA
26,470	1,645	6%	25,916	1,048	4%	14,995	650	4%
8,943	–	0%	5,732	184	3%	4,270	120	3%
29,950	2,679	9%	11,471	3,605	31%	16,490	2,884	17%
28,723	1,410	5%	13,656	13,656	100%	–	–	NA
686	–	–	1,337	1,337	100%	–	–	NA
162,706	7,152	4%	140,758	5,478	4%	120,676	1,470	1%
–	–	NA	2,729	–	0%	3,739	–	0%
–	–	NA	–	–	NA	–	–	NA
10,088	5,752	57%	7,037	5,523	79%	5,085	1,125	22%
22,344	7,152	32%	31,265	14,230	46%	59,422	9,350	16%
27,326	1,529	6%	22,146	1,428	6%	23,667	1,062	4%
19,640	5,225	27%	12,995	4,995	38%	14,900	300	2%
252,494	8,331	3%	168,733	12,952	8%	192,802	5,035	3%
250,249	13,463	5%	289,470	19,654	7%	299,377	23,086	8%
355,178	8,947	3%	276,116	12,465	5%	298,603	12,767	4%
158,136	958	1%	70,005	1,004	1%	101,492	–	0%
2,528	85	3%	2,290	7	0%	3,087	2,236	72%
–	–	NA	–	–	NA	71,483	3,600	5%
90,406	10,116	11%	63,235	9,807	16%	69,568	9,024	13%
130,587	40,414	31%	92,325	26,377	29%	118,047	25,810	22%
–	1,520	*	1,378	–	0%	378	–	0%
233,598	2,047	1%	112,847	1,670	2%	114,870	1,309	1%
309,017	12,868	4%	243,600	9,504	4%	303,507	14,206	5%
112,113	4,885	4%	150,844	3,740	3%	148,199	4,392	3%
10,786	378	4%	7,114	1,425	20%	11,001	1,958	18%
287,418	10,148	4%	258,383	10,611	4%	257,116	12,689	5%
9,329	380	4%	7,960	306	4%	5,760	217	4%
17,182	418	2%	28,918	471	2%	37,821	214	1%
694	60	9%	1,021	16	2%	1,191	61	5%
116,616	4,975	4%	112,010	2,633	2%	124,666	3,752	3%
74,564	1,829	2%	46,361	834	2%	49,674	599	1%

Table 11 continued

Export dependence of US small arms firms, 1998–2003

Company/Weapon Type	2003		
	Produced	Exported	Per cent
American Deringer Corp./Pistols	155	–	0%
AR-7 Industries/Rifles	2,479	–	0%
Argus Publications Inc./Rifles	82,597	1,650	2%
Arms Technology Inc./Pistols (2)	24,536	–	0%
Beretta USA Corp./Pistols	92,033	985	1%
Beretta USA Corp./Shotguns	3,679	–	0%
Black Creek Inc./Pistols	–	–	NA
Colt's Manufacturing/Pistols	13,675	655	5%
Colt's Manufacturing/Revolvers	3,486	230	7%
Colt's Manufacturing/Rifles	18,480	1,116	6%
Davis Industries/Pistols	–	–	NA
Gordon, Gerald Paul Jr./Rifles	–	–	NA
H & R 1871 Inc./Shotguns	114,044	1,330	1%
Ithaca Gun Parts & Serv./Shotguns	5,514	–	0%
Lorcin Eng. Co. Inc./Pistols	–	–	NA
Marlin Firearms Co./Rifles	233,759	10,280	4%
Maverick Arms Inc./Misc.	6,264	4,599	73%
Maverick Arms Inc./Shotguns	61,084	6,603	11%
North American Arms/Revolvers	25,668	952	4%
OF Mossberg & Sons/Misc.	13,657	2,390	18%
OF Mossberg & Sons/Shotguns	178,931	7,602	4%
Remington Arms/Rifles (2)	290,873	21,913	8%
Remington Arms/Shotguns	300,399	12,269	4%
Savage Arms Inc./Rifles	92,122	3,969	4%
Savage Arms Inc./Shotguns	4,666	117	3%
Sig Arms/Pistols	57,501	4,426	8%
Smith & Wesson Corp./Pistols (2)	78,236	5,638	7%
Smith & Wesson Corp./Revolvers	120,398	22,058	18%
Special Weapons LLC/Rifles	–	–	NA
Sturm, Ruger & Co./Pistols	98,422	1,257	1%
Sturm, Ruger & Co./Rifles (2)	234,595	15,004	6%
Sturm, Ruger & Co./Revolvers	110,894	2,041	2%
Taurus International/Pistols	–	–	NA
Thompson Center Arms/Pistols	6,121	409	7%
Thompson Center Arms/Rifles	47,569	318	1%
United States Firearm Manu./Rev.	1,026	1,026	100%
US Repeating Arms/Rifles (2)	125,736	5,560	4%
US Repeating Arms/Shotguns (2)	42,650	940	2%

the exception of Smith & Wesson, are much more dependent on the domestic market than on foreign sales. And Smith & Wesson's export dependence is a recent development. That company's revolver exports grew from zero in 1998 to 29 per cent of its revolver production (more than 26,000 revolvers) in 2001, perhaps due to its temporary acquisition by a UK company. The company experienced a similar but less drastic increase in its export dependence of pistols, going from 2 per cent of annual production in 1998 to 16 per cent in 2001. Other producers in the top ten have either seen a relatively constant level of export dependence during 1998–2001 or significantly decreased their export dependence—as was the case for US Repeating Arms and H & R 1871 Inc.

Firearms industry lawsuits

In addition to increased foreign competition and a general economic downturn, US handgun makers have been hit hard by lawsuits brought against them by more than 30 cities, the state of New York, and the National Association for the Advancement of Colored People. The plaintiffs—including the cities of Chicago, Los Angeles, St. Louis, Boston, Detroit, Atlanta, and Washington, DC—are accusing firearms firms and retailers of irresponsible manufacture or marketing of their goods, leading to high costs for their public health and public protection services. Because of the nature of the complaint, only makers of handguns have been targeted, though some of the companies named in the suits also make rifles or shotguns. Handgun manufacturers typically are not as financially secure as long-gun or ammunition makers, and the cost of fighting the suits has brought some firms to bankruptcy (Barrett, 1999). One lawyer for the firearms industry estimated that handgun manufacturers had spent USD 175 million on legal fees as of November 2004. He also said that the suits have led to hikes of between 200 and 400 per cent in insurance rates for firearms producers (Reisinger, 2004).

US courts dismissed some of the lawsuits—including the original New Orleans suit, the Chicago case, and the consolidated city suits in California—for various legal reasons. But many individuals and groups have won settlement in their cases. Most recently, in September 2004 Bull's Eye Shooter Supply in Tacoma, Washington, and Bushmaster Firearms in Windham, Maine, paid out USD 2.5

million to families affected by a series of shootings in the Washington, DC, area in 2002 (*News Tribune*, 2004). The much publicized sniper shootings of 13 people were carried out with a weapon made by Bushmaster and purchased at Bull's Eye. In addition, high courts in Washington, DC, Indiana, and Ohio have reinstated lawsuits that lower courts had previously dismissed against the gun industry (*BNA Product Safety & Liability Reporter*, 2004; Brady Center to Prevent Gun Violence, 2002; Coyne, 2005).

In reaction to the lawsuits, and at the urging of the gun industry and its supporters, as of September 2005, 38 (of 50) states had passed laws prohibiting local jurisdictions (cities and states) from suing the industry. And in July 2005 the US Senate passed a bill, later signed into federal law, that prohibits current and future lawsuits against firearms manufacturers and retailers for misuse of weapons that were lawfully sold.⁴⁴

Company profiles: recent highlights

The lawsuits shook up the US firearms manufacturing industry in both profound and subtle ways. This section highlights the leading US manufacturers' responses to the lawsuits, as well as other recent corporate developments.

Colt's Manufacturing Company Inc. is the oldest US firearms manufacturer, producing weapons for the civilian, law enforcement, and military markets since 1847. The company's fortunes have been in decline since the 1980s. In 2002 Colt Defense LLC split off from Colt's Manufacturing for sales to law enforcement, military, and private security markets worldwide.

Colt's was damaged significantly by the loss of its contract in 1985 to supply standard pistols to the US military. The company had been the principal supplier of military pistols since the mid-1800s, though it stopped producing the standard M1911A1 pistol in 1945 (Kennedy, 2000). (Colt's still produces variants of this weapon for law enforcement agencies in the United States; Mills and Kamm, 2002.) In 1988 it also lost the contract to produce the M16 rifle for the US Army—a weapon it had been making since 1959 (*Hoover's Company Profiles*, 2004a). After the Belgian-owned Fabrique Nationale (FN) Herstal took over production, Colt's tried unsuccessfully to purchase FN Herstal in 1997 (*Hoover's Company Profiles*, 2004a). Colt Defense still produces the popular M4 carbine

for the US military, but this weapon will eventually be phased out in favour of the new XM8 rifle.

In 1998 Ron Stewart, then Colt's CEO, offended the company's civilian customer base by endorsing federal registration of handguns. His views provoked a grass-roots boycott of Colt's firearms that cost the company an estimated USD 10 million (Bai, 2000). The company's next CEO, Steven Sliwa, attempted to bring a smart gun—one that can be fired only by its authorized owner—to market. He met secretly with gun control advocates to discuss the product, further angering some of Colt's clientele in the process (Bai, 2000). In the end, the company lost the race to develop a viable smart gun, and the iColt subsidiary company created to produce smart guns went out of business.

In an effort to ward off future lawsuits, Colt's stopped most of its consumer handgun production in 1999. As a result, between 1998 and 2003 pistol production plummeted from nearly 59,000 to fewer than 14,000, and revolver production dropped from 20,000 to 3,500. Rifle production also fell sharply—from 29,500 to fewer than 8,000 in 2001, with a subsequent rise to 18,500 in 2003 (ATF, 1998–2003).

As of 2003, Colt's still had annual production worth USD 95 million with 700 employees, but it had a zero per cent growth rate over the previous year (*Hoover's Company Profiles*, 2004a).

The lawsuits also affected *Smith & Wesson*, financially and in the eyes of its customers. In March 2000 Tompkins PLC, its UK-based owner, reached an agreement with the Clinton Administration on a wide range of safety issues, thereby seeking to protect itself from federal lawsuits. Many gun retailers strongly opposed this action. Encouraged by the National Rifle Association, some gun retailers and consumers boycotted Smith & Wesson products. The company suffered large sales losses and laid off workers but was able to weather the boycott, probably because it sells 25 per cent of its stock to law enforcement officers, and because it markets many high-end products to collectors who may not be susceptible to pressure for such a boycott (Bai, 2000).

But the repurchase of the company by Saf-T-Hammer Corporation (a US firm, now the Smith & Wesson Holding Corporation) in 2001 brought back many buyers. At the 2002 SHOT show, the company's orders doubled from the previous year, and its corporate earnings during the last nine months of

2002 were up 30 per cent from the previous year (PR Newswire, 2002). Bob Scott, Smith & Wesson's new president, was given the Shooting Industry Award in April 2002 by the Shooting Industry Academy of Excellence, signalling the company's return to grace among gun owners (Thurman, 2003a). An announcement of nine new guns at four national and international trade shows in 2003 led to a 60 per cent increase in purchase orders over the previous year (*Business Wire*, 2003). By 2004, Smith & Wesson had regained its title as top US handgun maker, with sales up 25 per cent from the previous fiscal year (*Patriot Ledger*, 2004).

Press reports in 2000 noted that *Glock, Inc.*, a US unit of Austria's Glock GmbH based in Smyrna, Georgia, was considering making a similar deal with the Clinton Administration (Brice, 2000). As a provider of pistols to more than half of the nation's police districts, it had an interest in maintaining good relations with the cities that were bringing the lawsuits. The city of Atlanta, for example, said it would recommend purchases only of weapons whose manufacturers had made a safety agreement. Ultimately, Glock decided not to sign the agreement, in part because it felt the requirement to implement smart gun technology within three years was unreasonable. (Interestingly, there is no data on Glock in the publicly released portion of ATF's annual firearms manufacturing and export reports. As a result, all of the tables and figures in this study covering domestic pistol production and exports do not include data on Glock.)

Sturm, Ruger & Co., Inc.—as the number-one maker of pistols and revolvers in the United States for years—has also been targeted by the lawsuits. Sturm, Ruger also produces rifles and shotguns, making it the only US firm to produce all types of firearms. Sturm, Ruger has also provoked a consumer boycott by encouraging its distributors to sell its weapons only in stores, and not at gun shows (*Hoover, Company Profiles*, 2004b). The company was in a good position to weather the lawsuits and customer anger, however. It had experienced enormous growth between 1998 and 1999, increasing its pistol production by 34 per cent and its rifle production by 29 per cent. In fact, one industry analyst said that the overall market rise in 1999 was due in large part to this increase by Sturm, Ruger (Thurman, 2001). And yet it was not immune from the economic and political fallout during this period. The company's sales income dropped by 39 per cent between 1999 and 2003, and employment was cut from 1,952 to 1,242 (*Hoover's Company Records*, 2004a).

The reduction in number of small arms companies noted above was in part due to mergers and bankruptcies, also resulting from the lawsuits. For example, the owner of *H&R 1871 LLC*, the number-three shotgun producer and a top-ten rifle producer, agreed to be bought out by the *Marlin Firearms Co.* in 2000. The sale was made to protect the company from the high costs of fighting the lawsuits, which represented around USD 250,000 in annual legal fees (Kievra, 2000). Even though it stopped small-pistol production in 1999, it was still named in some of the suits. Marlin Firearms is also being sued but appears to be in a better position to handle the costs.

In addition, a number of small producers of 'Saturday night specials'—small, cheap semi-automatic pistols, renowned for their poor safety features and popularity with street criminals—either closed or filed for bankruptcy because of the lawsuits and declining handgun sales in the second part of the 1990s. Six of these companies based around Los Angeles, California, were dubbed the 'Ring of Fire' for their contribution to violent crime through their production of Saturday night specials.⁴⁵ At their prime in the early 1990s, they built one-quarter of US pistols. Losses in major liability lawsuits forced them all out of business. *Lorcin Engineering Co.*, which had been the fourth-largest producer of pistols in 1998, closed its doors in 1999. Others filed for bankruptcy to protect themselves from claims. For instance, *Bryco Arms*, the nation's number-two pistol producer in 2000 and 2001, filed for bankruptcy to avoid paying a USD 24 million claim won against it in a product liability lawsuit (Anton, 2004).

In 2001 *Remington Arms* overtook Sturm, Ruger to become the number-one firearms manufacturer in the United States (in terms of production quantities). This was the first time a long-gun maker had held that title, which it maintained in both 2002 and 2003 (Thurman, 2003b; ATF, 2001; 2002). Remington's improved fortune is due to a rise in rifle production—one of the few increases in production throughout the industry in 2001. It is also a top seller of ammunition and is the only US company that makes both firearms and ammunition (*Hoover's Company Records*, 2004b).

SIGARMS, a Swiss-German company with production facilities in Exeter, New Hampshire, is a curious case. As noted in Chapter III, it is now a significant producer of firearms for police departments in the north-eastern United States, and it recently won a large contract for pistols from the Department of Home-

land Security. The DHS contract—worth USD 23.7 million—also allows other federal agencies to buy SIGARMS weapons without having to go through a testing and evaluation phase. The company also supplies weapons to the US Secret Service and Navy SEALs. Although it ranked seventh and fourth in the US pistol market in 1998 and 1999 respectively, it reported no production at all to ATF in 2000–03. One possible explanation is that its automatic fire weapons, designed largely for law enforcement officers, fall into one of ATF’s ‘confidential’ categories (that is, ‘NFA weapons’—see Table 2, note c). Or it may have cut back on production while it undertook a major overhaul and expansion of its facilities in New Hampshire, raising production capacity by 25 per cent and employment by 27 per cent (Warner, 2004).

SIGARMS markets top-quality guns—the ‘BMW’ of pistols—to individuals and government agencies. In 2003 it introduced the Granite State Rail (GSR) 1911, which won the 2004 Handgun of the Year award from the Shooting Industry Academy of Excellence, a highly coveted award that helps boost the market appeal of the weapon (Ayoob, 2004). 📌

V. Firearms imports into the United States

According to the UN Commodity Trade Statistics Database (UN Comtrade)⁴⁶—the international clearing house of customs data—the United States is the largest importer of small arms in the world. As shown in Chapter 4, imports as a percentage of the total firearms available to the US civilian market have risen consistently since the late 1990s (see Figure 1). Many of the major exporters to the United States, such as Beretta, Glock, and SIGARMS, produce high-quality guns that are receiving increasing attention from US civilian, police, and military customers. In addition, many of these companies now have production facilities on US soil, making them more competitive among a particularly patriotic market base. The Pentagon has also increased its purchases of weapons from non-AUS companies in recent years, though it often requires the weapons to be built in the United States.

This chapter examines the trend lines for firearms imports, provides an overview of local (US-based) manufacture of firearms by foreign-owned firms, and summarizes US laws and regulations governing firearms imports into the United States.

Trends

Small arms imports into the United States rose significantly, though not consistently, between 1998 and 2004 (the last year for which US Customs data is currently available). The number of firearms imported nearly doubled between 1998 and 2002—from 1.29 million to 2.56 million annually. Quantities of small arms imported into the United States fell in 2003 by more than 260,000 from the preceding year’s peak, but then rose slightly in 2004. The dollar value of these imports rose consistently during this period, from USD 258 million to USD 482 million in 2004. Table 12 presents data on the quantity of weapons imported into the United States in recent years, while Table 13 shows the dollar value of those imports.

Table 12
Quantities of small arms imported into the United States, by type, 1998–2004

	1998	1999	2000	2001	2002	2003	2004
Pistols and revolvers	590,661	657,957	712,846	711,017	949,106	762,764	838,856
Military rifles	113,962	158,513	233,173	185,160	266,270	140,007	178,546
Machine guns	2,331	6,547	2,386	6,692	2,894	3,428	2,804
Military shotguns	408	20	8	22	1,758	16,071	192
Muzzle-loading firearms	186,514	155,764	259,315	345,534	380,499	353,673	379,883
Shotguns (non-military) and combination shotgun-rifles	166,490	332,650	332,888	428,312	499,206	498,686	507,050
Rifles (non-military)	229,242	315,413	319,633	322,206	458,684	517,509	499,056
Total	1,289,608	1,626,864	1,860,249	1,998,943	2,558,417	2,292,138	2,406,387

Source: US Customs Service

A breakdown by exporting country and weapon category is available in Appendix E. Overall, Austria, Brazil, Germany, Italy, and Spain have consistently been the leading exporters of firearms to the United States in terms of quantities of weapons shipped, with each country sending at least 100,000 firearms to the United States annually from 1998 to 2004. The most popular categories of weapons imported are pistols/revolvers, non-military rifles, and non-military shotguns, in decreasing order. Muzzle-loading rifles are the fourth most popular firearm import, with about 380,000 of these archaic weapons imported annually in recent years. Spain is the leading source of these imports.

A significant number of handgun (pistol and revolver) imports are destined for US police forces. Appendix E shows that Austria, Brazil, Germany, and Italy are overwhelmingly the largest foreign suppliers of handguns to the US market. Correspondingly, the most popular supplying companies are Glock, Heckler & Koch, Beretta (all of which have US subsidiaries), and Imbel in Brazil (which provides handguns to the FBI). Several other countries—Argentina, Canada, the Czech Republic, Israel, and Spain—comprise a second tier of handgun suppliers. Israel exported more than 100,000 handguns to the United States in 2002, dramatically more than it shipped in previous or later years. Pistol and revolver imports increased in 2004 from the previous year’s levels, but they did not reach the high mark of 2002, when nearly one million weapons were

Table 13
Value of small arms imports, by type, 1998–2004 (in USD millions)

	1998	1999	2000	2001	2002	2003	2004
Military rifles	3.53	8.18	6.5	6.88	7.36	5.3	7.58
Military shotguns	0.17	0.02	0.11	0.03	0.29	3.3	0.17
Machine guns	2.97	2.93	3.85	6.16	2.9	3.74	2.58
Pistols and revolvers	114.47	123.94	130.88	119.81	149.72	148.11	171.04
Muzzle-loading firearms	15.44	13.96	19.23	22.74	29.19	31.95	38.94
Shotguns and combination shotgun-rifles (non-military)	79.85	89.8	113.76	132.38	142.89	151.56	166.76
Rifles (non-military)	41.85	56.29	61.77	55.69	64.45	79.72	95.01

Source: US Customs Service

imported. Most of the 2004 increase can be attributed to Brazil, which shipped nearly 70,000 more handguns to the United States than in the previous year.

Table 13 shows a steady increase in the value of imports over time, even when these values are adjusted for inflation. In 2004 imports neared USD 500 million. By dollar volume, shotguns are the most lucrative and fastest-growing import firearms product, having surpassed pistols in 2003. (In 2004, however, handguns once again topped the charts in terms of value.) As shown in Appendix E, shotgun imports crossed the 500,000-gun threshold for the first time in 2004. Brazil, Italy, and Turkey are the leading sources of foreign shotgun imports into the United States. Turkish exports jumped from fewer than 3,000 in 1998 to nearly 114,000 in 2003, and then dropped by half in 2004. Imports of Russian shotguns increased significantly in 2004, making that country the fourth largest supplier, followed by China, which shipped more than 36,000 shotguns to the US market in 2004.

Nearly half a million civilian (non-military) rifles were imported into the United States in 2004. Canada has been the leading source of these weapons since 1999, shipping nearly 160,000 in 2004. Other leading suppliers include Brazil, Japan, and Romania.

As shown in Table 14, ammunition imports were also on the rise during 1998–2004, but with some fluctuation. A sharp fall from 1999 to 2000 may have

Table 14
Quantities of ammunition imported into the United States, 1998–2004
(in thousands)

	1998	1999	2000	2001	2002	2003	2004
Shotgun cartridges	74,934	108,545	116,947	158,437	200,986	170,351	123,130
Cartridges .22 cal.	113,991	139,812	93,935	80,003	108,333	156,188	348,230
Cartridges for rifles and handguns (not .22 cal.)	503,699	910,049	591,080	654,464	821,245	693,397	783,557
Total	692,624	1,158,406	801,962	892,904	1,130,564	1,019,936	1,254,917

Source: US Customs Service

been due to a glut in the market after consumers loaded up on ammunition in anticipation of a feared Y2K effect (see p. 15). US retailers imported more ammunition in 2004 than during any other year covered in this report.

Quirks in the data

The rise in imports is somewhat surprising given that a number of foreign-owned manufacturers now have factories producing in the United States. For example, FN Herstal created FN Manufacturing in South Carolina to make M16 rifles; Beretta has a factory in Maryland; Heckler & Koch is working on a new factory in Ohio; and Glock has a facility in Georgia. These local factories help improve the popularity of foreign weapons among a typically patriotic clientele. For example, SIGARMS, which has a plant in New Hampshire (known as the ‘Granite state’), is marketing its 1911 Granite Series Rail pistol as ‘completely made in America’ with 100 per cent US parts and design (Ayooob, 2004a).

One possible explanation for some of the high import numbers is that weapons used by US troops abroad are passing through customs on their way back into the United States and are being erroneously classified as ‘imports’. There are cases of transfers that appear bound for repatriated US troops. For example, during 1998–2003 US Customs data show more than 200,000 military rifles imported into the United States from the Balkans. While these figures might represent weapons confiscated or collected by US troops in the region, published data on weapons collection in the Balkans is not consistent with this theory (Faltas, McDonald, and Waszink, 2001). In addition, most weapons collected in the Balkans were destroyed *in situ*. While the US government has stated that it does not include weapons transferred to its troops stationed abroad in its customs data, it is unclear whether it includes such transfers as imports when troops are redeployed home.⁴⁷

Another contributing factor might be the import of foreign weapons by the US government for transfer to third parties. For example, the United States has requisitioned a large number of Bulgarian-made AK-47 rifles to provide to Iraqi soldiers, as well as Austrian Glock pistols for the Iraqi police (see Box 1). US brokers are arranging shipment of most of these weapons. One broker, Kiesler Police Supply Inc., has won at least USD 25 million in contracts since

Box 1

Importing arms for Iraq

As part of its effort to train and equip a new Iraqi Civil Defense Corps, the US military has purchased tens of thousands of assault rifles. To the surprise of US manufacturers, however, the US Department of Defense sent out requests for proposals for brand-new AK-47 assault rifles—the Russian-origin weapon now used by dozens of militaries and non-governmental combatants. The DOD is planning to purchase 50,000 AK-47s and at least 500 million rounds of ammunition for a Defense Corps expected to be 40,000 strong by the end of 2006 (Matthews and Smith, 2004; Wood, 2004).

FN Manufacturing Inc., which makes the US military's M16 assault rifle, was disappointed by the news, especially since the M16 line will close without new orders; the DOD is switching to a new line of assault rifles, and there are not enough foreign customers to keep the line open. Russian exporters were also unhappy because the DOD decided to buy the guns from Arsenal, the Bulgarian company which makes the AK-47 for use with NATO standard 5.56 mm ammunition (Nicholson, 2004). Members of the US Congress protested the decision, but DOD officials defended their choice by noting that AK-47s are much cheaper; the Bulgarian models will cost USD 100 apiece, as opposed to USD 500–600 apiece for an M16 (Nicholson, 2004). The weapons are also better suited to Iraq's sandy conditions and are already familiar to Iraqi soldiers.

US small arms firms were again disappointed when they learned of a no-bid contract to supply handguns to Iraqi police forces. In late 2003, the US-run Coalition Provisional Authority agreed to purchase 50,000 Glock handguns for approximately USD 19 million without allowing US firms to bid on the deal (Matthews, 2003). A Pakistani news source has also claimed that the US military would be buying Pakistani small arms and ammunition to send to forces in Iraq and Afghanistan (Pakistani Press International, 2004).

August 2003 to supply pistols, rifles, ammunition, and other equipment to the Iraqi police (Davis and Adams, 2004; Port, 2004). If these weapons are shipped to Kiesler or other brokers in the United States for conditioning before going on to Iraq, they exaggerate the number of actual firearms imports.

Import rules

Despite large-scale gun imports into the United States, US federal law and regulations generally prohibit the import of firearms—except those deemed appropriate for sporting activities or going to US federal or state agencies or law

enforcement officials.⁴⁸ ATF determines whether specific models of firearms are 'suitable for or readily adaptable to sporting purposes' by assessing their general appearance, caliber, length, weight, frame design, magazine capacity, and other characteristics that distinguish sporting firearms from those designed for military or law enforcement use (such as folding or telescoping stocks, bayonets or bayonet mounts, flash suppressors, grenade launchers, and night sights) (ATF, 2003, pp. 1, 4).

Individuals and companies seeking to import, manufacture, or deal in firearms and ammunition must acquire a licence from ATF. Licences are valid for three years and can be renewed. Importers of firearms, firearm parts, ammunition, and light weapons, as well as any other items on the US Munitions Import List (USMIL),⁴⁹ must also register with ATF under the terms of the Arms Export Control Act.⁵⁰ Importers of machine guns, destructive devices, and other items covered by the National Firearms Act must also register and pay a special occupational tax (ATF, 2003, p. 2).

Exceptions to these licence and registration requirements are made for individuals seeking to import curios and relics for a personal collection, individuals importing sporting-type ammunition or firearm parts, and federally licensed firearms dealers looking to import a weapon on behalf of a specific person. None of these imported items may be resold (ATF, 2003, p. 3).

Each import transaction must also be authorized via a permit from ATF. Permit applications must include, among other information:

- the name and address of the exporter and shipper;
- the name and address of the manufacturer;
- details about the weapon, such as the type, model, calibre, gauge or size, barrel length, overall length, serial number, whether the arm is new or used;
- quantity;
- unit cost; and
- the purpose of import, including final destination if other than importer.⁵¹

Importers of items on the USMIL must also provide a copy of the export licence for the arms in question or an attestation that no such licence is required from the supplying country. Licences are valid for one year from the date of approval.

Certain types of firearms are prohibited from import, except for sale to federal or state law enforcement agencies (or their contractors), or nuclear facilities (for protection of the facilities). Weapons controlled for commercial import include machine guns,⁵² silencers, armour-piercing ammunition,⁵³ semi-automatic assault rifles,⁵⁴ and large-capacity ammunition feeding devices.⁵⁵ The import of surplus military firearms (belonging to either regular or irregular foreign military forces) is also prohibited, except those classified as curios or relics, again with an exception for sale to government or law enforcement.⁵⁶ Surplus military curios and relics are those that have been owned by foreign forces and, with some exceptions, manufactured before 1946. They must be in their original military configuration in order to be imported for commercial sale. The Arms Export Control Act prohibits reimport of US-origin military firearms unless authorized by the Department of State.⁵⁷

Finally, the importation of defence articles manufactured in or being exported from certain countries—including those that the US government has placed under an arms embargo—is prohibited. As of November 2003, this list included: Afghanistan, Angola, Belarus, Burma, China, Cuba, Haiti, Iran, Iraq, Liberia, Libya, North Korea, Rwanda, Somalia, Sudan, Syria, Vietnam, and Zaire (ATF, 2003, p. 6). The US government also has a voluntary restraining agreement with countries of the former Soviet Union that prohibit import of all but a specified list of firearms and ammunition (ATF, 2003, p. 7).

The Defense Department has its own rules for the importation of firearms for its acquisition. Congress is continuously urging the DOD to ‘buy American’, and the DOD often requires foreign-owned firms bidding on major contracts to manufacture them in the United States. But it also has a Foreign Comparative Testing (FCT) Programme, which allows the US military to look to foreign suppliers for ‘non-development’ items. This program is intended to offer ‘cost-effective alternatives to new, and perhaps unnecessary, US developmental efforts and reduce the time to field equipment needed by the war fighter’.⁵⁸ ■

VI. US small arms exports

In addition to being the world’s leading firearms importer, the United States—including government and private industry—is the largest exporter, in terms of value of guns if not quantity.⁵⁹ According to US Customs data (which fails to count some US military shipments), the United States exported, on average, about 350,000 firearms per year during the years 1998–2003 (see Table 15).

Even so, the United States imports significantly more guns than it exports. Gun imports in 2003 totalled USD 424 million (see Table 13), while exports were valued at around USD 100 million (see Table 17). Moreover, small arms represent only a fraction of overall US arms exports in monetary terms and an even smaller fraction of all US exports. Nevertheless, US small arms exports are important because of the inordinate impact firearms supply can have on internal political situations in recipient countries. For example, small arms are among a government’s primary tools for controlling or repressing its population. Similarly, arms supplied to insurgent groups or criminals can contribute to the outbreak of increased communal violence or armed hostilities, resulting in profound hardship for the population. For this reason, the US Congress has mandated several public reports on weapons exports, making it possible to know a good deal more about US exports of firearms than can be known about imports of firearms.

Exports are driven by commercial interests of US firearms manufacturers and by foreign policy considerations of the US government. Since the Second World War, US foreign policy has maintained close military ties with numerous governments around the world through a system of regional military alliances. As of 2005, the US military had ties with more than 146 countries.⁶⁰ Weapons transfers—including small arms—have been used to advance these alliances. This policy of global military engagement and arms transfers has existed through liberal and conservative presidential administrations.

The majority of US small arms exports are commercial rather than political deals. At the same time, exports have always formed an insignificant part of the

US firearms industry's overall sales. With increased competition from foreign producers for the US civilian and military markets, however, some analysts believe that foreign customers will be an increasingly important part of US companies' marketing strategies. Bearing out this assertion, a record high of 122 representatives from US small arms firms attended the Internationale Waffenausstellung (IWA) in Nuremberg, Germany in 2001 (Ezell, 2001a). The IWA is primarily a civilian small arms trade show, but police and military customers also attend. US sport shooting and hunting firms do very well in Germany, providing half of that country's imports in 1999 (Ezell, 2001a). US firms also have a significant presence at the International Sporting Arms and Outdoor show in Italy and the SHOT show in the United States, which draws many foreign retailers.

This chapter surveys US firearms export programmes, laws and regulations, and actual exports during 1998–2004.

Table 15
Quantity of small arms exported, by type, 1998–2003

	1998	1999	2000	2001	2002	2003
Pistols and revolvers	114,042	107,957	74,618	72,825	71,382	65,694
Military rifles	104,076	87,686	99,343	23,096	31,092	32,580
Machine guns	6,358	10,263	1,889	1,511	21,465	4,413
Muzzle-loading firearms	10,358	7,253	4,698	14,684	35,276	4,879
Shotguns (non-military) & combination shotgun-rifles	117,315	63,652	87,303	113,088	115,833	75,684
Rifles (non-military)	78,770	60,922	59,768	74,826	89,746	93,394

Source: US Customs Data

Table 16
Quantity of ammunition exported, 1998–2003

	1998	1999	2000	2001	2002	2003
Shotgun cartridges	122,078	104,841	103,267	92,388	111,868	68,369
Cartridges .22 cal.	179,212	190,980	217,994	173,963	276,840	221,084
Cartridges for rifles and pistols (not .22 cal.)	348,379	323,770	137,186	136,571	92,785	171,175

Source: US Customs Data

Table 17
Value of US small arms exports, 1998–2004 (in USD millions)

	1998	1999	2000	2001	2002	2003	2004
Military rifles	45.81	45.56	28.15	12.99	16.89	26.32	22.92
Military shotguns	0.69	0.43	0.37	0.2	0.16	0.3	0.57
Machine guns	18.43	15.14	2.77	1.67	13.48	13.04	12.95
Pistols and revolvers	27.26	26.62	19.55	20.91	20.04	19.54	18.89
Muzzle-loading firearms	1.31	1.19	0.82	2.25	1.03	1.23	1.27
Shotguns and combination shotgun-rifles (non-military)	18.87	12	14.45	18	17.46	13.5	13.81
Rifles (non-military)	16.18	11.94	13.01	15.85	19.73	22.73	27.09

Source: US Customs Data

Laws, regulations, and policy

The United States has highly developed export control laws, including provisions controlling the operations of private arms brokers. However, the laws are often interpreted in ways that support US foreign policy or commercial goals. The primary law on the export of military goods is the Arms Export Control Act of 1976 (AECA), with the associated International Traffic in Arms Regulations (ITAR). The Foreign Assistance Act of 1961 (FAA) governs overseas development and military assistance, including the transfer of arms. In addition, annual laws, such as those providing appropriations for foreign aid, often include specific provisions affecting the export of arms. Finally, exports of shotguns are regulated by the Export Administration Act and the associated Export Administration Regulations.

The AECA requires the State Department to issue a licence (or permit) for the transfer of all small arms, light weapons, ammunition, spare parts, or any other item on the US Munitions List (USML). The Office of Defense Trade Controls at the State Department makes licensing approval decisions in coordination with various offices at the State and Defense Departments, depending on the recipient and the type of weapon. Certain countries are barred from receiving US small arms outright, because of either UN or US embargoes.⁶¹ Otherwise, decisions are made on a case-by-case basis using guidelines developed by

each administration and the restrictions listed in the laws noted above.⁶² For example, the AECA requires that weapons exported by the United States be used only for self-defence, internal security, UN or other multilateral operations, or (in a recent addition) to prevent the proliferation of weapons of mass destruction.

In addition, the FAA stipulates that governments that are 'gross and consistent' human rights abusers are not eligible to receive US military aid or arms. While this provision has never been invoked,⁶³ the Clinton Administration barred exports of small arms and crowd control equipment to Indonesia and Turkey in the mid-1990s, due to concerns that these weapons would be used in the commission of human rights violations.⁶⁴

Annual foreign aid bills have also barred the transfer of arms and aid to governments installed through a military coup. (President George W. Bush issued an order overriding the military coup provision for Pakistan in March 2003; *Federal Register*, 2003a.)

In addition, US law mandates that foreign governments obtain US government permission before re-exporting any US-origin weapons or parts. The US State and Defense Departments both have programmes to monitor the end use of certain exports to ensure recipients comply with this law (the 'Blue Lantern' and 'Golden Sentry' programmes, respectively). When it appears that this law is being broken on a regular basis or that unauthorized retransfers are likely to occur, the US government may suspend arms sales. For example, the United States cut off small arms transfers to Paraguay in 1996 and Venezuela in 1999 because of those countries' failure to stop illicit retransfers of arms to other countries in the region (Bonner, 2000). Suspensions about the large quantities of small arms going to Canada and the UK (which both have tight civilian arms control restrictions) prompted temporary suspensions of small arms export licences in 2000 and 1998, respectively.⁶⁵

The State Department's end-use monitoring report for 2003 noted that the department had increased the number of checks on small arms and ammunition exports due to heightened concern about diversion. The report states that almost half of the record-high number of 'unfavorable cases'—or instances of ineligible or illegitimate recipients, unauthorized end use, or possible diversion—involved firearms and ammunition (US Department of State, 2004b, p. 2).

The western hemisphere was the region with the highest percentage of firearms cases (US Department of State, 2004b, p. 3).

US law also gives Congress the right to review (and reject) sales over a certain monetary threshold. Because sales of small arms and light weapons usually fall under this threshold (which ranges from USD 14 million to USD 100 million depending on the recipient and type of weapon), in September 2002 Congress amended the AECA to require congressional notification of small arms transfers valued at USD 1 million or more.⁶⁶

Adding another element of accountability and transparency, notifications to Congress of pending arms transfers are also published in the *Federal Register*, the daily journal of the Executive Branch. Though they are usually published after the window for Congressional action has closed, these public notices appear more frequently, and provide more detail, than the annual arms transfers reports profiled below.⁶⁷

In terms of US policy, there has been a dramatic shift during the eight years covered in this report—particularly in the stated relationship between concerns about human rights and US small arms export decisions. In the mid 1990s, for instance, the Clinton Administration barred small arms shipments to Turkey and Indonesia on human rights grounds.⁶⁸ In the late 1990s, the State Department stopped almost all small arms transfers to Africa. And in 1999 then Secretary of State Madeleine Albright declared that the United States would 'refrain from selling arms to regions of conflict not already covered by arms embargoes' (Albright, 1999). (The State Department's limited definition of 'conflict' excluded some states with internal conflicts, such as Colombia.)

By contrast, since its declaration of a global war on terrorism in late 2001, the US government has rewarded many governments for their material or political support for US military efforts in Afghanistan and Iraq. It lifted unilateral arms embargoes on Armenia, Azerbaijan, India, and Pakistan. And it has increased the flow of arms to other states—such as Nepal—with poor human rights records. These weapons are often paid for with US government funds.

At the same time, in March 2004 the US State Department suspended commercial licences of small arms transfers to Jamaica due to concerns over their use in crime (Myers and Sinclair, 2004).

Export channels

Legal exports of small arms and light weapons from the United States fall into the following categories:

- industry-negotiated Direct Commercial Sales (DCS);
- government-negotiated Foreign Military Sales (FMS);
- grants or sales of the US military's Excess Defence Articles (EDA); and
- emergency drawdown of surplus US weapons stocks.⁶⁹

(Illicit exports and exports as part of covert US government-run programmes are excluded from this analysis.⁷⁰)

Foreign customers—both government and private—may purchase weapons directly from a US company or commercial agent through the DCS programme administered by the US State Department. In addition, the US Commerce Department regulates the export of certain weapons, including sporting shotguns with barrels between 18 and 28 inches long.

Foreign governments may negotiate a sale with the US Department of Defense through the FMS programme. That programme was designed to help governments manage large and complex contracts, which is not usually the case with the purchase of small arms and light weapons. As a result, FMS is not usually used for small arms sales unless they are part of a larger weapons package.

The EDA and emergency drawdown programmes are free or low-cost programmes to aid foreign militaries (and sometimes non-state actors). Transfers may take the form of a grant (though there may be a shipping charge) or a sale (with the price usually based on the current value of the weapons, not the purchase price). Either the Defense Logistics Agency or one of three military services (Army, Navy, or Air Force) provides the weapons.

In addition, the State Department administers several other military aid programmes that underwrite foreign sales of small arms and light weapons. (The weapons sale would take place through either FMS or DCS.) The principal aid programmes likely to finance exports of these weapons are Foreign Military Financing (FMF); Anti-Terrorism Assistance (and other anti-terrorism programmes); International Narcotics Control and Law Enforcement programmes; and aid in support of peacekeeping operations. FMF pays for weapons, services, and training for 'coalition partners and friendly foreign governments'.⁷¹ Approxi-

mately three-quarters of the total FMF allotment goes to countries in the Middle East (Israel, Egypt, and Jordan) in exchange for their peace agreements. The bulk of these countries' aid from the United States pays for larger, more expensive weaponry, but some is used for small and light arms (profiled below). Counter-narcotics aid may also include funding for firearms. The largest recipient of this aid is Colombia, which received more than USD 3.7 billion in military assistance from 1997 to 2005, inclusive.⁷² State Department descriptions of counter-narcotics aid to other states—such as Afghanistan, Liberia, Mexico, Morocco, Pakistan, and the Philippines—also list equipment for police, which may include pistols or revolvers.

Trends

While Customs provides data on US small arms exports, the State and Defense Departments publish more detail. They disaggregate data (by recipient country) on DCS authorizations (licence approvals), FMS deliveries (actual shipments), and EDA deliveries (shipments) in an annual report to Congress. This report is known as the 655 Report, after the section of US law that mandates it. (In the case of EDA, an online database⁷³ also provides a highly detailed source of information.) Data from the 655 Report is presented here, in condensed form, and is available in its totality for the years 1997–2003 on the Internet. Despite the highly disaggregated data, the 655 Report still does not provide a comprehensive picture of US small arms exports, since no data on actual shipments of DCS is provided.

According to the Defense Department's part of the report, FMS exports of small arms and light weapons vary sharply from year to year, and the magnitude is relatively small. The highest dollar volume indicated in the years surveyed (excluding ammunition and spare parts) is around USD 45 million. The largest variation during this period is a USD 35 million decline from FY 2001 to FY 2002.

Most small arms transfers occur through the State Department's DCS programme, but the 655 Report (to date) lists only authorizations of transfers, not actual deliveries. As shown in Table 19, the State Department approved export licences for an average of more than USD 150 million of small arms and light

Table 18

FMS transfers of small arms and light weapons, FY 1998–2002

	1997–98	1998–99	1999–2000	2000–01	2001–02	Total
Carbines	\$104,000	\$99,000	\$1,743,000	\$7,754,000	\$1,427,500	\$11,127,500
Machine guns	\$11,890,000	\$6,912,000	\$17,263,000	\$3,306,000	\$3,268,000	\$42,639,000
Military rifles	\$10,755,000	\$3,008,000	\$10,287,500	\$2,452,500	\$4,129,000	\$30,632,000
Mortars	\$353,000	\$25,000	\$261,000	\$2,554,000	\$799,000	\$3,992,000
Other weapons up to .75 calibre	\$55,000	\$142,000				\$197,000
Pistols and revolver parts					\$1,000	\$1,000
Pistols and revolvers	\$98,000	\$1,000	\$1,206,000	\$180,500	\$1,000	\$1,486,500
Recoil-less rifles and .76 calibre guns		\$102,000				\$102,000
Riot control guns	\$4,000			\$1,500		\$5,500
Sub-calibre weapons						
Unspecified guns				\$28,733,000		\$28,733,000
Unspecified launchers					\$233,000	\$233,000
Total	\$23,259,000	\$10,289,000	\$30,760,500	\$44,981,500	\$9,858,500	\$119,148,500

Source: 655 Report

Table 19

DCS export licences for small arms/light weapons, FY 1998–2003

	1997–1998	1998–1999	1999–2000	2000–01	2001–02	2002–03	Total
Carbines	\$5,483,662	\$1,813,360	\$4,160,311	\$4,182,408	\$10,223,657	\$17,580,662	\$43,444,060
Grenade launchers	\$279,422	\$1,886,201	\$3,821,523	\$4,644,299	\$3,598,878	\$6,088,709	\$20,319,032
Grenades; hand and weapon types	\$1,754,129	\$71,053	\$247,070	\$47,526	\$950,344	\$2,027,797	\$5,097,919
M16 rifles	\$3,561,646	\$17,071,580	\$99,895	\$1,474,059	\$16,298,635	\$3,258,019	\$41,763,834
Machine guns	\$49,258,600	\$323,290	\$159,845	\$1,397,489	\$5,515,038	\$8,423,367	\$65,077,629
MANPADS missiles and launchers			\$11,813,790	\$4,027,442	\$6,074,834		\$21,916,066
Military rifles			\$4,708		\$608,962	\$995,240	\$1,608,910
Mortars				\$8,252	\$33,288	\$3,760	\$45,300
Non-military rifles	\$60,988,971	\$49,858,055	\$57,497,781	\$71,194,863	\$60,769,868	\$55,306,655	\$355,616,193
Pistols and revolvers (9302)				\$77,214			\$77,214
Pistols and revolvers	\$101,418,100	\$86,808,623	\$137,541,600	\$74,320,445	\$43,712,695	\$52,751,651	\$496,553,114
Shotguns	\$171,563	\$401,013	\$993,159	\$61,271	\$81,148	\$2,187,116	\$3,895,270
Sub-machine guns	\$589,620	\$448,328	\$739,684	\$6,091	\$601,928	\$100,291	\$2,485,942
Unspecified launchers			\$4,638				\$4,638
Total	\$223,505,713	\$158,681,503	\$217,084,004	\$161,441,359	\$148,469,275	\$148,723,267	\$1,057,905,121

Source: 655 Report

Table 20

Exports of small arms and light weapons Excess Defense Articles, 1997–2003

Country	Item	Quantity	USD value (at time of export)	Year ^a	Status/grant (G) or foreign military sale (FMS)
Argentina	.38 cal. pistol	1,000	18,000	1997	Delivered/G
	M16A2 rifle	1,945	60,295	1999	Delivered/FMS
	M249 machine gun	349	46,417	1999	Delivered/FMS
	M203 grenade launcher	245	7,350	1999	Delivered/FMS
Bolivia	M79 grenade launcher	30	4,200	1999	Delivered/G
	5.56 mm rifle	10,000	1,338,000	2003	Pending auth./G
Colombia	M60 machine gun	55	170,500	2000	Delivered/G
	M16A1 rifle	10,000	900,000	2003	Authorized/G
Dom. Rep.	5.56 mm rifle	20,000	2,676,000	2002	Authorized/G
Egypt	Small arms	Unknown ^b	N/A	1998	Delivered/FMS
Estonia	M14 rifle	40,500	2,389,500	1998	Delivered/G
Germany	HK 512 shotgun	7	2,261	1997	Delivered/FMS
Israel	M16A1 rifle	10,000	890,000	1998	Delivered/G
	M16A1 rifle	30,000	2,670,000	2001	Authorized/G
	M16A1 rifle	50,000	4,460,000	2002	Authorized/G
	M16A1 rifle	20,000	1,800,000	2003	Authorized/G
Latvia	Machine gun	Not given	97,913	1998	Authorized/G
	M14 rifle	30,500	2,104,500	2000	Authorized/G
Lithuania	M16A1 rifle	200	44,600	1997	Delivered/G
	M14 rifle	40,000	2,360,000	1998	Delivered/G
	M60 machine gun	75	87,975	2002	Authorized/G
Macedonia	M3 machine gun	300	780,000	1998	Delivered/G
	M3 machine gun	407	930,809	1999	Delivered/G

Philippines	M16A1 rifle	30,000	2,670,000	1999	Delivered/G
	M16A1 rifle	14,641	4,014,000	2001	Delivered/G
Senegal	M16A1 rifle	2,000	178,000	1999	Authorized/G
	M16 rifle	4,000	532,000	2001	Authorized/G
	M203 grenade launcher	16	2,846	2002	Authorized/G
	M16 rifle	10,000	1,338,000	2002	Authorized/G
	M60 machine gun	2,500	4,398,000	2002	Authorized/G
	M2 machine gun	16	38,966	2002	Authorized/G
	M60 machine gun	150	307,875	2003	Authorized/G
Thailand	.45 cal. pistol	2,570	293,200	2000	Delivered/G
Tunisia	Machine guns	Unknown	1,693,272	1998	Delivered/G
UK	SA 80 rifle	491	85,434	1997	Delivered/FMS
	L86A1 machine gun	32	7,744	1997	Delivered/FMS
Uruguay	M16A1 rifle	2,000	178,000	2000	Authorized/G
Yemen	M60 machine gun	15	26,385	2003	Authorized/G

^a Fiscal year at time of request.

^b An unspecified amount of small arms were transferred as part of the on-board armory of two frigates transferred to Egypt.

Source: DSCA Web site, <<http://www.dsca.osd.mil/programs/eda/search.asp>>, 5 August 2004

weapons each year during 1997–2003. Pistols, revolvers, and non-military rifles were by far the most popular small arms exports.

These export licences are valid for up to four years. Thus, a spike in a certain year's data may indicate a rise in transfers coming one or more years down the road—or not, as licences might not be fulfilled. The sharp rise in licences in FY 2000 probably stemmed from a change in US policy that imposed a new requirement for export licences for small arms going to Canada (to comply with the Organization of American States, OAS, Firearms Convention, which the United States has signed but not ratified). Wary of State Department bureaucracy,

importers from Canada overstated their import needs in order to avoid having to apply for additional licences for potential future purchases. This practice seemingly ended in early 2001, after the US government noticed the spike in export requests and temporarily halted all new licences for firearm shipments to Canada (Bonner, 2000).

EDA exports are included in the Defense Department portion of the 655 Report, but they are not listed in a complete and up-to-date manner.⁷⁴ The 655 Report—covering one year at a time—notes only those transfers that are completed the same year they are authorized. It may take years for an authorized transfer to turn into a delivery, as it is usually up to the receiving country to arrange transport. Therefore, one often cannot learn from the 655 Report which items are actually shipped. This lapse is unfortunate because significant quantities of proposed transfers of small arms are listed. In addition, while some EDA transfers appear in Customs data, some are sent directly by the DOD on US military transport craft or to overseas depots and are therefore not listed.

The data presented in Table 20 is derived from the Defense Security Cooperation Agency (DSCA) Web site, which provides the most comprehensive and timely information available on EDA. The site is a database on planned and actual EDA transfers from 1993 to the present.⁷⁵ The DSCA database also notes the status of the transfer, including possible refusal by Congress or the recipient state. However, some transfers are listed only as authorized (as opposed to delivered) when other sources suggest that the transfer has been completed.⁷⁶ At the same time, it is important to keep in mind that any transfer listed in Table 20 as authorized (rather than delivered) might never be carried out.

This data shows that the DOD gave away more than 335,000 firearms through the EDA programme during 1997–2003. Israel was the largest beneficiary, receiving—or being authorized to receive—110,000 M16A1 automatic rifles. The US military also shipped nearly 45,000 M16A1 rifles to the Philippines in 1999 and 2001. Each of the Baltic states—Latvia, Lithuania, and Estonia—benefited from this giveaway, as well. And Senegal, which began receiving small arms from the DOD through this programme in 1999, has received 16,000 M16 rifles and 2,600 machine guns since that time. Also noteworthy, the DOD authorized the shipment of 20,000 assault rifles to the Dominican Republic in 2002—during a time of great political upheaval in neighbouring Haiti.

Customer profiles

Among the leading overall importers of US firearms are close allies, such as Australia, Belgium, Canada, Germany, Japan, and Spain. Large exports to these countries, which are also significant suppliers of small arms to the United States, could reflect the fact that US Customs Service documents on weapons exports do not note whether the transfers are permanent. For example, the second-highest recipient of pistols and revolvers during 1998–2003 was Germany, which was also the second-highest supplier of pistols and revolvers to the United States during the same period. The weapons transfers to major suppliers such as Germany may therefore simply be temporary transfers for weapons repairs (Small Arms Survey, 2004, pp. 120–21). This explanation would be more likely for countries such as Germany, which make high-end products that might require servicing, than for Brazil, which is the third-largest supplier of pistols or revolvers (exporting 132,501 to the United States for the period in question) but importing only 683 pistols or revolvers from the United States.

The remainder of this section draws on US Customs export data. The increase in transfers due to US anti-terrorism efforts is reflected in the Customs data, especially the rise in transfers of military rifles and machine guns after 2001.

The Middle East

The Middle East is the leading recipient region of US small arms exports, largely due to the number of strategic alliances the United States maintains in the region. Israel, Egypt, and Jordan receive significant annual US military aid allocations, which can be used towards the acquisition of small arms and other weapons. Israel receives the largest sum, followed by Egypt and then Jordan. US Customs data shows that Israel was the leading small arms recipient in the region, with total imports of 75,900 US firearms for the period 1998–2003. Most of these were military rifles. Egypt and Jordan were much smaller importers, with totals of only 14,242 and 4,749 guns, respectively. (As noted in Table 20, Egypt also received an unspecified quantity of small arms as part of an EDA transfer of two frigates in 1998 that would not have gone through Customs.) The United Arab Emirates and Kuwait were the second- and third-largest recipients of US small arms, after Israel. Surprisingly, Saudi Arabia, normally a large US arms importer, imported a total of only 2,255 small arms during 1998–2003.

Table 21

US small arms transfers to the Middle East, 1998–2003

Country	Category	1998	1999	2000	2001	2002	2003	Total
Bahrain	Machine guns	65	280	0	0	0	0	345
	Military rifles	0	4	0	0	2,000	0	2,004
	Pistols and revolvers	0	56	0	0	0	0	56
	Shotguns (non-military) & comb. shotgun-rifles	57	20	157	0	0	0	234
Egypt	Machine guns	80	1	0	0	0	847	928
	Military rifles	0	10	0	0	184	0	194
	Military shotguns	0	1,009	435	0	0	0	1,444
	Rifles (non-military)	0	0	0	0	0	546	546
Israel	Shotguns (non-military) & comb. shotgun-rifles	9,572	0	0	0	728	830	11,130
	Machine guns	17	0	0	0	75	222	314
	Military rifles	40,350	10,055	2,843	3,442	6,375	184	63,249
	Military shotguns	0	0	0	5	0	0	5
Jordan	Muzzle-loading firearms	3,806	4,146	535	0	0	0	8,487
	Pistols and revolvers	95	0	42	709	700	1,261	2,807
	Rifles (non-military)	0	26	0	0	0	0	26
	Shotguns (non-military) & comb. shotgun-rifles	4	0	0	197	801	10	1,012
	Machine guns	80	0	0	0	9	155	244
	Military rifles	425	0	53	0	400	41	919
Kuwait	Military shotguns	0	4	0	0	0	0	4
	Pistols and revolvers	1,161	100	0	378	114	581	2,334
	Rifles (non-military)	0	0	0	1	553	0	554
	Shotguns (non-military) & comb. shotgun-rifles	222	210	102	15	50	95	694
Kuwait	Machine guns	550	0	0	0	1	0	551
	Military rifles	16,137	0	0	10,650	10,800	450	38,037

	Military shotguns	0	0	0	0	100	0	100
	Muzzle-loading firearms	0	0	0	0	0	2	2
	Pistols and revolvers	0	0	100	40	12	157	309
	Rifles (non-military)	0	90	0	0	0	208	298
Lebanon	Shotguns (non-military) & comb. shotgun-rifles	847	269	550	186	744	30	2,626
	Military rifles	0	0	900	0	909	0	1,809
	Pistols and revolvers	0	0	4	4	600	0	608
	Rifles (non-military)	76	0	0	0	0	220	296
Oman	Shotguns (non-military) & comb. shotgun-rifles	2,039	127	660	550	1,371	37	4,784
	Machine guns	0	0	0	4	0	0	4
	Military rifles	0	0	954	298	0	725	1,977
	Rifles (non-military)	55	0	107	22	0	8	192
Qatar	Machine guns	50	0	0	0	0	0	50
	Military rifles	0	0	1,000	0	0	200	1,200
	Military shotguns	286	0	0	0	0	0	286
	Rifles (non-military)	0	0	0	1,148	0	0	1,148
Saudi Arabia	Shotguns (non-military) & comb. shotgun-rifles	0	0	0	0	175	0	175
	Military rifles	795	0	0	0	0	0	795
	Pistols and revolvers	30	0	190	306	0	100	626
	Rifles (non-military)	329	0	19	0	0	0	348
UAE	Shotguns (non-military) & comb. shotgun-rifles	186	50	0	50	0	200	486
	Machine guns	0	0	24	700	2	0	726
	Military rifles	240	22,245	314	1,072	2,100	15,762	41,733
	Military shotguns	0	18	0	6	0	0	24
	Pistols and revolvers	608	1,120	628	0	322	13	2,691
	Rifles (non-military)	850	464	224	105	221	1,812	3,676
	Shotguns (non-military) & comb. shotgun-rifles	121	41	3	92	6	92	355

Source: US Customs Agency

The destinations of these arms shipments were sites of human rights violations (severe in many cases), a persistent lack of democratic reforms, and regular violations of humanitarian law (in the case of the Israeli–Palestinian conflict). Approvals of EDA transfers to Israel continued to grow as the *intifada* in the West Bank returned in late 2000. While one section of the US State Department was authorizing the transfer of 110,000 excess M16 rifles, the State Department’s human rights branch noted that ‘Israel’s overall human rights record in the occupied territories remained poor . . . as it continued to commit numerous, serious human rights abuses’, including targeted killings, the use of excessive force, arbitrary destruction of private property, and the use of torture and other force against prisoners (US Department of State, 2004a). (The State Department report also noted the poor record of the Palestinian Authority.) The United Arab Emirates and seven other recipients of US guns in the region received a rating of ‘not free’ from Freedom House, a US non-governmental organization that produces an annual rating of states’ respect for political and civil rights (Freedom House, 2003).

Table 21 summarizes US firearms shipments to countries in the Middle East.

Latin America

The breadth of US firearms exports to Latin America is striking. During 1998–2003, the US government delivered or issued licences for the sale of small arms and light weapons to every country in Central and South America except Cuba, as well as most foreign-controlled territories. Many of these governments, including those of El Salvador and Honduras, are working to reduce the availability of small arms in civilian hands following long civil wars. These states, along with Mexico, Brazil, and Jamaica, are plagued with high levels of crime and death involving the use of firearms.⁷⁷

Table 22 shows high levels of US firearms shipments to Venezuela from 1998 onward, including nearly 50,000 shotguns and nearly 40,000 handguns. These exports coincided with the election of President Hugo Chavez. The Bush Administration has expressed opposition to President Chavez’s policies on numerous occasions. It would be reasonable to speculate that these weapons are going to civilians in opposition to President Chavez rather than to the military and police forces. However, the Customs data does not specify end users.

Table 22
US small arms transfers to selected Latin American states, 1998–2003

Country	Category	1998	1999	2000	2001	2002	2003	Total
Brazil	Machine guns	115	8	30	12	0	156	321
	Military rifles	433	13,411	0	0	2	65	13,911
	Muzzle-loading firearms	0	64	0	1,781	0	0	1,845
	Pistols & revolvers	53	77	0	0	377	176	683
	Rifles (non-military)	0	1,520	13	6,259	2	0	7,794
	Shotguns (non-military) & shotgun-rifles	1	34	51	26	183	0	295
Colombia	Machine guns	1,669	19	338	97	5,031	1,203	8,357
	Military rifles	85	0	7	2,231	256	0	2,579
	Pistols & revolvers	711	96	1,739	50	735	0	3,331
	Rifles (non-military)	50	0	0	1,875	2,218	11,584	15,727
	Shotguns (non-military) & shotgun-rifles	2,315	919	500	600	500	905	5,739
El Salvador	Military rifles	10	154	20	0	2	0	186
	Military shotguns	1,715	200	71	0	75	0	2,061
	Pistols & revolvers	1,916	2,085	474	789	1,038	1,958	8,260
	Rifles (non-military)	421	588	358	145	167	173	1,852
	Shotguns (non-military) & shotgun-rifles	1,046	2,042	2,110	917	597	668	7,380
Guatemala	Military rifles	0	500	0	5	0	0	505
	Military shotguns	0	0	100	0	0	0	100
	Pistols & revolvers	0	334	700	444	1,193	459	3,130
	Rifles (non-military)	525	1,465	748	1,095	2,650	1,131	7,614
	Shotguns (non-military) & shotgun-rifles	2,742	1,255	1,860	1,636	1,646	2,730	11,869
Honduras	Machine guns	25	0	0	0	0	0	25
	Military rifles	58	549	1,039	250	60	0	1,956
	Military shotguns	0	150	630	25	0	0	805
	Pistols & revolvers	63	5,932	5,241	1,797	3,594	270	16,897
	Rifles (non-military)	0	0	0	29	731	428	1,188
	Shotguns (non-military) & shotgun-rifles	788	561	36	100	149	0	1,634

Table 22 continued

US small arms transfers to selected Latin American states, 1998–2003

Country	Category	1998	1999	2000	2001	2002	2003	Total
Jamaica	Military rifles	0	0	260	0	600	600	1,460
	Muzzle-loading firearms	0	0	45	0	0	0	45
	Pistols & revolvers	777	812	1,135	1,131	1,208	1,085	6,148
	Rifles (non-military)	0	0	100	0	0	0	100
	Shotguns (non-military) & shotgun-rifles	174	79	198	202	79	99	831
Mexico	Machine guns	230	4	10	295	23	4	566
	Military rifles	2,976	17	1,627	58	1	0	4,679
	Military shotguns	40	0	0	0	0	0	40
	Muzzle-loading firearms	142	261	0	67	21	0	491
	Pistols & revolvers	5,481	6,527	7,950	1,313	0	474	21,745
	Rifles (non-military)	539	2,000	846	1,575	105	88	5,153
	Shotguns (non-military) & shotgun-rifles	1,168	3,748	9,058	172	240	680	15,066
Nicaragua	Military rifles	0	0	0	50	0	0	50
	Pistols & revolvers	0	71	204	95	60	135	565
	Rifles (non-military)	24	333	645	447	450	585	2,484
	Shotguns (non-military) & shotgun-rifles	351	610	645	577	245	575	3,003
Venezuela	Machine guns	0	0	61	0	0	0	61
	Military rifles	242	64	0	450	0	0	756
	Military shotguns	0	100	0	0	119	0	219
	Pistols & revolvers	22,960	8,143	878	2,800	3,832	211	38,824
	Rifles (non-military)	1,992	1,722	302	678	1,411	0	6,105
	Shotguns (non-military) & shotgun-rifles	10,392	8,160	6,250	13,514	8,171	2,491	48,978

Source: US Customs

Customs data also shows a surprisingly large number of small arms transfers to the Dominican Republic during 1998–2003, including 9,400 shotguns and 24,000 handguns. At these quantities, the tiny Dominican Republic is the United States' 16th-largest importer of shotguns and sixth-largest importer of pistols

or revolvers. The Bush Administration notified Congress of plans to transfer 20,000 M16 assault rifles to the country in January 2002 through the EDA programme.⁷⁸ Press reports have speculated that some of these weapons might have been intended for forces in Haiti that ousted President Jean-Bertrand Aristide in 2004, given the notoriously porous border between the two countries (Lindenmayer, 2004; *Online NewsHour*, 2004).

US counter-narcotics programmes are also contributing to high US small arms exports to the region. Since 1997, the US Congress has approved more than USD 3 billion in military and police aid to Colombia to fight drug traffickers and left-wing guerrilla groups.⁷⁹ Much of the aid is used for the purchase of expensive weaponry, but significant small arms transfers are included in the yearly aid packages. Particularly noteworthy from the table, Colombia received more than 8,000 machine guns from the United States during this period.

Asia-Pacific

More than half of all known exports to the Asia-Pacific region in 2000 (by value) came from the United States. Leakage from these states' arsenals are reportedly commonplace, especially in Papua New Guinea, which received more than 1,500 military rifles, pistols or revolvers, and shotguns from the United States during 1998–2003. New Caledonia also received in excess of 2,000 rifles (military and non-military). Some analysts have expressed concerns that these firearms might be used to destabilize already fragile governments in Fiji, the Solomon Islands, and Papua New Guinea, and lead the countries back to violent conflict (Alpers and Twyford, 2003, pp. 8, 20).

Africa

The United States is not a major exporter of firearms to Africa, though it does provide military training and logistical supplies. Two notable exceptions in the 1998–2003 timeframe are Senegal and Zimbabwe. Among other items, Senegal was approved to receive 16,000 M16 assault rifles during 1999–2002 and 2,666 machine guns during 2002–03 as part of the EDA programme. These transfers were justified in support of regional peacekeeping activities. Ghana also imported almost 22,000 non-military shotguns during 1998–2003, according to Customs data, making it the sixth-largest importer of this type of US

weaponry in the world. Both of these countries are members of the Economic Community of West African States (ECOWAS), which has had in place a self-imposed voluntary arms embargo since 1998.⁸⁰

Shipments to Zimbabwe were much smaller; Customs data indicate 245 shotguns and 68 pistols and rifles during 1998–2000, but the risk of misuse of the weapons was high. These transfers took place at a time when President Robert Mugabe was encouraging seizure of white farmers' lands. The violence escalated to such a degree that the State Department imposed an arms embargo in April 2002, but not before approving licences for the transfer of more than two million rounds of ammunition (.22 to .50 calibre) and USD 60,000 worth of pistols and revolvers. 📄

VII. Summary of key findings and recommendations

The following are among the findings on the US small arms economy—production, imports, domestic sales, and exports—that can be gleaned from public information sources:

- The US public is the leading world market for US and most non-US firearms manufacturers.
- The US public holds about 230,000,000–280,000,000 guns—at least one out of every three guns in the world, and nearly one gun per person in the United States.
- The US military holds approximately 3,600,000 small arms—1.38 guns per uniformed serviceperson.
- US law enforcement officials hold approximately 900,000 small arms.
- On average about 5,300,000 new firearms were introduced into the US civilian market each year from 1998 to 2003.
- Based on new production being introduced into the civilian market, the types of weapons in greatest demand are—in decreasing order—pistols, rifles, and shotguns; handguns represent about one-third of the US civilian market.
- In 1998, the United States imported 1,290,000 firearms. In 2002, that number jumped to 2,560,000. By dollar volume, shotguns appear to be the most lucrative and fastest-growing import firearms product, with pistols the other leading import weapon.
- According to US Customs data, the United States exported about 350,000 small arms in 2002. (This source omits some small arms shipments made by the Department of Defense, possibly in the range of tens of thousands of guns.) In 2002, the United States imported seven times more guns than it exported.
- Austria, Brazil, Germany, and Italy are overwhelmingly the largest foreign suppliers of handguns to the US market. Several other countries—Argentina, Canada, the Czech Republic, Israel, and Spain—comprise a second tier of

handgun suppliers. Israel exported more than 100,000 handguns to the United States in 2002, dramatically more than it shipped in previous or later years.

- The Department of Defense gave away more than 335,000 surplus firearms through the Excess Defense Articles programme during 1997–2003. Among the leading recipients were several governments with poor human rights records.

These findings, heavily qualified as they are, for the most part are informed approximations. Despite the plethora of data sources and information, little is known with certainty about the US small arms economy. The overarching conclusion of this study is that the degree of transparency in US small arms manufacture and trade is insufficient and is diminishing. The trend since 2001, as highlighted in Chapter I, has been to limit public information—through either Executive Branch fiat or legislated changes.

The overarching recommendation, based on a belief that sound foreign and domestic policy-making must be informed by full and accurate information, is for coherence and cooperation among all relevant US government agencies involved in the collection and dissemination of data on small arms production, imports, exports, and sales. The acceptance of this recommendation, as well as of the following specific recommendations, would require a climate of transparency to prevail within the Executive Branch and Congress.

Include all shipments of Excess Defense Articles and Emergency Drawdowns of US weapons stocks in Customs data. Currently, the Defense Department ships some EDA directly on US military transport craft or to overseas depots. As a result, a reading of Customs information alone would lead one to overlook some important arms transfers.

For example, Customs data for Israel in 2001–03 shows only 10,000 military rifles. Yet the Defense Department’s EDA Web site shows that 100,000 M16A1 rifles were approved for transfer during that same period. While some of the transfers may have taken a longer period to materialize, they may instead have been sent by the military directly and thus will never appear in Customs reports. But the Defense Department section of the 655 Report states that 30,000 EDA military rifles were delivered in FY 2001 alone.

Another significant data discrepancy relates to the Philippines. Whereas Customs data shows 1,252 military rifles transferred during 1999–2001, the EDA Web site shows a combined delivery of 45,000 M16 rifles in 1999 and 2001. According to the Defense Security Cooperation Agency (DSCA), which maintains the Web database of EDA, Senegal was also scheduled to receive 2,516 machine guns in 2002. The 655 Reports as of FY 2003 do not list any transfers, nor does Customs data. Relying on Customs reports alone, especially for EDA recipients, can therefore be quite misleading.

Moreover, even if these transfers do not go through, it is still important—from a political point of view—to know about proposed transfers.

Provide data on DCS deliveries in the 655 Report or in another timely manner. Congress passed a law in 2000 requiring that data on DCS shipments be included in subsequent 655 Reports.⁸¹ The State Department has been slow to comply with this law. Advocates of greater transparency should encourage members of Congress to apply pressure, encouragement, and resources, if necessary, to obtain compliance.

Require the Commerce Department to publish annual detailed data on US exports of shotguns and any other firearms the Department licences for export. Currently no such data is made available.

Support a systematic programme of data collection and research on civilian gun ownership and markets in the United States. The greatest omission in public data on the US small arms economy relates to the US domestic market. To date, the US Congress has expressly prohibited agencies of the US government from collecting or coordinating information on annual firearms purchases by private citizens. There is no comprehensive data on the availability of firearms in the United States, on new sales, on resales, or on the number of owners or households with guns. A major study on firearms and violence in the United States published in 2004 noted that no hypotheses about gun availability and criminal violence could be tested without baseline information, thereby hindering the formation of effective public policies (National Academies of Science, 2004). ■

Appendix A: Notes on data-sets

US firearms production levels

The Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), part of the US Department of Justice,⁸² collects data on firearms manufacture, import, and export from licensed manufacturers and retailers as part of its responsibilities under US law.⁸³ It publishes much of this data in the *Annual Firearms Manufacturing and Export Report* (AFMER).⁸⁴ The most recent report includes data for 2003.

The AFMER lists the quantity of firearms produced and exported, disaggregated by manufacturer and type of weapon. It provides the address of the manufacturer, though no destination country for exports. The report divides firearms into seven categories, but no definitions are provided for these categories. The categories are:

- pistols (broken down into six subcategories by size);
- revolvers (broken down into six subcategories by size);
- rifles;
- shotguns;
- machine guns;
- any other NFA weapon⁸⁵; and
- miscellaneous firearms (any firearm not falling under the aforementioned categories).

In 2003 Congress passed a law⁸⁶ that restricted publication of information about the production of machine guns and 'NFA weapons'.⁸⁷ Such information is publicly available only through 2001. In addition, data on rifle production for the US military has always been withheld from the public in the annual AFMER data tables. Nearly half of the total report for 2003 is withheld from public disclosure.⁸⁸

One interesting and unexplained omission in this data concerns the handgun manufacturer Glock, Inc. (the US subsidiary of the Austrian company). The

publicly released portion of AFMER includes no data for the company. As a result, all of the tables and figures in this study based on ATF data understate actual US domestic pistol production and exports.

ATF also publishes an occasional report, *Firearms Commerce in the United States*, which synthesizes data from the AFMER and other government agencies' reports or databases. It provides summaries of firearms manufactured, exported, and imported (by country of origin), plus data on importation applications, firearms, and ammunition excise tax collections, weapons registered and tax collected on NFA weapons, and various statistics related to Federal Firearms Licensees (those licensed to sell firearms). The 2001–2002 report, the most recent one published, notes that its data—and therefore presumably the data from AFMER reports on which it is based—includes firearms purchased by domestic law enforcement agencies but *not* by the US military (ATF, 2002, p. E-1).

In addition, the US Census Bureau collects data on US manufacturing industries every five years, including the small arms and the small arms ammunition industries. The data is compiled in a report that is published approximately two years later. The last two industry census reports contain data from 1997 and 2002.⁸⁹ Reports prior to 1997 used a different definition for the industry, and the data is not comparable as a result.

Imports and exports

The US Customs Service collects data on small arms imports and exports through forms or automated reports submitted at the time of shipment. The US Census Bureau then aggregates this data. The US Commerce Department's International Trade Administration (ITA) has a Web site that uses this data to provide a highly detailed account of imports and exports (broken down by country) for the previous year.⁹⁰ Data is updated monthly, with about a three-month lag time. The same data for previous years can be purchased from the Census Bureau.⁹¹

Whereas many countries use more general headings, the United States has very distinct categories and subcategories of small arms under its customs definitions.⁹² The US Customs category definitions that pertain to small arms include the following:

- 9301 – military weapons, other than revolvers and pistols;
- 9302 – revolvers and pistols;
- 9303 – other firearms and similar devices which operate by the firing of an explosive charge, including the following subcategories:
 - ★ 930310 – muzzle-loading firearms;
 - ★ 93032000 – shotguns; and
 - ★ 930330 – sporting, hunting, or target-shooting rifles.

The US Customs data provided from the aforementioned sources breaks down the customs category 9301 (military weapons) into subcategories.⁹³ It is therefore possible to establish whether a certain country received, for example, military rifles or machine guns, rather than just ‘small arms’. Quantities of weapons exported and their value in US dollars are provided.

There are several caveats to keep in mind when using Customs data. First, Customs includes those shipments sent by commercial transporters (and therefore registered with Customs upon shipment). This would include DCS as well as those FMS that use commercial shipping; however, it excludes FMS that use military transport and nearly all EDA shipments, which routinely utilize military transport.

In addition, Customs data includes weapons that are shipped for repair or refurbishment to the original factory. This means that a weapon that is already in circulation will be listed as an export and then be reimported after repairs. This phenomenon results in an exaggeration of trade levels. There is no way to estimate the amount of weapons that pass through customs as a result of repair or refurbishment. However, it is reasonable to speculate that a portion of the trade with major US small arms trade partners (such as Belgium or Italy) actually comprises weapons being sent back to the factory and then being reimported.

The US International Trade Commission (USITC) also publishes the Census data, though in a less detailed format. It has an online database called the USITC Interactive Tariff and Trade DataWeb.⁹⁴ The database contains data from 1989 onward and is searchable by country, year, and product category—but the categories are very general (for example, ‘small arms’ or ‘small arms ammunition’) and, therefore, less useful.

Since 1995, the US Congress has mandated that the State Department produce an annual report on US arms exports and imports.⁹⁵ The 655 Report, referring to the section of the Foreign Assistance Act that mandates the report, is actually produced in two different parts, with the State Department and Department of Defense each reporting on the exports managed by their organizations. Amendments to the law removed the requirement to report on imports, but required that the reports be placed online and show where US funds paid for the weapons transfers.⁹⁶ So far, only the State Department has placed the reports online, and neither department has complied with the requirement to show US funding.⁹⁷

The reports cover fiscal years (FY), which run from 1 October through 30 September. While the law requires the reports be published each February for the preceding fiscal year, they usually are not sent to Congress until the summer. So a report on exports from 1 October 2002–30 September 2003 (FY 2003) will not appear until the summer of 2004—if not later. Some of the exports will be nearly two years old before the reports are published.

To date, the State Department’s portion of the 655 Report only provides information on *licences* granted in that fiscal year for arms exports under the DCS programme. Since these licences are valid for four years, however, and actual shipments may be of much lesser value (or may not take place at all), it is not possible to know from this data the quantity of weapons *actually shipped* abroad. Thus the value of licences given in the 655 Report is usually much higher than the delivery data that has been inefficiently tracked by Customs and reported to State (a summary of this delivery data is available in the Congressional Presentation Document, see below). Under directives from Congress, the State Department is finalizing an automated reporting system wherein actual arms shipments will be reported directly to the State Department by the exporters themselves. A law passed in 2000 required this shipment data to be included in 655 Reports, though the slow development of this system has meant that the State Department has not yet been able to comply with the provision.⁹⁸

In response to a particular concern about the proliferation of powerful small arms, Congress added a requirement in 2002 that there be special notification about the quantity and value of export licences for those semi-automatic assault weapons and spare parts that were prohibited for sale or manufacture in the United States until September 2004, when the ban expired.⁹⁹

The Defense Department's portion of the 655 Report provides figures on *deliveries* under its Foreign Military Sales, Excess Defense Articles, and Emergency Drawdown programmes. No data is given on contracts, which may differ from actual deliveries.

Both sections of the report provide the weapons category, quantity, value, and country of destination. The State Department's section provides fairly precise categories of weapons, sometimes down to the weapon model, whereas the Defense Department lumps weapons together into broad categories, such as rifles or 'other weapons'.

The Norwegian Initiative on Small Arms Exports maintains a database of global small arms shipments. It presents the 655 Report data in a highly searchable format, including the licence and delivery data for each year.¹⁰⁰ And the Federation of American Scientists has a copy of the export portion of all 655 reports since FY 1998 available on its Web site.¹⁰¹

To give Congress a measure of oversight on the arms transfer process, the State and Defense Departments are also required to notify Congress about pending arms transfers over a certain monetary threshold. Public notice of these planned weapons sales appear in the *Federal Register* within a few months of Congressional notification. The notifications provide the greatest level of detail about pending transfers, though the deals may not ultimately take place, or may be slightly modified without requiring another notification.¹⁰² The Congressional notification figures are not used in this report because they represent only a portion of US arms transfers, but they are a useful source for those interested in further investigation.

Another source of data on small arms transfers is the Congressional Budget Justification document presented by the State Department to Congress with its budget request each year. The 'Request by Region' section of this report sometimes includes information on small arms transfers to individual countries as part of the Foreign Military Financing or Excess Defense Articles programmes.¹⁰³ The document also provides country totals for military aid, excess weapons transfers, and DCS deliveries, though the deliveries data comes from Customs reports that are notoriously slow and incomplete.

Excess Defense Article transfers can also be researched via the Defense Security Cooperation Agency's database.¹⁰⁴ Commercial exports of shotguns are managed by the Commerce Department, which does not make public details of transfers.

Appendix B: Quantities of US-manufactured firearms, by type, 1986–1999

Firearms manufactured (1986–1999)*

Year	Pistols	Revolvers	Rifles	Shotguns	Machine guns	Total firearms
1986	692,977	734,650	970,541	641,482	41,482	3,081,132
1987	963,562	695,270	1,006,100	857,949	3,963	3,526,844
1988	991,011	754,711	1,144,707	928,070	2,239	3,820,738
1989	1,402,660	628,765	1,407,317	935,541	2,387	4,376,670
1990	1,376,399	462,496	1,156,213	848,948	3,809	3,847,865
1991	1,381,325	456,941	883,482	828,426	2,213	3,552,387
1992	1,549,659	460,373	1,001,708	1,018,204	900	4,030,844
1993	2,272,001	552,808	1,160,124	1,144,940	4,240	5,134,113
1994	1,995,511	586,450	1,324,240	1,254,926	10,248	5,171,375
1995	1,195,266	527,664	1,331,780	1,173,645	9,185	4,237,540
1996	985,533	498,944	1,424,319	925,732	22,020	3,856,548
1997	1,036,077	370,428	1,251,341	915,978	67,844	3,641,668
1998	916,070	324,390	1,535,690	868,639	32,866	3,677,655
1999	995,446	335,784	1,569,685	1,106,995	22,490	4,030,400

*The manufacturers' reports exclude production for the US military but include firearms purchased by domestic law enforcement agencies. They also include firearms manufactured for export.

US manufacturers' exports (1986–1999)

Year	Pistols	Revolvers	Rifles	Shotguns	Machine guns	Total firearms
1986	16,657	103,890	37,224	58,943	24,781	241,495
1987	24,941	133,859	42,144	41,014	24,448	266,406
1988	32,570	99,289	53,896	68,699	12,338	266,792
1989	41,976	76,494	73,247	67,559	11,599	270,875
1990	73,398	104,620	71,659	104,250	19,337	373,264
1991	79,462	110,058	91,111	117,801	36,785	435,217
1992	77,309	111,821	89,965	119,127	10,219	408,441
1993	59,080	89,641	94,170	171,475	7,012	421,378
1994	93,956	78,935	81,835	146,524	16,717	417,967
1995	97,969	131,634	89,053	100,894	19,259	438,809
1996	64,126	90,058	74,555	97,173	33,875	359,787
1997	44,182	63,656	76,626	86,263	20,857	291,584
1998	28,805	15,788	65,807	89,699	12,529	212,628
1999	34,663	48,616	65,669	67,342	22,255	238,545

Manufacture for US market (production – exports)

Year	Pistols	Revolvers	Rifles	Shotguns	Machine guns*	Total firearms
1986	676,320	630,760	933,317	582,539	16,701	2,839,637
1987	938,621	561,411	963,956	816,935	- 20,485	3,260,438
1988	958,441	655,422	1,090,811	859,371	- 10,099	3,553,946
1989	1,360,684	552,271	1,334,070	867,982	- 9,212	4,105,795
1990	1,303,001	357,876	1,084,554	744,698	- 15,528	3,474,601
1991	1,301,863	346,883	792,371	710,625	- 34,572	3,117,170
1992	1,472,350	348,552	911,743	899,077	- 9,319	3,622,403
1993	2,212,921	463,167	1,065,954	973,465	- 2,772	4,712,735
1994	1,901,555	507,515	1,242,405	1,108,402	- 6,469	4,753,408
1995	1,097,297	396,030	1,242,727	1,072,751	- 10,074	3,798,731
1996	921,407	408,886	1,349,764	828,559	- 11,855	3,496,761
1997	991,895	306,772	1,174,715	829,715	46,987	3,350,084
1998	887,265	308,602	1,469,883	778,940	20,337	3,465,027
1999	960,783	287,168	1,504,016	1,039,653	235	3,791,855

* A negative number indicates that more machine guns were exported than manufactured, due to the export of earlier production.

Source: ATF (2002)

Appendix C1: US military small arms procurement budget, 1997–2005*

Service	Weapon	1997,	1997,	1998,	1998,
		Q	USD	Q	USD
		Units	'000s	Units	'000s
Army	Armor machine gun, 7.62 mm M240 series	2,034	20,291	1,500	14,692
	Machine gun, 5.56 mm (SAW)	3,802	12,050	406	5,455
	M16 rifle	15,583	6,523	11,297	4,984
	5.56 carbine M4	10,603	6,523	7,484	4,984
	XM107, cal. 50, sniper rifle				
Navy	Small arms and weapons		849		970
Air Force	M16/A2 rifle		15,524		6,009
	9 mm compact pistol	113	73	273	179
	M-9 pistol			1,652	955
	Small arms				
Army Reserve	M16 rifle	5,160	2,776	4,863	2,492
	5.56 carbine M4	3,082	2,224	1,646	1,073
	XM107, cal. 50, sniper rifle				
	Armor machine gun, 7.62 mm M240 series				
Army National Guard	Armor machine gun, 7.62 mm M240 series	0	0	0	0
	Machine gun, 5.56 mm (SAW)	2,532	7,393	297	1,845
	M16 rifle	5,160	2,776	4,863	2,492
	5.56 carbine M4	3,082	2,224	5,838	3,911
	XM107, cal. 50, sniper rifle				
Defense-wide/ Special Ops	Small arms and weapons				

Service	Weapon	1999,	1999,	2000,	2000,	2001,
		Q	USD	Q	USD	Q
		Units	'000s	Units	'000s	Units
Army	Armor machine gun, 7.62 mm M240 series	1,198	11,399	4,297	38,364	1,306
	Machine gun, 5.56 mm (SAW)	1,525	5,665	3,698	9,903	4,280
	M16 rifle	16,464	6,771	12,479	5,719	9,296
	5.56 carbine M4	6,310	4,194	8,687	5,286	16,215
	XM107, cal. 50, sniper rifle				1,133	0
Navy	Small arms and weapons		865		2,371	
Air Force	M16/A2 rifle		4,364			
	9 MM compact pistol		232			
	M-9 pistol		741			
	Small arms				3,422	
Army Reserve	M16 rifle	0	0	2,496	1,143	0
	5.56 carbine M4	0	0			
	XM107, cal. 50, sniper rifle					
	Armor machine gun, 7.62 mm M240 series					0
Army National Guard	Armor machine gun, 7.62 mm M240 series	0	0	1,130	10,088	1,306
	Machine gun, 5.56 mm (SAW)	1,525	4,482			
	M16 rifle	0	0	9,983	4,576	8,238
	5.56 carbine M4	0	0	8,687	5,286	8,309
	XM107, cal. 50, sniper rifle					
Defense-wide/ Special Ops	Small arms and weapons					

2001,	2002,	2002,	2003,	2003,	2004,	2004,	2005,	2005,
USD	Q	USD	Q	USD	Q**	USD**	Q**	USD**
'000s	Units	'000s	Units	'000s	Units	'000s	Units	'000s
12,335	716	7,978	1,780	16,994	1,480	16,752	2,070	25,249
16,844	0	0	750	3,818	1,200	4,963	0	80
4,749	3,060	1,964	5,564	3,052	0	0	0	0
10,634	2,800	2,383	7,809	9,001	8,158	8,911	8,255	9,376
0	150	2,134	600	8,955	600	8,688	600	8,871
3,983		902		9,710		4,208		2,195
3,985		2,401		7,677		19,033		10,949
0	520	330						
			0	0	0	0	2,342	2,660
							2	44
0	0	0					101	1,233
12,335	716	7,978						
3,828			5,564	3,052	0	0	0	0
5,190	2,800	2,383	0	0	8,158	8,030	5,438	6,177
			0	0	120	1,786	150	2,988
43,900		9,436		115,422		74,657		8,221

Note: Small arms encompassed in broader categories with no means to separate them out are not included in this table.

* Years refer to fiscal years.

** Past years' data indicates that differences between planned and actual procurement may be substantial.

Source: Defense Department Budget Summary Justification Material for FY 1998–2005

<<http://www.defenselink.mil/comptroller/defbudget/fy2005/index.html>>

Appendix C2: US military ammunition procurement budget, 1997–2005 (in USD '000s)

Service	Title	FY 1997	FY 1998
Army	CTG, 5.56 mm, all types	40,695	63,531
	CTG, 7.62 mm, all types	11,965	4,043
	CTG, 9 mm, all types	999	4,135
	CTG, .50 cal., all types	4,947	19,724
	CTG, .45 cal., all types	–	72
	CTG 5.56 mm armor piercing M995	1,996	1,933
	CTG 7.62 mm armor piercing XM993	1,996	1,949
Navy	Small arms and landing party ammunition	3,060	7,587
	Machine gun ammunition	5,230	9,350
Air Force	Cartridges	–	–
	5.56 mm ammunition	6,714	7,421
Marine Corps	5.56 mm, all types	20,773	30,407
	7.62 mm, all types	4,608	3,473
	.50 calibre	1	734
Army Reserve	CTG, 5.56 mm, all types	3,897	1,080
	CTG, 7.62 mm, all types	1,499	69
	CTG, 9 mm, all types	249	70
	CTG, .45 cal., all types	–	1
	CTG, .50 cal, all types	1,658	336
Army National Guard	CTG, 5.56 mm, all types	9,746	11,309
	CTG, 7.62 mm, all types	1,692	720
	CTG, 9 mm, all types	250	736
	CTG, .45 cal., all types	–	13
	CTG, .50 cal., all types	1,658	3,511
Marine Corps Reserves	Ammunition 5.56 mm, all types	973	1,425
	Ammunition 7.62 mm, all types	347	262
	Ammunition .50 calibre	–	108
Navy Reserves	Small arms and landing party ammunition	23	66
Air Force Reserves	5.56 mm ammunition	100	459
	Cartridges	–	–
Air National Guard	5.56 mm ammunition	300	910
	Cartridges	–	–
TOTAL		125,376	175,434

FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
95,122	118,089	78,101	63,811	193,029	182,367	173,550
12,358	8,462	9,414	14,146	54,303	64,929	45,062
2,042	975	5,213	2,639	10,500	5,516	5,078
17,258	23,191	19,495	31,812	112,251	61,028	59,810
2	–	–	–	–	–	–
1,911	1,876	1,337	–	–	–	–
1,911	1,344	–	–	–	–	–
–	–	8,665	8,798	18,489	17,592	23,235
8,701	9,122	–	–	31,629	17,800	25,674
	69,061	108,309	120,142	131,626	150,607	149,100
5,375	–	–	–	–	–	–
21,868	31,834	25,278	9,317	44,608	24,435	35,129
746	6,164	4,018	7,329	6,556	6,304	8,708
6,196	11,658	8,576	6,169	13,724	10,142	1,898
2,556	3,511	1,290	1,030	1,125	11,577	8,450
201	116	190	141	172	3,636	799
387	196	506	45	40	–	89
–	–	–	–	–	–	–
316	397	634	460	575	7,463	149
25,119	35,053	13,515	10,808	11,207	19,277	81,540
2,112	1,219	1,998	1,484	1,809	6,061	8,136
570	294	760	472	420	–	483
–	–	–	–	–	–	–
3,292	4,161	4,301	4,453	5,598	12,438	4,921
1,026	1,089	1,243	1,296	1,949	1,155	1,692
		299	578	429	479	673
913	2,326	1,130	914	1,363	1,505	294
69	68	67	67	29	32	268
365	–	–	–	–	–	–
–	2,164	4,259	6,787	11,151	14,579	14,168
506	–	–	–	–	–	–
–	6,548	10,052	15,670	28,153	31,789	32,187
210,922	338,918	308,650	308,368	680,735	650,711	681,093

Sources: Compilation of data from searches of contracts at <<http://www.defenselink.mil/search>> and <<http://procnet.pica.army.mil/dbi/DynCBD/award.cfm>>

Appendix D: Domestic suppliers by type of weapon, numbers supplied, 1998–2003

Pistols	1998	1998 rank	1999	1999 rank
Sturm, Ruger & Co.	157,032	1	210,357	1
Smith & Wesson	130,471	2	124,358	2
Beretta USA Corp.	110,719	3	116,614	3
Lorcin Eng. Co.	75,250	4	–	NA
Bryco Arms	66,167	5	68,254	5
Colt's Manufacturing	58,789	6	35,965	7
Sig Arms Inc.	52,137	7	71,964	4
Phoenix Arms	43,563	8	21,487	12
Davis Industries	33,308	9	33,344	8
Kimber Mfg.	31,688	10	37,170	6
Southwest Metal Finishing	–	NA	31,268	9
Kel Tec CNC Industries	19,239	13	30,919	10
Beemiller Inc.	23,343	11	30,840	11
Springfield Inc.	10,125	17	17,333	15
Arms Technology Inc.	20,198	12	16,917	16
Revolvers	1998	1998 rank	1999	1999 rank
Smith & Wesson	139,583	1	114,867	1
Sturm, Ruger & Co.	113,230	2	92,505	2
North American Arms Inc.	28,545	3	25,770	4
Colt's Manufacturing	20,139	4	14,864	5
H & R 1871 Inc.	3,850	5	2,572	7
Heritage Mfg. Inc.	–	NA	29,687	3
Charco 2000	–	NA	3,860	6
Misc. firearms	1998	1998 rank	1999	1999 rank
OF Mossberg & Sons Inc.			20,223	1
Maverick Arms Inc.			9,711	2
H & R 1871 Inc.			4,972	3
Defense Procurement MFG.				
Rifles	1998	1998 rank	1999	1999 rank
Sturm, Ruger & Co.	321,158	1	414,832	1
Marlin Firearms Co.	290,280	2	289,340	2
Remington Arms	254,140	3	235,945	3
US Repeating Arms	107,069	4	152,703	4
Savage Arms Inc.	80,621	5	78,343	5
Argus Publications	33,917	6	40,905	7
Colt's Manufacturing	29,564	7	25,533	11
H & R 1871 Inc.	28,897	8	33,536	8
Beemiller Inc.	28,642	9	33,100	9
Bushmaster firearms	25,098	10	64,374	6
Wright Products	–	NA	28,614	10
Thompson Center Arms	14,660	11	10,167	14
Century Arms Inc.	–	NA	13,875	12
Shotguns	1998	1998 rank	1999	1999 rank
Remington Arms	319,251	1	353,233	1
OF Mossberg & Sons Inc.	308,538	2	315,741	2
H & R 1871 Inc.	179,857	3	173,849	3
US Repeating Arms	67,215	4	134,013	4
Maverick Arms Inc.	35,461	5	27,988	5
Sturm, Ruger & Co.	17,311	6	18,354	6

Source: ATF (1999–2003)

2000	2000 rank	2001	2001 rank	2002	2002 rank	2003	2003 rank
231,551	1	111,177	1	113,561	1	97,165	1
80,290	4	53,428	4	60,544	6	72,598	5
89,416	3	56,399	3	69,282	3	91,048	2
–	NA	–	NA	–	NA	–	NA
116,664	2	66,874	2	70,524	2	59,841	6
24,825	10	24,868	10	14,344	NR	13,020	NR
–	NA	–	NA	67,883	4	53,075	7
20,888	12	5,050	18	11,149	NR	9,115	NR
27,313	9	–	NA	–	NA	–	–
48,926	7	32,533	8	45,970	8	47,966	8
61,957	5	–	NA	–	NA	–	NA
42,447	8	45,658	6	44,839	9	47,020	9
49,670	6	50,878	5	66,994	5	81,150	3
22,598	11	27,170	9	47,814	7	77,363	4
18,996	13	38,053	7	22,399	10	24,536	11
2000	2000 rank	2001	2001 rank	2002	2002 rank	2003	2003 rank
90,173	2	65,948	2	92,237	2	98,340	2
107,228	1	147,104	1	143,807	1	108,853	1
25,797	3	20,718	4	22,605	4	24,716	4
8,329	5	5,548	6	4,150	6	3,256	6
–	NA	–	NA	–	NA	–	NA
23,830	4	34,100	3	33,776	3	34,270	3
7,970	6	9,144	5	11,491	5	8,720	5
2000	2000 rank	2001	2001 rank	2002	2002 rank	2003	2003 rank
14,385	1	8,000	1	14,600	1	11,267	1
4,336	2	1,514	2	3,960	2	1,665	3
–	NA	–	NA	–	NA	–	–
						9,679	2
2000	2000 rank	2001	2001 rank	2002	2002 rank	2003	2003 rank
296,149	1	234,096	3	289,301	1	219,591	3
277,270	2	247,772	2	244,427	3	223,479	2
236,786	3	269,816	1	276,291	2	268,960	1
111,641	6	109,377	4	120,914	4	120,176	4
157,178	4	69,001	5	101,492	5	88,153	5
60,987	7	63,037	6	88,099	6	80,947	7
27,271	10	7,866	13	13,606	13	17,364	12
57,532	8	51,597	7	64,733	7	86,896	6
12,390	13	13,450	11	19,990	11	7,310	NR
39,926	9	31,179	8	44,795	8	44,617	9
127,922	5	–	NA	–	NA	–	NA
16,764	12	28,447	9	37,607	9	47,251	8
19,468	11	21,893	10	17,789	12	18,019	11
2000	2000 rank	2001	2001 rank	2002	2002 rank	2003	2003 rank
346,231	1	263,651	1	285,835	1	288,130	1
244,163	2	155,781	2	187,767	2	171,329	2
155,554	3	135,280	3	119,206	3	112,714	3
72,735	4	45,527	4	49,615	5	41,710	5
15,154	6	17,026	5	50,072	4	54,481	4
17,754	5	7,631	6	5,437	6	4,491	8

Appendix E: Sources and quantities of weapons imported into the US, by type, 1998–2004

Pistols and revolvers

Country	1998	1999	2000	2001	2002	2003	2004
Argentina	19,772	40,721	32,237	40,499	42,342	46,976	45,736
Austria	170,240	210,996	245,869	234,330	257,255	245,949	245,431
Belgium	5,381	4,436	2,004	4,054	4,269	8,284	7,841
Brazil	138,489	156,042	160,548	135,267	228,333	132,501	201,565
Bulgaria	2,852	16,742	6,429	6,142	5,400	2,400	9,300
Canada	11,098	14,041	15,151	23,458	22,303	11,624	14,927
Chile	0	0	0	0	10	0	14
Croatia	0	600	5,500	3,830	20,241	34,461	63,151
Czech Rep.	28,389	11,498	19,006	27,806	21,010	35,149	18,083
Denmark	0	0	0	500	0	10	0
Ecuador	2,863	0	0	0	0	0	0
Egypt	1,000	0	0	0	0	1,000	1,000
Finland	0	0	0	0	15	0	0
France	13	9	1,923	349	30	2,041	110
Germany	109,612	100,112	114,876	92,443	139,029	149,648	141,598
Hungary	17,260	15,850	12,200	13,328	9,666	5,102	400
India	366	0	0	0	0	0	500
Ireland	0	0	0	0	0	1	0
Israel	9,088	14,746	22,373	14,469	109,457	11,313	9,568
Italy	44,738	37,002	41,324	58,914	49,857	38,209	39,506
Mexico	0	0	100	0	0	0	0
New Zealand	0	0	0	0	2	0	0
Norway	0	0	0	6	0	0	4
Philippines	3,830	6,458	11,310	9,570	7,220	6,573	10,012
Poland	130	51	0	3,000	0	170	2,237
Portugal	0	500	0	12	0	2,409	1,171
Romania	500	1,000	2,000	1,000	3,000	450	0
Russia	30	430	1,150	510	1,223	2,039	1,060
St. Kitts	986	0	0	0	0	0	0
Singapore	4	0	0	0	0	0	0
South Africa	250	1,210	790	400	0	0	10
South Korea	930	1,300	0	1,250	603	0	1,660
Spain	18,053	20,806	11,935	19,443	19,772	12,991	21,556
Sweden	0	0	0	10,004	0	0	0
Switzerland	4,736	1,993	6,118	1,565	8,056	8,476	2,016
Ukraine	0	0	0	8,835	0	100	400
UK	1	14	3	33	3	46	0
Yugoslavia*	0	0	0	0	0	12	0
Total	590,661	657,957	712,846	711,017	949,106	762,764	838,856

Military rifles

Country	1998	1999	2000	2001	2002	2003	2004
Albania	0	0	0	0	7,000	2,865	0
Algeria	0	600	0	0	0	0	0
Argentina	2,025	2,277	1,080	0	280	200	0
Australia	0	0	0	14	0	16	0
Austria	0	5,498	500	1,500	960	438	0
Belgium	54	68	34	979	66	153	106
Bosnia & Herz.	0	0	0	2,880	2,000	1,000	0
Botswana	0	0	955	0	0	0	0
Brazil	0	0	620	0	0	0	0
Bulgaria	0	0	4,000	0	0	15	0
Canada	14	6	191	28	12	0	252
Chile	0	0	0	0	12	0	0
Croatia	0	7,355	6,390	11,270	1,481	0	0
Czech Rep.	20,834	22,403	16,737	11,006	28,473	2,198	74
Egypt	0	2,400	0	0	0	0	0
El Salvador	0	0	0	745	0	0	0
Finland	0	3,886	0	9,230	4,615	13,000	5
France	33,036	4,810	0	4,052	0	0	0
Germany	5,276	21,593	29,671	1,218	9,819	9,654	20,420
Greece	1,841	0	0	16	10	0	0
Guatemala	0	0	1,923	1,508	0	0	0
Hungary	5,121	8,409	6,280	11,541	15,939	2,742	0
India	0	0	0	0	0	0	6,000
Israel	0	0	341	50	4	0	30
Italy	44	0	0	3,627	0	0	0
Macedonia	4,560	1,550	24,960	5,100	4,200	12,000	13,000
New Zealand	0	0	0	13	0	0	0
Philippines	0	0	0	160	0	0	0
Poland	3,213	5,227	2,976	4,093	6,831	676	58
Romania	10,067	52,430	51,055	19,406	21,286	8,354	50
Russia	15,221	13,994	22,795	28,236	40,465	47,123	33,939
Singapore	4	0	0	0	252	0	0
Spain	0	0	981	591	0	0	0
Sweden	4,574	1,264	0	98	0	1	243
Switzerland	150	74	82	1,201	27,302	4,000	8,500
Tokelau	0	4,425	0	0	0	0	0
Turkey			48,449	34,531	18,738	0	200
Ukraine			200		11,165	18,170	6,150
UK	7,928	244	12,953	487	109	18	11,168
Yugoslavia*	0	0	0	31,670	65,251	17,384	78,351
Total	113,962	158,513	233,173	185,160	266,270	140,007	178,546

Machine guns

Country	1998	1999	2000	2001	2002	2003	2004
Australia	0	85	0	0	107	37	0
Austria	42	20	7	23	0	68	0
Belgium	124	5	4	30	489	483	586
Brazil	0	0	0	0	0	10	0
Bulgaria	0	0	46	108	0	0	0
Canada	0	0	1	246	150	0	0
Croatia	0	4,320	0	0	0	0	0
Czech Rep.	96	0	12	0	0	0	0
Finland	0	0	0	0	1	0	0
France	0	63	0	0	0	0	0
Germany	1,786	1,880	1,938	2,627	1,877	1,524	1,837
Greece	0	0	0	0	0	0	3
Hungary	15	12	16	0	0	22	0
Israel	38	18	18	344	113	76	84
Italy	114	10	24	24	0	470	170
Norway	0	3	212	0	0	0	0
Pakistan	0	0	0	0	18	6	0
Poland	0	0	0	0	0	313	0
Russia	0	0	0	0	0	71	0
Singapore	38	10	5	0	0	26	0
South Africa	0	17	12	5	4	3	0
South Korea	24	0	0	7	0	0	0
Sweden	0	0	0	0	0	0	17
Switzerland	0	25	44	56	128	197	94
Turkey	0	0	0	4	0	0	0
UK	12	65	23	3,268	7	122	3
Yugoslavia*	0	0	0	0	0	0	10
Total	2,331	6,547	2,386	6,692	2,894	3,428	2,804

Military shotguns

Country	1998	1999	2000	2001	2002	2003	2004
Australia	0	0	0	18	0	0	0
Belgium	92	0	0	0	200	0	0
Canada	0	0	0	0	0	13,970	0
China	0	9	0	0	1,400	2,000	0
Germany	48	0	0	0	1	0	0
Italy	0	0	2	0	0	100	0
Spain	38	11	0	0	1	1	0
Sweden	90	0	0	0	0	0	0
UK	140	0	6	4	156	0	192
Total	408	20	8	22	1,758	16,071	192

Shotguns (non-military) and combination shotgun-rifles

Country	1998	1999	2000	2001	2002	2003	2004
Argentina	0	0	0	355	0	0	0
Australia	8,010	3,246	65	67	40	43	40
Austria	0	11	7	1	5	8	7
Belgium	312	550	519	875	379	357	857
Brazil	13,370	64,144	55,605	77,109	118,780	91,275	103,505
Canada	19	27	3	0	0	19	0
China	4,400	20,116	8,320	15,703	27,035	28,682	36,724
Cyprus	1	0	0	1	3	0	0
Czech Rep.	10	36	115	20	20	1	32
Denmark	0	0	0	0	0	0	14
Finland	0	0	0	0	0	0	11
France	5	8	98	8	7	4	5
Germany	834	1,302	5,976	5,464	2,082	1,648	5,438
Greece	0	0	0	0	0	0	7
Hong Kong	1	0	0	0	0	0	0
Hungary	0	0	0	4	0	0	43
India	0	0	0	0	0	3	0
Italy	116,357	175,519	171,536	228,368	180,367	207,055	209,692
Japan	8,212	9,527	7,070	5,261	4,144	4,474	3,288
Kenya	0	0	0	0	0	186	0
Liechtenstein	0	0	0	0	0	11	0
Lithuania	0	0	0	0	0	0	1
Netherlands	0	0	0	15	25	0	0
New Zealand	31	23	2	0	25	0	0
Philippines	0	0	282	0	430	500	0
Portugal	28	26	15	5	75	145	32
Romania	0	0	0	69	0	0	0
Russia	4,955	32,363	39,683	42,487	48,963	39,910	66,011
Saudi Arabia	0	0	0	0	201	0	0
South Africa	0	3	0	0	1	0	0
Spain	6,298	5,360	6,382	5,733	11,166	5,446	6,163
Sweden	199	111	511	385	554	72	758
Switzerland	0	0	2	2	0	2	0
Taiwan	0	1,200	0	1,200	3,606	0	0
Turkey	2,776	16,415	30,308	43,706	92,981	113,751	67,556
UK	672	2,693	4,723	1,393	8,371	4,875	6,872
Total	166,490	332,650	332,888	428,312	499,206	498,686	507,050

Rifles (non-military)

Country	1998	1999	2000	2001	2002	2003	2004
Argentina	0	960	0	0	0	0	0
Australia	18	25	2	3	2	241	212
Austria	3,256	9,135	9,425	236	3,484	737	4,985
Belgium	17,526	15,399	24,070	17,512	8,287	7,404	8,568
Bosnia & Herz.	0	0	0	0	1,990	0	0
Brazil	26,099	22,027	31,486	28,644	39,520	147,119	82,253
Bulgaria	0	60	300	0	0	2,500	2,280
Canada	8,305	67,899	87,250	75,704	121,657	143,010	157,917
Chile	344	0	0	0	0	0	7
China	0	4,400	0	800	0	0	0
Cyprus	0	0	0	2	0	0	0
Czech Rep.	3,741	5,195	19,425	14,515	23,541	29,976	24,965
Ecuador	13	0	0	0	0	0	0
Egypt	0	17,470	0	0	0	0	0
Finland	8,351	16,748	18,954	13,938	13,685	17,005	23,787
France	204	24	396	79	40	16	27
Germany	6,553	13,192	7,065	17,514	10,363	15,528	13,818
India	0	5	0	0	0	3	0
Israel	65	0	125	2	0	0	0
Italy	9,228	8,447	10,909	11,754	12,617	22,458	32,020
Hungary	0	4,500	3,100	0	0	2,970	0
Japan	60,677	52,133	61,025	56,586	62,816	63,931	68,932
Liechtenstein	0	0	0	0	0	16	0
Macedonia	2,000	1,600	470	4,000	20,340	0	0
Netherlands	0	0	0	1	0	4	
New Zealand	0	26	0	0	0	0	5
Pakistan	0	0	0	0	0	0	600
Philippines	30	4,650	1,356	1,305	730	2,140	100
Portugal	760	775	0	0	0	4	1,289
Romania	5,394	52,379	27,807	42,100	37,900	13,459	37,239
Russia	0	5,372	9,603	4,309	31,109	14,825	14,941
South Africa	3	1,390	36	14	4	2	6
Spain	2	953	2	4,310	2	0	7
Sweden	219	1	644	325	603	45	1,016
Switzerland	3,062	4,229	2,178	14,692	65,154	111	2
Taiwan	135	0	0	0	0	0	0
Turkey	0	1,085	0	0	0	0	340
Ukraine	0	0	0	0	0	0	3,020
UK	1,028	2,108	3,945	4,567	4,607	3,983	6,137
Yugoslavia*	0	0	0	1,620	233	2	14,583
Total	229,242	315,413	319,633	322,206	458,684	517,509	499,056

Muzzle-loading firearms

Country	1998	1999	2000	2001	2002	2003	2004
Australia	0	0	1	0	0	0	0
Belgium	0	3	0	0	0	0	0
Brazil	0	0	0	2,490	12,463	13,095	4,344
Canada	0	0	0	393	27	0	0
China	2,000	4,300	7,600	7,000	2,200	1,300	0
Czech Rep.	0	50	0	17	0	0	0
France	11,658	4,031	2	0	10,971	0	0
Germany	0	643	1,117	965	2,935	1,710	0
India	0	34	0	80	217	0	0
Ireland	0	0	0	0	0	2	0
Italy	57,153	55,255	70,701	76,063	66,947	51,611	49,742
Japan	200	12	0	0	0	1,490	0
New Zealand	0	0	0	0	0	2	0
Philippines	0	0	0	0	800	2,050	1,170
South Korea	0	0	0	2,091	0	0	0
Spain	114,488	91,100	179,443	256,434	283,935	282,398	324,618
Switzerland	0	2	0	0	0	0	0
Turkey	12	0	0	0	0	0	0
UK	1,003	334	451	1	4	15	9
Total	186,514	155,764	259,315	345,534	380,499	353,673	379,883

* Yugoslavia stands for the Former Republic of Yugoslavia (1998–2002) or Serbia and Montenegro (2003–04).

Source: US Customs Data

Endnotes

- 1 One of the principal recommendations from a major study on firearms and violence in the United States in 2004 was for the federal government to support a systematic programme of data collection and research on civilian gun ownership and markets in the United States. See National Academies of Science, Committee on Law and Justice (2004).
- 2 The paper does not focus on the dynamics of the illicit market for firearms within the United States or on illicit or covert exports from the United States, except in passing.
- 3 *Consolidated Appropriations Act, Fiscal Year 2004*, passed by Congress on 23 January 2004 and signed into law as Public Law No. 108-199.
- 4 FOIA allows private individuals to request the release of most non-classified information from government agencies. See OMB Watch (2002), which also includes a partial list of Web sites removed from the Internet.
- 5 US Department of Defense, 'DSCA Foreign Military Sales, Detailed Deliveries for Fiscal Year 2004', p. 137.
<http://www.fas.org/asmp/profiles/655-2004/rpt655_2004DODFMSMozNepal.pdf>
- 6 US Department of Defense, Defense Security Cooperation Agency (DSCA), Excess Defense Articles <<http://www.dsca.osd.mil/programs/eda/search.asp>>
- 7 Rather than question the utility of the transfers or their potential use in human rights abuses, Congress named the Philippines a 'major non-NATO ally' in 2002, making it a priority recipient of surplus US military arms. See *Security Assistance Act of 2002*, Division B, P.L. 107-228, 30 September 2002. Military relations between the two countries were further strengthened following reciprocal visits by the heads of state (see Office of the Press Secretary of Malacanang Palace, 2003).
- 8 *Firearms Commerce in the United States, 2001/2002* was, until recently, available at <<http://www.atf.gov/pub/fire-explo/pub/firearmscommerce/index.htm>>; AFMER is available at <<http://www.atf.gov/firearms/stats>>
- 9 Available at <<http://www.ita.doc.gov/td/industry/otea/trade-detail>>
- 10 Available at <<http://dataweb.usitc.gov>>
- 11 Available on a Federation of American Scientists Web site, 'U.S. Arms Transfers: Government Data', <<http://www.fas.org/asmp/profiles/worldfms.html>>
- 12 According to the National Rifle Association (NRA), 'The number of privately owned guns in the US is at an all-time high. The Bureau of Alcohol, Tobacco, Firearms and Explosives . . . estimates that there were about 215 million guns in 1999, when the number of new guns was averaging about 4.5 million annually' (NRA-ILA, 2005).
- 13 Firearms Owners' Protection Act of 1986 (Public Law No. 99-308).
- 14 The Consolidated Appropriations Act for Fiscal Year 2004 (Public Law No. 108-199).
- 15 The US government occasionally provides data on the domestic illegal firearms market, most recently in 2000. See ATF (2000b).
- 16 ATF publishes annual reports on US manufacture and export of small arms through 2001 that include quantities of machine guns and other NFA weapons (see Table 2, note c, for definition) manufactured in the United States. The US Congress restricted dissemination of this data when it passed the Consolidated Appropriations Act for Fiscal Year 2004; therefore, US manufacture and export data for automatic rifles and machine guns subsequent to 2001 is absent. The US Customs Service produces its own set of data on imports of small arms. But ATF and Customs—like the other agencies and departments that collect data on the sale of small arms—break weapons down into different categories, with different definitions for categories with similar names. Finally, the ATF report does not include firearms manufactured for the US military, whereas the Customs' report does (though not in a clear enough manner to allow them to be separated out). Combining categories for convenience may therefore be misleading.
- 17 Bureau of Justice Statistics (2004); Federal Bureau of Investigation (2003).
- 18 Public Law No. 103-159
- 19 For a breakdown of attitudes toward firearms possession by demographic groups, see Smith (2001).
- 20 According to Ken Jorgensen, of Smith & Wesson, 'When people think their ability to buy a gun is threatened either by legislation or litigation, they start buying guns' (Wharton, 2000).
- 21 US Department of Justice, Bureau of Justice Statistics. 'Table 2.62 Respondents Reporting a Firearm in their Home', *Sourcebook of Criminal Justice Statistics Online 2003*, p. 151.
<<http://www.albany.edu/sourcebook/pdf/t262.pdf>>
- 22 The National Rifle Association recently launched *Women's Outlook*, a new magazine to appeal to women, and added Spanish-language sections to its Web site.
<<http://www.nrapublications.org/woman's%20outlook/index.asp>>
- 23 Sturm, Ruger & Company, Form 10Q, filed with the Securities and Exchange Commission, November 10, 1999, cited in Violence Policy Center (1999).
- 24 US Department of Defense, 'DOD 101: An Introductory Overview of the Department of Defense', slides 4, 6, <<http://www.defenselink.mil/pubs/dod101/>>
- 25 Small Arms Survey (2002, pp. 84–85). The data was gathered through personal correspondence between Small Arms Survey staff and US government officials. In September 2005 the US Army provided the Small Arms Survey with information on a previously undisclosed stockpile of 'unserviceable' weapons—equipment awaiting a decision on repair, refurbishment, or disposal. This new information increased the Army's holding of potentially serviceable weapons from 1.6 million (as reported in the preceding citation) to 2.3 million.
- 26 An extensive breakdown of the Army's stockpiles (with the exception of currently unserviceable weapons)—including weapon type, quantity deployed, and quantity non-deployed—can be found in Small Arms Survey (2002, pp. 84–85).
- 27 Small Arms Survey (2001, p. 70) estimated 830,000 firearms. Contracts announced after 2001 boost the estimate to 900,000.
- 28 Search contracts at <<http://www.defenselink.mil/search>>
- 29 Contracts available at <<http://procnnet.pica.army.mil/dbi/DynCBD/award.cfm>>
- 30 Alliant Tech Web site at <http://www.atk.com/AdvancedWeaponSystems/advanceweapon_systems_xm25.asp>

31 <<http://www.defenselink.mil/contracts/2004/ct20040706.html>>
32 In December 2003 a contract was awarded to General Dynamics Armament and Technical
Products for weapon and ammunition development of the XM307. (This award was a USD
5 million increment of a USD 63 million contract.) Source: <<http://www.defenselink.mil/contracts/2003/ct20031224.html>>
33 <<http://www.defenselink.mil>>
34 <<http://procnnet.pica.army.mil>>
35 Small Arms Survey (2001, p. 70). The estimate breakdown was for 680,000 handguns, 131,000
shotguns, and 20,000 special weapons.
36 Personal correspondence, 17 November 2004.
37 See, for instance, Smith & Wesson (2004), in which Smith & Wesson announced a USD 900,000
contract to supply the Atlanta police department with more than 1,500 Model 4003 TSW .40
calibre handguns.
38 <http://www.glock.com/market_position1.htm>
39 As part of this general contract, the Coast Guard ordered 12,000 SIG SAUER P229 compact
pistols (.40 mm). These weapons are to replace the Berretta M9 9 mm pistol, three-quarters
of which have exceeded their expected service life (US Coast Guard, 2004; SIGARMS, 2004b).
40 The automobile industry, for example, not including truck manufacturing, employs nearly
ten times as many people (US Census Bureau, 2004c).
41 For an explanation of the limitations of the geographical data, see US Census Bureau (2004a,
p. 7).
42 These figures do not include small arms manufacturers without employees—that is, those
small-scale producers that are either self-employed or have a partnership. Therefore, other
data-collection agencies, such as ATF, have different figures for the number of US small
arms manufacturers. In its 2001 *Annual Firearms Manufacturing and Export Report*, ATF (2001)
listed 263 different companies as producing firearms, though this figure does not include
manufacturers of machine guns and ‘National Firearms Act firearms’, since producers of
those weapons are listed as confidential by ATF. It does, however, include individuals who
manufactured only one firearm in a year.
43 The Center’s definition of ‘assault weapon’ was broader than that included in the US federal
assault weapons ban.
44 Bill no. S.397, the Protection of Lawful Commerce in Arms Act, as signed into Public Law
No. 109-92 .
45 See, for instance, ‘Hot Guns: Ring of Fire—The Handgun Makers of Southern California’,
<<http://www.pbs.org/wgbh/pages/frontline/shows/guns/ring>>
46 <<http://unstats.un.org/unsd/comtrade>>
47 Specifically, the United States answered ‘no’ to the following question from the UN Statistics
Division: ‘Do you include in trade statistics goods consigned by a government to its armed
forces and diplomatic representatives abroad?’ (The United Nations recommendation is: No).
Source: <<http://unstats.un.org/unsd/tradereport/questform.asp?qid=21>>
48 Applicable laws are: The Gun Control Act of 1968 (18 USC, Chapter 44), the National Fire-
arms Act (26 USC 5844 and 5845(a)), and Section 38 of the Arms Export Control Act of 1976
(22 USC 2778). Associated regulations are, respectively: 27 CFR, Part 478 (formerly Part 178)

‘Commerce in Firearms and Ammunition’, 27 CFR, Part 479 (formerly Part 179) ‘Machine
Guns, Destructive Devices, and Certain Other Firearms’, and 27 CFR, Part 447 (formerly
Part 47), ‘Importation of Arms, Ammunition, and Implements of War.’ For a comprehensive
treatment of this subject, see ATF (2003).
49 27 CFR 447.21, US Munitions Import List.
50 27 CFR 447.2(a), Relation to Other Laws and Regulations.
51 27 CFR 478.112, Importation by a Licensed Importer.
52 27 CFR 478.36.
53 27 CFR 478.99(d).
54 Subject to a number of exemptions; see 27 CFR 478.40.
55 27 CFR 478.40(a).
56 18 USC Chapter 44, § 925(d) and (e). Handguns imported under the ‘curios or relics’ category
must be deemed suitable for sporting purposes.
57 27 CFR 447.57.
58 <http://www.defenselink.mil/releases/1998/b10191998_bt540-98.html>
59 Based on an analysis of international customs data. Data submitted by other countries indi-
cates that it is possible that in some years covered in this report either China or Russia may
have surpassed the United States in terms of quantities of arms exported. However, because
the data-sets from these two countries are incomplete, such a possibility cannot be proved
or disproved. Moreover, in terms of dollar value of exports the United States is the clear
front-runner.
60 US Department of Defense, ‘DOD 101: An Introductory Overview of the Department of
Defense’, slide 6, <<http://www.defenselink.mil/pubs/dod101>>
61 The list of US embargoed states is available on the State Department Web site at <<http://www.pmdtc.org/country.htm>>
62 For a comprehensive list of export restrictions see ‘Arms Transfers Eligibility Criteria Index’
at <<http://www.fas.org/asmp/campaigns/legislationindex.html>>
63 Because of the vague and broad nature of this provision, however, it has never been applied.
A provision in successive foreign aid bills that bars US-funded arms transfers to specific
human-rights abusing military units (known as the Leahy Law) appears to be more effective.
64 See ‘Indonesia’ at <<http://www.fas.org/asmp/profiles/indonesia.htm>> and US Department
of State (1997).
65 The State Department suspended new licences for Canada in February 2000 after noting that
licences for 115,000 handguns, 25,000 rifles, and 200 million rounds of ammunition had been
approved since the previous April. It turned out that the numbers were so high because pro-
spective purchasers, wary of the long time it can take to receive a licence, requested permission
to import much larger quantities than they immediately needed so that future purchases
could be shipped under the same licence. In April 1999 the United States began requiring
export licences to Canada for small arms for the first time in 50 years (Duffy, 2000). Suspen-
sions of licences to the UK two years beforehand appeared to have the desired effect, namely,
a significant reduction in the amount of licence requests the following year (Bonner, 2000).
66 *Security Assistance Act of 2002*, incorporated into the Foreign Relations Authorization Act,
Fiscal Year 2003. Public Law No 107-228.

- 67 The *Federal Register* can be accessed at <http://www.access.gpo.gov/su_docs/fedreg/frcont05.html>. In addition, the State Department publishes arms sales notices at <http://www.pmdtc.org/CongNotify_intro.htm>, and the Federation of American Scientists has maintained a searchable database of arms sales notices since 1992, available at <<http://www.fas.org/asmp/profiles/world.html>>
- 68 See 'Indonesia' at <<http://www.fas.org/asmp/profiles/indonesia.htm>> and US Department of State (1997).
- 69 For a thorough description of these programmes, see Lumpe and Donarski (1998).
- 70 For more on the latter phenomenon, see Lumpe and Mathiak (2000).
- 71 See the State Department's annual *Congressional Budget Justification for Foreign Operations* <<http://www.state.gov/m/rm/rls/cbj/>> for details on this and other foreign aid programmes.
- 72 <<http://ciponline.org/colombia/aidtable.htm>>
- 73 <<http://www.dsca.osd.mil/programs/eda/search.asp>>
- 74 The 'Supporting Information' section of the annual 'Congressional Budget Justification for Foreign Operations' for FY 2002 <<http://www.state.gov/m/rm/rls/cbj/>> also provides country totals for requested and delivered EDA, which may provide clues about whether specific transfers listed in the EDA database went through.
- 75 <<http://www.dsca.osd.mil/programs/eda/search.asp>>
- 76 For example, a subsequent 655 Report confirms delivery of weapons to Lithuania, and several press reports indicate delivery of arms to the Dominican Republic. See Lindenmayer (2004); *Online NewsHour* (2004); *Democracy Now* (2004).
- 77 Statistics on murder rates in El Salvador and Guatemala (for the late 1980s and early 1990s) from Buvinic, Morrison, and Shifter (1999). For 1998 statistics on Honduras, see also Godnick (2002).
- 78 See the Federation of American Scientists' online database of congressional transfers, <<http://www.fas.org/asmp/profiles/world.html>>
- 79 Center for International Policy, 'US Aid to Colombia Since 1997: Summary Tables', <<http://www.ciponline.org/colombia/aidtable.htm>> (accessed 28 February 2006).
- 80 For more on the regional moratorium, see <<http://www.nisat.org/west%20africa/african.htm>>
- 81 Section 702 of the Security Assistance Act of 2000 (P.L. 106-280).
- 82 ATF was transferred from the Treasury Department to the Justice Department in January 2003, as part of a restructuring of the US government bureaucracy following the 9/11 attacks.
- 83 ATF implements the Gun Control Act, the National Firearms Act, and the firearms excise tax provisions of the Internal Revenue Code. It is also responsible for the firearms importation provisions of the Arms Export Control Act.
- 84 <<http://www.atf.gov/firearms/stats/>>
- 85 See Table 2, note c.
- 86 *The Consolidated Appropriations Act for Fiscal Year 2004* (Public Law No. 108-199).
- 87 Company names and production breakdowns for this category are not released to the public. (Source: personal e-mail to FEA@atf.gov.)
- 88 <<http://www.atf.gov/firearms/stats/afmer/afmer2003.pdf>>
- 89 US Census Bureau (1999). The 2002 manufacturing census for small arms and small arms ammunition is available at <<http://www.census.gov/prod/www/abs/manu-ind2002.html>>
- 90 <<http://www.ita.doc.gov/td/industry/otea/trade-detail>>
- 91 Customs data from 1994 to 1998 is also available on the Internet at <<http://govinfo.kerr.orst.edu/impexp.html>>. Data from 1999 is available at <<http://www.fas.org/asmp/profiles/customs-99.htm>>.
- 92 Delineation and definition of US Customs categories are available at <<http://hotdocs.usitc.gov/docs/tata/hts/bychapter/0500C93.pdf>>
- 93 For a listing of these subcategories, see <<http://hotdocs.usitc.gov/docs/tata/hts/bychapter/0500C93.pdf>>
- 94 <<http://dataweb.usitc.gov>>
- 95 Section 655 of the Foreign Assistance Act was added in 1995, requiring such reports to Congress beginning in FY 1996.
- 96 Removal of import requirement: sec. 1262(b) of the Security Assistance Act of 2002 (division B of the Foreign Relations Authorization Act, Fiscal Year 2003; Public Law 107-228). Financial aid and Internet provisions: Sec. 1306(a) and 1306(b) of the Arms Control, Nonproliferation, and Security Assistance Act of 1999 (division B of the Admiral James W. Nance and Meg Donovan Foreign Relations Authorization Act, Fiscal Years 2000 and 2001 (enacted by reference in sec. 1000(a)(7) of Public Law 106-113)).
- 97 State Department reports are available at <<http://www.pmdtc.org/rpt655intro.htm>>.
- 98 Section 702 of the Security Assistance Act of 2000 (P.L. 106-280).
- 99 Sec. 1205(c) of the Security Assistance Act of 2002 (division B of the Foreign Relations Authorization Act, Fiscal Year 2003; Public Law 107-228.)
- 100 <<http://www.nisat.org>>
- 101 <<http://www.fas.org/asmp/profiles/worldfms.html>>
- 102 The State Department lists its notifications at <http://www.pmdtc.org/CongNotify_intro.htm>; the Federation of American Scientists maintains a database of arms sales notifications to Congress dating back to 1992, available at <<http://www.fas.org/asmp/profiles/world.html>>
- 103 International Affairs budgets and congressional presentation reports available at <<http://www.state.gov/m/rm/c6112.htm>>
- 104 <<http://www.dsca.osd.mil/programs/eda/search.asp>>

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